NM2 - ___19____

CELL 3 & 4 CEASE TILLING DEMONSTRATION

Sept. 18, 2020

Jones, Brad A., EMNRD

From: Boultinghouse, Stacy <Stacy.Boultinghouse@energytransfer.com>
Sent: Monday, September 21, 2020 6:22 AM
To: Jones, Brad A., EMNRD
Cc: Billings, Bradford, EMNRD; Christine Mathews; Boultinghouse, Stacy
Subject: [EXT] RE: 2019 Annual Report - Jal Landfarm (NM2-019)
Attachments: 11208903_Jones01-2020_Cease_Tilling_Notification_FINAL.pdf

Good morning.

Please find attached a formal request to Cease Tilling in Cells 3 & 4 for the above reference Site. ETC understands that NMOCD staff continue to work from home for their health and safety; however, ETC sincerely requests approval to cease tilling such that we are not continuing to spend unnecessary funds on this project.

This request has also been uploaded into the EMNRD Centrestack in Brad Billing's ETC folder.

Let us know if you have any questions.

Thank you.

"of all the paths you take in life,
make sure a few of them are dirt"

ENERGY TRANSFER

Stacy Boultinghouse, PG(TX4889/LA73)
EH&S Environmental-Sr. Manager
Emergency Response/Remediation/ Waste/Water
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September 18, 2020 Reference No. 11208903

Mr. Brad Jones
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Jones:

Re: ETC Field Services LLC Jal No. 4 Landfarm
Notification that Tilling of Landfarm Cells Will Cease
Lea County, New Mexico, Permit NM-2-019

On behalf of ETC Field Services LLC (ETC), GHD Services Inc. (GHD) is notifying the New Mexico Oil Conservation Division that bi-weekly tilling of Landfarm Cells 3 and 4 will cease. The ETC Jal No. 4 Landfarm is located in Lea County, New Mexico. The facility is located approximately 10 miles north of Jal, New Mexico to the south of Deep Wells Road and approximately 2 miles west of Highway 18 in Lea County. The area surrounding the Landfarm is used for cattle grazing and oil and gas production. In 2018, bi-weekly tilling ceased in Landfarm Cells 1, 2, and 4 through 15. However, bi-weekly tilling in Cell 4 resumed.

Landfarmed soils within each cell have been disked, at minimum, on a bi weekly schedule in accordance with the existing permit and closure plan to promote the degradation of hydrocarbon concentrations. The analytical data for concentrations of total petroleum hydrocarbons (TPH) in the treatment zone indicate that TPH now meets the permit and closure plan action levels since November 2019 in all Landfarm cells.

Based on the data, continued tilling of Landfarm cells is no longer beneficial and will only contribute to soil erosion. Landfarm monitoring data is attached on Table 1. The laboratory analytical data for Cells 3 and 4 from 2015 to present has been attached.

If you have any questions or require additional information, please feel free to contact us at (505) 884-0672, or christine.mathews@ghd.com or tom.larson@ghd.com.

Sincerely,

GHD

Christine Mathews,
Project Manager

Tom Larson
Senior Project Manager

CM/mk/01

Encl.

cc: Stacy Boultinghouse, Energy Transfer

GHD
6121 Indian School Road NE Suite 200 Albuquerque New Mexico 87110 USA
T 505 884 0672 **F** 505 884 4932 **W** www.ghd.com

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**		**NE**		**500**	**2,500**	**2,500**	**1000**
TZ Cell 1	G1	12/15/09	NA	NA	<16.2	670	81	**670**	751	NA	61.5
		6/14/10	NA	NA	<15.9	727	82.2	**727**	809.2	NA	40.9
		12/1/10	NA	NA	<15.4	724	50.4	**724**	774.4	NA	34
		6/14/11	NA	NA	<15.1	887	118	**887**	1005	NA	67.8
		11/28/11	NA	NA	<19.1	<19.1	<19.1	<38.2	<57.3	NA	45.7
		6/14/12	NA	NA	<15.2	638	78.5	**638**	716.5	NA	20.7
		10/30/12	NA	NA	<15.4	514	63.5	**514**	577.5	NA	21
		5/22/13	NA	NA	<15.3	527	312	**527**	839	NA	47.5
		11/14/13	NA	NA	<15.6	548	50.5	**548**	598.5	NA	50.1
	G2	12/15/09	NA	NA	<15.8	582	74	**582**	656	NA	98
		6/14/10	NA	NA	<15.8	672	89.2	**672**	761.2	NA	83.2
		12/1/10	NA	NA	<15.6	855	85.5	**855**	940.5	NA	59
		6/14/11	NA	NA	<15.1	665	37.3	**665**	702.3	NA	107
		11/28/11	NA	NA	<15.4	560	196	**560**	756	NA	27.7
		6/14/12	NA	NA	<15.2	472	87.8	472	559.8	NA	16.2
		10/30/12	NA	NA	<15.5	438	47.2	438	485.2	NA	18.3
		5/22/13	NA	NA	<15.4	887	230	**887**	1117	NA	89.2
		11/14/13	NA	NA	<15.5	58.4	<15.7	58.4	58.4	NA	18.3
	G3	12/15/09	NA	NA	<16.4	1,060	134	**1,060**	1,194	NA	231
		6/14/10	NA	NA	<78.5	1,310	157	**1,310**	1,467	NA	161
		12/1/10	NA	NA	<15.5	978	34	**978**	1012	NA	187
		6/14/11	NA	NA	<15.2	1,510	157	**1,510**	1,667	NA	184
		11/28/11	NA	NA	<15.5	1,110	359	**1,110**	1,469	NA	306
		6/14/12	NA	NA	<15.2	1,390	88.7	**1,390**	1,479	NA	75.9
		10/30/12	NA	NA	<15.5	1,100	124	**1,100**	1,224	NA	82.4
		5/22/13	NA	NA	<15.3	1340	349	**1340**	1689	NA	119
		11/14/13	NA	NA	17.3	1,830	139	**1,847**	1,986	NA	205
	G4	12/15/09	NA	NA	53.7	1,230	113	**1,284**	1,397	NA	300
		6/14/10	NA	NA	<76.5	1,720	253	**1,720**	1,973	NA	186
		12/1/10	NA	NA	<15.7	826	16.2	**826**	842.2	NA	83.2
		6/14/11	NA	NA	<15.1	1,580	131	**1,580**	1,711	NA	304
		11/28/11	NA	NA	<15.4	1,380	376	**1,380**	1,756	NA	309
		6/14/12	NA	NA	<15.1	419	85	419	504	NA	36.4
		10/30/12	NA	NA	<15.5	1,220	148	**1,220**	1,368	NA	90
		5/22/13	NA	NA	<15.3	1300	533	**1300**	1833	NA	181
		11/14/13	NA	NA	<15.5	1,480	93.2	**1,480**	1,573	NA	187
	G5	12/15/09	NA	NA	<18.3	189	21.5	189	210.5	NA	44.8
		6/14/10	NA	NA	<16.3	240	30.5	240	270.5	NA	136
		12/1/10	NA	NA	<15.3	962	43.3	**962**	1005.3	NA	113
		6/14/11	NA	NA	15.9	1,120	121	**1,136**	1,257	NA	105
		11/28/11	NA	NA	<15.4	1,720	655	**1,720**	2,375	NA	214
		6/14/12	NA	NA	<15.1	678	95.5	**678**	773.5	NA	52.2
		10/30/12	NA	NA	<15.3	961	140	**961**	1101	NA	62.1
		5/22/13	NA	NA	<15.1	1,490	368	**1,490**	1,858	NA	143
		11/14/13	NA	NA	99	1,450	116	**1,549**	1,665	NA	141
	CS	8/5/14	NA	NA	<20.0	<50.0	NA	<70.0	NA	NA	151
		2/26/15	<0.00533	<0.0116	<2.32	<7.41	NA	<9.73	NA	32.6	12.9
		5/27/15	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/12/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	52.3
		2/16/16	NA	NA	<4.9	82	NA	82	NA	NA	<7.5
		8/31/16	Data inconclusive due to laboratory error								
		11/21/16	NA	NA	<4.9	36	110	36	146	NA	<30
		2/24/17	<0.025	<0.222	<4.9	52	100	52	152	NA	<30
		9/21/17	<0.024	<0.216	<4.8	100	290	100	390	NA	<30
		11/29/17	<0.025	<0.221	<4.9	61	230	61	291	NA	<30
		5/29/18	<0.021	<0.192	<4.3	70	230	70	300	NA	<30
		11/14/18	NA	NA	<5.4	45	130	45	175	NA	<33
		5/30/19	<0.024	<0.22	<4.9	10	66	10	76	NA	<7.8
		11/13/19	NA	NA	<4.7	12	<50	12	12	NA	<60
		3/26/20	<0.024	<0.212	<4.7	22	57	22	79	NA	<60
		8/27/20	NA	NA	<4.9	<9.2	<46	<55.2	<60.1	NA	21

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 2	G1	12/15/09	NA	NA	<18.8	65.2	<18.8	65.2	65.2	NA	7.83
		6/14/10	NA	NA	<15.5	1,220	189	**1,220**	1,409	NA	24
		12/1/10	NA	NA	<15.6	733	35.6	**733**	768.6	NA	11.2
		6/14/11	NA	NA	<15.1	722	45.7	**722**	767.7	NA	16.5
		11/28/11	NA	NA	<15.5	1,100	421	**1,100**	1,521	NA	17.2
		6/14/12	NA	NA	<15.3	906	100	**906**	1006	NA	12.5
		10/30/12	NA	NA	<15.3	669	63.5	**669**	732.5	NA	16.3
		5/22/13	NA	NA	<15.5	586	161	**586**	747	NA	42.1
		11/14/13	NA	NA	<15.4	602	50.1	**602**	652.1	NA	46.7
	G2	12/15/09	NA	NA	<16.0	307	50.4	307	357.4	NA	161
		6/14/10	NA	NA	<15.6	584	92.8	**584**	676.8	NA	126
		12/1/10	NA	NA	<15.5	387	25.3	387	412.3	NA	54.3
		6/14/11	NA	NA	<15.1	644	27.7	**644**	671.7	NA	55.5
		11/28/11	NA	NA	<15.3	661	280	**661**	941	NA	150
		6/14/12	NA	NA	<15.3	556	89.2	**556**	645.2	NA	28.8
		10/30/12	NA	NA	<15.4	467	52.7	467	519.7	NA	50.6
		5/22/13	NA	NA	<15.2	429	147	429	576	NA	115
		11/14/13	NA	NA	<15.5	58.8	<15.5	58.8	58.8	NA	73.4
	G3	12/15/09	NA	NA	<18.9	140	19.6	140	159.6	NA	144
		6/14/10	NA	NA	<16.3	154	24.7	154	178.7	NA	135
		12/1/10	NA	NA	<15.4	481	42.1	481	523.1	NA	70.5
		6/14/11	NA	NA	18.1	828	100	**846.1**	946.1	NA	151
		11/28/11	NA	NA	<15.4	672	304	**672**	976	NA	89.9
		6/14/12	NA	NA	<15.2	649	98.4	**649**	747.4	NA	21.2
		10/30/12	NA	NA	<15.2	523	78	**523**	601	NA	35.9
		5/22/13	NA	NA	<15.1	467	224	467	691	NA	109
		11/14/13	NA	NA	<15.5	524	65.6	**524**	589.6	NA	84.6
	G4	12/15/09	NA	NA	<19.1	136	21.8	136	157.8	NA	45.6
		6/4/10	NA	NA	<15.6	372	98.7	372	470.7	NA	152
		12/1/10	NA	NA	<15.5	319	28	319	347	NA	55.2
		6/14/11	NA	NA	<14.8	579	49.7	**579**	628.7	NA	51.8
		11/28/11	NA	NA	<15.4	635	283	**635**	918	NA	200
		6/14/12	NA	NA	<15.2	423	100	423	523	NA	21.2
		10/30/12	NA	NA	<15.3	430	79	430	509	NA	88.3
		5/22/13	NA	NA	<15.2	455	222	455	677	NA	136
		11/14/13	NA	NA	<15.3	377	53.4	377	430.4	NA	60.8
	CS	8/5/14	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	66.3
		2/26/15	<0.00533	<0.0116	<2.32	7.42	NA	7.42	NA	299	11
		5/27/15	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/12/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	44.7
		2/16/16	NA	NA	<4.7	47	NA	47	NA	NA	3.7
		8/31/16	Data inconclusive due to laboratory error								
		11/21/16	NA	NA	<4.8	17	52	17	69	NA	<30
		2/24/17	<0.025	<0.224	<5.0	34	150	34	184	NA	<30
		9/21/17	<0.024	<0.212	<4.7	39	200	39	239	NA	<30
		11/29/17	<0.024	<0.212	<4.7	41	190	41	231	NA	<30
		5/29/18	<0.017	<0.217	<3.3	<9.9	<49	<13.2	<62.2	NA	<30
		11/14/18	NA	NA	<5.2	21	82	21	103	NA	<33
		5/30/19	<0.026	<0.228	<5.1	45	160	45	205	NA	<16
		11/13/19	NA	NA	<4.9	12	75	12	87	NA	<61
		3/26/20	<0.025	<0.224	<5.0	23	76	23	99	NA	<60
		8/27/20	NA	NA	<4.9	45	200	45	245	NA	12

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 3	G1	12/15/09	NA	NA	<307	3,860	538	**3,860**	**4,398**	NA	16.2
		6/14/10	NA	NA	<154	3,540	373	**3,540**	**3,913**	NA	21.5
		12/1/10	NA	NA	<15.3	3,070	58.9	**3,070**	**3,129**	NA	9.53
		6/14/11	NA	NA	<15.1	3,250	317	**3,250**	**3,567**	NA	14.3
		11/28/11	NA	NA	<15.3	3760	870	**3760**	**4630**	NA	13.2
		6/14/12	NA	NA	<77.3	4,050	468	**4,050**	**4,518**	NA	12.3
		10/30/12	NA	NA	<15.3	3,590	319	**3,590**	**3,909**	NA	3.87
		5/22/13	NA	NA	20.6	3,560	749	**3,581**	**4,330**	NA	28.3
		11/14/13	NA	NA	21.3	4,230	199	**4,251**	**4,450**	NA	3.87
	G2	12/15/09	NA	NA	<16.8	630	67.5	**630**	**697.5**	NA	26.3
		6/14/10	NA	NA	<154	3,420	364	**3,420**	**3,784**	NA	22.7
		12/1/10	NA	NA	<15.2	4,470	287	**4,470**	**4,757**	NA	9.39
		6/14/11	NA	NA	<15.2	3,720	<15.2	**3,720**	**3720**	NA	25
		11/28/11	NA	NA	<15.4	4,790	913	**4,790**	**5,703**	NA	45.2
		6/14/12	NA	NA	<75.8	5,410	398	**5,410**	**5,808**	NA	12.5
		10/30/12	NA	NA	<15.4	3,900	311	**3,900**	**4,211**	NA	16.8
		5/22/13	NA	NA	<15.2	2,890	1,140	**2,890**	**4,030**	NA	27.3
		11/14/13	NA	NA	19.9	4,280	191	**4,300**	**4,491**	NA	16.8
	G3	12/15/09	NA	NA	<80.9	2,930	365	**2,930**	**3,295**	NA	26.6
		6/14/10	NA	NA	<159	4,830	515	**4,830**	**5,345**	NA	26.3
		12/1/10	NA	NA	<15.1	3,490	112	**3,490**	**3,602**	NA	10.6
		6/14/11	NA	NA	<15.2	3,290	<15.2	**3,290**	**3290**	NA	10.9
		11/28/11	NA	NA	<15.2	4,330	1,010	**4,330**	**5,340**	NA	16.5
		6/14/12	NA	NA	<75.5	3,720	411	**3,720**	**4,131**	NA	9.49
		10/30/12	NA	NA	<15.2	3,380	276	**3,380**	**3,656**	NA	6.02
		5/22/13	NA	NA	<15.1	3,840	535	**3,840**	**4,375**	NA	13.8
		11/14/13	NA	NA	20.8	4,220	213	**4,241**	**4,454**	NA	6.02
	G4	12/15/09	NA	NA	<81.9	2,120	247	**2,120**	**2,367**	NA	15.8
		6/14/10	NA	NA	<169	4,440	488	**4,440**	**4,928**	NA	15.6
		12/01/10	NA	NA	<15.2	4,340	220	**4,340**	**4,560**	NA	<8.55
		6/14/11	NA	NA	22	3,750	<15.1	**3,772**	**3750**	NA	9.3
		11/28/11	NA	NA	<15.2	4,070	893	**4,070**	**4,963**	NA	50.7
		6/14/12	NA	NA	<75.4	4,800	448	**4,800**	**5,248**	NA	10.8
		10/30/12	NA	NA	<15.4	2,810	226	**2,810**	**3,036**	NA	6.05
		5/22/13	NA	NA	<75.2	5150	900	**5150**	**6050**	NA	13.7
		11/14/13	NA	NA	22.5	5030	226	**5052.5**	**5278.5**	NA	31.1
	G5	12/15/09	NA	NA	<16.8	489	47.4	**489**	536.4	NA	17.8
		6/14/10	NA	NA	<153	4,540	506	**4,540**	**5,046**	NA	15.1
		12/1/10	NA	NA	<15.4	3,830	54.9	**3,830**	**3,885**	NA	10.8
		6/14/11	NA	NA	19.5	3,100	<15.2	**3,120**	**3119.5**	NA	23.2
		11/28/11	NA	NA	<15.2	4,690	1,020	**4,690**	**5,710**	NA	21.6
		6/14/12	NA	NA	<75.8	3,780	414	**3,780**	**4,194**	NA	11.8
		10/30/12	NA	NA	<15.3	3,030	246	**3,030**	**3,276**	NA	6.11
		5/22/13	NA	NA	<15.2	3,580	823	**3,580**	**4,403**	NA	15.9
		11/14/13	NA	NA	20.4	4,410	182	**4,430**	**4,612**	NA	31.6
	CS	8/5/14	NA	NA	<20.0	163	NA	163	NA	NA	25.7
		2/26/15	<0.00533	<0.0116	<2.32	175	NA	175	NA	366	20.6
		5/27/15	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/12/15	<0.100	<0.400	<20.0	1,080	NA	**1,080**	NA	52.2	32.7
		2/16/16	NA	NA	<4.8	630	NA	**630**	NA	NA	<1.5
		8/31/16	Data inconclusive due to laboratory error								
		11/21/16	NA	NA	<4.7	270	630	270	900	NA	<30
		2/24/17	<0.023	<0.210	<4.7	1100	1800	**1100**	**2900**	NA	<30
		9/21/17	<0.023	<0.212	<4.7	850	1600	**850**	**2450**	NA	<30
		1/4/18	<0.024	0.168	<4.7	780	1700	**780**	**2480**	NA	<30
		5/29/18	NA	NA	<4.8	1300	2500	**1300**	**3800**	NA	NS
		11/14/18	NA	NA	<5.3	570	900	**570**	1470	NA	<33
		5/30/19	<0.025	<0.224	<5.0	470	1100	470	1570	NA	<15
		11/13/19	NA	NA	<4.6	270	840	270	1110	NA	<60
		3/26/20	<0.024	<0.212	<4.7	290	690	290	980	NA	<60
		8/27/20	NA	NA	<4.9	290	750	290	1040	NA	<7.5

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 4	G1	12/15/09	NA	NA	<18.14	428	32.2	428	460	NA	18
		6/14/10	NA	NA	<155	3,830	304	**3830**	**4134**	NA	37.7
		12/01/10	NA	NA	<15.3	3,120	52.6	**3120**	**3173**	NA	32.6
		6/14/11	NA	NA	<15.2	2,790	<15.2	**2790**	**2790**	NA	33
		11/28/11	NA	NA	<15.2	3,270	779	**3270**	**4049**	NA	33.6
		6/14/12	NA	NA	<75.8	4,100	410	**4100**	**4510**	NA	19.8
		10/30/12	NA	NA	<15.5	2,650	265	**2650**	**2915**	NA	18
		5/22/13	NA	NA	<76.1	5,230	855	**5230**	**6085**	NA	45
		11/14/13	NA	NA	17	3,560	145	**3577**	**3722**	NA	57.1
	G2	12/15/09	NA	NA	<80.1	3,320	339	**3320**	**3659**	NA	39.7
		6/14/10	NA	NA	<154	1,910	<154	**1910**	1910	NA	36.1
		12/01/10	NA	NA	<15.4	3,240	36.6	**3240**	**3277**	NA	33.6
		6/14/11	NA	NA	17.6	3,560	16.6	**3578**	**3594**	NA	39
		11/28/11	NA	NA	<15.2	4,270	1,050	**4270**	**5320**	NA	22.5
		6/14/12	NA	NA	<76.1	3,860	422	**3860**	**4282**	NA	25.2
		10/30/12	NA	NA	<15.6	2,340	228	**2340**	**2568**	NA	27.2
		5/22/13	NA	NA	<15.3	4,370	478	**4370**	**4848**	NA	39.6
		11/14/13	NA	NA	17.5	3,290	87.3	**3308**	**3395**	NA	63.9
	G3	12/15/09	NA	NA	<19.6	436	31.4	436	467	NA	9.49
		6/14/10	NA	NA	<160	3,460	276	**3460**	**3736**	NA	41
		12/01/10	NA	NA	<15.3	3,180	64.5	**3180**	**3245**	NA	43.1
		6/14/11	NA	NA	20.9	3,710	19.2	**3731**	**3750**	NA	52.3
		11/28/11	NA	NA	<15.2	3,470	764	**3470**	**4234**	NA	76.3
		6/14/12	NA	NA	<15.1	2,930	75.3	**2930**	**3005**	NA	24
		10/30/12	NA	NA	<15.5	2,800	258	**2800**	**3058**	NA	18
		5/22/13	NA	NA	<15.3	3,690	428	**3690**	**4118**	NA	68
		11/14/13	NA	NA	<15.5	2,500	67.7	**2500**	**2568**	NA	73.9
	G4	12/15/09	NA	NA	<18.3	302	22.4	302	324.4	NA	16.1
		6/14/10	NA	NA	<154	2,170	167	**2170**	2337	NA	126
		12/01/10	NA	NA	<15.4	2,330	47.9	**2330**	2378	NA	80.6
		6/14/11	NA	NA	<15.2	2,350	<15.2	**2350**	2350	NA	57.7
		11/28/11	NA	NA	<152	6,420	1,750	**6420**	**8170**	NA	12.2
		6/14/12	NA	NA	<15.2	2,600	82.5	**2600**	**2683**	NA	52.8
		10/30/12	NA	NA	<15.4	1,910	183	**1910**	2093	NA	35.7
		5/22/13	NA	NA	<15.1	2,780	436	**2780**	**3216**	NA	82
		11/14/13	NA	NA	16.1	2,280	89.9	**2296**	2386	NA	92.4
	G5	12/15/09	NA	NA	<16.8	489	47.4	489	536	NA	17.8
		6/14/10	NA	NA	<153	3,170	276	**3170**	**3446**	NA	75.9
		12/01/10	NA	NA	<15.3	2,470	41.7	**2470**	**2512**	NA	74.6
		6/14/11	NA	NA	<15.1	2,210	<15.1	**2210**	2210	NA	79.7
		11/28/11	NA	NA	<15.3	3,540	868	**3540**	**4408**	NA	81.1
		6/14/12	NA	NA	<15.2	2,580	82.2	**2580**	**2662**	NA	25.7
		10/30/12	NA	NA	<15.5	1,920	170	**1920**	2090	NA	33.6
		5/22/13	NA	NA	<15.2	3,120	517	**3120**	**3637**	NA	62.7
		11/14/13	NA	NA	18.3	3,370	134	**3388**	**3522**	NA	71.5
	CS	8/5/14	NA	NA	<20.0	140	NA	140	NA	NA	38.9
		2/26/15	<0.00533	<0.0116	<2.32	902	NA	**902**	NA	**5,640**	10.4
		5/27/15	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/12/15	<0.100	<0.400	<20.0	226	NA	226	NA	44.6	32.2
		2/16/16	NA	NA	<4.7	420	NA	420	NA	NA	2.9
		8/31/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.7	300	510	300	810	NA	<30
		2/24/17	<0.024	<0.217	<4.8	140	250	140	390	NA	<30
		9/21/17	<0.024	<0.219	<4.9	180	390	180	570	NA	<30
		11/29/17	<0.024	<0.217	<4.8	390	620	390	1110	NA	<30
		5/29/18	<0.018	<0.162	<3.6	850	1200	**850**	2050	NA	<30
		11/14/18	NA	NA	<5.5	210	260	210	470	NA	<34
		5/30/19	<0.025	0.221	<4.9	630	1100	**630**	1730	NA	<3.1
		11/13/19	NA	NA	<4.7	110	330	110	440	NA	<60
		3/26/20	<0.025	<0.225	<5.0	52	120	52	172	NA	<60
		8/27/20	NA	NA	<4.9	43	150	43	193	NA	<7.5

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 5	G1	12/15/09	NA	NA	<15.3	82.2	51.9	82.2	134.1	NA	<4.28
		6/14/10	NA	NA	<15.4	73.1	29.4	73.1	102.5	NA	12.5
		12/1/10	NA	NA	<15.1	143	51.6	143	194.6	NA	<4.26
		6/14/11	NA	NA	<15.1	71.1	18.2	71.1	89.3	NA	<4.22
		11/28/11	NA	NA	<15.1	151	196	151	347	NA	<5.04
		6/14/12	NA	NA	<15.2	46.2	53.8	46.2	100	NA	6.29
		10/30/12	NA	NA	<15.1	60.6	31.1	60.6	91.7	NA	<1.01
		5/22/13	NA	NA	<15.2	40.4	68.7	40.4	109.1	NA	4.09
		11/14/13	NA	NA	<15.3	89.1	62.4	89.1	151.5	NA	6.44
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	188	<25.0
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	9
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	341
		2/16/16	NA	NA	<4.7	<10	NA	<14.7	NA	NA	<1.5
		8/31/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.7	<9.9	61	<14.6	61	NA	<30
		2/24/17	<0.025	<0.224	<5.0	<10	<51	<15	<66	NA	<30
		9/21/17	<0.023	<0.207	<4.6	<9.4	110	<14	110	NA	<30
		11/29/17	<0.024	<0.216	<4.8	<9.8	82	<14.6	82	NA	<30
		5/29/18	<0.016	<0.143	<3.2	<10	80	<13.2	80	NA	<30
		11/14/18	NA	NA	<5.1	<10	<50	<15.1	<65.1	NA	<32
		5/30/19	<0.024	<0.216	<4.8	<10	<51	<14.8	<55.8	NA	<3.1
		11/13/19	NA	NA	<4.8	<9.9	90	<14.7	90	NA	<60
		3/26/20	<0.024	<.217	<4.8	<8.3	<41	<13.1	<54.1	NA	<60
		8/27/20	NA	NA	<5.0	<9.4	<47	<14.4	<61.4	NA	<7.5
TZ Cell 6	G1	12/15/09	NA	NA	<18.4	98.7	18.7	98.7	117.4	NA	<20.6
		6/14/10	NA	NA	<15.4	286	77.2	286	363.2	NA	48.9
		12/1/10	NA	NA	<15.4	207	24.3	207	231.3	NA	<17.2
		6/14/11	NA	NA	<15.2	398	<15.2	398	398	NA	51.7
		11/28/11	NA	NA	<15.3	333	182	333	515	NA	20.4
		6/14/12	NA	NA	<15.4	206	82.3	206	288.3	NA	10.9
		10/30/12	NA	NA	<15.4	176	23.6	176	199.6	NA	7.22
		5/22/13	NA	NA	<15.1	216	115	216	331	NA	43
		11/14/13	NA	NA	<15.3	37.7	<15.3	37.7	37.7	NA	37
	G2	12/15/09	NA	NA	<18.5	177	30	177	207	NA	36.5
		6/14/10	NA	NA	<15.5	347	68	347	415	NA	98
		12/1/10	NA	NA	<15.3	276	21.1	276	297.1	NA	81.4
		6/14/11	NA	NA	<15.2	462	<15.2	462	462	NA	72.8
		11/28/11	NA	NA	<15.3	297	147	297	444	NA	86.2
		6/14/12	NA	NA	<15.2	330	89.8	330	419.8	NA	31.5
		10/30/12	NA	NA	<15.3	246	27	246	273	NA	27.6
		5/22/13	NA	NA	<15.2	216	92.1	216	308.1	NA	57.1
		11/14/13	NA	NA	<15.3	39.1	<15.3	39.1	39.1	NA	94.9
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	146	32
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	15.6
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	<25.0
		2/16/16	NA	NA	<4.7	19	NA	19	NA	NA	<1.5
		8/31/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.9	30	170	30	200	NA	<30
		2/24/17	<0.025	<0.222	<4.9	15	120	15	135	NA	<30
		9/21/17	<0.024	<0.219	<4.9	<10	<50	<14.9	<64.9	NA	<30
		11/29/17	<0.023	<0.206	<4.6	<9.2	63	<13.8	63	NA	<30
		5/29/18	<0.018	<0.165	<3.7	13	85	13	98	NA	<30
		11/14/18	NA	NA	<5.4	<10	<50	<15.4	<65.4	NA	<33
		5/30/19	<0.025	<0.224	<5.0	17	120	17	137	NA	<3.1
		11/13/19	NA	NA	<4.7	<10	<50	<14.7	<64.7	NA	<59
		3/26/20	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	NA	<60
		8/27/20	NA	NA	<4.9	<9.5	<47	<14.4	<61.4	NA	<7.5

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 7	G1	12/15/09	NA	NA	<18.5	267	30.9	267	297.9	NA	17.1
		6/14/10	NA	NA	<15.8	525	77.9	**525**	602.9	NA	15.5
		12/1/10	NA	NA	<15.8	166	146.2	166	312.2	NA	5.69
		6/14/11	NA	NA	<15.2	719	27.5	**719**	746.5	NA	28.9
		11/28/11	NA	NA	<15.5	535	202	**535**	737	NA	11.4
		6/14/12	NA	NA	<15.1	429	105	429	534	NA	9.11
		10/30/12	NA	NA	<15.7	204	36.5	204	240.5	NA	5.67
		5/22/13	NA	NA	<15.2	404	148	404	552	NA	11.3
		11/14/13	NA	NA	<15.7	218	26	218	244	NA	10.5
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	249	26.2
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	8.62
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	32.8
		2/16/16	NA	NA	<4.7	17	NA	17	NA	NA	<1.5
		8/31/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.7	25	97	25	122	NA	<30
		2/24/17	<0.023	<0.206	<4.6	11	59	11	70	NA	<30
		9/21/17	<0.024	<0.216	<4.8	14	47	14	61	NA	<30
		11/29/17	<0.025	<0.224	<5.0	18	95	18	113	NA	<30
		5/29/18	<0.017	<0.149	<3.3	15	110	15	125	NA	<30
		11/14/18	NA	NA	<5.2	16	62	16	78	NA	<33
		5/30/19	<0.26	<0.228	<5.1	14	90	14	104	NA	<3.1
		11/13/19	NA	NA	<4.7	<9.9	66	<14.6	66	NA	<60
		3/26/20	<0.024	<0.215	<4.9	<9.5	<47	<14.4	<61.4	NA	<60
		8/27/20	NA	NA	<5.0	21	130	21	151	NA	<7.5
TZ Cell 8	G1	12/15/09	NA	NA	<218	3910	405	**3910**	**4315**	NA	2050
		6/14/10	NA	NA	<15.7	650	88.9	**650**	738.9	NA	81.2
		12/1/10	NA	NA	NA	NA	NA	NA	NA	NA	NA
		6/14/11	NA	NA	NA	NA	NA	NA	NA	NA	NA
		11/28/11	NA	NA	NA	NA	NA	NA	NA	NA	NA
		6/14/12	NA	NA	NA	NA	NA	NA	NA	NA	NA
		10/30/12	NA	NA	NA	NA	NA	NA	NA	NA	NA
		5/22/13	NA	NA	NA	NA	NA	NA	NA	NA	NA
		11/14/13	NA	NA	NA	NA	NA	NA	NA	NA	NA
	G2	12/15/09	NA	NA	<18.6	95	<18.6	95	95	NA	<10.4
		6/14/10	NA	NA	<16.3	537	87	**537**	624	NA	146
		12/1/10	NA	NA	<15.5	556	41.1	**556**	597.1	NA	24.3
		6/14/11	NA	NA	<15.2	449	33.4	449	482.4	NA	66.5
		11/28/11	NA	NA	<15.3	208	83.4	208	291.4	NA	140
		6/14/12	NA	NA	<15.2	382	97.2	382	479.2	NA	48.2
		10/30/12	NA	NA	<15.2	161	27	161	188	NA	25.3
		5/22/13	NA	NA	<15.2	282	119	282	401	NA	47.9
		11/14/13	NA	NA	18.6	227	51	245.6	296.6	NA	56.6
	CS	8/5/14	<0.0400	<0.0400	<8.00	<50.0	NA	<58.0	NA	185	43
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	11
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<8.0	<50.0	NA	<58.0	NA	NA	<25.0
		2/16/16	NA	NA	<4.7	11	NA	11	NA	NA	<1.5
		8/31/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.8	<9.4	<47	<14.2	<61.2	NA	<30
		2/24/17	<0.024	<0.213	<4.7	<9.6	<48	<14.3	<62.3	NA	<30
		9/21/17	<0.023	<0.210	<4.7	<9.3	<46	<14	<60	NA	<30
		11/29/17	<0.024	<0.213	<4.7	<9.8	<49	<14.5	<63.5	NA	<30
		5/30/18	<0.016	<0.291	<3.3	29	140	29	169	NA	<30
		11/14/18	NA	NA	<5.2	<11	<53	<16.2	<69.2	NA	<33
		5/30/19	<0.025	<0.227	<5.1	21	120	21	141	NA	<3.1
		11/13/19	NA	NA	<4.8	<9.7	<48	<14.5	<62.5	NA	<60
		3/26/20	<0.025	<0.222	<4.9	440	510	440	950	NA	<60
		8/27/20	NA	NA	<4.9	16	79	16	95	NA	13

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 9	G1	12/15/09	NA	NA	<17.7	71.9	18	71.9	89.9	NA	156
		6/14/10	NA	NA	<15.5	238	62.3	238	300.3	NA	110
		12/1/10	NA	NA	<15.3	55.3	<15.3	55.3	55.3	NA	84
		6/14/11	NA	NA	<15.1	262	<15.1	262	262	NA	107
		11/28/11	NA	NA	<15.4	391	307	391	698	NA	145
		6/14/12	NA	NA	<15.1	341	97.2	341	438.2	NA	40
		10/30/12	NA	NA	<15.3	194	34.8	194	228.8	NA	40.3
		5/22/13	NA	NA	<15.1	240	122	240	362	NA	69.7
		11/14/13	NA	NA	<15.5	234	55.7	234	289.7	NA	56.7
	G2	12/15/09	NA	NA	<16.2	194	71.7	194	265.7	NA	152
		6/14/10	NA	NA	<15.4	1250	135	**1250**	1385	NA	407
		12/1/10	NA	NA	<15.3	689	54.1	**689**	743.1	NA	263
		6/14/11	NA	NA	<15.1	165	<15.1	165	165	NA	163
		11/28/11	NA	NA	<15.3	828	286	**828**	1114	NA	218
		6/14/12	NA	NA	<15.1	348	117	348	465	NA	34.1
		10/30/12	NA	NA	<15.5	142	30.4	142	172.4	NA	37.7
		5/22/13	NA	NA	<15.1	210	114	210	324	NA	69.9
		11/14/13	NA	NA	<15.4	242	66.7	242	308.7	NA	112
	G3	12/15/09	NA	NA	<17.0	86.9	28.8	86.9	115.7	NA	58.6
		6/14/10	NA	NA	<15.5	286	60.7	286	346.7	NA	229
		12/1/10	NA	NA	<15.4	312	41.4	312	353.4	NA	58.8
		6/14/11	NA	NA	<15.0	216	<15.0	216	216	NA	109
		11/28/11	NA	NA	<15.4	279	187	279	466	NA	130
		6/14/12	NA	NA	<15.1	193	105	193	298	NA	22.2
		10/30/12	NA	NA	<15.4	133	35.7	133	168.7	NA	81.3
		5/22/13	NA	NA	<15.2	171	105	171	276	NA	72.7
		11/14/13	NA	NA	<15.3	114	34.7	114	148.7	NA	104
	G4	12/15/09	NA	NA	<16.3	210	58.2	210	268.2	NA	43.5
		6/14/10	NA	NA	<15.4	277	78.6	277	355.6	NA	206
		12/1/10	NA	NA	<15.3	335	40.3	335	375.3	NA	56.3
		6/14/11	NA	NA	<14.9	221	<14.9	221	221	NA	86
		11/28/11	NA	NA	<15.1	531	271	**531**	802	NA	87
		6/14/12	NA	NA	<15.1	441	113	441	554	NA	38.9
		10/30/12	NA	NA	<15.3	184	41.5	184	225.5	NA	22.4
		5/22/13	NA	NA	<15.2	168	89	168	257	NA	61.1
		11/14/13	NA	NA	<15.4	136	51.1	136	187.1	NA	66.6
	G5	12/15/09	NA	NA	<15.4	164	63.5	164	227.5	NA	81.6
		6/14/10	NA	NA	<15.4	164	42	164	206	NA	55.9
		12/1/10	NA	NA	<15.3	199	22.6	199	221.6	NA	33.5
		6/14/11	NA	NA	<15.1	153	<15.1	153	153	NA	75.4
		11/28/11	NA	NA	<15.6	305	200	305	505	NA	77.5
		6/14/12	NA	NA	<15.1	182	72.1	182	254.1	NA	19.2
		10/30/12	NA	NA	<15.2	107	22.9	107	129.9	NA	35.9
		5/22/13	NA	NA	<15.1	123	56.5	123	179.5	NA	33.7
		11/14/13	NA	NA	<15.4	64.9	18	64.9	82.9	NA	99
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	220	68.2
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	10.2
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	89.3
		2/16/16	NA	NA	<4.9	9.6	NA	9.6	NA	NA	<1.5
		8/31/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.7	43	170	43	213	NA	<30
		2/24/17	<0.024	<0.215	<4.8	11	<50	11	11	NA	<30
		9/21/17	<0.025	<0.221	<4.9	13	130	13	143	NA	<30
		11/29/17	<0.023	<0.207	<4.6	<9.3	60	<13.9	60	NA	<30
		5/30/18	<0.016	<0.145	<3.2	<9.8	76	<13	76	NA	<30
		11/14/18	NA	NA	<5.3	12	68	12	80	NA	<33
		5/30/19	<0.025	<0.225	<5.0	<10	63	<15.0	63	NA	<3.0
		11/13/19	NA	NA	<4.8	<9.0	<45	<13.8	<58.8	NA	<60
		3/26/20	<0.24	<0.219	<4.9	<9.9	<50	<14.8	<64.8	NA	<60
		8/27/20	NA	NA	<4.9	<9.4	48	<14.3	48	NA	<7.5

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 10	G1	12/15/09	NA	NA	<17.8	276	50.9	276	326.9	NA	9.63
		6/14/10	NA	NA	<15.5	600	135	**600**	735	NA	16.7
		12/1/10	NA	NA	<15.2	643	76.3	**643**	719.3	NA	<4.25
		6/14/11	NA	NA	<15.0	513	43.8	**513**	556.8	NA	16.8
		11/28/11	NA	NA	<15.5	671	246	**671**	917	NA	14.3
		6/14/12	NA	NA	<15.1	423	89.6	423	512.6	NA	11.7
		10/30/12	NA	NA	<15.2	288	66.9	288	354.9	NA	3.69
		5/22/13	NA	NA	<15.1	425	120	425	545	NA	10.4
		11/14/13	NA	NA	<15.8	202	69.6	202	271.6	NA	15.6
	G2	12/15/09	NA	NA	<16.2	217	52.4	217	269.4	NA	11.9
		6/14/10	NA	NA	<15.5	329	80.5	329	409.5	NA	11.3
		12/1/10	NA	NA	<15.3	265	40	265	305	NA	<8.56
		6/14/11	NA	NA	<15.1	234	<15.1	234	234	NA	<8.43
		11/28/11	NA	NA	<15.3	324	154	324	478	NA	24.3
		6/14/12	NA	NA	<15.0	222	82.1	222	304.1	NA	8.87
		10/30/12	NA	NA	<15.1	132	41	132	173	NA	3.3
		5/22/13	NA	NA	<15.0	231	75.9	231	306.9	NA	11.9
		11/14/13	NA	NA	<15.5	123	32.2	123	155.2	NA	18
	G3	12/15/09	NA	NA	<17.0	96.8	24.1	96.8	120.9	NA	9.06
		6/14/10	NA	NA	<15.2	200	58.2	200	258.2	NA	25.7
		12/1/10	NA	NA	<15.2	185	27.3	185	212.3	NA	<8.54
		6/14/11	NA	NA	<15.0	185	<15.0	185	185	NA	26
		11/28/11	NA	NA	<15.2	269	152	269	421	NA	21.8
		6/14/12	NA	NA	<15.1	226	88.5	226	314.5	NA	14.7
		10/30/12	NA	NA	15.1	150	39.6	165.1	204.7	NA	3.91
		5/22/13	NA	NA	<15.1	179	62.5	179	241.5	NA	19.2
		11/14/13	NA	NA	<15.3	167	41.4	167	208.4	NA	24.5
	G4	12/15/09	NA	NA	<18.9	129	19.2	129	148.2	NA	10
		6/14/10	NA	NA	<15.3	576	137	**576**	713	NA	44.8
		12/1/10	NA	NA	<15.3	905	95.3	**905**	1000.3	NA	<8.59
		6/14/11	NA	NA	<15.0	549	70.4	**549**	619.4	NA	90.6
		11/28/11	NA	NA	<15.3	767	246	**767**	1013	NA	138
		6/14/12	NA	NA	<15.1	756	129	**756**	885	NA	11.5
		10/30/12	NA	NA	<15.2	521	110	**521**	631	NA	9.29
		5/22/13	NA	NA	<15.2	678	148	**678**	826	NA	78.3
		11/14/13	NA	NA	<15.4	297	59.3	297	356.3	NA	46.4
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	N/A	<54.0	NA	331	32.8
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	14.7
		5/27/15	<0.0200	<0.0800	<4.00	55.7	NA	55.7	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	<25.0
		2/16/16	NA	NA	<4.8	43	NA	43	NA	NA	<1.5
		8/31/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.7	69	300	69	369	NA	<30
		2/24/17	<0.024	<0.216	<4.8	<9.7	<48	<14.5	<62.5	NA	<30
		9/21/17	<0.024	<0.212	<4.7	55	400	55	455	NA	<30
		11/29/17	<0.024	<0.219	<4.9	28	100	28	128	NA	<30
		5/30/18	<0.016	<0.148	<3.3	21	100	21	121	NA	<30
		11/14/18	NA	NA	<5.2	<11	<53	<16.2	<69.2	NA	<32
		5/30/19	<0.024	<0.216	<4.8	<10	55	<14.8	55	NA	<3.1
		11/13/19	NA	NA	<5.0	<9.8	<49	<14.8	<63.8	NA	<60
		3/26/20	<0.024	<0.213	<4.7	28	91	28	119	NA	<60
		8/27/20	NA	NA	<5.0	14	68	14	82	NA	<7.5

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 11	G1	12/15/09	NA	NA	26.7	589	27.9	**615.7**	643.6	NA	128
		6/14/10	NA	NA	85.9	1,510	123	**1,596**	1,719	NA	469
		12/1/10	NA	NA	<15.3	362	15.3	362	377.3	NA	215
		6/14/11	NA	NA	<15.2	350	<15.2	350	350	NA	305
		11/28/11	NA	NA	<15.5	721	195	**721**	916	NA	651
		6/14/12	NA	NA	<15.1	260	61.6	260	321.6	NA	113
		10/30/12	NA	NA	<15.2	132	15.4	132	147.4	NA	49.9
		5/22/13	NA	NA	<15.1	185	59.3	185	244.3	NA	192
		11/14/13	NA	NA	<15.5	147	33.7	147	180.7	NA	167
	G2	12/15/09	NA	NA	27	488	49.7	**515**	564.7	NA	161
		6/14/10	NA	NA	<15.4	202	19.9	202	221.9	NA	169
		12/1/10	NA	NA	<15.5	181	17.8	181	198.8	NA	44.1
		6/14/11	NA	NA	<15.0	274	<15.0	274	274	NA	112
		11/28/11	NA	NA	<15.1	212	74.4	212	286.4	NA	76.9
		6/14/12	NA	NA	<15.1	118	41.8	118	159.8	NA	22.3
		10/30/12	NA	NA	<15.1	56.1	<15.2	56.1	56.1	NA	<1.01
		5/22/13	NA	NA	<15.1	117	33.1	117	150.1	NA	38.9
		11/14/13	NA	NA	<15.4	95.5	20.6	95.5	116.1	NA	48
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	226	<25.0
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	22.1
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	39
		2/17/16	NA	NA	<4.9	15	NA	15	NA	NA	<1.5
		9/1/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.7	<9.8	60	<14.5	60	NA	<30
		2/24/17	<0.025	<0.221	<4.9	<9.1	<46	<14	<60	NA	<30
		9/21/17	<0.024	<0.216	<4.8	<9.8	<49	<14.6	<63.6	NA	<30
		11/29/17	<0.023	<0.208	<4.6	<9.9	<49	<14.5	<63.5	NA	<30
		5/30/18	<0.017	<0.149	<3.3	<9.9	<50	<13.2	<63.2	NA	<30
		11/14/18	NA	NA	<5.0	<10	<50	<15	<65	NA	<32
		5/30/19	<0.024	<0.213	<4.7	<10	<51	<14.7	<65.7	NA	<7.7
		11/14/19	NA	NA	<4.6	<9.5	<48	<14.1	<62.1	NA	<60
		3/26/20	<0.024	<0.213	<4.7	<9.6	<48	<14.3	<62.3	NA	<60
		8/27/20	NA	NA	<4.9	<8.6	<43	<13.5	<56.5	NA	<7.5
TZ Cell 12	G1	12/15/09	NA	NA	<16.2	302	38.1	302	340.1	NA	<22.6
		6/14/10	NA	NA	<15.6	449	78.1	449	527.1	NA	47.3
		12/1/10	NA	NA	<15.6	374	42.4	374	416.4	NA	<43.5
		6/14/11	NA	NA	<15.1	573	18	**573**	591	NA	29
		11/28/11	NA	NA	<15.3	452	161	452	613	NA	28.1
		6/14/12	NA	NA	<15.2	319	89.4	319	408.4	NA	11.7
		10/30/12	NA	NA	<15.3	209	35.3	209	244.3	NA	<1.02
		5/22/13	NA	NA	<16.4	139	43.6	139	182.6	NA	28.7
		11/14/13	NA	NA	<15.5	171	22	171	193	NA	65.6
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	403	<25.0
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	12.5
		5/27/15	<0.0200	0.2121	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	610
		2/17/16	NA	NA	<4.7	10	NA	10	NA	NA	<1.5
		9/1/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.7	<9.5	<48	<14.2	<62.2	NA	<30
		2/24/17	<0.025	<0.225	<5.0	<9.6	<48	<14.6	<62.6	NA	<30
		9/21/17	<0.025	<0.222	<4.9	<9.2	<46	<14.1	<60.1	NA	<30
		11/29/17	<0.024	<0.219	<4.9	30	<45	30	30	NA	<30
		5/30/18	<0.017	<0.152	<3.4	<10	<50	<13.4	<63.4	NA	<30
		11/14/18	NA	NA	<5.2	<11	<54	<16.2	<70.2	NA	<33
		5/30/19	<0.026	<0.242	<5.3	<11	<53	<14.3	<67.3	NA	<7.9
		11/14/19	NA	NA	<4.9	<9.8	<49	<14.7	<63.7	NA	<60
		3/26/20	<0.025	<0.222	<4.9	<9.1	<45	<14.0	<59.0	NA	<60
		8/27/20	NA	NA	<4.9	<9.8	<49	<14.7	<63.7	NA	<7.5

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 13	G1	12/15/09	NA	NA	20	597	64.6	**617**	681.6	NA	291
		6/14/10	NA	NA	<15.7	288	71.6	288	359.6	NA	347
		12/1/10	NA	NA	<15.9	185	16.2	185	201.2	NA	425
		6/14/11	NA	NA	<15.3	414	25.6	414	439.6	NA	458
		11/28/11	NA	NA	<15.5	211	112	211	323	NA	311
		6/14/12	NA	NA	<15.4	395	89.1	395	484.1	NA	93.5
		10/30/12	NA	NA	<15.6	133	29.4	133	162.4	NA	131
		5/22/13	NA	NA	<15.3	450	195	450	645	NA	329
		11/14/13	NA	NA	<15.7	153	<15.7	153	153	NA	334
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	130	231
		2/26/15	NA	NA	<2.32	<7.41	NA	<9.73	NA	NA	424
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	81.9
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	541
		2/17/16	NA	NA	<5.0	47	NA	47	NA	NA	8.3
		9/1/16	Data inconclusive due to laboratory error								
		11/22/16	NA	NA	<4.9	32	120	32	152	NA	41
		2/24/17	<0.025	<0.221	<4.9	26	<48	26	26	NA	<30
		9/21/17	<0.025	<0.222	<4.9	19	79	19	98	NA	<30
		11/29/17	<0.023	<0.207	<4.6	30	110	30	140	NA	35
		5/30/18	<0.017	<0.152	<3.4	34	97	34	131	NA	32
		11/14/18	NA	NA	<5.4	11	<53	11	11	NA	<34
		5/30/19	<0.025	<0.224	<5.0	20	110	20	130	NA	14
		11/14/19	NA	NA	<4.9	<9.6	<48	<14.5	<62.5	NA	81
		3/26/20	<0.023	<0.207	<4.6	25	81	25	106	NA	<60
		8/27/20	NA	NA	<5.0	35	150	35	185	NA	110
TZ Cell 14	G1	12/15/09	NA	NA	<17.6	61.5	<17.6	61.5	61.5	NA	<4.92
		6/14/10	NA	NA	<16.9	48.4	<16.9	48.4	48.4	NA	5.37
		12/1/10	NA	NA	<15.3	127	15.6	127	142.6	NA	<4.27
		6/14/11	NA	NA	<15.1	110	<15.1	110	110	NA	15.7
		11/28/11	NA	NA	<15.4	88.5	62.3	88.5	150.8	NA	762
		6/14/12	NA	NA	<15.1	93.2	44.4	93.2	137.6	NA	7.02
		10/30/12	NA	NA	<15.3	80	16.5	80	96.5	NA	3.7
		5/22/13	NA	NA	<15.3	129	55.8	129	184.8	NA	10.3
		11/14/13	NA	NA	<15.4	77.8	<15.4	77.8	77.8	NA	9.88
	CS	8/5/14	<0.0200	<0.0200	<4.00	<50.0	NA	<54.0	NA	82	<25.0
		2/26/15	NA	NA	<2.32	116	NA	116	NA	NA	37.5
		5/27/15	<0.0200	<0.0800	<4.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<4.00	<50.0	NA	<54.0	NA	NA	<25.0
		2/17/16	NA	NA	<4.8	12	NA	12	NA	NA	<1.5
		9/1/16	Data inconclusive due to laboratory error								
		11/23/16	NA	NA	<4.9	<10	<51	<14.9	<65.9	NA	<30
		2/24/17	<0.024	<0.216	<4.8	<9.5	<47	<14.3	<61.3	NA	<30
		9/21/17	<0.024	<0.213	<4.7	<9.5	<47	<14.2	<61.2	NA	<30
		11/29/17	<0.024	<0.212	<4.7	<9.6	<48	<14.3	<62.3	NA	<30
		5/30/18	<0.017	<0.153	<3.4	<10	<50	<13.4	<63.4	NA	<30
		11/14/18	NA	NA	<5.1	<10	<51	<15.1	<66.1	NA	<32
		5/30/19	<0.025	<0.227	<5.1	<10	57	<15.1	57	NA	<7.8
		11/14/19	NA	NA	<4.8	<9.6	<48	<14.4	<62.4	NA	<60
		3/26/20	<0.023	<0.210	<4.7	11	50	11	61	NA	<60
		8/27/20	NA	NA	<4.9	<9.8	<49	<14.7	<63.7	NA	10

Table 1
Treatment Zone Soil Analytical Data Summary - TPH and Chloride
Jal No. 4 Landfarm
ETC Field Services LLC

Sample Location	Grid Location	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6 to C12) (mg/kg)	TPH-DRO (>C12 to C28) (mg/kg)	TPH-ORO (>C28 to C35) (mg/kg)	TPH GRO/DRO Total (C6 to C28) (mg/kg)	TPH GRO/DRO/ ORO Total (C6 to C35) (mg/kg)	TRPH by 418.1 (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Landfarm Closure Criteria			**0.2**	**50**	**NE**			**500**	**2,500**	**2,500**	**1000**
TZ Cell 15	G1	12/15/09	NA	NA	NA	NA	NA	NA	NA	NA	NS
		6/14/10	NA	NA	<16.2	209	82.2	209	291.2	NA	79.7
		12/1/10	NA	NA	<15.7	218	29.7	218	247.7	NA	26.2
		6/14/11	NA	NA	<15.4	205	<15.4	205	205	NA	64.1
		11/28/11	NA	NA	<15.5	322	219	322	541	NA	30.9
		6/14/12	NA	NA	<15.5	291	113	291	404	NA	16.5
		10/30/12	NA	NA	<16.0	164	64.6	164	228.6	NA	13.8
		5/22/13	NA	NA	<15.7	317	221	317	538	NA	70.9
		11/14/13	NA	NA	<15.9	286	27.2	286	313.2	NA	79.7
	CS	8/5/14	<0.100	<0.100	<20.0	<50.0	NA	<70.0	NA	1220	<125
		2/26/15	NA	NA	<2.32	22	NA	22	NA	NA	54.4
		5/27/15	<0.0400	0.4243	<8.00	<50.0	NA	<54.0	NA	<10.0	<25.0
		8/11/15	NA	NA	<20.0	<50.0	NA	<52.0	NA	NA	30.4
		2/17/16	NA	NA	<4.8	67	NA	67	NA	NA	3.2
		9/1/16	Data inconclusive due to laboratory error								
		11/23/16	NA	NA	<4.6	150	450	150	600	NA	<30
		2/24/17	<0.025	<0.224	<5.0	200	230	200	430	NA	<30
		9/21/17	<0.024	<0.219	<4.9	130	290	130	420	NA	<30
		11/29/17	<0.024	<0.217	<4.8	85	320	85	405	NA	<30
		5/30/18	0.024	0.159	13	310	400	323	723	NA	<30
		11/14/18	NA	NA	<5.7	120	240	120	360	NA	<34
		5/30/19	<0.026	<0.228	<5.1	160	630	160	790	NA	<8.1
		11/14/19	NA	NA	<4.8	53	210	53	263	NA	<59
		3/26/20	<0.024	<0.213	<4.7	180	310	180	490	NA	<60
		8/27/20	NA	NA	<4.9	110	580	110	690	NA	<7.5

Notes:

TZ = Treatment Zone
CS= Composite Sample
mg/kg = milligrams per kilogram
TPH = Total Petroleum Hydrocarbons
GRO/DRO = Gasoline/Diesol Range Organics
BTEX = Benzene + Toluene + Ethylbenzene + Xylenes
NS = Not Sampled
NA = Not Analyzed
*Concentrations in **Bold** exceed the New Mexico Oil Conservation Division Landfarm Closure Criteria*

Analytical Data 2015

TRACEANALYSIS, INC.

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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Liz Scaggs
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: March 30, 2015

Work Order: 15022633

Project Location: Lea Co, NM
Project Name: Jal Landfarm
Project Number: 702114G075

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
387696	TZ Cell 1	soil	2015-02-26	09:10	2015-02-26
387697	TZ Cell 2	soil	2015-02-26	09:45	2015-02-26
387698	TZ Cell 3	soil	2015-02-26	14:10	2015-02-26
387699	TZ Cell 4	soil	2015-02-26	10:10	2015-02-26
387700	TZ Cell 5	soil	2015-02-26	10:30	2015-02-26
387701	TZ Cell 6	soil	2015-02-26	10:50	2015-02-26
387702	TZ Cell 7	soil	2015-02-26	11:10	2015-02-26
387703	TZ Cell 8	soil	2015-02-26	11:40	2015-02-26
387704	TZ Cell 9	soil	2015-02-26	12:00	2015-02-26
387705	TZ Cell 10	soil	2015-02-26	12:15	2015-02-26
387706	TZ Cell 11	soil	2015-02-26	12:30	2015-02-26
387707	TZ Cell 12	soil	2015-02-26	12:45	2015-02-26
387708	TZ Cell 13	soil	2015-02-26	13:05	2015-02-26
387709	TZ Cell 14	soil	2015-02-26	13:25	2015-02-26
387710	TZ Cell 15	soil	2015-02-26	14:30	2015-02-26
387711	VZ Cell 1	soil	2015-02-26	09:00	2015-02-26
387712	VZ Cell 2	soil	2015-02-26	09:30	2015-02-26
387713	VZ Cell 3	soil	2015-02-26	14:00	2015-02-26
387714	VZ Cell 4	soil	2015-02-26	10:00	2015-02-26

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
387715	VZ Cell 5	soil	2015-02-26	10:20	2015-02-26
387716	VZ Cell 6	soil	2015-02-26	10:45	2015-02-26
387717	VZ Cell 7	soil	2015-02-26	11:00	2015-02-26
387718	VZ Cell 8	soil	2015-02-26	11:30	2015-02-26
387719	VZ Cell 9	soil	2015-02-26	11:50	2015-02-26
387720	VZ Cell 10	soil	2015-02-26	12:10	2015-02-26
387721	VZ Cell 11	soil	2015-02-26	12:25	2015-02-26
387722	VZ Cell 12	soil	2015-02-26	12:40	2015-02-26
387723	VZ Cell 13	soil	2015-02-26	12:55	2015-02-26
387724	VZ Cell 14	soil	2015-02-26	13:15	2015-02-26
387725	VZ Cell 15	soil	2015-02-26	14:20	2015-02-26

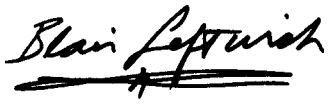
Notes

- **Work Order 15022633:** Please run all analysis to PQL's in Table 7, previously provided. Shipping 3/2

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 64 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Notes:
For inorganic analyses, the term MQL should actually read PQL.



Dr. Blair Leftwich, Director
James Taylor, Assistant Director
Brian Pellam, Operations Manager

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Case Narrative

Samples for project Jal Landfarm were received by TraceAnalysis, Inc. on 2015-02-26 and assigned to work order 15022633. Samples for work order 15022633 were received intact at a temperature of 6.1 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Ag, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
As, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Ba, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
BTEX	S 8021B	101294	2015-03-03 at 15:16	119748	2015-03-03 at 15:16
BTEX	S 8021B	101317	2015-03-04 at 14:57	119789	2015-03-05 at 10:21
Cd, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Chloride (IC)	E 300.0	101413	2015-03-05 at 15:00	119885	2015-03-09 at 10:50
Chloride (IC)	E 300.0	101414	2015-03-05 at 15:00	119886	2015-03-09 at 10:50
Chloride (IC)	E 300.0	101530	2015-03-13 at 12:00	120011	2015-03-16 at 11:48
Cr, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Cu, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Fe, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Hg, Total	S 7471 B	101370	2015-03-05 at 16:15	119834	2015-03-06 at 13:15
Mn, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Pb, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Se, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
TPH 418.1	E 418.1	101449	2015-03-11 at 12:00	119921	2015-03-11 at 15:50
TPH DRO - NEW	S 8015 D	101356	2015-03-05 at 16:03	119868	2015-03-09 at 14:35
TPH GRO	S 8015 D	101317	2015-03-04 at 14:57	119791	2015-03-05 at 10:28
TPH GRO	S 8015 D	101336	2015-03-05 at 11:54	119849	2015-03-09 at 09:05
U, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07
Zn, Total	S 6010C	101482	2015-03-12 at 18:11	120228	2015-03-18 at 15:07

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 15022633 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 387696 - TZ Cell 1

Laboratory:	Midland					
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035	
QC Batch:	119789	Date Analyzed:	2015-03-05	Analyzed By:	AK	
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	5	<0.00533	<0.0200	<0.00533	mg/Kg	1	0.00533	0.02	0.00533
Toluene	U	5	<0.00645	<0.0200	<0.00645	mg/Kg	1	0.00645	0.02	0.00645
Ethylbenzene	U	5	<0.0116	<0.0200	<0.0116	mg/Kg	1	0.0116	0.02	0.0116
Xylene	U	5	<0.00874	<0.0200	<0.00874	mg/Kg	1	0.00874	0.02	0.00874

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.81	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			2.16	mg/Kg	1	2.00	108	70 - 130

Sample: 387696 - TZ Cell 1

Laboratory:	Lubbock					
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A	
QC Batch:	119885	Date Analyzed:	2015-03-09	Analyzed By:	RL	
Prep Batch:	101413	Sample Preparation:		Prepared By:	RL	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**12.9**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387696 - TZ Cell 1

Laboratory:	Lubbock					
Analysis:	Hg, Total	Analytical Method:	S 7471 B	Prep Method:	N/A	
QC Batch:	119834	Date Analyzed:	2015-03-06	Analyzed By:	TP	
Prep Batch:	101370	Sample Preparation:	2015-03-06	Prepared By:	TP	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury		1,2,3,4,6	**0.0665**	**0.0665**	<0.00325	mg/Kg	1	0.00325	0.025	0.00325

Sample: 387696 - TZ Cell 1

Laboratory: Lubbock
Analysis: Total Metals | Analytical Method: S 6010C | Prep Method: S 3050B
QC Batch: 120228 | Date Analyzed: 2015-03-18 | Analyzed By: LM
Prep Batch: 101482 | Sample Preparation: 2015-03-12 | Prepared By: LM

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	1,2,3,4,6	<0.0344	<0.500	<0.0344	mg/Kg	1	0.0344	0.5	0.0344
Total Arsenic	Qr,Qs,U	1,2,3,4,6	<0.432	<2.00	<0.432	mg/Kg	1	0.432	2	0.432
Total Barium	Qs	1,2,3,4,6	**125**	**125**	<0.0501	mg/Kg	1	0.0501	1	0.0501
Total Cadmium	J,Qs	1,2,3,4,6	**0.0936**	<0.500	<0.0320	mg/Kg	1	0.0320	0.5	0.032
Total Chromium		1,2,3,4,6	**6.84**	**6.84**	<0.0512	mg/Kg	1	0.0512	0.5	0.0512
Total Copper		1,2,3,4,6	**2.61**	**2.61**	<0.226	mg/Kg	1	0.226	0.5	0.226
Total Iron	Qs	1,2,3,4,6	**6570**	**6570**	<6.84	mg/Kg	100	6.84	0.5	0.0684
Total Manganese	Qs	1,2,3,4,6	**80.1**	**80.1**	<0.0957	mg/Kg	1	0.0957	2	0.0957
Total Lead	Qs,U	1,2,3,4,6	<0.263	<1.00	<0.263	mg/Kg	1	0.263	1	0.263
Total Selenium	Qr,Qs,U	1,2,3,4,6	<0.422	<2.00	<0.422	mg/Kg	1	0.422	2	0.422
Total Zinc		1,2,3,4,6	**17.1**	**17.1**	<0.0266	mg/Kg	1	0.0266	1	0.0266

Sample: 387696 - TZ Cell 1

Laboratory: Lubbock
Analysis: TPH 418.1 | Analytical Method: E 418.1 | Prep Method: N/A
QC Batch: 119921 | Date Analyzed: 2015-03-11 | Analyzed By: ZY
Prep Batch: 101449 | Sample Preparation: 2015-03-11 | Prepared By: ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**32.6**	**32.6**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387696 - TZ Cell 1

Laboratory: Midland
Analysis: TPH DRO - NEW | Analytical Method: S 8015 D | Prep Method: N/A
QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC
Prep Batch: 101356 | Sample Preparation: 2015-03-05 | Prepared By: SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			124	mg/Kg	1	100	124	70 - 130

Sample: 387696 - TZ Cell 1

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.88	mg/Kg	1	2.00	94	70 - 130

Sample: 387696 - TZ Cell 1

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	120228	Date Analyzed:	2015-03-18	Analyzed By:	LM
Prep Batch:	101482	Sample Preparation:	2015-03-12	Prepared By:	LM

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Uranium	Qs		**31.3**	**31.3**	<0.100	mg/Kg	1	0.100	0.1	0.1

Sample: 387697 - TZ Cell 2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119789	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	5	<0.00533	<0.0200	<0.00533	mg/Kg	1	0.00533	0.02	0.00533

continued ...

sample 387697 continued . . .

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Toluene	U	5	<0.00645	<0.0200	<0.00645	mg/Kg	1	0.00645	0.02	0.00645
Ethylbenzene	U	5	<0.0116	<0.0200	<0.0116	mg/Kg	1	0.0116	0.02	0.0116
Xylene	U	5	<0.00874	<0.0200	<0.00874	mg/Kg	1	0.00874	0.02	0.00874

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.78	mg/Kg	1	2.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)			2.08	mg/Kg	1	2.00	104	70 - 130

Sample: 387697 - TZ Cell 2

Laboratory:	Lubbock					
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A	
QC Batch:	119885	Date Analyzed:	2015-03-09	Analyzed By:	RL	
Prep Batch:	101413	Sample Preparation:		Prepared By:	RL	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**11.0**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387697 - TZ Cell 2

Laboratory:	Lubbock					
Analysis:	Hg, Total	Analytical Method:	S 7471 B	Prep Method:	N/A	
QC Batch:	119834	Date Analyzed:	2015-03-06	Analyzed By:	TP	
Prep Batch:	101370	Sample Preparation:	2015-03-06	Prepared By:	TP	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury		1,2,3,4,6	**0.0670**	**0.0670**	<0.00325	mg/Kg	1	0.00325	0.025	0.00325

Sample: 387697 - TZ Cell 2

Laboratory:	Lubbock					
Analysis:	Total Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B	
QC Batch:	120228	Date Analyzed:	2015-03-18	Analyzed By:	LM	
Prep Batch:	101482	Sample Preparation:	2015-03-12	Prepared By:	LM	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	1,2,3,4,6	<0.0344	<0.500	<0.0344	mg/Kg	1	0.0344	0.5	0.0344
Total Arsenic	Qr,Qs,U	1,2,3,4,6	<0.432	<2.00	<0.432	mg/Kg	1	0.432	2	0.432
Total Barium	Qs	1,2,3,4,6	**110**	**110**	<0.0501	mg/Kg	1	0.0501	1	0.0501
Total Cadmium	J,Qs	1,2,3,4,6	**0.0768**	<0.500	<0.0320	mg/Kg	1	0.0320	0.5	0.032
Total Chromium		1,2,3,4,6	**6.70**	**6.70**	<0.0512	mg/Kg	1	0.0512	0.5	0.0512
Total Copper		1,2,3,4,6	**1.90**	**1.90**	<0.226	mg/Kg	1	0.226	0.5	0.226
Total Iron	Qs	1,2,3,4,6	**6750**	**6750**	<6.84	mg/Kg	100	6.84	0.5	0.0684
Total Manganese	Qs	1,2,3,4,6	**58.8**	**58.8**	<0.0957	mg/Kg	1	0.0957	2	0.0957
Total Lead	Qs	1,2,3,4,6	**2.40**	**2.40**	<0.263	mg/Kg	1	0.263	1	0.263
Total Selenium	Qr,Qs,U	1,2,3,4,6	<0.422	<2.00	<0.422	mg/Kg	1	0.422	2	0.422
Total Zinc		1,2,3,4,6	**14.5**	**14.5**	<0.0266	mg/Kg	1	0.0266	1	0.0266

Sample: 387697 - TZ Cell 2

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**299**	**299**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387697 - TZ Cell 2

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	5	**7.42**	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr		155	mg/Kg	1	100	155	70 - 130

Sample: 387697 - TZ Cell 2

Laboratory: Midland

Analysis: TPH GRO | Analytical Method: S 8015 D | Prep Method: S 5035
QC Batch: 119791 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | Sample Preparation: 2015-03-04 | Prepared By: AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.77	mg/Kg	1	2.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.82	mg/Kg	1	2.00	91	70 - 130

Sample: 387697 - TZ Cell 2

Laboratory: Lubbock
Analysis: U, Total | Analytical Method: S 6010C | Prep Method: S 3050B
QC Batch: 120228 | Date Analyzed: 2015-03-18 | Analyzed By: LM
Prep Batch: 101482 | Sample Preparation: 2015-03-12 | Prepared By: LM

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Uranium	Qs		**31.2**	**31.2**	<0.100	mg/Kg	1	0.100	0.1	0.1

Sample: 387698 - TZ Cell 3

Laboratory: Midland
Analysis: BTEX | Analytical Method: S 8021B | Prep Method: S 5035
QC Batch: 119789 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | Sample Preparation: 2015-03-04 | Prepared By: AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	5	<0.00533	<0.0200	<0.00533	mg/Kg	1	0.00533	0.02	0.00533
Toluene	U	5	<0.00645	<0.0200	<0.00645	mg/Kg	1	0.00645	0.02	0.00645
Ethylbenzene	U	5	<0.0116	<0.0200	<0.0116	mg/Kg	1	0.0116	0.02	0.0116
Xylene	U	5	<0.00874	<0.0200	<0.00874	mg/Kg	1	0.00874	0.02	0.00874

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.83	mg/Kg	1	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70 - 130

Sample: 387698 - TZ Cell 3

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119885	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101413	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**20.6**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387698 - TZ Cell 3

Laboratory:	Lubbock				
Analysis:	Hg, Total	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	119834	Date Analyzed:	2015-03-06	Analyzed By:	TP
Prep Batch:	101370	Sample Preparation:	2015-03-06	Prepared By:	TP

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury		1,2,3,4,6	**0.0764**	**0.0764**	<0.00325	mg/Kg	1	0.00325	0.025	0.00325

Sample: 387698 - TZ Cell 3

Laboratory:	Lubbock				
Analysis:	Total Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	120228	Date Analyzed:	2015-03-18	Analyzed By:	LM
Prep Batch:	101482	Sample Preparation:	2015-03-12	Prepared By:	LM

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	1,2,3,4,6	<0.0344	<0.500	<0.0344	mg/Kg	1	0.0344	0.5	0.0344
Total Arsenic	Qr,Qs,U	1,2,3,4,6	<0.432	<2.00	<0.432	mg/Kg	1	0.432	2	0.432
Total Barium	Qs	1,2,3,4,6	**74.7**	**74.7**	<0.0501	mg/Kg	1	0.0501	1	0.0501
Total Cadmium	Qs,U	1,2,3,4,6	<0.0320	<0.500	<0.0320	mg/Kg	1	0.0320	0.5	0.032
Total Chromium		1,2,3,4,6	**5.81**	**5.81**	<0.0512	mg/Kg	1	0.0512	0.5	0.0512
Total Copper		1,2,3,4,6	**0.843**	**0.843**	<0.226	mg/Kg	1	0.226	0.5	0.226
Total Iron	Qs	1,2,3,4,6	**6000**	**6000**	<6.84	mg/Kg	100	6.84	0.5	0.0684
Total Manganese	Qs	1,2,3,4,6	**48.4**	**48.4**	<0.0957	mg/Kg	1	0.0957	2	0.0957
Total Lead	Qs	1,2,3,4,6	**1.85**	**1.85**	<0.263	mg/Kg	1	0.263	1	0.263
Total Selenium	J,Qr,Qs	1,2,3,4,6	**0.741**	<2.00	<0.422	mg/Kg	1	0.422	2	0.422
Total Zinc		1,2,3,4,6	**13.3**	**13.3**	<0.0266	mg/Kg	1	0.0266	1	0.0266

Sample: 387698 - TZ Cell 3

Laboratory: Lubbock
Analysis: TPH 418.1 | Analytical Method: E 418.1 | Prep Method: N/A
QC Batch: 119921 | Date Analyzed: 2015-03-11 | Analyzed By: ZY
Prep Batch: 101449 | Sample Preparation: 2015-03-11 | Prepared By: ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**366**	**366**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387698 - TZ Cell 3

Laboratory: Midland
Analysis: TPH DRO - NEW | Analytical Method: S 8015 D | Prep Method: N/A
QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC
Prep Batch: 101356 | Sample Preparation: 2015-03-05 | Prepared By: SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		5	**175**	**175**	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr		157	mg/Kg	1	100	157	70 - 130

Sample: 387698 - TZ Cell 3

Laboratory: Midland
Analysis: TPH GRO | Analytical Method: S 8015 D | Prep Method: S 5035
QC Batch: 119791 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | Sample Preparation: 2015-03-04 | Prepared By: AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.84	mg/Kg	1	2.00	92	70 - 130

Sample: 387698 - TZ Cell 3

Laboratory: Lubbock
Analysis: U, Total | Analytical Method: S 6010C | Prep Method: S 3050B

QC Batch: 120228 | Date Analyzed: 2015-03-18 | Analyzed By: LM
Prep Batch: 101482 | Sample Preparation: 2015-03-12 | Prepared By: LM

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Uranium	Qs		**27.4**	**27.4**	<0.100	mg/Kg	1	0.100	0.1	0.1

Sample: 387699 - TZ Cell 4

Laboratory: Midland
Analysis: BTEX | Analytical Method: S 8021B | Prep Method: S 5035
QC Batch: 119789 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | Sample Preparation: 2015-03-04 | Prepared By: AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	5	<0.00533	<0.0200	<0.00533	mg/Kg	1	0.00533	0.02	0.00533
Toluene	U	5	<0.00645	<0.0200	<0.00645	mg/Kg	1	0.00645	0.02	0.00645
Ethylbenzene	U	5	<0.0116	<0.0200	<0.0116	mg/Kg	1	0.0116	0.02	0.0116
Xylene	U	5	<0.00874	<0.0200	<0.00874	mg/Kg	1	0.00874	0.02	0.00874

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.73	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)			1.98	mg/Kg	1	2.00	99	70 - 130

Sample: 387699 - TZ Cell 4

Laboratory: Lubbock
Analysis: Chloride (IC) | Analytical Method: E 300.0 | Prep Method: N/A
QC Batch: 119885 | Date Analyzed: 2015-03-09 | Analyzed By: RL
Prep Batch: 101413 | Sample Preparation: | Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**10.4**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387699 - TZ Cell 4

Laboratory: Lubbock
Analysis: Hg, Total | Analytical Method: S 7471 B | Prep Method: N/A
QC Batch: 119834 | Date Analyzed: 2015-03-06 | Analyzed By: TP

Prep Batch: 101370 | Sample Preparation: 2015-03-06 | Prepared By: TP

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury		1,2,3,4,6	**0.0323**	**0.0323**	<0.00325	mg/Kg	1	0.00325	0.025	0.00325

Sample: 387699 - TZ Cell 4

Laboratory: Lubbock
Analysis: Total Metals | Analytical Method: S 6010C | Prep Method: S 3050B
QC Batch: 120228 | Date Analyzed: 2015-03-18 | Analyzed By: LM
Prep Batch: 101482 | Sample Preparation: 2015-03-12 | Prepared By: LM

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	1,2,3,4,6	<0.0344	<0.500	<0.0344	mg/Kg	1	0.0344	0.5	0.0344
Total Arsenic	Qr,Qs,U	1,2,3,4,6	<0.432	<2.00	<0.432	mg/Kg	1	0.432	2	0.432
Total Barium	Qs	1,2,3,4,6	**120**	**120**	<0.0501	mg/Kg	1	0.0501	1	0.0501
Total Cadmium	J,Qs	1,2,3,4,6	**0.131**	<0.500	<0.0320	mg/Kg	1	0.0320	0.5	0.032
Total Chromium		1,2,3,4,6	**7.31**	**7.31**	<0.0512	mg/Kg	1	0.0512	0.5	0.0512
Total Copper		1,2,3,4,6	**1.38**	**1.38**	<0.226	mg/Kg	1	0.226	0.5	0.226
Total Iron	Qs	1,2,3,4,6	**7360**	**7360**	<6.84	mg/Kg	100	6.84	0.5	0.0684
Total Manganese	Qs	1,2,3,4,6	**67.4**	**67.4**	<0.0957	mg/Kg	1	0.0957	2	0.0957
Total Lead	Qs	1,2,3,4,6	**3.33**	**3.33**	<0.263	mg/Kg	1	0.263	1	0.263
Total Selenium	Qr,Qs,U	1,2,3,4,6	<0.422	<2.00	<0.422	mg/Kg	1	0.422	2	0.422
Total Zinc		1,2,3,4,6	**17.2**	**17.2**	<0.0266	mg/Kg	1	0.0266	1	0.0266

Sample: 387699 - TZ Cell 4

Laboratory: Lubbock
Analysis: TPH 418.1 | Analytical Method: E 418.1 | Prep Method: N/A
QC Batch: 119921 | Date Analyzed: 2015-03-11 | Analyzed By: ZY
Prep Batch: 101449 | Sample Preparation: 2015-03-11 | Prepared By: ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**5640**	**5640**	<22.6	mg/Kg	5	22.6	10	4.53

Sample: 387699 - TZ Cell 4

Laboratory: Midland
Analysis: TPH DRO - NEW | Analytical Method: S 8015 D | Prep Method: N/A
QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC
Prep Batch: 101356 | Sample Preparation: 2015-03-05 | Prepared By: SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		5	**902**	**902**	<37.0	mg/Kg	5	37.0	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	J,Qsr		224	mg/Kg	5	100	224	70 - 130

Sample: 387699 - TZ Cell 4

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.68	mg/Kg	1	2.00	84	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.72	mg/Kg	1	2.00	86	70 - 130

Sample: 387699 - TZ Cell 4

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	120228	Date Analyzed:	2015-03-18	Analyzed By:	LM
Prep Batch:	101482	Sample Preparation:	2015-03-12	Prepared By:	LM

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Uranium	Qs		**33.5**	**33.5**	<0.100	mg/Kg	1	0.100	0.1	0.1

Sample: 387700 - TZ Cell 5

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119885	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101413	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**9.00**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387700 - TZ Cell 5

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			116	mg/Kg	1	100	116	70 - 130

Sample: 387700 - TZ Cell 5

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.95	mg/Kg	1	2.00	98	70 - 130

Sample: 387701 - TZ Cell 6

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	120011	Date Analyzed:	2015-03-16	Analyzed By:	RL
Prep Batch:	101530	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb,Qr,Qs	3,4,6	**15.6**	<25.0	6.99	mg/Kg	1	3.97	25	3.97

Sample: 387701 - TZ Cell 6

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			124	mg/Kg	1	100	124	70 - 130

Sample: 387701 - TZ Cell 6

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.71	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.73	mg/Kg	1	2.00	86	70 - 130

Sample: 387702 - TZ Cell 7

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119885	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101413	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**8.62**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387702 - TZ Cell 7

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			113	mg/Kg	1	100	113	70 - 130

Sample: 387702 - TZ Cell 7

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.78	mg/Kg	1	2.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.87	mg/Kg	1	2.00	94	70 - 130

Sample: 387703 - TZ Cell 8

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119885	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101413	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**11.0**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387703 - TZ Cell 8

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr		134	mg/Kg	1	100	134	70 - 130

Sample: 387703 - TZ Cell 8

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.86	mg/Kg	1	2.00	93	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.92	mg/Kg	1	2.00	96	70 - 130

Sample: 387704 - TZ Cell 9

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119885	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101413	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb	3,4,6	**10.2**	<25.0	9.26	mg/Kg	1	3.97	25	3.97

Sample: 387704 - TZ Cell 9

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			117	mg/Kg	1	100	117	70 - 130

Sample: 387704 - TZ Cell 9

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	Sample Preparation:	2015-03-04	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.89	mg/Kg	1	2.00	94	70 - 130

Sample: 387705 - TZ Cell 10

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119886	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101414	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb,Qr,Qs	3,4,6	**14.7**	<25.0	7.92	mg/Kg	1	3.97	25	3.97

Sample: 387705 - TZ Cell 10

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			123	mg/Kg	1	100	123	70 - 130

Sample: 387705 - TZ Cell 10

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119849	Date Analyzed:	2015-03-09	Analyzed By:	AK
Prep Batch:	101336	Sample Preparation:	2015-03-05	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	Qs,U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.79	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.85	mg/Kg	1	2.00	92	70 - 130

Sample: 387706 - TZ Cell 11

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	120011	Date Analyzed:	2015-03-16	Analyzed By:	RL
Prep Batch:	101530	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb,Qr,Qs	3,4,6	**22.1**	<25.0	6.99	mg/Kg	1	3.97	25	3.97

Sample: 387706 - TZ Cell 11

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			121	mg/Kg	1	100	121	70 - 130

Sample: 387706 - TZ Cell 11

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119849	Date Analyzed:	2015-03-09	Analyzed By:	AK
Prep Batch:	101336	Sample Preparation:	2015-03-05	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	Qs,U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.69	mg/Kg	1	2.00	84	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.79	mg/Kg	1	2.00	90	70 - 130

Sample: 387707 - TZ Cell 12

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	120011	Date Analyzed:	2015-03-16	Analyzed By:	RL
Prep Batch:	101530	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Jb,Qr,Qs	3,4,6	**12.5**	<25.0	6.99	mg/Kg	1	3.97	25	3.97

Sample: 387707 - TZ Cell 12

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			137	mg/Kg	1	100	137	70 - 130

Sample: 387707 - TZ Cell 12

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119849	Date Analyzed:	2015-03-09	Analyzed By:	AK
Prep Batch:	101336	Sample Preparation:	2015-03-05	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	Qs,U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.74	mg/Kg	1	2.00	87	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.82	mg/Kg	1	2.00	91	70 - 130

Sample: 387708 - TZ Cell 13

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119886	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101414	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	Qr,Qs	3,4,6	**424**	**424**	39.6	mg/Kg	5	19.8	25	3.97

Sample: 387708 - TZ Cell 13

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	U	5	<7.41	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			111	mg/Kg	1	100	111	70 - 130

Sample: 387708 - TZ Cell 13

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119849	Date Analyzed:	2015-03-09	Analyzed By:	AK
Prep Batch:	101336	Sample Preparation:	2015-03-05	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	Qs,U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.73	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.84	mg/Kg	1	2.00	92	70 - 130

Sample: 387709 - TZ Cell 14

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	119886	Date Analyzed:	2015-03-09	Analyzed By:	RL
Prep Batch:	101414	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	B,Qr,Qs	3,4,6	**37.5**	**37.5**	7.92	mg/Kg	1	3.97	25	3.97

Sample: 387709 - TZ Cell 14

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		5	**116**	**116**	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr		146	mg/Kg	1	100	146	70 - 130

Sample: 387709 - TZ Cell 14

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119849	Date Analyzed:	2015-03-09	Analyzed By:	AK
Prep Batch:	101336	Sample Preparation:	2015-03-05	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	Qs,U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.72	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.79	mg/Kg	1	2.00	90	70 - 130

Sample: 387710 - TZ Cell 15

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	120011	Date Analyzed:	2015-03-16	Analyzed By:	RL
Prep Batch:	101530	Sample Preparation:		Prepared By:	RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride	B,Qr,Qs	3,4,6	**54.4**	**54.4**	6.99	mg/Kg	1	3.97	25	3.97

Sample: 387710 - TZ Cell 15

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	119868	Date Analyzed:	2015-03-09	Analyzed By:	SC
Prep Batch:	101356	Sample Preparation:	2015-03-05	Prepared By:	SC

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO	J	5	**22.0**	<50.0	<7.41	mg/Kg	1	7.41	50	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			123	mg/Kg	1	100	123	70 - 130

Sample: 387710 - TZ Cell 15

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	119849	Date Analyzed:	2015-03-09	Analyzed By:	AK
Prep Batch:	101336	Sample Preparation:	2015-03-05	Prepared By:	AK

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO	Qs,U	5	<2.32	<4.00	<2.32	mg/Kg	1	2.32	4	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	J		1.80	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)	J		1.89	mg/Kg	1	2.00	94	70 - 130

Sample: 387711 - VZ Cell 1

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	Jb	1,2,3,4,6	**0.00450**	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.81	mg/Kg	1	2.00	90	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.77	mg/Kg	1	2.00	88	75 - 120

Sample: 387711 - VZ Cell 1

Laboratory:	Lubbock					
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A	
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY	
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**89.8**	**89.8**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387712 - VZ Cell 2

Laboratory:	Lubbock					
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035	
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS	
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.77	mg/Kg	1	2.00	88	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.79	mg/Kg	1	2.00	90	75 - 120

Sample: 387712 - VZ Cell 2

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**13.5**	**13.5**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387713 - VZ Cell 3

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.78	mg/Kg	1	2.00	89	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.70	mg/Kg	1	2.00	85	75 - 120

Sample: 387713 - VZ Cell 3

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs,U		<4.53	<10.0	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387714 - VZ Cell 4

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.89	mg/Kg	1	2.00	94	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.90	mg/Kg	1	2.00	95	75 - 120

Sample: 387714 - VZ Cell 4

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs,U		<4.53	<10.0	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387715 - VZ Cell 5

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.68	mg/Kg	1	2.00	84	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.70	mg/Kg	1	2.00	85	75 - 120

Sample: 387715 - VZ Cell 5

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs,U		<4.53	<10.0	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387716 - VZ Cell 6

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.70	mg/Kg	1	2.00	85	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.71	mg/Kg	1	2.00	86	75 - 120

Sample: 387716 - VZ Cell 6

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs,U		<4.53	<10.0	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387717 - VZ Cell 7

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.87	mg/Kg	1	2.00	94	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.89	mg/Kg	1	2.00	94	75 - 120

Sample: 387717 - VZ Cell 7

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**23.0**	**23.0**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387718 - VZ Cell 8

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.76	mg/Kg	1	2.00	88	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.69	mg/Kg	1	2.00	84	75 - 120

Sample: 387718 - VZ Cell 8

Laboratory:	Lubbock					
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A	
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY	
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**13.5**	**13.5**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387719 - VZ Cell 9

Laboratory:	Lubbock					
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035	
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS	
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS	

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.66	mg/Kg	1	2.00	83	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.70	mg/Kg	1	2.00	85	75 - 120

Sample: 387719 - VZ Cell 9

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs,U		<4.53	<10.0	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387720 - VZ Cell 10

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.64	mg/Kg	1	2.00	82	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.55	mg/Kg	1	2.00	78	75 - 120

Sample: 387720 - VZ Cell 10

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**299**	**299**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387721 - VZ Cell 11

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.75	mg/Kg	1	2.00	88	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.76	mg/Kg	1	2.00	88	75 - 120

Sample: 387721 - VZ Cell 11

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**13.5**	**13.5**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387722 - VZ Cell 12

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.78	mg/Kg	1	2.00	89	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.71	mg/Kg	1	2.00	86	75 - 120

Sample: 387722 - VZ Cell 12

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs,U		<4.53	<10.0	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387723 - VZ Cell 13

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.80	mg/Kg	1	2.00	90	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.83	mg/Kg	1	2.00	92	75 - 120

Sample: 387723 - VZ Cell 13

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs,U		<4.53	<10.0	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387724 - VZ Cell 14

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.85	mg/Kg	1	2.00	92	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.83	mg/Kg	1	2.00	92	75 - 120

Sample: 387724 - VZ Cell 14

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**156**	**156**	<4.53	mg/Kg	1	4.53	10	4.53

Sample: 387725 - VZ Cell 15

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	119748	Date Analyzed:	2015-03-03	Analyzed By:	JS
Prep Batch:	101294	Sample Preparation:	2015-03-03	Prepared By:	JS

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Benzene	U	1,2,3,4,6	<0.00347	<0.0200	<0.00347	mg/Kg	1	0.00347	0.02	0.00347
Toluene	U	1,2,3,4,6	<0.00355	<0.0200	<0.00355	mg/Kg	1	0.00355	0.02	0.00355
Ethylbenzene	U	1,2,3,4,6	<0.00366	<0.0200	<0.00366	mg/Kg	1	0.00366	0.02	0.00366
Xylene	U	1,2,3,4,6	<0.00349	<0.0200	0.00660	mg/Kg	1	0.00349	0.02	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.86	mg/Kg	1	2.00	93	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.79	mg/Kg	1	2.00	90	75 - 120

Sample: 387725 - VZ Cell 15

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	119921	Date Analyzed:	2015-03-11	Analyzed By:	ZY
Prep Batch:	101449	Sample Preparation:	2015-03-11	Prepared By:	ZY

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC	Qs		**118**	**118**	<4.53	mg/Kg	1	4.53	10	4.53

Method Blanks

Method Blank (1)

QC Batch: 119748 | Date Analyzed: 2015-03-03 | Analyzed By: JS
Prep Batch: 101294 | QC Preparation: 2015-03-03 | Prepared By: JS

Parameter	F	C	Result	Units	Reporting Limits
Benzene		1,2,3,4,6	<0.00347	mg/Kg	0.00347
Toluene		1,2,3,4,6	<0.00355	mg/Kg	0.00355
Ethylbenzene		1,2,3,4,6	<0.00366	mg/Kg	0.00366
Xylene		1,2,3,4,6	0.00660	mg/Kg	0.00349

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		6	1.85	mg/Kg	1	2.00	92	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.81	mg/Kg	1	2.00	90	75 - 120

Method Blank (1)

QC Batch: 119789 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | QC Preparation: 2015-03-04 | Prepared By: AK

Parameter	F	C	Result	Units	Reporting Limits
Benzene		5	<0.00533	mg/Kg	0.00533
Toluene		5	<0.00645	mg/Kg	0.00645
Ethylbenzene		5	<0.0116	mg/Kg	0.0116
Xylene		5	<0.00874	mg/Kg	0.00874

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)			2.01	mg/Kg	1	2.00	100	70 - 130

Method Blank (1)

QC Batch: 119791 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | QC Preparation: 2015-03-04 | Prepared By: AK

Parameter	F	C	Result	Units	Reporting Limits
GRO		5	<2.32	mg/Kg	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	70 - 130

Method Blank (1)

QC Batch: 119834 | Date Analyzed: 2015-03-06 | Analyzed By: TP
Prep Batch: 101370 | QC Preparation: 2015-03-05 | Prepared By: TP

Parameter	F	C	Result	Units	Reporting Limits
Total Mercury		1,2,3,4,6	<0.00325	mg/Kg	0.00325

Method Blank (1)

QC Batch: 119849 | Date Analyzed: 2015-03-09 | Analyzed By: AK
Prep Batch: 101336 | QC Preparation: 2015-03-05 | Prepared By: AK

Parameter	F	C	Result	Units	Reporting Limits
GRO		5	<2.32	mg/Kg	2.32

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	70 - 130

Method Blank (1)

QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC
Prep Batch: 101356 | QC Preparation: 2015-03-05 | Prepared By: SC

Parameter	F	C	Result	Units	Reporting Limits
DRO		5	<7.41	mg/Kg	7.41

Surrogate	F	C	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			109	mg/Kg	1	100	109	70 - 130

Method Blank (1)

QC Batch: 119885 | Date Analyzed: 2015-03-09 | Analyzed By: RL
Prep Batch: 101413 | QC Preparation: 2015-03-05 | Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		3,4,6	9.26	mg/Kg	3.97

Method Blank (1)

QC Batch: 119886 | Date Analyzed: 2015-03-09 | Analyzed By: RL
Prep Batch: 101414 | QC Preparation: 2015-03-05 | Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		3,4,6	7.92	mg/Kg	3.97

Method Blank (1)

QC Batch: 119921 | Date Analyzed: 2015-03-11 | Analyzed By: ZY
Prep Batch: 101449 | QC Preparation: 2015-03-11 | Prepared By: ZY

Parameter	F	C	Result	Units	Reporting Limits
TRPHC			<4.53	mg/Kg	4.53

Method Blank (1)

QC Batch: 120011 | Date Analyzed: 2015-03-16 | Analyzed By: RL
Prep Batch: 101530 | QC Preparation: 2015-03-13 | Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		3,4,6	6.99	mg/Kg	3.97

Method Blank (1)

QC Batch: 120228 Date Analyzed: 2015-03-18 Analyzed By: LM
Prep Batch: 101482 QC Preparation: 2015-03-12 Prepared By: PM

Parameter	F	C	Result	Units	Reporting Limits
Total Uranium			<0.100	mg/Kg	0.1

Method Blank (1)

QC Batch: 120228 Date Analyzed: 2015-03-18 Analyzed By: LM
Prep Batch: 101482 QC Preparation: 2015-03-12 Prepared By: PM

Parameter	F	C	Result	Units	Reporting Limits
Total Silver		1,2,3,4,6	<0.0344	mg/Kg	0.0344
Total Arsenic		1,2,3,4,6	<0.432	mg/Kg	0.432
Total Barium		1,2,3,4,6	<0.0501	mg/Kg	0.0501
Total Cadmium		1,2,3,4,6	<0.0320	mg/Kg	0.032
Total Chromium		1,2,3,4,6	<0.0512	mg/Kg	0.0512
Total Copper		1,2,3,4,6	<0.226	mg/Kg	0.226
Total Iron		1,2,3,4,6	<0.0684	mg/Kg	0.0684
Total Manganese		1,2,3,4,6	<0.0957	mg/Kg	0.0957
Total Lead		1,2,3,4,6	<0.263	mg/Kg	0.263
Total Selenium		1,2,3,4,6	<0.422	mg/Kg	0.422
Total Zinc		1,2,3,4,6	<0.0266	mg/Kg	0.0266

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 119748 | Date Analyzed: 2015-03-03 | Analyzed By: JS
Prep Batch: 101294 | QC Preparation: 2015-03-03 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,6	1.75	mg/Kg	1	2.00	<0.00347	88	74.8 - 120
Toluene		1,2,3,4,6	1.78	mg/Kg	1	2.00	<0.00355	89	77.3 - 120
Ethylbenzene		1,2,3,4,6	1.85	mg/Kg	1	2.00	<0.00366	92	76.2 - 120
Xylene		1,2,3,4,6	5.56	mg/Kg	1	6.00	0.0066	93	76.2 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,6	1.74	mg/Kg	1	2.00	<0.00347	87	74.8 - 120	1	20
Toluene		1,2,3,4,6	1.81	mg/Kg	1	2.00	<0.00355	90	77.3 - 120	2	20
Ethylbenzene		1,2,3,4,6	1.90	mg/Kg	1	2.00	<0.00366	95	76.2 - 120	3	20
Xylene		1,2,3,4,6	5.66	mg/Kg	1	6.00	0.0066	94	76.2 - 121	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)		6	1.88	1.86	mg/Kg	1	2.00	94	93	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.70	1.78	mg/Kg	1	2.00	85	89	75 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 119789 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | QC Preparation: 2015-03-04 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		5	2.05	mg/Kg	1	2.00	<0.00533	102	70 - 130
Toluene		5	1.99	mg/Kg	1	2.00	<0.00645	100	70 - 130
Ethylbenzene		5	1.99	mg/Kg	1	2.00	<0.0116	100	70 - 130
Xylene		5	6.10	mg/Kg	1	6.00	<0.00874	102	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		5	2.06	mg/Kg	1	2.00	<0.00533	103	70 - 130	0	20
Toluene		5	2.02	mg/Kg	1	2.00	<0.00645	101	70 - 130	2	20
Ethylbenzene		5	2.02	mg/Kg	1	2.00	<0.0116	101	70 - 130	2	20
Xylene		5	6.15	mg/Kg	1	6.00	<0.00874	102	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			1.75	1.73	mg/Kg	1	2.00	88	86	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	2.03	mg/Kg	1	2.00	103	102	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 119791 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | QC Preparation: 2015-03-04 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	21.3	mg/Kg	1	20.0	<2.32	106	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		5	19.4	mg/Kg	1	20.0	<2.32	97	70 - 130	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			1.93	1.90	mg/Kg	1	2.00	96	95	70 - 130
4-Bromofluorobenzene (4-BFB)			1.92	1.90	mg/Kg	1	2.00	96	95	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 119834 | Date Analyzed: 2015-03-06 | Analyzed By: TP
Prep Batch: 101370 | QC Preparation: 2015-03-05 | Prepared By: TP

continued ...

control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1,2,3,4,6	0.259	mg/Kg	1	0.250	<0.00325	104	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,6	0.235	mg/Kg	1	0.250	<0.00325	94	80 - 120	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 119849 | Date Analyzed: 2015-03-09 | Analyzed By: AK
Prep Batch: 101336 | QC Preparation: 2015-03-05 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	20.6	mg/Kg	1	20.0	<2.32	103	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		5	21.1	mg/Kg	1	20.0	<2.32	106	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			1.84	1.92	mg/Kg	1	2.00	92	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.87	1.87	mg/Kg	1	2.00	94	94	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC
Prep Batch: 101356 | QC Preparation: 2015-03-05 | Prepared By: SC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		5	289	mg/Kg	1	250	<7.41	116	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		5	244	mg/Kg	1	250	<7.41	98	70 - 130	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane			122	117	mg/Kg	1	100	122	117	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 119885 | Date Analyzed: 2015-03-09 | Analyzed By: RL
Prep Batch: 101413 | QC Preparation: 2015-03-05 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	234	mg/Kg	1	250	9.26	90	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	234	mg/Kg	1	250	9.26	90	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 119886 | Date Analyzed: 2015-03-09 | Analyzed By: RL
Prep Batch: 101414 | QC Preparation: 2015-03-05 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	235	mg/Kg	1	250	7.92	91	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	234	mg/Kg	1	250	7.92	90	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 119921 | Date Analyzed: 2015-03-11 | Analyzed By: ZY
Prep Batch: 101449 | QC Preparation: 2015-03-11 | Prepared By: ZY

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			54.2	mg/Kg	1	50.0	<4.53	108	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			50.4	mg/Kg	1	50.0	<4.53	101	80 - 120	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 120011 | Date Analyzed: 2015-03-16 | Analyzed By: RL
Prep Batch: 101530 | QC Preparation: 2015-03-13 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	235	mg/Kg	1	250	6.99	91	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	232	mg/Kg	1	250	6.99	90	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 120228 | Date Analyzed: 2015-03-18 | Analyzed By: LM
Prep Batch: 101482 | QC Preparation: 2015-03-12 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Uranium			52.0	mg/Kg	1	50.0	<0.100	104	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Uranium			52.1	mg/Kg	1	50.0	<0.100	104	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 120228 | Date Analyzed: 2015-03-18 | Analyzed By: LM
Prep Batch: 101482 | QC Preparation: 2015-03-12 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver		1,2,3,4,6	12.4	mg/Kg	1	12.5	<0.0344	99	85 - 115
Total Arsenic		1,2,3,4,6	50.0	mg/Kg	1	50.0	<0.432	100	85 - 115
Total Barium		1,2,3,4,6	106	mg/Kg	1	100	<0.0501	106	85 - 115
Total Cadmium		1,2,3,4,6	25.5	mg/Kg	1	25.0	<0.0320	102	85 - 115
Total Chromium		1,2,3,4,6	10.0	mg/Kg	1	10.0	<0.0512	100	85 - 115
Total Copper		1,2,3,4,6	12.4	mg/Kg	1	12.5	<0.226	99	85 - 115
Total Iron		1,2,3,4,6	53.4	mg/Kg	1	50.0	<0.0684	107	85 - 115
Total Manganese		1,2,3,4,6	27.3	mg/Kg	1	25.0	<0.0957	109	85 - 115
Total Lead		1,2,3,4,6	54.7	mg/Kg	1	50.0	<0.263	109	85 - 115
Total Selenium		1,2,3,4,6	47.9	mg/Kg	1	50.0	<0.422	96	85 - 115
Total Zinc		1,2,3,4,6	24.6	mg/Kg	1	25.0	<0.0266	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver		1,2,3,4,6	12.3	mg/Kg	1	12.5	<0.0344	98	85 - 115	1	20
Total Arsenic		1,2,3,4,6	50.0	mg/Kg	1	50.0	<0.432	100	85 - 115	0	20
Total Barium		1,2,3,4,6	107	mg/Kg	1	100	<0.0501	107	85 - 115	1	20
Total Cadmium		1,2,3,4,6	25.4	mg/Kg	1	25.0	<0.0320	102	85 - 115	0	20
Total Chromium		1,2,3,4,6	10.1	mg/Kg	1	10.0	<0.0512	101	85 - 115	1	20
Total Copper		1,2,3,4,6	12.5	mg/Kg	1	12.5	<0.226	100	85 - 115	1	20
Total Iron		1,2,3,4,6	54.0	mg/Kg	1	50.0	<0.0684	108	85 - 115	1	20
Total Manganese		1,2,3,4,6	27.6	mg/Kg	1	25.0	<0.0957	110	85 - 115	1	20
Total Lead		1,2,3,4,6	54.4	mg/Kg	1	50.0	<0.263	109	85 - 115	0	20
Total Selenium		1,2,3,4,6	47.2	mg/Kg	1	50.0	<0.422	94	85 - 115	2	20
Total Zinc		1,2,3,4,6	24.5	mg/Kg	1	25.0	<0.0266	98	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 387711

QC Batch: 119748 | Date Analyzed: 2015-03-03 | Analyzed By: JS
Prep Batch: 101294 | QC Preparation: 2015-03-03 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,6	1.54	mg/Kg	1	2.00	<0.00347	77	71.4 - 132
Toluene		1,2,3,4,6	1.57	mg/Kg	1	2.00	<0.00355	78	77.8 - 132
Ethylbenzene		1,2,3,4,6	1.64	mg/Kg	1	2.00	<0.00366	82	80 - 136
Xylene		1,2,3,4,6	4.91	mg/Kg	1	6.00	0.0045	82	80 - 138

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,6	1.63	mg/Kg	1	2.00	<0.00347	82	71.4 - 132	6	20
Toluene		1,2,3,4,6	1.66	mg/Kg	1	2.00	<0.00355	83	77.8 - 132	6	20
Ethylbenzene		1,2,3,4,6	1.73	mg/Kg	1	2.00	<0.00366	86	80 - 136	5	20
Xylene		1,2,3,4,6	5.17	mg/Kg	1	6.00	0.0045	86	80 - 138	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)		6	1.63	1.70	mg/Kg	1	2	82	85	76.6 - 120
4-Bromofluorobenzene (4-BFB)		6	1.56	1.62	mg/Kg	1	2	78	81	75 - 120

Matrix Spike (xMS-1) Spiked Sample: 387700

QC Batch: 119789 | Date Analyzed: 2015-03-05 | Analyzed By: AK
Prep Batch: 101317 | QC Preparation: 2015-03-04 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		5	1.62	mg/Kg	1	2.00	<0.00533	81	70 - 130
Toluene		5	1.65	mg/Kg	1	2.00	<0.00645	82	70 - 130
Ethylbenzene		5	1.79	mg/Kg	1	2.00	<0.0116	90	70 - 130
Xylene		5	5.47	mg/Kg	1	6.00	<0.00874	91	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

matrix spikes continued . . .

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		5	1.79	mg/Kg	1	2.00	<0.00533	90	70 - 130	10	20
Toluene		5	1.83	mg/Kg	1	2.00	<0.00645	92	70 - 130	10	20
Ethylbenzene		5	1.95	mg/Kg	1	2.00	<0.0116	98	70 - 130	9	20
Xylene		5	5.97	mg/Kg	1	6.00	<0.00874	100	70 - 130	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			1.68	1.76	mg/Kg	1	2	84	88	70 - 130
4-Bromofluorobenzene (4-BFB)			2.07	2.13	mg/Kg	1	2	104	106	70 - 130

Matrix Spike (MS-1) Spiked Sample: 387700

QC Batch:	119791	Date Analyzed:	2015-03-05	Analyzed By:	AK
Prep Batch:	101317	QC Preparation:	2015-03-04	Prepared By:	AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	15.6	mg/Kg	1	20.0	<2.32	78	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		5	16.6	mg/Kg	1	20.0	<2.32	83	70 - 130	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			1.68	1.76	mg/Kg	1	2	84	88	70 - 130
4-Bromofluorobenzene (4-BFB)			1.89	1.95	mg/Kg	1	2	94	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 387698

QC Batch:	119834	Date Analyzed:	2015-03-06	Analyzed By:	TP
Prep Batch:	101370	QC Preparation:	2015-03-05	Prepared By:	TP

continued . . .

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1,2,3,4,6	0.311	mg/Kg	1	0.250	0.0764	94	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,6	0.322	mg/Kg	1	0.250	0.0764	98	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 387705

QC Batch: 119849 | Date Analyzed: 2015-03-09 | Analyzed By: AK
Prep Batch: 101336 | QC Preparation: 2015-03-05 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	15.2	mg/Kg	1	20.0	<2.32	76	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qs	5	13.4	mg/Kg	1	20.0	<2.32	67	70 - 130	13	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			1.81	1.83	mg/Kg	1	2	90	92	70 - 130
4-Bromofluorobenzene (4-BFB)			1.94	1.96	mg/Kg	1	2	97	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 387700

QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC
Prep Batch: 101356 | QC Preparation: 2015-03-05 | Prepared By: SC

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		5	233	mg/Kg	1	250	<7.41	93	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		5	223	mg/Kg	1	250	<7.41	89	70 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	F	C	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane			121	122	mg/Kg	1	100	121	122	70 - 130

Matrix Spike (MS-1) Spiked Sample: 387704

QC Batch: 119885 | Date Analyzed: 2015-03-09 | Analyzed By: RL
Prep Batch: 101413 | QC Preparation: 2015-03-05 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	237	mg/Kg	1	250	10.2	91	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	243	mg/Kg	1	250	10.2	93	80 - 120	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (xMS-1) Spiked Sample: 387710

QC Batch: 119886 | Date Analyzed: 2015-03-09 | Analyzed By: RL
Prep Batch: 101414 | QC Preparation: 2015-03-05 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	Qs	3,4,6	1600	mg/Kg	50	250	367	493	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	Qr	3,4,6	571	mg/Kg	50	250	367	82	80 - 120	95	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 387725

QC Batch: 119921 | Date Analyzed: 2015-03-11 | Analyzed By: ZY
Prep Batch: 101449 | QC Preparation: 2015-03-11 | Prepared By: ZY

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	Qs		195	mg/Kg	1	50.0	118.3	153	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			176	mg/Kg	1	50.0	118.3	115	80 - 120	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 387710

QC Batch: 120011 | Date Analyzed: 2015-03-16 | Analyzed By: RL
Prep Batch: 101530 | QC Preparation: 2015-03-13 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	Qs	3,4,6	253	mg/Kg	1	250	54.4	79	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	255	mg/Kg	1	250	54.4	80	80 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 119748 | Date Analyzed: 2015-03-03 | Analyzed By: JS

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,6	mg/kg	0.100	0.0881	88	80 - 120	2015-03-03
Toluene		1,2,3,4,6	mg/kg	0.100	0.0907	91	80 - 120	2015-03-03
Ethylbenzene		1,2,3,4,6	mg/kg	0.100	0.0920	92	80 - 120	2015-03-03
Xylene		1,2,3,4,6	mg/kg	0.300	0.274	91	80 - 120	2015-03-03

Standard (CCV-2)

QC Batch: 119748 | Date Analyzed: 2015-03-03 | Analyzed By: JS

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,6	mg/kg	0.100	0.0917	92	80 - 120	2015-03-03
Toluene		1,2,3,4,6	mg/kg	0.100	0.0919	92	80 - 120	2015-03-03
Ethylbenzene		1,2,3,4,6	mg/kg	0.100	0.0937	94	80 - 120	2015-03-03
Xylene		1,2,3,4,6	mg/kg	0.300	0.280	93	80 - 120	2015-03-03

Standard (CCV-3)

QC Batch: 119748 | Date Analyzed: 2015-03-03 | Analyzed By: JS

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,6	mg/kg	0.100	0.0887	89	80 - 120	2015-03-03
Toluene		1,2,3,4,6	mg/kg	0.100	0.0898	90	80 - 120	2015-03-03
Ethylbenzene		1,2,3,4,6	mg/kg	0.100	0.0927	93	80 - 120	2015-03-03
Xylene		1,2,3,4,6	mg/kg	0.300	0.278	93	80 - 120	2015-03-03

Standard (CCV-1)

QC Batch: 119789 | Date Analyzed: 2015-03-05 | Analyzed By: AK

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		5	mg/kg	0.100	0.102	102	80 - 120	2015-03-05
Toluene		5	mg/kg	0.100	0.0998	100	80 - 120	2015-03-05
Ethylbenzene		5	mg/kg	0.100	0.101	101	80 - 120	2015-03-05
Xylene		5	mg/kg	0.300	0.304	101	80 - 120	2015-03-05

Standard (CCV-2)

QC Batch: 119789 Date Analyzed: 2015-03-05 Analyzed By: AK

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		5	mg/kg	0.100	0.0983	98	80 - 120	2015-03-05
Toluene		5	mg/kg	0.100	0.0952	95	80 - 120	2015-03-05
Ethylbenzene		5	mg/kg	0.100	0.0961	96	80 - 120	2015-03-05
Xylene		5	mg/kg	0.300	0.288	96	80 - 120	2015-03-05

Standard (CCV-1)

QC Batch: 119791 Date Analyzed: 2015-03-05 Analyzed By: AK

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		5	mg/Kg	1.00	1.04	104	80 - 120	2015-03-05

Standard (CCV-2)

QC Batch: 119791 Date Analyzed: 2015-03-05 Analyzed By: AK

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		5	mg/Kg	1.00	1.01	101	80 - 120	2015-03-05

Standard (CCV-3)

QC Batch: 119791 Date Analyzed: 2015-03-05 Analyzed By: AK

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		[5]	mg/Kg	1.00	0.937	94	80 - 120	2015-03-05

Standard (CCV-1)

QC Batch: 119834 Date Analyzed: 2015-03-06 Analyzed By: TP

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		[1,2,3,4,6]	mg/L	0.0100	0.0100	100	90 - 110	2015-03-06

Standard (CCV-2)

QC Batch: 119834 Date Analyzed: 2015-03-06 Analyzed By: TP

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		[1,2,3,4,6]	mg/L	0.0100	0.0102	102	90 - 110	2015-03-06

Standard (CCV-1)

QC Batch: 119849 Date Analyzed: 2015-03-09 Analyzed By: AK

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		[5]	mg/Kg	1.00	1.05	105	80 - 120	2015-03-09

Standard (CCV-2)

QC Batch: 119849 Date Analyzed: 2015-03-09 Analyzed By: AK

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		[5]	mg/Kg	1.00	0.979	98	80 - 120	2015-03-09

Standard (CCV-1)

QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		[5]	mg/Kg	250	250	100	80 - 120	2015-03-09

Standard (CCV-2)

QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		[5]	mg/Kg	250	249	100	80 - 120	2015-03-09

Standard (CCV-3)

QC Batch: 119868 | Date Analyzed: 2015-03-09 | Analyzed By: SC

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		[5]	mg/Kg	250	250	100	80 - 120	2015-03-09

Standard (CCV-1)

QC Batch: 119885 | Date Analyzed: 2015-03-09 | Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		[3,4,6]	mg/Kg	25.0	22.5	90	90 - 110	2015-03-09

Standard (CCV-2)

QC Batch: 119885 | Date Analyzed: 2015-03-09 | Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	23.3	93	90 - 110	2015-03-09

Standard (CCV-1)

QC Batch: 119886 Date Analyzed: 2015-03-09 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	23.3	93	90 - 110	2015-03-09

Standard (CCV-2)

QC Batch: 119886 Date Analyzed: 2015-03-09 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	22.8	91	90 - 110	2015-03-09

Standard (ICV-1)

QC Batch: 119921 Date Analyzed: 2015-03-11 Analyzed By: ZY

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	83.0	67.5	81	80 - 120	2015-03-11

Standard (CCV-1)

QC Batch: 119921 Date Analyzed: 2015-03-11 Analyzed By: ZY

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	54.2	108	80 - 120	2015-03-11

Standard (CCV-1)

QC Batch: 120011 Date Analyzed: 2015-03-16 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	23.1	92	90 - 110	2015-03-16

Standard (CCV-2)

QC Batch: 120011 Date Analyzed: 2015-03-16 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	23.4	94	90 - 110	2015-03-16

Standard (ICV-1)

QC Batch: 120228 Date Analyzed: 2015-03-18 Analyzed By: LM

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Uranium			mg/Kg	1.00	1.03	103	90 - 110	2015-03-18

Standard (ICV-1)

QC Batch: 120228 Date Analyzed: 2015-03-18 Analyzed By: LM

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		1,2,3,4,6	mg/Kg	0.125	0.126	101	90 - 110	2015-03-18
Total Arsenic		1,2,3,4,6	mg/Kg	1.00	0.991	99	90 - 110	2015-03-18
Total Barium		1,2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-03-18
Total Cadmium		1,2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-03-18
Total Chromium		1,2,3,4,6	mg/Kg	1.00	0.988	99	90 - 110	2015-03-18
Total Copper		1,2,3,4,6	mg/Kg	1.00	1.04	104	90 - 110	2015-03-18
Total Iron		1,2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-03-18
Total Manganese		1,2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-03-18
Total Lead		1,2,3,4,6	mg/Kg	1.00	1.06	106	90 - 110	2015-03-18
Total Selenium		1,2,3,4,6	mg/Kg	1.00	1.06	106	90 - 110	2015-03-18

continued ...

standard continued ...

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		1,2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-03-18

Standard (CCV-1)

QC Batch: 120228 Date Analyzed: 2015-03-18 Analyzed By: LM

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Uranium			mg/Kg	1.00	1.04	104	90 - 110	2015-03-18

Standard (CCV-1)

QC Batch: 120228 Date Analyzed: 2015-03-18 Analyzed By: LM

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		1,2,3,4,6	mg/Kg	0.125	0.128	102	90 - 110	2015-03-18
Total Arsenic		1,2,3,4,6	mg/Kg	1.00	1.04	104	90 - 110	2015-03-18
Total Barium		1,2,3,4,6	mg/Kg	1.00	1.04	104	90 - 110	2015-03-18
Total Cadmium		1,2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-03-18
Total Chromium		1,2,3,4,6	mg/Kg	1.00	1.03	103	90 - 110	2015-03-18
Total Copper		1,2,3,4,6	mg/Kg	1.00	1.05	105	90 - 110	2015-03-18
Total Iron		1,2,3,4,6	mg/Kg	1.00	1.04	104	90 - 110	2015-03-18
Total Manganese		1,2,3,4,6	mg/Kg	1.00	1.03	103	90 - 110	2015-03-18
Total Lead		1,2,3,4,6	mg/Kg	1.00	1.08	108	90 - 110	2015-03-18
Total Selenium		1,2,3,4,6	mg/Kg	1.00	1.04	104	90 - 110	2015-03-18
Total Zinc		1,2,3,4,6	mg/Kg	1.00	1.03	103	90 - 110	2015-03-18

Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike Amount	Pass
Ag, Total	S 6010C	soil	PE 8300	Total Silver	0.0500	Pass
As, Total	S 6010C	soil	PE 8300	Total Arsenic	0.500	Pass
Ba, Total	S 6010C	soil	PE 8300	Total Barium	0.500	Pass
BTEX	S 8021B	soil	BTEX-2	Benzene	0.0120	Pass
BTEX	S 8021B	soil	BTEX-2	Toluene	0.0120	Pass
BTEX	S 8021B	soil	BTEX-2	Ethylbenzene	0.0120	Pass
BTEX	S 8021B	soil	BTEX-2	Xylene	0.0120	Pass
BTEX	S 8021B	soil	GC-9	Benzene	0.00960	Pass
BTEX	S 8021B	soil	GC-9	Toluene	0.00960	Pass
BTEX	S 8021B	soil	GC-9	Ethylbenzene	0.00960	Pass
BTEX	S 8021B	soil	GC-9	Xylene	0.00960	Pass
Cd, Total	S 6010C	soil	PE 8300	Total Cadmium	0.0500	Pass
Chloride (IC)	E 300.0	soil	Dionex IC	Chloride	2.50	Pass
Cr, Total	S 6010C	soil	PE 8300	Total Chromium	0.250	Pass
Cu, Total	S 6010C	soil	PE 8300	Total Copper	0.125	Pass
Fe, Total	S 6010C	soil	PE 8300	Total Iron	0.250	Pass
Hg, Total	S 7471 B	soil	Mercury Analyzer	Total Mercury	0.00500	Pass
Mn, Total	S 6010C	soil	PE 8300	Total Manganese	0.250	Pass
Pb, Total	S 6010C	soil	PE 8300	Total Lead	0.500	Pass
Se, Total	S 6010C	soil	PE 8300	Total Selenium	0.500	Pass
TPH 418.1	E 418.1	soil	FT-IR (2)	TRPHC	15.0	Pass
TPH DRO - NEW	S 8015 D	soil	TPH-1	DRO	30.0	Pass
TPH GRO	S 8015 D	soil	BTEX-2	GRO	5.00	Pass
U, Total	S 6010C	soil	PE 8300	Total Uranium	0.00	-
Zn, Total	S 6010C	soil	PE 8300	Total Zinc	0.250	Pass

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	PJLA	L14-93	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-14-10	Lubbock
5	NELAP	T104704392-14-8	Midland
6		2014-018	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

15022633

CHAIN OF CUSTODY RECORD

APEX

Office Location DALLAS

Project Manager Liz Scaggs

Laboratory: Trace Analysis
Address: 6701 Aberdeen Ave
Lubbock, TX 79424
Contact: Liz Givins
Phone: 806-794-1296
PO/SO #: 702011460075.001

Lab use only
Due Date:

Temp. of coolers when received (C°): 6.1

1	2	3	4	5

Page 1 of 3

Sampler's Name: Ryan Reich
Sampler's Signature:

Proj. No.: 702011460075.001
Project Name: Regency Jal, NM Landfarm
No/Type of Containers: 4 oz soil

ANALYSIS REQUESTED

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt	250 ml	Glass Jar	P/O	TPH 8015 (GRO/DRO)	Chloride (300.1)	BTEX (8021B)	TPH (418.1)	Metals * (6010C or 6020A)	Lab Sample ID (Lab Use Only)
S	2/26/15	0910	X		TZ Cell 1								✓	✓	✓	✓	✓	387696
		0945	X		TZ Cell 2								✓	✓	✓	✓	✓	697
		1410	X		TZ Cell 3								✓	✓	✓	✓	✓	698
		1010	X		TZ Cell 4								✓	✓	✓	✓	✓	699
		1030	X		TZ Cell 5								✓	✓				2-26-15 700
		1050	X		TZ Cell 6								✓	✓				701
		1110	X		TZ Cell 7								✓	✓				702
		1140	X		TZ Cell 8								✓	✓				703
		1200	X		TZ Cell 9								✓	✓				704
		1215	X		TZ Cell 10								✓	✓				705

Turn around time: ☒ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	2-26-15	1530	Trace	2/26/15	1530
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
Pls run all analysis to PQL's in Table 7, previously provided.
* As, Ba, Cd, Cr, Cu, Fe, Pb, Hg, Se, Ag, Mg & Zn
* Samples Straight from Field

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

RB 2.1

Apex TITAN, Inc. • 2351 W. Northwest Hwy., Suite 3321 • Dallas, Texas 75220 • Office: 214-350-5469 • Fax 214-350-2914

CHAIN OF CUSTODY RECORD

APEX

Office Location Dallas

Project Manager Liz Scaggs

Laboratory: Trace

Address: Midland

Contact:

Phone:

PO/SO #:

Lab use only
Due Date:

Temp. of coolers when received (C°): 6.1

1	2	3	4	5

Sampler's Name Ryan Reid

Sampler's Signature

Proj. No. 702011460TS.201

Project Name Resency Jal Landfarm

No/Type of Containers 4oz 30:1

ANALYSIS REQUESTED: TPH (8015 GRO/DRO); Chloride (300.1); TPH (418.1); BTEX (8021B)

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH (8015 GRO/DRO)	Chloride (300.1)	TPH (418.1)	BTEX (8021B)	Lab Sample ID (Lab Use Only)
S	2-26-15	1230	X		T2 Cell 11								✓	✓			387706
		1245	X		T2 Cell 12								✓	✓			707
		1305	X		T2 Cell 13								✓	✓			708
		1325	X		T2 Cell 14								✓	✓			709
		1430	X		T2 Cell 15								✓	✓			710
		0930		X	V2 Cell 1										✓	✓	711
		0930		X	V2 Cell 2										✓	✓	712
		1400		X	V2 Cell 3										✓	✓	713
		1000		X	V2 Cell 4										✓	✓	714
↓	↓	1020		X	V2 Cell 5										✓	✓	715

Turn around time ☐ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	2-26-15	1530	DDunlap Trace	2-26-15	1530
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
			DChisecos	3-3-15	0900

NOTES:

See page 1 notes

IR3
2.1

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

CS2529332

CHAIN OF CUSTODY RECORD

APEX

Office Location: Dallas

Project Manager: Liz Scaggs

Laboratory: Trace - Midland

Address:

Contact:

Phone:

PO/SO #:

Sampler's Name: Ryan Reich

Sampler's Signature:

Proj. No.: 702011460750.001

Project Name: Reserve Jal Landfarm

No/Type of Containers: 4 oz Soil

ANALYSIS REQUESTED: TPH (418.1), BTEX (8021B)

Lab use only
Due Date:

Temp. of coolers when received (C°): 6.1

1 | 2 | 3 | 4 | 5

Page 3 of 3

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH (418.1)	BTEX (8021B)	Lab Sample ID (Lab Use Only)
S	2/20/15	1045		X	V2 cell 6								✓	✓	387716
		1100		X	V2 cell 7								✓	✓	717
		1130		X	V2 cell 8								✓	✓	718
		1150		X	V2 cell 9								✓	✓	719
		1210		X	V2 cell 10								✓	✓	720
		1225		X	V2 cell 11								✓	✓	721
		1240		X	V2 cell 12								✓	✓	722
		1255		X	V2 cell 13								✓	✓	723
		1315		X	V2 cell 14								✓	✓	724
		1420		X	V2 cell 15								✓	✓	725

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	2-26-15	1530	D Dunlap Trace	2-26-15	1530
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
			B Cisneros	3-3-15	0900

NOTES:

See page 1 notes

IR3/2.1

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

LS 25229332

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Liz Scaggs
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: June 11, 2015

Work Order: 15052904

Project Name: Regency Jal Landfarm
Project Number: 7020114G075.001

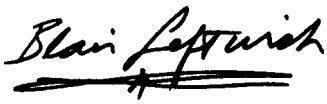
Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
394183	VZ-1	soil	2015-05-28	10:15	2015-05-29
394184	VZ-2	soil	2015-05-28	10:45	2015-05-29
394185	VZ-3	soil	2015-05-28	11:15	2015-05-29
394186	VZ-4	soil	2015-05-28	11:45	2015-05-29
394187	VZ-5	soil	2015-05-28	12:25	2015-05-29
394188	VZ-6	soil	2015-05-28	12:30	2015-05-29
394189	VZ-7	soil	2015-05-28	13:00	2015-05-29
394190	VZ-8	soil	2015-05-28	13:45	2015-05-29
394191	VZ-9	soil	2015-05-28	13:15	2015-05-29
394192	VZ-10	soil	2015-05-27	14:15	2015-05-29
394193	VZ-11	soil	2015-05-27	14:40	2015-05-29
394194	VZ-12	soil	2015-05-28	14:15	2015-05-29
394195	VZ-13	soil	2015-05-28	14:45	2015-05-29
394196	VZ-14	soil	2015-05-28	15:00	2015-05-29
394197	VZ-15	soil	2015-05-27	15:15	2015-05-29

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

This report consists of a total of 34 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
James Taylor, Assistant Director
Brian Pellam, Operations Manager

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Case Narrative

Samples for project Regency Jal Landfarm were received by TraceAnalysis, Inc. on 2015-05-29 and assigned to work order 15052904. Samples for work order 15052904 were received intact at a temperature of 3.2 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	103161	2015-06-01 at 07:26	121945	2015-06-02 at 13:33
BTEX	S 8021B	103178	2015-06-02 at 13:36	121962	2015-06-03 at 11:26
Chloride (IC)	E 300.0	103320	2015-06-08 at 17:00	122128	2015-06-08 at 18:28
Chloride (IC)	E 300.0	103321	2015-06-08 at 17:00	122129	2015-06-08 at 18:28
Chloride (IC)	E 300.0	103343	2015-06-09 at 12:30	122152	2015-06-09 at 14:14
TPH 418.1	E 418.1	103410	2015-06-10 at 14:48	122229	2015-06-10 at 14:51

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 15052904 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 394183 - VZ-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	Sample Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.06	mg/Kg	1	2.00	103	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70 - 130

Sample: 394183 - VZ-1

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B	1,2,4	**32.9**	mg/Kg	1	25.0

Sample: 394183 - VZ-1

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			<10.0	mg/Kg	1	10.0

Sample: 394184 - VZ-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	Sample Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70 - 130

Sample: 394184 - VZ-2

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394184 - VZ-2

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			<10.0	mg/Kg	1	10.0

Sample: 394185 - VZ-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	Sample Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.95	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70 - 130

Sample: 394185 - VZ-3

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394185 - VZ-3

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394186 - VZ-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	Sample Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.95	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70 - 130

Sample: 394186 - VZ-4

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394186 - VZ-4

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394187 - VZ-5

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	Sample Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70 - 130

Sample: 394187 - VZ-5

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394187 - VZ-5

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			**180**	mg/Kg	1	10.0

Sample: 394188 - VZ-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	Sample Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70 - 130

Sample: 394188 - VZ-6

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394188 - VZ-6

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394189 - VZ-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	Sample Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Toluene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	Qr,U	3	<0.0200	mg/Kg	1	0.0200
Xylene	Qr,U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	70 - 130
4-Bromofluorobenzene (4-BFB)			2.05	mg/Kg	1	2.00	102	70 - 130

Sample: 394189 - VZ-7

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B	1,2,4	**39.0**	mg/Kg	1	25.0

Sample: 394189 - VZ-7

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			**23.7**	mg/Kg	1	10.0

Sample: 394190 - VZ-8

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.99	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			2.12	mg/Kg	1	2.00	106	70 - 130

Sample: 394190 - VZ-8

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb,Qs	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394190 - VZ-8

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			**37.0**	mg/Kg	1	10.0

Sample: 394191 - VZ-9

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.97	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			2.13	mg/Kg	1	2.00	106	70 - 130

Sample: 394191 - VZ-9

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394191 - VZ-9

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394192 - VZ-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.93	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70 - 130

Sample: 394192 - VZ-10

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb,Qs	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394192 - VZ-10

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394193 - VZ-11

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.98	mg/Kg	1	2.00	99	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

Sample: 394193 - VZ-11

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394193 - VZ-11

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394194 - VZ-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.95	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			2.01	mg/Kg	1	2.00	100	70 - 130

Sample: 394194 - VZ-12

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B,Qs	1,2,4	**31.6**	mg/Kg	1	25.0

Sample: 394194 - VZ-12

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394195 - VZ-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70 - 130

Sample: 394195 - VZ-13

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394195 - VZ-13

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394196 - VZ-14

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70 - 130

Sample: 394196 - VZ-14

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B,Qs	1,2,4	**28.1**	mg/Kg	1	25.0

Sample: 394196 - VZ-14

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394197 - VZ-15

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	Sample Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	3	<0.0200	mg/Kg	1	0.0200
Toluene	U	3	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	3	<0.0200	mg/Kg	1	0.0200
Xylene	U	3	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.97	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			2.03	mg/Kg	1	2.00	102	70 - 130

Sample: 394197 - VZ-15

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	1,2,4	<25.0	mg/Kg	1	25.0

Sample: 394197 - VZ-15

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 121945

QC Batch:	121945	Date Analyzed:	2015-06-02	Analyzed By:	AK
Prep Batch:	103161	QC Preparation:	2015-06-01	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		3	<0.00733	mg/Kg	0.02
Toluene		3	<0.00743	mg/Kg	0.02
Ethylbenzene		3	<0.00703	mg/Kg	0.02
Xylene		3	<0.00534	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.01	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	70 - 130

Method Blank (1) QC Batch: 121962

QC Batch:	121962	Date Analyzed:	2015-06-03	Analyzed By:	AK
Prep Batch:	103178	QC Preparation:	2015-06-02	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		3	<0.00533	mg/Kg	0.02
Toluene		3	<0.00645	mg/Kg	0.02
Ethylbenzene		3	<0.0116	mg/Kg	0.02
Xylene		3	<0.00874	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.01	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	70 - 130

Method Blank (1) QC Batch: 122128

QC Batch:	122128	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103320	QC Preparation:	2015-06-08	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		1,2,4	7.73	mg/Kg	25

Method Blank (1) QC Batch: 122129

QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	QC Preparation:	2015-06-08	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		1,2,4	6.25	mg/Kg	25

Method Blank (1) QC Batch: 122152

QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	QC Preparation:	2015-06-09	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		1,2,4	5.68	mg/Kg	25

Method Blank (1) QC Batch: 122229

QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	QC Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<4.53	mg/Kg	10

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 121945 | Date Analyzed: 2015-06-02 | Analyzed By: AK
Prep Batch: 103161 | QC Preparation: 2015-06-01 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		3	2.01	mg/Kg	1	2.00	<0.00733	100	70 - 130
Toluene		3	2.16	mg/Kg	1	2.00	<0.00743	108	70 - 130
Ethylbenzene		3	2.22	mg/Kg	1	2.00	<0.00703	111	70 - 130
Xylene		3	6.66	mg/Kg	1	6.00	<0.00534	111	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		3	2.03	mg/Kg	1	2.00	<0.00733	102	70 - 130	1	20
Toluene		3	2.14	mg/Kg	1	2.00	<0.00743	107	70 - 130	1	20
Ethylbenzene		3	2.18	mg/Kg	1	2.00	<0.00703	109	70 - 130	2	20
Xylene		3	6.56	mg/Kg	1	6.00	<0.00534	109	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.08	2.02	mg/Kg	1	2.00	104	101	70 - 130
4-Bromofluorobenzene (4-BFB)	2.18	2.15	mg/Kg	1	2.00	109	108	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 121962 | Date Analyzed: 2015-06-03 | Analyzed By: AK
Prep Batch: 103178 | QC Preparation: 2015-06-02 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		3	1.75	mg/Kg	1	2.00	<0.00533	88	70 - 130
Toluene		3	2.01	mg/Kg	1	2.00	<0.00645	100	70 - 130
Ethylbenzene		3	2.11	mg/Kg	1	2.00	<0.0116	106	70 - 130
Xylene		3	6.30	mg/Kg	1	6.00	<0.00874	105	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		3	1.77	mg/Kg	1	2.00	<0.00533	88	70 - 130	1	20
Toluene		3	2.03	mg/Kg	1	2.00	<0.00645	102	70 - 130	1	20
Ethylbenzene		3	2.14	mg/Kg	1	2.00	<0.0116	107	70 - 130	1	20
Xylene		3	6.40	mg/Kg	1	6.00	<0.00874	107	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.95	1.99	mg/Kg	1	2.00	98	100	70 - 130
4-Bromofluorobenzene (4-BFB)	2.11	2.15	mg/Kg	1	2.00	106	108	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 122128 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103320 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		1,2,4	242	mg/Kg	1	250	7.73	94	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		1,2,4	242	mg/Kg	1	250	7.73	94	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122129 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103321 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		1,2,4	243	mg/Kg	1	250	6.25	95	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		1,2,4	242	mg/Kg	1	250	6.25	94	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122152 | Date Analyzed: 2015-06-09 | Analyzed By: RL
Prep Batch: 103343 | QC Preparation: 2015-06-09 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		1,2,4	248	mg/Kg	1	250	5.68	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		1,2,4	239	mg/Kg	1	250	5.68	93	90 - 110	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122229 | Date Analyzed: 2015-06-10 | Analyzed By: ZY
Prep Batch: 103410 | QC Preparation: 2015-06-10 | Prepared By: ZY

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			54.2	mg/Kg	1	50.0	<4.53	108	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			50.4	mg/Kg	1	50.0	<4.53	101	80 - 120	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 394258

QC Batch: 121945 | Date Analyzed: 2015-06-02 | Analyzed By: AK
Prep Batch: 103161 | QC Preparation: 2015-06-01 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		3	1.55	mg/Kg	1	2.00	<0.00733	78	70 - 130
Toluene		3	1.71	mg/Kg	1	2.00	<0.00743	86	70 - 130
Ethylbenzene		3	1.77	mg/Kg	1	2.00	<0.00703	88	70 - 130
Xylene		3	5.34	mg/Kg	1	6.00	0.0097	89	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	Qr	Qr 3	1.95	mg/Kg	1	2.00	<0.00733	98	70 - 130	23	20
Toluene	Qr	Qr 3	2.14	mg/Kg	1	2.00	<0.00743	107	70 - 130	22	20
Ethylbenzene	Qr	Qr 3	2.24	mg/Kg	1	2.00	<0.00703	112	70 - 130	23	20
Xylene	Qr	Qr 3	6.79	mg/Kg	1	6.00	0.0097	113	70 - 130	24	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.93	1.99	mg/Kg	1	2	96	100	70 - 130
4-Bromofluorobenzene (4-BFB)	2.18	2.08	mg/Kg	1	2	109	104	70 - 130

Matrix Spike (MS-1) Spiked Sample: 394190

QC Batch: 121962 | Date Analyzed: 2015-06-03 | Analyzed By: AK
Prep Batch: 103178 | QC Preparation: 2015-06-02 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		3	1.64	mg/Kg	1	2.00	<0.00533	82	70 - 130
Toluene		3	1.94	mg/Kg	1	2.00	<0.00645	97	70 - 130
Ethylbenzene		3	2.06	mg/Kg	1	2.00	<0.0116	103	70 - 130
Xylene		3	6.22	mg/Kg	1	6.00	<0.00874	104	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		3	1.62	mg/Kg	1	2.00	<0.00533	81	70 - 130	1	20
Toluene		3	1.91	mg/Kg	1	2.00	<0.00645	96	70 - 130	2	20
Ethylbenzene		3	2.05	mg/Kg	1	2.00	<0.0116	102	70 - 130	0	20
Xylene		3	6.19	mg/Kg	1	6.00	<0.00874	103	70 - 130	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.99	1.95	mg/Kg	1	2	100	98	70 - 130
4-Bromofluorobenzene (4-BFB)	2.26	2.23	mg/Kg	1	2	113	112	70 - 130

Matrix Spike (xMS-1) Spiked Sample: 394192

QC Batch: 122128 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103320 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		1,2,4	231	mg/Kg	2	250	28	81	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		1,2,4	239	mg/Kg	2	250	28	84	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394208

QC Batch: 122129 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103321 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		1,2,4	240	mg/Kg	1	250	16.9	89	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		1,2,4	253	mg/Kg	1	250	16.9	94	80 - 120	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (xMS-1) Spiked Sample: 394500

QC Batch: 122152 | Date Analyzed: 2015-06-09 | Analyzed By: RL
Prep Batch: 103343 | QC Preparation: 2015-06-09 | Prepared By: RL

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	Qs	Qs	1,2,4	6500	mg/Kg	10	250	5970	212	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	Qs	Qs	1,2,4	6130	mg/Kg	10	250	5970	64	80 - 120	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394185

QC Batch: 122229 | Date Analyzed: 2015-06-10 | Analyzed By: ZY
Prep Batch: 103410 | QC Preparation: 2015-06-10 | Prepared By: ZY

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			58.0	mg/Kg	1	50.0	<4.53	116	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			59.9	mg/Kg	1	50.0	<4.53	120	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 121945 | Date Analyzed: 2015-06-02 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		3	mg/kg	0.100	0.0963	96	80 - 120	2015-06-02
Toluene		3	mg/kg	0.100	0.104	104	80 - 120	2015-06-02
Ethylbenzene		3	mg/kg	0.100	0.106	106	80 - 120	2015-06-02
Xylene		3	mg/kg	0.300	0.322	107	80 - 120	2015-06-02

Standard (CCV-2)

QC Batch: 121945 | Date Analyzed: 2015-06-02 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		3	mg/kg	0.100	0.0958	96	80 - 120	2015-06-02
Toluene		3	mg/kg	0.100	0.103	103	80 - 120	2015-06-02
Ethylbenzene		3	mg/kg	0.100	0.105	105	80 - 120	2015-06-02
Xylene		3	mg/kg	0.300	0.313	104	80 - 120	2015-06-02

Standard (CCV-1)

QC Batch: 121962 | Date Analyzed: 2015-06-03 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		3	mg/kg	0.100	0.0928	93	80 - 120	2015-06-03
Toluene		3	mg/kg	0.100	0.105	105	80 - 120	2015-06-03
Ethylbenzene		3	mg/kg	0.100	0.110	110	80 - 120	2015-06-03
Xylene		3	mg/kg	0.300	0.331	110	80 - 120	2015-06-03

Standard (CCV-2)

QC Batch: 121962 Date Analyzed: 2015-06-03 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		3	mg/kg	0.100	0.0800	80	80 - 120	2015-06-03
Toluene		3	mg/kg	0.100	0.0996	100	80 - 120	2015-06-03
Ethylbenzene		3	mg/kg	0.100	0.107	107	80 - 120	2015-06-03
Xylene		3	mg/kg	0.300	0.323	108	80 - 120	2015-06-03

Standard (CCV-1)

QC Batch: 122128 Date Analyzed: 2015-06-08 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1,2,4	mg/Kg	25.0	24.8	99	90 - 110	2015-06-08

Standard (CCV-2)

QC Batch: 122128 Date Analyzed: 2015-06-08 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1,2,4	mg/Kg	25.0	24.2	97	90 - 110	2015-06-08

Standard (CCV-1)

QC Batch: 122129 Date Analyzed: 2015-06-08 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1,2,4	mg/Kg	25.0	24.2	97	90 - 110	2015-06-08

Standard (CCV-2)

QC Batch: 122129 | Date Analyzed: 2015-06-08 | Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1,2,4	mg/Kg	25.0	24.3	97	90 - 110	2015-06-08

Standard (CCV-1)

QC Batch: 122152 | Date Analyzed: 2015-06-09 | Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.8	103	90 - 110	2015-06-09

Standard (CCV-2)

QC Batch: 122152 | Date Analyzed: 2015-06-09 | Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1,2,4	mg/Kg	25.0	24.0	96	90 - 110	2015-06-09

Standard (ICV-1)

QC Batch: 122229 | Date Analyzed: 2015-06-10 | Analyzed By: ZY

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	58.0	116	80 - 120	2015-06-10

Standard (CCV-1)

QC Batch: 122229 | Date Analyzed: 2015-06-10 | Analyzed By: ZY

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	54.2	108	80 - 120	2015-06-10

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	LELAP	LELAP-02003	Lubbock
2	NELAP	T104704219-15-11	Lubbock
3	NELAP	T104704392-14-8	Midland
4		2014-018	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

WO#: 15052904

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N Big Spr St. Suite 301A Midland, TX

Project Manager Liz Scaggs

Laboratory: Trace Analysis

Address:

Contact:

Phone:

PO/SO #:

ANALYSIS REQUESTED

Lab use only
Due Date:

Temp. of coolers when received (C°): 3.2

1	2	3	4	5

Page 1 of 2

Sampler's Name: Jake Munsey

Sampler's Signature:

Proj. No.: 70201146075.001

Project Name: Regency Jal Landfarm

No/Type of Containers: 15 4oz Jars

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH 418.1	BTEX 8021B	Chloride (300.1)	Lab Sample ID (Lab Use Only)
S	5-28-15	10:15		✓	VZ - 1	3'	3.5'				✓		✓	✓	✓	394183
		10:45			VZ - 2											394184
		11:15			VZ - 3											394185
		11:45			VZ - 4											394186
		12:25			VZ - 5											394187
		1230			VZ - 6											394188
		1300			VZ - 7											394189
		1345			VZ - 8											394190
		1315			VZ - 9											394191
↓	5-27-15	1415			VZ - 10	↓	↓				↓		↓	↓	↓	394192

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	5-29-15	800		5/29/15	8:00
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Nalley	5/29/15	14:12			
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				6-2-15	845

NOTES: Direct Bill Regency

183 / 2.8 / AJ / LS 2S550753

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

WO#: 15052904

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N Big Spr St. Suite 301A Midland, TX

Project Manager Liz Scaggs

Laboratory: Trace Analysis

Address:

Contact:

Phone:

PO/SO #:

ANALYSIS REQUESTED

TPH 418.1
BTEX 8021B
Chloride (300.1)

Lab use only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Page 2 of 2

Sampler's Name: Jake Mubsey

Sampler's Signature: Jake Mubsey

Proj. No.: 70201146075.001

Project Name: Regency Jal Landfarm

No/Type of Containers: 15-4oz Jars

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	5-27-15	1440		✓	VZ-11	3'	3.5'				✓		394193
	5-28-15	1415			VZ-12								394194
	5-28-15	1445			VZ-13								394195
	5-28-15	1500			VZ-14								394196
	5-27-15	1515			VZ-15								394197

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	5-29-15	800		5/29/15	8:00
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature) BC TA	Date: 6-2-15	Time: 8:45 AM

NOTES: Direct Bill Regency

IR3 2.8 / L525507S-3

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Liz Scaggs
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: June 16, 2015

Work Order: 15052910

Project Name: Regency Jal Landfarm
Project Number: 7020114G075.001

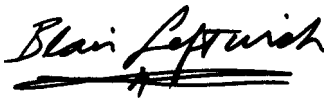
Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
394204	TZ-5	soil	2015-05-27	12:30	2015-05-29
394205	TZ-6	soil	2015-05-27	12:15	2015-05-29
394206	TZ-7	soil	2015-05-27	11:55	2015-05-29
394207	TZ-8	soil	2015-05-27	11:35	2015-05-29
394208	TZ-9	soil	2015-05-27	12:50	2015-05-29
394209	TZ-10	soil	2015-05-27	14:00	2015-05-29
394210	TZ-11	soil	2015-05-27	13:30	2015-05-29
394211	TZ-12	soil	2015-05-27	11:30	2015-05-29
394212	TZ-13	soil	2015-05-27	11:55	2015-05-29
394213	TZ-14	soil	2015-05-27	11:45	2015-05-29
394214	TZ-15	soil	2015-05-27	13:30	2015-05-29

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

This report consists of a total of 81 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
James Taylor, Assistant Director
Brian Pellam, Operations Manager

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Case Narrative

Samples for project Regency Jal Landfarm were received by TraceAnalysis, Inc. on 2015-05-29 and assigned to work order 15052910. Samples for work order 15052910 were received intact at a temperature of 3.2 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Ag, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
As, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Ba, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
BTEX	S 8021B	103246	2015-06-05 at 06:54	122048	2015-06-05 at 13:28
Cd, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Chloride (IC)	E 300.0	103321	2015-06-08 at 17:00	122129	2015-06-08 at 18:28
Chloride (IC)	E 300.0	103322	2015-06-08 at 17:00	122130	2015-06-08 at 18:28
Chloride (IC)	E 300.0	103343	2015-06-09 at 12:30	122152	2015-06-09 at 14:14
Chloride (IC)	E 300.0	103399	2015-06-10 at 15:00	122210	2015-06-10 at 17:23
Cr, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Cu, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Fe, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Hg, Total	S 7471 B	103253	2015-06-04 at 14:45	122043	2015-06-05 at 11:09
Hg, Total	S 7471 B	103355	2015-06-09 at 13:30	122171	2015-06-10 at 13:27
Mn, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Pb, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Se, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
TPH 418.1	E 418.1	103410	2015-06-10 at 14:48	122229	2015-06-10 at 14:51
TPH 418.1	E 418.1	103412	2015-06-11 at 15:17	122231	2015-06-10 at 15:20
TPH DRO - NEW	S 8015 D	103294	2015-06-05 at 12:00	122103	2015-06-08 at 23:40
TPH DRO - NEW	S 8015 D	103295	2015-06-05 at 12:00	122104	2015-06-08 at 23:41
TPH DRO - NEW	S 8015 D	103493	2015-06-15 at 18:45	122354	2015-06-16 at 12:26
TPH GRO	S 8015 D	103246	2015-06-05 at 06:54	122049	2015-06-05 at 13:48
U, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51
Zn, Total	S 6010C	103197	2015-06-03 at 12:52	122036	2015-06-05 at 09:51

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 15052910 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 394204 - TZ-5

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	70 - 130
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	70 - 130

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**6.03**	mg/Kg	1	0.500

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**5120**	mg/Kg	10	0.500

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**73.5**	mg/Kg	1	2.00

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**46.4**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**8.84**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	**0.177**	mg/Kg	1	0.0250
Total Lead		2,3,4,6	**6.89**	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	29.9	mg/Kg	1	25.0	120	48.9 - 172

Sample: 394204 - TZ-5

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.51	mg/Kg	1	2.00	126	70 - 130
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70 - 130

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Uranium			**66.9**	mg/Kg	1	0.500

Sample: 394204 - TZ-5

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**23.3**	mg/Kg	1	1.00

Sample: 394205 - TZ-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb,Qs	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**4.32**	mg/Kg	1	0.500

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**5020**	mg/Kg	10	0.500

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**69.8**	mg/Kg	1	2.00

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**94.9**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**7.99**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	**0.0574**	mg/Kg	1	0.0250
Total Lead	U	2,3,4,6	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	30.5	mg/Kg	1	25.0	122	48.9 - 172

Sample: 394205 - TZ-6

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.56	mg/Kg	1	2.00	128	70 - 130
4-Bromofluorobenzene (4-BFB)			2.10	mg/Kg	1	2.00	105	70 - 130

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Uranium			**79.1**	mg/Kg	1	0.500

Sample: 394205 - TZ-6

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**16.7**	mg/Kg	1	1.00

Sample: 394206 - TZ-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.84	mg/Kg	1	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			1.80	mg/Kg	1	2.00	90	70 - 130

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**2.19**	mg/Kg	1	0.500

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**3680**	mg/Kg	10	0.500

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**48.1**	mg/Kg	1	2.00

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**122**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**6.38**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	<0.0250	mg/Kg	1	0.0250
Total Lead	U	2,3,4,6	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	28.9	mg/Kg	1	25.0	116	48.9 - 172

Sample: 394206 - TZ-7

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.48	mg/Kg	1	2.00	124	70 - 130
4-Bromofluorobenzene (4-BFB)			2.03	mg/Kg	1	2.00	102	70 - 130

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Uranium			**61.9**	mg/Kg	1	0.500

Sample: 394206 - TZ-7

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**14.1**	mg/Kg	1	1.00

Sample: 394207 - TZ-8

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.87	mg/Kg	1	2.00	94	70 - 130

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**2.23**	mg/Kg	1	0.500

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**4460**	mg/Kg	10	0.500

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**64.2**	mg/Kg	1	2.00

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**61.1**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**6.35**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	<0.0250	mg/Kg	1	0.0250
Total Lead		2,3,4,6	**1.19**	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	30.0	mg/Kg	1	25.0	120	48.9 - 172

Sample: 394207 - TZ-8

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.56	mg/Kg	1	2.00	128	70 - 130
4-Bromofluorobenzene (4-BFB)			2.09	mg/Kg	1	2.00	104	70 - 130

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Uranium			**64.6**	mg/Kg	1	0.500

Sample: 394207 - TZ-8

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**15.8**	mg/Kg	1	1.00

Sample: 394208 - TZ-9

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**1.97**	mg/Kg	1	0.500

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**3850**	mg/Kg	10	0.500

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**50.4**	mg/Kg	1	2.00

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**80.3**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**6.29**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	**0.0357**	mg/Kg	1	0.0250
Total Lead	U	2,3,4,6	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122229	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103410	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	28.2	mg/Kg	1	25.0	113	48.9 - 172

Sample: 394208 - TZ-9

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.54	mg/Kg	1	2.00	127	70 - 130
4-Bromofluorobenzene (4-BFB)			2.10	mg/Kg	1	2.00	105	70 - 130

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Uranium			**59.4**	mg/Kg	1	0.500

Sample: 394208 - TZ-9

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**12.7**	mg/Kg	1	1.00

Sample: 394209 - TZ-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.87	mg/Kg	1	2.00	94	70 - 130

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122130	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103322	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**1.46**	mg/Kg	1	0.500

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**4420**	mg/Kg	10	0.500

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**44.6**	mg/Kg	1	2.00

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**54.9**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**6.86**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	**0.0276**	mg/Kg	1	0.0250
Total Lead		2,3,4,6	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122231	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103412	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1,2,3,4	**55.7**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	30.7	mg/Kg	1	25.0	123	48.9 - 172

Sample: 394209 - TZ-10

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.58	mg/Kg	1	2.00	129	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70 - 130

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Uranium			**64.2**	mg/Kg	1	0.500

Sample: 394209 - TZ-10

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**18.6**	mg/Kg	1	1.00

Sample: 394210 - TZ-11

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	70 - 130
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	70 - 130

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb,Qs	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**1.57**	mg/Kg	1	0.500

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**3770**	mg/Kg	10	0.500

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**51.9**	mg/Kg	1	2.00

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**55.1**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**5.76**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	**0.0973**	mg/Kg	1	0.0250
Total Lead	U	2,3,4,6	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122231	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103412	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394210 - TZ-11

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122354	Date Analyzed:	2015-06-16	Analyzed By:	SC
Prep Batch:	103493	Sample Preparation:	2015-06-15	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	H,Qr,Qs,U	5	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			60.3	mg/Kg	1	50.0	121	70 - 130

Sample: 394210 - TZ-11

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.49	mg/Kg	1	2.00	124	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70 - 130

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Uranium			**56.9**	mg/Kg	1	0.500

Sample: 394210 - TZ-11

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**13.2**	mg/Kg	1	1.00

Sample: 394211 - TZ-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene		5	**0.0471**	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene		5	**0.165**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	1	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			1.83	mg/Kg	1	2.00	92	70 - 130

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122152	Date Analyzed:	2015-06-09	Analyzed By:	RL
Prep Batch:	103343	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb,Qs	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**52.3**	mg/Kg	1	0.500

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**6780**	mg/Kg	10	0.500

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**67.8**	mg/Kg	1	2.00

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**72.9**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**11.5**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	**0.0690**	mg/Kg	1	0.0250
Total Lead		2,3,4,6	**4.23**	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122231	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103412	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	30.3	mg/Kg	1	25.0	121	48.9 - 172

Sample: 394211 - TZ-12

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.47	mg/Kg	1	2.00	124	70 - 130
4-Bromofluorobenzene (4-BFB)			2.05	mg/Kg	1	2.00	102	70 - 130

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Uranium			**93.5**	mg/Kg	1	0.500

Sample: 394211 - TZ-12

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**17.6**	mg/Kg	1	1.00

Sample: 394212 - TZ-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	70 - 130
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	70 - 130

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122130	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103322	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B	3,4,6	**81.9**	mg/Kg	2	25.0

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**2.27**	mg/Kg	1	0.500

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**4770**	mg/Kg	10	0.500

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**60.8**	mg/Kg	1	2.00

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122043	Date Analyzed:	2015-06-05	Analyzed By:	TP
Prep Batch:	103253	Sample Preparation:	2015-06-05	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**89.5**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**6.92**	mg/Kg	1	0.500
Total Mercury	Qs	1,2,3,4,6	**0.164**	mg/Kg	1	0.0250
Total Lead	U	2,3,4,6	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122231	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103412	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	29.0	mg/Kg	1	25.0	116	48.9 - 172

Sample: 394212 - TZ-13

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.51	mg/Kg	1	2.00	126	70 - 130
4-Bromofluorobenzene (4-BFB)			2.05	mg/Kg	1	2.00	102	70 - 130

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Uranium			**75.0**	mg/Kg	1	0.500

Sample: 394212 - TZ-13

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**13.7**	mg/Kg	1	1.00

Sample: 394213 - TZ-14

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)			1.80	mg/Kg	1	2.00	90	70 - 130

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122130	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103322	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**1.48**	mg/Kg	1	0.500

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**3320**	mg/Kg	10	0.500

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**43.6**	mg/Kg	1	2.00

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122171	Date Analyzed:	2015-06-10	Analyzed By:	TP
Prep Batch:	103355	Sample Preparation:	2015-06-10	Prepared By:	TP

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**110**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**5.45**	mg/Kg	1	0.500
Total Mercury	U	1,2,3,4,6	<0.0250	mg/Kg	1	0.0250
Total Lead	U	2,3,4,6	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122231	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103412	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122104	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103295	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	Jb	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	29.9	mg/Kg	1	25.0	120	48.9 - 172

Sample: 394213 - TZ-14

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	5	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.47	mg/Kg	1	2.00	124	70 - 130
4-Bromofluorobenzene (4-BFB)			2.03	mg/Kg	1	2.00	102	70 - 130

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Uranium			**55.5**	mg/Kg	1	0.500

Sample: 394213 - TZ-14

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**19.4**	mg/Kg	1	1.00

Sample: 394214 - TZ-15

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene [1]	U	5	<0.0400	mg/Kg	2	0.0200
Toluene		5	**0.0993**	mg/Kg	2	0.0200
Ethylbenzene	U	5	<0.0400	mg/Kg	2	0.0200
Xylene		5	**0.325**	mg/Kg	2	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			3.62	mg/Kg	2	4.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			3.55	mg/Kg	2	4.00	89	70 - 130

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	122210	Date Analyzed:	2015-06-10	Analyzed By:	RL
Prep Batch:	103399	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	Jb,Qs	3,4,6	<25.0	mg/Kg	1	25.0

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,6	**127**	mg/Kg	1	0.500

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron	Qs	2,3,4,6	**6980**	mg/Kg	10	0.500

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,6	**78.9**	mg/Kg	1	2.00

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	122171	Date Analyzed:	2015-06-10	Analyzed By:	TP
Prep Batch:	103355	Sample Preparation:	2015-06-10	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,6	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,6	**224**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,6	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,6	**13.2**	mg/Kg	1	0.500
Total Mercury		1,2,3,4,6	**0.0589**	mg/Kg	1	0.0250
Total Lead		2,3,4,6	**18.1**	mg/Kg	1	1.00
Total Selenium	U	2,3,4,6	<2.00	mg/Kg	1	2.00

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	122231	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103412	Sample Preparation:	2015-06-10	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	122104	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103295	Sample Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Jb	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	30.5	mg/Kg	1	25.0	122	48.9 - 172

Sample: 394214 - TZ-15

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	Sample Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO [2]	U	5	<8.00	mg/Kg	2	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.89	mg/Kg	2	4.00	122	70 - 130
4-Bromofluorobenzene (4-BFB)			4.08	mg/Kg	2	4.00	102	70 - 130

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
Total Uranium			**94.7**		mg/Kg	1	0.500

Sample: 394214 - TZ-15

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	Sample Preparation:	2015-06-04	Prepared By:	RR

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
Total Zinc	Qs	2,3,4,6	**34.7**		mg/Kg	1	1.00

Method Blanks

Method Blank (1) QC Batch: 122036

QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	QC Preparation:	2015-06-03	Prepared By:	PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Copper		2,3,4,6	<0.226	mg/Kg	0.5

Method Blank (1) QC Batch: 122036

QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	QC Preparation:	2015-06-03	Prepared By:	PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Iron		2,3,4,6	<0.0684	mg/Kg	0.5

Method Blank (1) QC Batch: 122036

QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	QC Preparation:	2015-06-03	Prepared By:	PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Manganese		2,3,4,6	<0.0957	mg/Kg	2

Method Blank (1) QC Batch: 122036

QC Batch:	122036	Date Analyzed:	2015-06-05	Analyzed By:	RR
Prep Batch:	103197	QC Preparation:	2015-06-03	Prepared By:	PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Uranium			<0.100	mg/Kg	0.5

Method Blank (1) QC Batch: 122036

QC Batch: 122036 Date Analyzed: 2015-06-05 Analyzed By: RR
Prep Batch: 103197 QC Preparation: 2015-06-03 Prepared By: PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Zinc		2,3,4,6	<0.0266	mg/Kg	1

Method Blank (1) QC Batch: 122036

QC Batch: 122036 Date Analyzed: 2015-06-05 Analyzed By: RR
Prep Batch: 103197 QC Preparation: 2015-06-03 Prepared By: PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Silver		2,3,4,6	<0.0344	mg/Kg	0.5
Total Arsenic		2,3,4,6	<0.432	mg/Kg	2
Total Barium		2,3,4,6	<0.0501	mg/Kg	1
Total Cadmium		2,3,4,6	<0.0320	mg/Kg	0.5
Total Chromium		2,3,4,6	<0.0512	mg/Kg	0.5
Total Lead		2,3,4,6	<0.263	mg/Kg	1
Total Selenium		2,3,4,6	<0.422	mg/Kg	2

Method Blank (1) QC Batch: 122043

QC Batch: 122043 Date Analyzed: 2015-06-05 Analyzed By: TP
Prep Batch: 103253 QC Preparation: 2015-06-04 Prepared By: TP

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Total Mercury		1,2,3,4,6	<0.00325	mg/Kg	0.025

Method Blank (1) QC Batch: 122048

QC Batch:	122048	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	QC Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		5	<0.00533	mg/Kg	0.02
Toluene		5	<0.00645	mg/Kg	0.02
Ethylbenzene		5	<0.0116	mg/Kg	0.02
Xylene		5	<0.00874	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.01	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	70 - 130

Method Blank (1) QC Batch: 122049

QC Batch:	122049	Date Analyzed:	2015-06-05	Analyzed By:	AK
Prep Batch:	103246	QC Preparation:	2015-06-05	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		5	<2.32	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.60	mg/Kg	1	2.00	130	70 - 130
4-Bromofluorobenzene (4-BFB)			2.14	mg/Kg	1	2.00	107	70 - 130

Method Blank (1) QC Batch: 122103

QC Batch:	122103	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103294	QC Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1,2,3,4	<5.22	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	24.2	mg/Kg	1	25.0	97	48.9 - 172

Method Blank (1) QC Batch: 122104

QC Batch:	122104	Date Analyzed:	2015-06-08	Analyzed By:	SM
Prep Batch:	103295	QC Preparation:	2015-06-05	Prepared By:	SM

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1,2,3,4	6.01	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	26.1	mg/Kg	1	25.0	104	48.9 - 172

Method Blank (1) QC Batch: 122129

QC Batch:	122129	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103321	QC Preparation:	2015-06-08	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		3,4,6	6.25	mg/Kg	25

Method Blank (1) QC Batch: 122130

QC Batch:	122130	Date Analyzed:	2015-06-08	Analyzed By:	RL
Prep Batch:	103322	QC Preparation:	2015-06-08	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		3,4,6	5.75	mg/Kg	25

Method Blank (1) QC Batch: 122152

QC Batch: 122152 Date Analyzed: 2015-06-09 Analyzed By: RL
Prep Batch: 103343 QC Preparation: 2015-06-09 Prepared By: RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		3,4,6	5.68	mg/Kg	25

Method Blank (1) QC Batch: 122171

QC Batch: 122171 Date Analyzed: 2015-06-10 Analyzed By: TP
Prep Batch: 103355 QC Preparation: 2015-06-09 Prepared By: TP

Parameter	Flag	Cert	MDL Result	Units	RL
Total Mercury		1,2,3,4,6	<0.00325	mg/Kg	0.025

Method Blank (1) QC Batch: 122210

QC Batch: 122210 Date Analyzed: 2015-06-10 Analyzed By: RL
Prep Batch: 103399 QC Preparation: 2015-06-10 Prepared By: RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		3,4,6	7.10	mg/Kg	25

Method Blank (1) QC Batch: 122229

QC Batch: 122229 Date Analyzed: 2015-06-10 Analyzed By: ZY
Prep Batch: 103410 QC Preparation: 2015-06-10 Prepared By: ZY

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<4.53	mg/Kg	10

Method Blank (1) QC Batch: 122231

QC Batch:	122231	Date Analyzed:	2015-06-10	Analyzed By:	ZY
Prep Batch:	103412	QC Preparation:	2015-06-11	Prepared By:	ZY

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<4.53	mg/Kg	10

Method Blank (1) QC Batch: 122354

QC Batch:	122354	Date Analyzed:	2015-06-16	Analyzed By:	SC
Prep Batch:	103493	QC Preparation:	2015-06-15	Prepared By:	SC

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		5	<7.41	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			48.8	mg/Kg	1	50.0	98	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper		2,3,4,6	13.8	mg/Kg	1	12.5	<0.226	110	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Copper		2,3,4,6	13.0	mg/Kg	1	12.5	<0.226	104	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron		2,3,4,6	49.5	mg/Kg	1	50.0	<0.0684	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Iron		2,3,4,6	51.0	mg/Kg	1	50.0	<0.0684	102	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese		2,3,4,6	27.0	mg/Kg	1	25.0	<0.0957	108	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Manganese		2,3,4,6	26.8	mg/Kg	1	25.0	<0.0957	107	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Uranium			111	mg/Kg	1	100	<0.100	111	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Uranium			109	mg/Kg	1	100	<0.100	109	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc		2,3,4,6	25.8	mg/Kg	1	25.0	<0.0266	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc		2,3,4,6	25.5	mg/Kg	1	25.0	<0.0266	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver		2,3,4,6	12.8	mg/Kg	1	12.5	<0.0344	102	85 - 115
Total Arsenic		2,3,4,6	52.3	mg/Kg	1	50.0	<0.432	105	85 - 115
Total Barium		2,3,4,6	100	mg/Kg	1	100	<0.0501	100	85 - 115
Total Cadmium		2,3,4,6	27.0	mg/Kg	1	25.0	<0.0320	108	85 - 115
Total Chromium		2,3,4,6	10.9	mg/Kg	1	10.0	<0.0512	109	85 - 115
Total Lead		2,3,4,6	55.0	mg/Kg	1	50.0	<0.263	110	85 - 115
Total Selenium		2,3,4,6	52.4	mg/Kg	1	50.0	<0.422	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver		2,3,4,6	12.7	mg/Kg	1	12.5	<0.0344	102	85 - 115	1	20
Total Arsenic		2,3,4,6	52.7	mg/Kg	1	50.0	<0.432	105	85 - 115	1	20
Total Barium		2,3,4,6	99.0	mg/Kg	1	100	<0.0501	99	85 - 115	1	20
Total Cadmium		2,3,4,6	26.7	mg/Kg	1	25.0	<0.0320	107	85 - 115	1	20
Total Chromium		2,3,4,6	10.6	mg/Kg	1	10.0	<0.0512	106	85 - 115	3	20
Total Lead		2,3,4,6	56.0	mg/Kg	1	50.0	<0.263	112	85 - 115	2	20
Total Selenium		2,3,4,6	53.0	mg/Kg	1	50.0	<0.422	106	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122043 | Date Analyzed: 2015-06-05 | Analyzed By: TP
Prep Batch: 103253 | QC Preparation: 2015-06-04 | Prepared By: TP

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1,2,3,4,6	0.255	mg/Kg	1	0.250	<0.00325	102	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,6	0.253	mg/Kg	1	0.250	<0.00325	101	80 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122048 | Date Analyzed: 2015-06-05 | Analyzed By: AK
Prep Batch: 103246 | QC Preparation: 2015-06-05 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		5	1.80	mg/Kg	1	2.00	<0.00533	90	70 - 130
Toluene		5	1.77	mg/Kg	1	2.00	<0.00645	88	70 - 130
Ethylbenzene		5	1.74	mg/Kg	1	2.00	<0.0116	87	70 - 130
Xylene		5	5.21	mg/Kg	1	6.00	<0.00874	87	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		5	1.73	mg/Kg	1	2.00	<0.00533	86	70 - 130	4	20
Toluene		5	1.70	mg/Kg	1	2.00	<0.00645	85	70 - 130	4	20
Ethylbenzene		5	1.69	mg/Kg	1	2.00	<0.0116	84	70 - 130	3	20
Xylene		5	5.07	mg/Kg	1	6.00	<0.00874	84	70 - 130	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.82	1.82	mg/Kg	1	2.00	91	91	70 - 130
4-Bromofluorobenzene (4-BFB)	1.79	1.77	mg/Kg	1	2.00	90	88	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 122049 | Date Analyzed: 2015-06-05 | Analyzed By: AK
Prep Batch: 103246 | QC Preparation: 2015-06-05 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	14.4	mg/Kg	1	20.0	<2.32	72	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		5	14.3	mg/Kg	1	20.0	<2.32	72	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.53	2.50	mg/Kg	1	2.00	126	125	70 - 130
4-Bromofluorobenzene (4-BFB)	2.18	2.14	mg/Kg	1	2.00	109	107	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 122103 | Date Analyzed: 2015-06-08 | Analyzed By: SM
Prep Batch: 103294 | QC Preparation: 2015-06-05 | Prepared By: SM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	440	mg/Kg	1	500	<5.22	88	60.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	447	mg/Kg	1	500	<5.22	89	60.9 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	3	24.2	24.5	mg/Kg	1	25.0	97	98	48.9 - 172

Laboratory Control Spike (LCS-1)

QC Batch: 122104 | Date Analyzed: 2015-06-08 | Analyzed By: SM
Prep Batch: 103295 | QC Preparation: 2015-06-05 | Prepared By: SM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	456	mg/Kg	1	500	6.01	90	60.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	461	mg/Kg	1	500	6.01	91	60.9 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	3	25.5	25.8	mg/Kg	1	25.0	102	103	48.9 - 172

Laboratory Control Spike (LCS-1)

QC Batch: 122129 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103321 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	243	mg/Kg	1	250	6.25	95	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	242	mg/Kg	1	250	6.25	94	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122130 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103322 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	245	mg/Kg	1	250	5.75	96	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	243	mg/Kg	1	250	5.75	95	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122152 | Date Analyzed: 2015-06-09 | Analyzed By: RL
Prep Batch: 103343 | QC Preparation: 2015-06-09 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	248	mg/Kg	1	250	5.68	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	239	mg/Kg	1	250	5.68	93	90 - 110	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122171 | Date Analyzed: 2015-06-10 | Analyzed By: TP
Prep Batch: 103355 | QC Preparation: 2015-06-09 | Prepared By: TP

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1,2,3,4,6	0.253	mg/Kg	1	0.250	<0.00325	101	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,6	0.245	mg/Kg	1	0.250	<0.00325	98	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122210 | Date Analyzed: 2015-06-10 | Analyzed By: RL
Prep Batch: 103399 | QC Preparation: 2015-06-10 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	248	mg/Kg	1	250	7.1	96	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	249	mg/Kg	1	250	7.1	97	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122229 | Date Analyzed: 2015-06-10 | Analyzed By: ZY
Prep Batch: 103410 | QC Preparation: 2015-06-10 | Prepared By: ZY

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			54.2	mg/Kg	1	50.0	<4.53	108	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			50.4	mg/Kg	1	50.0	<4.53	101	80 - 120	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122231 | Date Analyzed: 2015-06-10 | Analyzed By: ZY
Prep Batch: 103412 | QC Preparation: 2015-06-11 | Prepared By: ZY

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			54.2	mg/Kg	1	50.0	<4.53	108	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			50.4	mg/Kg	1	50.0	<4.53	101	80 - 120	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 122354 | Date Analyzed: 2015-06-16 | Analyzed By: SC
Prep Batch: 103493 | QC Preparation: 2015-06-15 | Prepared By: SC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		5	238	mg/Kg	1	250	<7.41	95	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		5	271	mg/Kg	1	250	<7.41	108	70 - 130	13	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	52.8	58.4	mg/Kg	1	50.0	106	117	70 - 130

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 394204

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper		2,3,4,6	21.5	mg/Kg	1	12.5	6.03	124	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Copper		2,3,4,6	21.5	mg/Kg	1	12.5	6.03	124	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394204

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron Qs	Qs	2,3,4,6	5390	mg/Kg	1	50.0	5120	540	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Iron Qs	Qs	2,3,4,6	5240	mg/Kg	1	50.0	5120	240	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394204

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese		2,3,4,6	103	mg/Kg	1	25.0	73.5	118	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Manganese		2,3,4,6	95.8	mg/Kg	1	25.0	73.5	89	75 - 125	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394204

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Uranium			173	mg/Kg	1	100	66.9	106	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Uranium			168	mg/Kg	1	100	66.9	101	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394204

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc	Qs Qs	2,3,4,6	54.8	mg/Kg	1	25.0	23.3	126	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc		2,3,4,6	49.5	mg/Kg	1	25.0	23.3	105	75 - 125	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394204

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR
Prep Batch: 103197 | QC Preparation: 2015-06-03 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver		2,3,4,6	11.9	mg/Kg	1	12.5	<0.0344	95	75 - 125
Total Arsenic		2,3,4,6	49.0	mg/Kg	1	50.0	<0.432	98	75 - 125
Total Barium		2,3,4,6	151	mg/Kg	1	100	46.4	105	75 - 125
Total Cadmium		2,3,4,6	26.9	mg/Kg	1	25.0	<0.0320	108	75 - 125
Total Chromium		2,3,4,6	21.2	mg/Kg	1	10.0	8.84	124	75 - 125
Total Lead		2,3,4,6	65.1	mg/Kg	1	50.0	6.89	116	75 - 125
Total Selenium		2,3,4,6	51.1	mg/Kg	1	50.0	<0.422	102	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver		2,3,4,6	11.2	mg/Kg	1	12.5	<0.0344	90	75 - 125	6	20
Total Arsenic		2,3,4,6	48.3	mg/Kg	1	50.0	<0.432	97	75 - 125	1	20
Total Barium		2,3,4,6	155	mg/Kg	1	100	46.4	109	75 - 125	3	20
Total Cadmium		2,3,4,6	26.4	mg/Kg	1	25.0	<0.0320	106	75 - 125	2	20
Total Chromium		2,3,4,6	19.9	mg/Kg	1	10.0	8.84	111	75 - 125	6	20
Total Lead		2,3,4,6	58.2	mg/Kg	1	50.0	6.89	103	75 - 125	11	20
Total Selenium		2,3,4,6	51.4	mg/Kg	1	50.0	<0.422	103	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394204

QC Batch: 122043 | Date Analyzed: 2015-06-05 | Analyzed By: TP
Prep Batch: 103253 | QC Preparation: 2015-06-04 | Prepared By: TP

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury Qs	Qs	1,2,3,4,6	0.369	mg/Kg	1	0.250	0.177	77	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,6	0.439	mg/Kg	1	0.250	0.177	105	80 - 120	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394211

QC Batch: 122048 | Date Analyzed: 2015-06-05 | Analyzed By: AK
Prep Batch: 103246 | QC Preparation: 2015-06-05 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		5	1.50	mg/Kg	1	2.00	<0.00533	75	70 - 130
Toluene		5	1.53	mg/Kg	1	2.00	0.0471	74	70 - 130
Ethylbenzene		5	1.59	mg/Kg	1	2.00	<0.0116	80	70 - 130
Xylene		5	4.76	mg/Kg	1	6.00	0.165	76	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		5	1.56	mg/Kg	1	2.00	<0.00533	78	70 - 130	4	20
Toluene		5	1.55	mg/Kg	1	2.00	0.0471	75	70 - 130	1	20
Ethylbenzene		5	1.60	mg/Kg	1	2.00	<0.0116	80	70 - 130	1	20
Xylene		5	4.78	mg/Kg	1	6.00	0.165	77	70 - 130	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.84	mg/Kg	1	2	94	92	70 - 130
4-Bromofluorobenzene (4-BFB)	1.83	1.85	mg/Kg	1	2	92	92	70 - 130

Matrix Spike (MS-1) Spiked Sample: 394211

QC Batch: 122049 | Date Analyzed: 2015-06-05 | Analyzed By: AK
Prep Batch: 103246 | QC Preparation: 2015-06-05 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	14.4	mg/Kg	1	20.0	<2.32	72	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		5	14.3	mg/Kg	1	20.0	<2.32	72	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued . . .

matrix spikes continued . . .

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.53	2.49	mg/Kg	1	2	126	124	70 - 130
4-Bromofluorobenzene (4-BFB)	2.18	2.15	mg/Kg	1	2	109	108	70 - 130

Matrix Spike (MS-1) Spiked Sample: 394205

QC Batch: 122103 | Date Analyzed: 2015-06-08 | Analyzed By: SM
Prep Batch: 103294 | QC Preparation: 2015-06-05 | Prepared By: SM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	512	mg/Kg	1	500	26.3	97	47.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	532	mg/Kg	1	500	26.3	101	47.9 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	3	29.7	30.6	mg/Kg	1	25	119	122	48.9 - 172

Matrix Spike (MS-1) Spiked Sample: 394749

QC Batch: 122104 | Date Analyzed: 2015-06-08 | Analyzed By: SM
Prep Batch: 103295 | QC Preparation: 2015-06-05 | Prepared By: SM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	577	mg/Kg	1	500	8.33	114	47.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	587	mg/Kg	1	500	8.33	116	47.9 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	3	31.2	31.9	mg/Kg	1	25	125	128	48.9 - 172

Matrix Spike (MS-1) Spiked Sample: 394208

QC Batch: 122129 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103321 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	240	mg/Kg	1	250	16.9	89	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	253	mg/Kg	1	250	16.9	94	80 - 120	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394230

QC Batch: 122130 | Date Analyzed: 2015-06-08 | Analyzed By: RL
Prep Batch: 103322 | QC Preparation: 2015-06-08 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,6	250	mg/Kg	1	250	20.1	92	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,6	242	mg/Kg	1	250	20.1	89	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (xMS-1) Spiked Sample: 394500

QC Batch: 122152 | Date Analyzed: 2015-06-09 | Analyzed By: RL
Prep Batch: 103343 | QC Preparation: 2015-06-09 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	Qs Qs	3,4,6	6500	mg/Kg	10	250	5970	212	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	Qs Qs	3,4,6	6130	mg/Kg	10	250	5970	64	80 - 120	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394390

QC Batch: 122171 | Date Analyzed: 2015-06-10 | Analyzed By: TP
Prep Batch: 103355 | QC Preparation: 2015-06-09 | Prepared By: TP

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1,2,3,4,6	0.273	mg/Kg	1	0.250	<0.00325	109	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,6	0.264	mg/Kg	1	0.250	<0.00325	106	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394500

QC Batch: 122210 | Date Analyzed: 2015-06-10 | Analyzed By: RL
Prep Batch: 103399 | QC Preparation: 2015-06-10 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	Qs Qs	3,4,6	5020	mg/Kg	1	250	4540	192	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	Qs	Qs	3,4,6	4850	mg/Kg	1	250	4540	124	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394185

QC Batch: 122229 | Date Analyzed: 2015-06-10 | Analyzed By: ZY
Prep Batch: 103410 | QC Preparation: 2015-06-10 | Prepared By: ZY

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			58.0	mg/Kg	1	50.0	<4.53	116	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			59.9	mg/Kg	1	50.0	<4.53	120	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 394214

QC Batch: 122231 | Date Analyzed: 2015-06-10 | Analyzed By: ZY
Prep Batch: 103412 | QC Preparation: 2015-06-11 | Prepared By: ZY

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			59.9	mg/Kg	1	50.0	<4.53	120	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			56.1	mg/Kg	1	50.0	<4.53	112	80 - 120	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (xMS-1) Spiked Sample: 395471

QC Batch: 122354 | Date Analyzed: 2015-06-16 | Analyzed By: SC
Prep Batch: 103493 | QC Preparation: 2015-06-15 | Prepared By: SC

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	Qs	Qs	5	1560	mg/Kg	1	250	1680	-48	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	Qr,Qs	Qr,Qs	5	1270	mg/Kg	1	250	1680	-164	70 - 130	20	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	Qsr	Qsr	130	109	mg/Kg	1	50	260	218	70 - 130

Calibration Standards

Standard (ICV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-06-05

Standard (ICV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		2,3,4,6	mg/Kg	1.00	1.04	104	90 - 110	2015-06-05

Standard (ICV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		2,3,4,6	mg/Kg	1.00	1.03	103	90 - 110	2015-06-05

Standard (ICV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Uranium			mg/Kg	2.00	1.98	99	90 - 110	2015-06-05

Standard (ICV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-06-05

Standard (ICV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		2,3,4,6	mg/Kg	0.125	0.127	102	90 - 110	2015-06-05
Total Arsenic		2,3,4,6	mg/Kg	1.00	1.03	103	90 - 110	2015-06-05
Total Barium		2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-06-05
Total Cadmium		2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-06-05
Total Chromium		2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-06-05
Total Lead		2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-06-05
Total Selenium		2,3,4,6	mg/Kg	1.00	1.04	104	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		2,3,4,6	mg/Kg	1.00	1.00	100	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Uranium			mg/Kg	2.00	1.96	98	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		2,3,4,6	mg/Kg	1.00	0.996	100	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122036 | Date Analyzed: 2015-06-05 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		2,3,4,6	mg/Kg	0.125	0.124	99	90 - 110	2015-06-05
Total Arsenic		2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-06-05
Total Barium		2,3,4,6	mg/Kg	1.00	1.00	100	90 - 110	2015-06-05
Total Cadmium		2,3,4,6	mg/Kg	1.00	1.00	100	90 - 110	2015-06-05
Total Chromium		2,3,4,6	mg/Kg	1.00	0.992	99	90 - 110	2015-06-05
Total Lead		2,3,4,6	mg/Kg	1.00	1.01	101	90 - 110	2015-06-05
Total Selenium		2,3,4,6	mg/Kg	1.00	1.02	102	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122043 | Date Analyzed: 2015-06-05 | Analyzed By: TP

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1,2,3,4,6	mg/L	0.0100	0.0104	104	90 - 110	2015-06-05

Standard (CCV-2)

QC Batch: 122043 | Date Analyzed: 2015-06-05 | Analyzed By: TP

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1,2,3,4,6	mg/L	0.0100	0.0100	100	90 - 110	2015-06-05

Standard (CCV-1)

QC Batch: 122048 | Date Analyzed: 2015-06-05 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		5	mg/kg	0.100	0.0870	87	80 - 120	2015-06-05
Toluene		5	mg/kg	0.100	0.0851	85	80 - 120	2015-06-05
Ethylbenzene		5	mg/kg	0.100	0.0847	85	80 - 120	2015-06-05
Xylene		5	mg/kg	0.300	0.253	84	80 - 120	2015-06-05

Standard (CCV-2)

QC Batch: 122048 | Date Analyzed: 2015-06-05 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		5	mg/kg	0.100	0.0894	89	80 - 120	2015-06-05
Toluene		5	mg/kg	0.100	0.0871	87	80 - 120	2015-06-05
Ethylbenzene		5	mg/kg	0.100	0.0851	85	80 - 120	2015-06-05
Xylene		5	mg/kg	0.300	0.256	85	80 - 120	2015-06-05

Standard (CCV-3)

QC Batch: 122048 | Date Analyzed: 2015-06-05 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		5	mg/kg	0.100	0.0883	88	80 - 120	2015-06-05
Toluene		5	mg/kg	0.100	0.0857	86	80 - 120	2015-06-05
Ethylbenzene		5	mg/kg	0.100	0.0841	84	80 - 120	2015-06-05
Xylene		5	mg/kg	0.300	0.253	84	80 - 120	2015-06-05

Standard (CCV-1)

QC Batch: 122049 | Date Analyzed: 2015-06-05 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		5	mg/Kg	1.00	0.929	93	80 - 120	2015-06-05

Standard (CCV-2)

QC Batch: 122049 | Date Analyzed: 2015-06-05 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		5	mg/Kg	1.00	0.916	92	80 - 120	2015-06-05

Standard (CCV-3)

QC Batch: 122049 | Date Analyzed: 2015-06-05 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		5	mg/Kg	1.00	0.892	89	80 - 120	2015-06-05

Standard (CCV-1)

QC Batch: 122103 | Date Analyzed: 2015-06-08 | Analyzed By: SM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	448	90	80 - 120	2015-06-08

Standard (CCV-2)

QC Batch: 122103 | Date Analyzed: 2015-06-08 | Analyzed By: SM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	460	92	80 - 120	2015-06-08

Standard (CCV-1)

QC Batch: 122104 | Date Analyzed: 2015-06-08 | Analyzed By: SM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	460	92	80 - 120	2015-06-08

Standard (CCV-2)

QC Batch: 122104 | Date Analyzed: 2015-06-08 | Analyzed By: SM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	473	95	80 - 120	2015-06-08

Standard (CCV-1)

QC Batch: 122129 | Date Analyzed: 2015-06-08 | Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	24.2	97	90 - 110	2015-06-08

Standard (CCV-2)

QC Batch: 122129 Date Analyzed: 2015-06-08 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	24.3	97	90 - 110	2015-06-08

Standard (CCV-1)

QC Batch: 122130 Date Analyzed: 2015-06-08 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	24.3	97	90 - 110	2015-06-08

Standard (CCV-2)

QC Batch: 122130 Date Analyzed: 2015-06-08 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.7	103	90 - 110	2015-06-08

Standard (CCV-1)

QC Batch: 122152 Date Analyzed: 2015-06-09 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.8	103	90 - 110	2015-06-09

Standard (CCV-2)

QC Batch: 122152 Date Analyzed: 2015-06-09 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	24.0	96	90 - 110	2015-06-09

Standard (CCV-1)

QC Batch: 122171 Date Analyzed: 2015-06-10 Analyzed By: TP

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1,2,3,4,6	mg/L	0.0100	0.0103	103	90 - 110	2015-06-10

Standard (CCV-2)

QC Batch: 122171 Date Analyzed: 2015-06-10 Analyzed By: TP

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1,2,3,4,6	mg/L	0.0100	0.0103	103	90 - 110	2015-06-10

Standard (CCV-1)

QC Batch: 122210 Date Analyzed: 2015-06-10 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.6	102	90 - 110	2015-06-10

Standard (CCV-2)

QC Batch: 122210 Date Analyzed: 2015-06-10 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,6	mg/Kg	25.0	24.7	99	90 - 110	2015-06-10

Standard (ICV-1)

QC Batch: 122229 Date Analyzed: 2015-06-10 Analyzed By: ZY

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	58.0	116	80 - 120	2015-06-10

Standard (CCV-1)

QC Batch: 122229 Date Analyzed: 2015-06-10 Analyzed By: ZY

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	54.2	108	80 - 120	2015-06-10

Standard (ICV-1)

QC Batch: 122231 Date Analyzed: 2015-06-10 Analyzed By: ZY

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	58.0	116	80 - 120	2015-06-10

Standard (CCV-1)

QC Batch: 122231 Date Analyzed: 2015-06-10 Analyzed By: ZY

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	54.2	108	80 - 120	2015-06-10

Standard (CCV-1)

QC Batch: 122354 Date Analyzed: 2015-06-16 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		5	mg/Kg	250	226	90	80 - 120	2015-06-16

Standard (CCV-2)

QC Batch: 122354 Date Analyzed: 2015-06-16 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		5	mg/Kg	250	233	93	80 - 120	2015-06-16

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	L-A-B	L2418	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-15-11	Lubbock
5	NELAP	T104704392-14-8	Midland
6		2014-018	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.

F	Description
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Result Comments

1 Dilution due to surfactants.
2 Dilution due to surfactants.

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

WO#: 1605291O

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N Big Spring
St. Suite 301A
Midland, TX

Project Manager Liz Scaggs

Laboratory: Trace Analysis
Address:
Contact:
Phone:
PO/SO #:

Lab use only
Due Date:

Temp. of coolers when received (C°): 32

1 | 2 | 3 | 4 | 5

Page 1 of 2

Sampler's Name: Jake Mutsey

Sampler's Signature: Jake Mutsey

Proj. No.: 702011460 75.001

Project Name: Regency Jal Landfarm

No/Type of Containers: 22 4oz Jars

ANALYSIS REQUESTED

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH 8015 DRO/GRO (300.1)	Chloride 8021B (300.1)	BTEX 8021B Table 7	Metals Table 1	TPH 418.1	Lab Sample ID (Lab Use Only)
S	5-27-15	1230	✓		TZ-5	1'	1.5'				✓		✓	✓	✓	✓	✓	394204
		1215			TZ-6													394205
		1155			TZ-7													394206
		1135			TZ-8													394207
		1250			TZ-9													394208
		1400			TZ-10													394209
		1330			TZ-11													394210
		1130			TZ-12													394211
		1155			TZ-13													394212
↓	↓	1145	↓		TZ-14	↓	↓				↓		↓	↓	↓	↓	↓	394213

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jake Mutsey	5-29-15	800		5-29-15	8:00
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
See Table 7
Direct Bill Regency

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

WO #: 15052910

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N Big Spr
St. Suite 301 A

Project Manager Liz Scaggs

Laboratory: Trace Analysis
Address:
Contact:
Phone:
PO/SO #:

Lab use only
Due Date:

Temp. of coolers when received (C°): 3.2

1	2	3	4	5

Page 2 of 2

Sampler's Name: Jake Mundsey
Sampler's Signature: Jake Mundsey

Proj. No.: 70201146075.001
Project Name: Regency Jal Land farm
No/Type of Containers: 22 4oz Jars

ANALYSIS REQUESTED

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH 8015 DRO/GRO	Chloride (300.1)	BTEX 8021B	Metals (6010)	TPH 418.1	Lab Sample ID (Lab Use Only)
S	5-27-15	1330	✓		TZ-15						✓		✓	✓	✓	✓	✓	394214

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jake Mundsey	5-29-15	800		5/29/15	8:00
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
See Table 7
Direct Bill Regency

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

WO#: 1605291O

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N Big Spring St. Suite 301A Midland, TX

Project Manager Liz Scaggs

Laboratory: Trace Analysis

Address:

Contact:

Phone:

PO/SO #:

ANALYSIS REQUESTED

Lab use only
Due Date:

Temp. of coolers when received (C°): 3.2

1 | 2 | 3 | 4 | 5

Page 1 of 2

Sampler's Name: Jake Mutsey

Sampler's Signature: Jake Mutsey

Proj. No.: 70201146075.001

Project Name: Regency Jal Landfarm

No/Type of Containers: 22 4oz Jars

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	5-27-15	1230	✓		TZ-5	1'	1.5'				✓		394204
		1215			TZ-6								394205
		1155			TZ-7								394206
		1135			TZ-8								394207
		1250			TZ-9								394208
		1400			TZ-10								394209
		1330			TZ-11								394210
		1130			TZ-12								394211
		1155			TZ-13								394212
↓	↓	1145	↓		TZ-14	↓	↓				↓		394213

TPH 8015 DRO/GRO ✓
Chloride (300.1) ✓
BTEX 8021B ✓
Metals Table 1 ✓
TPH 418.1 ✓

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jake Mutsey	5-29-15	800		5-29-15	8:00
Kelley	5/29/15	14:12		Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature) Brenda Ward	6/3/15	9:10

NOTES:
See Table 7
Direct Bill Regency
3.3/3.5
LS 25555464

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

WO #: 1505291O

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N Big Spr St. Suite 301 A

Project Manager Liz Scaggs

Laboratory: Trace Analysis

Address:

Contact:

Phone:

PO/SO #:

Lab use only
Due Date:

Temp. of coolers when received (C°): 3.2

1	2	3	4	5

Page 2 of 2

Sampler's Name: Jake Mubsey

Sampler's Signature: Jake Mubsey

Proj. No.: 702011460 75.001

Project Name: Regency Jal Land farm

No/Type of Containers: 22 4 oz Jars

ANALYSIS REQUESTED: TPH 8015 DRO/GRO; Chloride (300.1); BTEX 8021B; Metals (Table 7); TPH 418.1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	5-27-15	1330	✓		TZ-15						✓		394214

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jake Mubsey	5-29-15	800		5/29/15	8:00
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature) Brenda Ward	Date: 6/3/15	Time: 9:10

NOTES:
See Table 7
Direct Bill Regency
LS 25555464

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

TRACEANALYSIS, INC.

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(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Liz Scaggs
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: August 28, 2015

Work Order: 15081256

Project Name: Regency-Jal Landfarm
Project Number: 702014G075

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
401928	TZ-14	soil	2015-08-11	08:45	2015-08-12
401929	VZ-14	soil	2015-08-11	09:15	2015-08-12
401930	TZ-13	soil	2015-08-11	09:50	2015-08-12
401931	VZ-13	soil	2015-08-11	10:15	2015-08-12
401932	TZ-12	soil	2015-08-11	10:40	2015-08-12
401933	VZ-12	soil	2015-08-11	11:05	2015-08-12
401934	TZ-10	soil	2015-08-11	11:45	2015-08-12
401935	VZ-10	soil	2015-08-11	12:15	2015-08-12
401936	TZ-11	soil	2015-08-11	12:45	2015-08-12
401937	VZ-11	soil	2015-08-11	13:00	2015-08-12
401938	TZ-15	soil	2015-08-11	13:30	2015-08-12
401939	VZ-15	soil	2015-08-11	13:50	2015-08-12
401940	TZ-9	soil	2015-08-11	14:35	2015-08-12
401941	VZ-9	soil	2015-08-11	15:00	2015-08-12
401942	TZ-7	soil	2015-08-11	15:25	2015-08-12
401943	VZ-7	soil	2015-08-11	15:45	2015-08-12
401944	TZ-8	soil	2015-08-11	16:10	2015-08-12
401945	VZ-8	soil	2015-08-11	00:00	2015-08-12

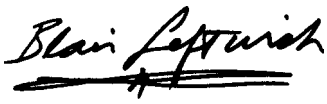
Notes

• **Work Order 15081256:** Samples were brought on ice. Checked temp of sample instead of temp blank but had already written down the temp. The temp read 5.0 on Temp Blank.

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

This report consists of a total of 39 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
James Taylor, Assistant Director
Brian Pellam, Operations Manager

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Case Narrative

Samples for project Regency-Jal Landfarm were received by TraceAnalysis, Inc. on 2015-08-12 and assigned to work order 15081256. Samples for work order 15081256 were received intact at a temperature of 5.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	104987	2015-08-18 at 14:34	124164	2015-08-18 at 14:34
Chloride (IC)	E 300.0	105200	2015-08-25 at 11:00	124409	2015-08-25 at 17:03
Chloride (IC)	E 300.0	105248	2015-08-28 at 08:30	124464	2015-08-28 at 09:53
TPH 418.1	E 418.1	105210	2015-08-27 at 17:16	124418	2015-08-27 at 17:18
TPH DRO	S 8015 D	104907	2015-08-14 at 13:00	124090	2015-08-17 at 11:49
TPH DRO	S 8015 D	104908	2015-08-14 at 14:00	124091	2015-08-17 at 11:51
TPH GRO	S 8015 D	105019	2015-08-19 at 15:57	124202	2015-08-19 at 15:57

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 15081256 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 401928 - TZ-14

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride		3,4,5	<25.0	mg/Kg	1	25.0

Sample: 401928 - TZ-14

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124091	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104908	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	24.2	mg/Kg	1	25.0	97	48.9 - 172

Sample: 401928 - TZ-14

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.55	mg/Kg	1	2.00	78	76.5 - 130

continued ...

sample continued . . .

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		3	1.77	mg/Kg	1	2.00	88	68.4 - 120

Sample: 401929 - VZ-14

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.81	mg/Kg	1	2.00	90	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.78	mg/Kg	1	2.00	89	71.2 - 123

Sample: 401929 - VZ-14

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401930 - TZ-13

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride		3,4,5	**541**	mg/Kg	5	25.0

Sample: 401930 - TZ-13

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124091	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104908	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	25.8	mg/Kg	1	25.0	103	48.9 - 172

Sample: 401930 - TZ-13

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	3	1.42	mg/Kg	1	2.00	71	76.5 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	3	1.71	mg/Kg	1	2.00	86	68.4 - 120

Sample: 401931 - VZ-13

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.77	mg/Kg	1	2.00	88	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.78	mg/Kg	1	2.00	89	71.2 - 123

Sample: 401931 - VZ-13

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401932 - TZ-12

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride		3,4,5	**610**	mg/Kg	10	25.0

Sample: 401932 - TZ-12

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	34.1	mg/Kg	1	25.0	136	48.9 - 172

Sample: 401932 - TZ-12

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.55	mg/Kg	1	2.00	78	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.68	mg/Kg	1	2.00	84	68.4 - 120

Sample: 401933 - VZ-12

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	2.02	mg/Kg	1	2.00	101	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	2.05	mg/Kg	1	2.00	102	71.2 - 123

Sample: 401933 - VZ-12

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			<10.0	mg/Kg	1	10.0

Sample: 401934 - TZ-10

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride		3,4,5	<25.0	mg/Kg	1	25.0

Sample: 401934 - TZ-10

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	29.0	mg/Kg	1	25.0	116	48.9 - 172

Sample: 401934 - TZ-10

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	3	1.16	mg/Kg	1	2.00	58	76.5 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	3	1.33	mg/Kg	1	2.00	66	68.4 - 120

Sample: 401935 - VZ-10

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.91	mg/Kg	1	2.00	96	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.93	mg/Kg	1	2.00	96	71.2 - 123

Sample: 401935 - VZ-10

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401936 - TZ-11

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124464	Date Analyzed:	2015-08-28	Analyzed By:	RL
Prep Batch:	105248	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B	3,4,5	**39.0**	mg/Kg	1	25.0

Sample: 401936 - TZ-11

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	29.6	mg/Kg	1	25.0	118	48.9 - 172

Sample: 401936 - TZ-11

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.85	mg/Kg	1	2.00	92	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.82	mg/Kg	1	2.00	91	68.4 - 120

Sample: 401937 - VZ-11

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.95	mg/Kg	1	2.00	98	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.98	mg/Kg	1	2.00	99	71.2 - 123

Sample: 401937 - VZ-11

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			<10.0	mg/Kg	1	10.0

Sample: 401938 - TZ-15

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124464	Date Analyzed:	2015-08-28	Analyzed By:	RL
Prep Batch:	105248	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B	3,4,5	**30.4**	mg/Kg	1	25.0

Sample: 401938 - TZ-15

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	32.3	mg/Kg	1	25.0	129	48.9 - 172

Sample: 401938 - TZ-15

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO [1]	Qr,U	1,2,3,4	<20.0	mg/Kg	5	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	3	1.27	mg/Kg	5	2.00	64	76.5 - 130
4-Bromofluorobenzene (4-BFB)			3	1.71	mg/Kg	5	2.00	86	68.4 - 120

Sample: 401939 - VZ-15

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.83	mg/Kg	1	2.00	92	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.85	mg/Kg	1	2.00	92	71.2 - 123

Sample: 401939 - VZ-15

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC			**14.1**	mg/Kg	1	10.0

Sample: 401940 - TZ-9

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride		3,4,5	**89.3**	mg/Kg	1	25.0

Sample: 401940 - TZ-9

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	34.0	mg/Kg	1	25.0	136	48.9 - 172

Sample: 401940 - TZ-9

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.56	mg/Kg	1	2.00	78	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.74	mg/Kg	1	2.00	87	68.4 - 120

Sample: 401941 - VZ-9

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.79	mg/Kg	1	2.00	90	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.80	mg/Kg	1	2.00	90	71.2 - 123

Sample: 401941 - VZ-9

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

continued ...

sample 401941 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401942 - TZ-7

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride		3,4,5	**32.8**	mg/Kg	1	25.0

Sample: 401942 - TZ-7

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	31.3	mg/Kg	1	25.0	125	48.9 - 172

Sample: 401942 - TZ-7

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.70	mg/Kg	1	2.00	85	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.75	mg/Kg	1	2.00	88	68.4 - 120

Sample: 401943 - VZ-7

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.71	mg/Kg	1	2.00	86	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.75	mg/Kg	1	2.00	88	71.2 - 123

Sample: 401943 - VZ-7

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401944 - TZ-8

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride		3,4,5	<25.0	mg/Kg	1	25.0

Sample: 401944 - TZ-8

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	30.7	mg/Kg	1	25.0	123	48.9 - 172

Sample: 401944 - TZ-8

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO [2]	Qr,U	1,2,3,4	<8.00	mg/Kg	2	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	3	1.20	mg/Kg	2	2.00	60	76.5 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	3	1.47	mg/Kg	2	2.00	74	68.4 - 120

Sample: 401945 - VZ-8

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.93	mg/Kg	1	2.00	96	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.96	mg/Kg	1	2.00	98	71.2 - 123

Sample: 401945 - VZ-8

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 124090

QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	QC Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1,2,3,4	<5.22	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	27.8	mg/Kg	1	25.0	111	48.9 - 172

Method Blank (1) QC Batch: 124091

QC Batch:	124091	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104908	QC Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1,2,3,4	<5.22	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	28.1	mg/Kg	1	25.0	112	48.9 - 172

Method Blank (1) QC Batch: 124164

QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	QC Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1,2,3,4,5	<0.00444	mg/Kg	0.02
Toluene		1,2,3,4,5	<0.00457	mg/Kg	0.02
Ethylbenzene		1,2,3,4,5	<0.00762	mg/Kg	0.02

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Xylene		1,2,3,4,5	<0.00367	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.83	mg/Kg	1	2.00	92	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.93	mg/Kg	1	2.00	96	71.2 - 123

Method Blank (1) QC Batch: 124202

QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	QC Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1,2,3,4	<0.641	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.74	mg/Kg	1	2.00	87	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.67	mg/Kg	1	2.00	84	68.4 - 120

Method Blank (1) QC Batch: 124409

QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	QC Preparation:	2015-08-25	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		3,4,5	<4.69	mg/Kg	25

Method Blank (1) QC Batch: 124418

QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	QC Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<4.53	mg/Kg	10

Method Blank (1) QC Batch: 124464

QC Batch:	124464	Date Analyzed:	2015-08-28	Analyzed By:	RL
Prep Batch:	105248	QC Preparation:	2015-08-28	Prepared By:	RL

Parameter		Flag	Cert	MDL Result	Units	RL
Chloride	B	B	3,4,5	7.47	mg/Kg	25

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ
Prep Batch: 104907 | QC Preparation: 2015-08-14 | Prepared By: HJ

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	431	mg/Kg	1	500	<5.22	86	60.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	433	mg/Kg	1	500	<5.22	87	60.9 - 130	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	3	21.1	21.4	mg/Kg	1	25.0	84	86	48.9 - 172

Laboratory Control Spike (LCS-1)

QC Batch: 124091 | Date Analyzed: 2015-08-17 | Analyzed By: HJ
Prep Batch: 104908 | QC Preparation: 2015-08-14 | Prepared By: HJ

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	408	mg/Kg	1	500	<5.22	82	60.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	443	mg/Kg	1	500	<5.22	89	60.9 - 130	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	3	25.5	21.4	mg/Kg	1	25.0	102	86	48.9 - 172

Laboratory Control Spike (LCS-1)

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS
Prep Batch: 104987 | QC Preparation: 2015-08-18 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.89	mg/Kg	1	2.00	<0.00444	94	68.7 - 120
Toluene		1,2,3,4,5	1.91	mg/Kg	1	2.00	<0.00457	96	76.1 - 120
Ethylbenzene		1,2,3,4,5	1.93	mg/Kg	1	2.00	<0.00762	96	74.8 - 120
Xylene		1,2,3,4,5	5.78	mg/Kg	1	6.00	<0.00367	96	75.3 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.84	mg/Kg	1	2.00	<0.00444	92	68.7 - 120	3	20
Toluene		1,2,3,4,5	1.89	mg/Kg	1	2.00	<0.00457	94	76.1 - 120	1	20
Ethylbenzene		1,2,3,4,5	1.85	mg/Kg	1	2.00	<0.00762	92	74.8 - 120	4	20
Xylene		1,2,3,4,5	5.56	mg/Kg	1	6.00	<0.00367	93	75.3 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.78	1.77	mg/Kg	1	2.00	89	88	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	1.88	1.86	mg/Kg	1	2.00	94	93	71.2 - 123

Laboratory Control Spike (LCS-1)

QC Batch: 124202 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1,2,3,4	15.4	mg/Kg	1	20.0	<0.641	77	60.3 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1,2,3,4	15.4	mg/Kg	1	20.0	<0.641	77	60.3 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	3	1.66	1.64	mg/Kg	1	2.00	83	82	76.5 - 130
4-Bromofluorobenzene (4-BFB)	3	1.74	1.70	mg/Kg	1	2.00	87	85	68.4 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 124409 | Date Analyzed: 2015-08-25 | Analyzed By: RL
Prep Batch: 105200 | QC Preparation: 2015-08-25 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	244	mg/Kg	1	250	<4.69	98	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,5	244	mg/Kg	1	250	<4.69	98	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124418 | Date Analyzed: 2015-08-27 | Analyzed By: ZY
Prep Batch: 105210 | QC Preparation: 2015-08-27 | Prepared By: ZY

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			48.4	mg/Kg	1	50.0	<4.53	97	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			48.4	mg/Kg	1	50.0	<4.53	97	80 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124464 | Date Analyzed: 2015-08-28 | Analyzed By: RL
Prep Batch: 105248 | QC Preparation: 2015-08-28 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	241	mg/Kg	1	250	7.47	93	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,5	242	mg/Kg	1	250	7.47	94	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 402043

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ
Prep Batch: 104907 | QC Preparation: 2015-08-14 | Prepared By: HJ

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	638	mg/Kg	1	500	107	106	47.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	615	mg/Kg	1	500	107	102	47.9 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	3	24.9	23.8	mg/Kg	1	25	100	95	48.9 - 172

Matrix Spike (MS-1) Spiked Sample: 401928

QC Batch: 124091 | Date Analyzed: 2015-08-17 | Analyzed By: HJ
Prep Batch: 104908 | QC Preparation: 2015-08-14 | Prepared By: HJ

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	417	mg/Kg	1	500	<5.22	83	47.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	391	mg/Kg	1	500	<5.22	78	47.9 - 130	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	3	25.1	24.5	mg/Kg	1	25	100	98	48.9 - 172

Matrix Spike (MS-1) Spiked Sample: 402285

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS
Prep Batch: 104987 | QC Preparation: 2015-08-18 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.88	mg/Kg	1	2.00	<0.00444	94	61.8 - 120
Toluene		1,2,3,4,5	2.00	mg/Kg	1	2.00	<0.00457	100	64.6 - 122
Ethylbenzene		1,2,3,4,5	2.11	mg/Kg	1	2.00	<0.00762	106	62.2 - 130
Xylene		1,2,3,4,5	6.36	mg/Kg	1	6.00	<0.00367	106	62.2 - 126

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.81	mg/Kg	1	2.00	<0.00444	90	61.8 - 120	4	20
Toluene		1,2,3,4,5	2.11	mg/Kg	1	2.00	<0.00457	106	64.6 - 122	5	20
Ethylbenzene		1,2,3,4,5	2.03	mg/Kg	1	2.00	<0.00762	102	62.2 - 130	4	20
Xylene		1,2,3,4,5	6.10	mg/Kg	1	6.00	<0.00367	102	62.2 - 126	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.96	1.97	mg/Kg	1	2	98	98	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	2.04	2.04	mg/Kg	1	2	102	102	71.2 - 123

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124202 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1,2,3,4	14.4	mg/Kg	1	20.0	<0.641	72	25 - 139

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr Qr	1,2,3,4	19.0	mg/Kg	1	20.0	<0.641	95	25 - 139	28	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued . . .

matrix spikes continued ...

Surrogate				MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate				MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	Qsr	Qsr	3	1.46	1.79	mg/Kg	1	2	73	90	76.5 - 130
4-Bromofluorobenzene (4-BFB)			3	1.58	1.94	mg/Kg	1	2	79	97	68.4 - 120

Matrix Spike (MS-1) Spiked Sample: 401950

QC Batch: 124409 | Date Analyzed: 2015-08-25 | Analyzed By: RL
Prep Batch: 105200 | QC Preparation: 2015-08-25 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	257	mg/Kg	1	250	22.1	94	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,5	254	mg/Kg	1	250	22.1	93	80 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401961

QC Batch: 124418 | Date Analyzed: 2015-08-27 | Analyzed By: ZY
Prep Batch: 105210 | QC Preparation: 2015-08-27 | Prepared By: ZY

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			48.4	mg/Kg	1	50.0	<4.53	97	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			50.4	mg/Kg	1	50.0	<4.53	101	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 399660

QC Batch: 124464 | Date Analyzed: 2015-08-28 | Analyzed By: RL
Prep Batch: 105248 | QC Preparation: 2015-08-28 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	291	mg/Kg	2	250	50.2	96	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,5	284	mg/Kg	2	250	50.2	94	80 - 120	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	424	85	80 - 120	2015-08-17

Standard (CCV-2)

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	443	89	80 - 120	2015-08-17

Standard (CCV-1)

QC Batch: 124091 | Date Analyzed: 2015-08-17 | Analyzed By: HJ

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	443	89	80 - 120	2015-08-17

Standard (CCV-2)

QC Batch: 124091 | Date Analyzed: 2015-08-17 | Analyzed By: HJ

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	444	89	80 - 120	2015-08-17

Standard (CCV-1)

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0891	89	80 - 120	2015-08-18
Toluene		1,2,3,4,5	mg/kg	0.100	0.0893	89	80 - 120	2015-08-18
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0899	90	80 - 120	2015-08-18
Xylene		1,2,3,4,5	mg/kg	0.300	0.271	90	80 - 120	2015-08-18

Standard (CCV-2)

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0934	93	80 - 120	2015-08-18
Toluene		1,2,3,4,5	mg/kg	0.100	0.0944	94	80 - 120	2015-08-18
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0944	94	80 - 120	2015-08-18
Xylene		1,2,3,4,5	mg/kg	0.300	0.282	94	80 - 120	2015-08-18

Standard (CCV-3)

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0938	94	80 - 120	2015-08-18
Toluene		1,2,3,4,5	mg/kg	0.100	0.0932	93	80 - 120	2015-08-18
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.105	105	80 - 120	2015-08-18
Xylene		1,2,3,4,5	mg/kg	0.300	0.280	93	80 - 120	2015-08-18

Standard (CCV-1)

QC Batch: 124202 | Date Analyzed: 2015-08-19 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1,2,3,4	mg/Kg	1.00	0.949	95	80 - 120	2015-08-19

Standard (CCV-2)

QC Batch: 124202 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1,2,3,4	mg/Kg	1.00	0.888	89	80 - 120	2015-08-19

Standard (CCV-3)

QC Batch: 124202 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1,2,3,4	mg/Kg	1.00	1.07	107	80 - 120	2015-08-19

Standard (CCV-1)

QC Batch: 124409 Date Analyzed: 2015-08-25 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	25.1	100	90 - 110	2015-08-25

Standard (CCV-2)

QC Batch: 124409 Date Analyzed: 2015-08-25 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	25.3	101	90 - 110	2015-08-25

Standard (ICV-1)

QC Batch: 124418 Date Analyzed: 2015-08-27 Analyzed By: ZY

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	41.5	40.8	98	80 - 120	2015-08-27

Standard (CCV-1)

QC Batch: 124418 Date Analyzed: 2015-08-27 Analyzed By: ZY

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	52.2	104	80 - 120	2015-08-27

Standard (CCV-1)

QC Batch: 124464 Date Analyzed: 2015-08-28 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	24.0	96	90 - 110	2015-08-28

Standard (CCV-2)

QC Batch: 124464 Date Analyzed: 2015-08-28 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	24.3	97	90 - 110	2015-08-28

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	L-A-B	L2418	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-15-11	Lubbock
5		2014-018	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.

F	Description
U	The analyte is not detected above the SDL

Result Comments

1 Sample dilution due to surfactants.
2 Sample dilution due to surfactants.

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

WO #: 1508256

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N. Big Spring Suite 301A Midland, TX 79707

Project Manager Liz Scaggs

Laboratory: Trace Analysis, Inc.
Address: 6701 Aberdeen Ave Lubbock, TX 79424
Contact: Liz Gibens
Phone: 806-794-1296
PO/SO #:

Lab use only
Due Date:
Temp. of coolers when received (C°): ~~15.2~~ 5.0 NH
1 | 2 | 3 | 4 | 5
Page 1 of 2

Sampler's Name: Ryan Darney
Sampler's Signature:

Proj. No.: 102014607S
Project Name: Regency - Jal Landfarm #4
No/Type of Containers: 2/4oz

ANALYSIS REQUESTED: TPH (8015 DRO/GRO), Chloride (300.1), TPH (418.1), BTEX (8021B)

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH (8015 DRO/GRO)	Chloride (300.1)	TPH (418.1)	BTEX (8021B)	Lab Sample ID (Lab Use Only)
S	8/11/15	0845	X		TZ-14	1	1.5				X		X	X			401928
S	8/11/15	0915		X	VZ-14	3	3.5				X				X	X	401929
S	8/11/15	0950	X		TZ-13	1	1.5				X		X	X			401930
S	8/11/15	1015		X	VZ-13	3	3.5				X				X	X	401931
S	8/11/15	1040	X		TZ-12	1	1.5				X		X	X			401932
S	8/11/15	1105		X	~~TZ-12~~ VZ-12	3	3.5				X				X	X	401933
S	8/11/15	1145	X		TZ-10	1	1.5				X		X	X			401934
S	8/11/15	1215		X	VZ-10	3	3.5				X				X	X	401935
S	8/11/15	1245	X		TZ-11	1	1.5				X		X	X			401936
S	8/11/15	1300		X	VZ-11	3	3.5				X				X	X	401937

Turn around time: ☒ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	8/12/15	1506	Nancy TA	8/12/15	15:06
Nancy TA	8/13/15	9:55			
			BC/TA	8/14-15	820

NOTES: See Table 7 for PQLs
samples were brought on ice. corrected temp because temperature was checked on sample and not temp blank. Temp blank recd 5.0 NH
IR3 2.1/2.3c
AJ

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

LS 25807590

WO #: 1508256

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N. Big Springs
Suite 301 A
Midland, TX 79707
Project Manager Liz Scaggs

Laboratory: Trace Analysis, Inc.
Address: 6701 Aberdeen Ave
Lubbock, TX 79424
Contact: Liz Gibens
Phone: 806-794-1296
PO/SO #:

Sampler's Name: Ryan Darney
Sampler's Signature:

Proj. No.: 702014 6075
Project Name: Regency - Jal Landfarm
No/Type of Containers: 2 / 4oz

ANALYSIS REQUESTED: TPH (8015 DRO/GRO), Chloride (300.1), TPH (418.1), BTEX (8021B)

Lab use only
Due Date:
Temp. of coolers when received (C°): 5.0 WH ~~15.2~~
1 | 2 | 3 | 4 | 5
Page 2 of 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH (8015 DRO/GRO)	Chloride (300.1)	TPH (418.1)	BTEX (8021B)	Lab Sample ID (Lab Use Only)
S	8/11/15	1330	X		TZ-15	1	1.5				X		X	X			401938
S	8/11/15	1350		X	VZ-15	3	3.5				X				X	X	401939
S	8/11/15	1435	X		TZ-9	1	1.5				X		X	X			401940
S	8/11/15	1500		X	VZ-9	3	3.5				X				X	X	401941
S	8/11/15	1525	X		TZ-7	1	1.5				X		X	X			401942
S	8/11/15	1545		X	~~TZ~~ VZ-7	3	3.5				X				X	X	401943
S	8/11/15	1610	X		TZ-8	1	1.5				X		X	X			401944
S	8/11/15			X	VZ-8	3	3.5				X				X	X	401945

Turn around time: ☒ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	8/12/15	1500	Kelley TA	8/14/15	15:08
Kelley TA	8/13/15	9:55			
			BC/TA	8-14-15	820

NOTES: See Table 7 for PQLs

IR3 2.1/2.3 C°

LS 20807590

KJ

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Liz Scaggs
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: August 28, 2015

Work Order: 15081301

Project Name: Regency-Jal Landfarm
Project Number: 702014G075

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

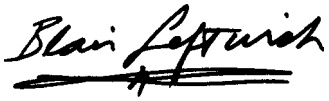
Sample	Description	Matrix	Date Taken	Time Taken	Date Received
401950	TZ-6	soil	2015-08-11	17:10	2015-08-12
401951	VZ-6	soil	2015-08-11	17:35	2015-08-12
401952	TZ-5	soil	2015-08-11	18:10	2015-08-12
401953	VZ-5	soil	2015-08-11	18:30	2015-08-12
401954	TZ-4	soil	2015-08-12	08:05	2015-08-12
401955	VZ-4	soil	2015-08-12	08:30	2015-08-12
401956	TZ-3	soil	2015-08-12	09:00	2015-08-12
401957	VZ-3	soil	2015-08-12	09:30	2015-08-12
401958	TZ-2	soil	2015-08-12	09:55	2015-08-12
401959	VZ-2	soil	2015-08-12	10:20	2015-08-12
401960	TZ-1	soil	2015-08-12	10:55	2015-08-12
401961	VZ-1	soil	2015-08-12	11:25	2015-08-12

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company,

sampler, contacts and any special remarks.

This report consists of a total of 59 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
James Taylor, Assistant Director
Brian Pellam, Operations Manager

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Case Narrative

Samples for project Regency-Jal Landfarm were received by TraceAnalysis, Inc. on 2015-08-12 and assigned to work order 15081301. Samples for work order 15081301 were received intact at a temperature of 5.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Ag, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
As, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Ba, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
BTEX	S 8021B	104948	2015-08-17 at 17:10	124123	2015-08-17 at 17:10
BTEX	S 8021B	104987	2015-08-18 at 14:34	124164	2015-08-18 at 14:34
BTEX	S 8021B	105019	2015-08-19 at 15:57	124201	2015-08-19 at 15:57
Cd, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Chloride (IC)	E 300.0	105200	2015-08-25 at 11:00	124409	2015-08-25 at 17:03
Chloride (IC)	E 300.0	105201	2015-08-25 at 11:00	124410	2015-08-25 at 17:03
Cr, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Cu, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Fe, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Hg, Total	S 7471 B	104926	2015-08-17 at 10:05	124111	2015-08-17 at 16:06
Mn, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Pb, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Se, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
TPH 418.1	E 418.1	105210	2015-08-27 at 17:16	124418	2015-08-27 at 17:18
TPH DRO	S 8015 D	104907	2015-08-14 at 13:00	124090	2015-08-17 at 11:49
TPH GRO	S 8015 D	105019	2015-08-19 at 15:57	124202	2015-08-19 at 15:57
U, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34
Zn, Total	S 6010C	104872	2015-08-14 at 11:22	124110	2015-08-17 at 14:34

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 15081301 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 401950 - TZ-6

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,5	<25.0	mg/Kg	1	25.0

Sample: 401950 - TZ-6

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	31.6	mg/Kg	1	25.0	126	48.9 - 172

Sample: 401950 - TZ-6

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.55	mg/Kg	1	2.00	78	76.5 - 130

continued ...

sample continued . . .

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		3	1.70	mg/Kg	1	2.00	85	68.4 - 120

Sample: 401951 - VZ-6

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.93	mg/Kg	1	2.00	96	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.95	mg/Kg	1	2.00	98	71.2 - 123

Sample: 401951 - VZ-6

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401952 - TZ-5

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124410	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105201	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	B	3,4,5	**341**	mg/Kg	1	25.0

Sample: 401952 - TZ-5

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	28.7	mg/Kg	1	25.0	115	48.9 - 172

Sample: 401952 - TZ-5

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.66	mg/Kg	1	2.00	83	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.75	mg/Kg	1	2.00	88	68.4 - 120

Sample: 401953 - VZ-5

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.84	mg/Kg	1	2.00	92	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.85	mg/Kg	1	2.00	92	71.2 - 123

Sample: 401953 - VZ-5

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124201	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene [1]	U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200
Toluene	U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200
Xylene	B,U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	5	1.37	mg/Kg	5	2.00	68	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.65	mg/Kg	5	2.00	82	71.2 - 123

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124410	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105201	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B	3,4,5	**32.2**	mg/Kg	1	25.0

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,5	**3.10**	mg/Kg	1	0.500

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron		2,3,4,5	**5370**	mg/Kg	10	1.50

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,5	**52.3**	mg/Kg	1	2.00

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	124111	Date Analyzed:	2015-08-17	Analyzed By:	TP
Prep Batch:	104926	Sample Preparation:	2015-08-17	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,5	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,5	**92.3**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,5	**6.83**	mg/Kg	1	0.500
Total Mercury		1,2,3,4,5	<0.0250	mg/Kg	1	0.0250
Total Lead	U	2,3,4,5	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,5	<2.00	mg/Kg	1	2.00

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC			**44.6**	mg/Kg	1	10.0

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	**226**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	3	56.4	mg/Kg	1	25.0	226	48.9 - 172

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter		Flag	Cert	Result	Units	Dilution	RL
GRO	2	Qr,U	1,2,3,4	<20.0	mg/Kg	5	4.00

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	3	1.27	mg/Kg	5	2.00	64	76.5 - 130
4-Bromofluorobenzene (4-BFB)			3	1.71	mg/Kg	5	2.00	86	68.4 - 120

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Uranium	U		<1.00	mg/Kg	1	1.00

Sample: 401954 - TZ-4

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Zinc		2,3,4,5	**27.7**	mg/Kg	1	1.00

Sample: 401955 - VZ-4

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.78	mg/Kg	1	2.00	89	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.80	mg/Kg	1	2.00	90	71.2 - 123

Sample: 401955 - VZ-4

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124201	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene [3]	U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200
Toluene	U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200
Xylene	B,U	1,2,3,4,5	<0.100	mg/Kg	5	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.76	mg/Kg	5	2.00	88	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.64	mg/Kg	5	2.00	82	71.2 - 123

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124410	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105201	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride	B	3,4,5	**32.7**	mg/Kg	1	25.0

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Copper		2,3,4,5	**1.11**	mg/Kg	1	0.500

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Iron		2,3,4,5	**3840**	mg/Kg	1	1.50

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Manganese		2,3,4,5	**32.6**	mg/Kg	1	2.00

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	124111	Date Analyzed:	2015-08-17	Analyzed By:	TP
Prep Batch:	104926	Sample Preparation:	2015-08-17	Prepared By:	TP

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Silver	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,5	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,5	**46.4**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,5	**4.38**	mg/Kg	1	0.500
Total Mercury		1,2,3,4,5	**0.102**	mg/Kg	1	0.0250
Total Lead	U	2,3,4,5	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,5	<2.00	mg/Kg	1	2.00

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC			**52.2**	mg/Kg	1	10.0

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1,2,3,4	**1080**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	3	134	mg/Kg	1	25.0	536	48.9 - 172

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter		Flag	Cert	Result	RL Units	Dilution	RL
GRO	4	Qr,U	1,2,3,4	<20.0	mg/Kg	5	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.70	mg/Kg	5	2.00	85	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.73	mg/Kg	5	2.00	86	68.4 - 120

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Uranium	U		<1.00	mg/Kg	1	1.00

Sample: 401956 - TZ-3

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Zinc		2,3,4,5	**8.24**	mg/Kg	1	1.00

Sample: 401957 - VZ-3

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.83	mg/Kg	1	2.00	92	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.84	mg/Kg	1	2.00	92	71.2 - 123

Sample: 401957 - VZ-3

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124201	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	B,U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	1.29	mg/Kg	1	2.00	64	77.1 - 120
4-Bromofluorobenzene (4-BFB)			5	1.46	mg/Kg	1	2.00	73	71.2 - 123

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124410	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105201	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B	3,4,5	**44.7**	mg/Kg	1	25.0

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,5	**2.95**	mg/Kg	1	0.500

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron		2,3,4,5	**4980**	mg/Kg	1	1.50

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,5	**55.7**	mg/Kg	1	2.00

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	124111	Date Analyzed:	2015-08-17	Analyzed By:	TP
Prep Batch:	104926	Sample Preparation:	2015-08-17	Prepared By:	TP

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Silver	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,5	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,5	**180**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,5	**6.45**	mg/Kg	1	0.500
Total Mercury		1,2,3,4,5	**0.0594**	mg/Kg	1	0.0250
Total Lead	U	2,3,4,5	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,5	<2.00	mg/Kg	1	2.00

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	29.3	mg/Kg	1	25.0	117	48.9 - 172

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	3	1.29	mg/Kg	1	2.00	64	76.5 - 130
4-Bromofluorobenzene (4-BFB)			3	1.46	mg/Kg	1	2.00	73	68.4 - 120

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Uranium	U		<1.00	mg/Kg	1	1.00

Sample: 401958 - TZ-2

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Zinc		2,3,4,5	**10.6**	mg/Kg	1	1.00

Sample: 401959 - VZ-2

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124164	Date Analyzed:	2015-08-18	Analyzed By:	JS
Prep Batch:	104987	Sample Preparation:	2015-08-18	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.78	mg/Kg	1	2.00	89	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.82	mg/Kg	1	2.00	91	71.2 - 123

Sample: 401959 - VZ-2

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124201	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	B,U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	1.39	mg/Kg	1	2.00	70	77.1 - 120
4-Bromofluorobenzene (4-BFB)			5	1.58	mg/Kg	1	2.00	79	71.2 - 123

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	124410	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105201	Sample Preparation:		Prepared By:	RL

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	B,Qs	3,4,5	**52.3**	mg/Kg	2	25.0

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Copper		2,3,4,5	**2.42**	mg/Kg	1	0.500

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Iron		2,3,4,5	**4910**	mg/Kg	10	1.50

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	Mn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Total Manganese		2,3,4,5	**62.2**	mg/Kg	1	2.00

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471 B	Prep Method:	N/A
QC Batch:	124111	Date Analyzed:	2015-08-17	Analyzed By:	TP
Prep Batch:	104926	Sample Preparation:	2015-08-17	Prepared By:	TP

Parameter	Flag	Cert	Result	Units	Dilution	RL
Total Silver	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Arsenic	U	2,3,4,5	<2.00	mg/Kg	1	2.00
Total Barium		2,3,4,5	**143**	mg/Kg	1	1.00
Total Cadmium	U	2,3,4,5	<0.500	mg/Kg	1	0.500
Total Chromium		2,3,4,5	**6.18**	mg/Kg	1	0.500
Total Mercury		1,2,3,4,5	**0.0262**	mg/Kg	1	0.0250
Total Lead	U	2,3,4,5	<1.00	mg/Kg	1	1.00
Total Selenium	U	2,3,4,5	<2.00	mg/Kg	1	2.00

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	Result	Units	Dilution	RL
TRPHC			<10.0	mg/Kg	1	10.0

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	Sample Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	U	1,2,3,4	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	31.3	mg/Kg	1	25.0	125	48.9 - 172

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	124202	Date Analyzed:	2015-08-19	Analyzed By:	JS
Prep Batch:	105019	Sample Preparation:	2015-08-19	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,U	1,2,3,4	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.36	mg/Kg	1	2.00	68	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.58	mg/Kg	1	2.00	79	68.4 - 120

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	U, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Uranium	U		<1.00	mg/Kg	1	1.00

Sample: 401960 - TZ-1

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010C	Prep Method:	S 3050B
QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	Sample Preparation:	2015-08-14	Prepared By:	RR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Zinc		2,3,4,5	**12.5**	mg/Kg	1	1.00

Sample: 401961 - VZ-1

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	124123	Date Analyzed:	2015-08-17	Analyzed By:	JS
Prep Batch:	104948	Sample Preparation:	2015-08-17	Prepared By:	JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Toluene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

continued . . .

sample 401961 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Ethylbenzene	U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200
Xylene	B,U	1,2,3,4,5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.68	mg/Kg	1	2.00	84	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.50	mg/Kg	1	2.00	75	71.2 - 123

Sample: 401961 - VZ-1

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	Sample Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC	U		<10.0	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 124090

QC Batch:	124090	Date Analyzed:	2015-08-17	Analyzed By:	HJ
Prep Batch:	104907	QC Preparation:	2015-08-14	Prepared By:	HJ

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1,2,3,4	<5.22	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		3	27.8	mg/Kg	1	25.0	111	48.9 - 172

Method Blank (1) QC Batch: 124110

QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	QC Preparation:	2015-08-14	Prepared By:	PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Copper		2,3,4,5	<0.149	mg/Kg	0.5

Method Blank (1) QC Batch: 124110

QC Batch:	124110	Date Analyzed:	2015-08-17	Analyzed By:	RR
Prep Batch:	104872	QC Preparation:	2015-08-14	Prepared By:	PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Iron		2,3,4,5	<0.836	mg/Kg	1.5

Method Blank (1) QC Batch: 124110

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Manganese		2,3,4,5	<0.0315	mg/Kg	2

Method Blank (1) QC Batch: 124110

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Uranium			<0.823	mg/Kg	1

Method Blank (1) QC Batch: 124110

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Zinc		2,3,4,5	<0.113	mg/Kg	1

Method Blank (1) QC Batch: 124110

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Parameter	Flag	Cert	MDL Result	Units	RL
Total Silver		2,3,4,5	<0.0356	mg/Kg	0.5
Total Arsenic		2,3,4,5	<0.568	mg/Kg	2
Total Barium		2,3,4,5	<0.105	mg/Kg	1
Total Cadmium		2,3,4,5	<0.0303	mg/Kg	0.5

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Total Chromium		2,3,4,5	<0.118	mg/Kg	0.5
Total Lead		2,3,4,5	<0.140	mg/Kg	1
Total Selenium		2,3,4,5	<0.451	mg/Kg	2

Method Blank (1) QC Batch: 124111

QC Batch: 124111 Date Analyzed: 2015-08-17 Analyzed By: TP
Prep Batch: 104926 QC Preparation: 2015-08-17 Prepared By: TP

Parameter	Flag	Cert	MDL Result	Units	RL
Total Mercury		1,2,3,4,5	<0.00325	mg/Kg	0.025

Method Blank (1) QC Batch: 124123

QC Batch: 124123 Date Analyzed: 2015-08-17 Analyzed By: JS
Prep Batch: 104948 QC Preparation: 2015-08-17 Prepared By: JS

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1,2,3,4,5	<0.00444	mg/Kg	0.02
Toluene		1,2,3,4,5	<0.00457	mg/Kg	0.02
Ethylbenzene		1,2,3,4,5	<0.00762	mg/Kg	0.02
Xylene	B	B	1,2,3,4,5	0.00520	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.66	mg/Kg	1	2.00	83	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.52	mg/Kg	1	2.00	76	71.2 - 123

Method Blank (1) QC Batch: 124164

QC Batch: 124164 Date Analyzed: 2015-08-18 Analyzed By: JS
Prep Batch: 104987 QC Preparation: 2015-08-18 Prepared By: JS

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1,2,3,4,5	<0.00444	mg/Kg	0.02
Toluene		1,2,3,4,5	<0.00457	mg/Kg	0.02
Ethylbenzene		1,2,3,4,5	<0.00762	mg/Kg	0.02
Xylene		1,2,3,4,5	<0.00367	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.83	mg/Kg	1	2.00	92	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.93	mg/Kg	1	2.00	96	71.2 - 123

Method Blank (1) QC Batch: 124201

QC Batch: 124201 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1,2,3,4,5	<0.00444	mg/Kg	0.02
Toluene		1,2,3,4,5	<0.00457	mg/Kg	0.02
Ethylbenzene		1,2,3,4,5	<0.00762	mg/Kg	0.02
Xylene	B	B	1,2,3,4,5	0.00450	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5	1.73	mg/Kg	1	2.00	86	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.70	mg/Kg	1	2.00	85	71.2 - 123

Method Blank (1) QC Batch: 124202

QC Batch: 124202 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1,2,3,4	<0.641	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3	1.74	mg/Kg	1	2.00	87	76.5 - 130

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method blank continued ...

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		3	1.67	mg/Kg	1	2.00	84	68.4 - 120

Method Blank (1) QC Batch: 124409

QC Batch:	124409	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105200	QC Preparation:	2015-08-25	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		3,4,5	<4.69	mg/Kg	25

Method Blank (1) QC Batch: 124410

QC Batch:	124410	Date Analyzed:	2015-08-25	Analyzed By:	RL
Prep Batch:	105201	QC Preparation:	2015-08-25	Prepared By:	RL

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride	B	3,4,5	6.99	mg/Kg	25

Method Blank (1) QC Batch: 124418

QC Batch:	124418	Date Analyzed:	2015-08-27	Analyzed By:	ZY
Prep Batch:	105210	QC Preparation:	2015-08-27	Prepared By:	ZY

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<4.53	mg/Kg	10

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ
Prep Batch: 104907 | QC Preparation: 2015-08-14 | Prepared By: HJ

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	431	mg/Kg	1	500	<5.22	86	60.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	433	mg/Kg	1	500	<5.22	87	60.9 - 130	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	3	21.1	21.4	mg/Kg	1	25.0	84	86	48.9 - 172

Laboratory Control Spike (LCS-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper		2,3,4,5	12.5	mg/Kg	1	12.5	<0.149	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Copper		2,3,4,5	12.2	mg/Kg	1	12.5	<0.149	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron		2,3,4,5	51.0	mg/Kg	1	50.0	<0.836	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Iron		2,3,4,5	50.5	mg/Kg	1	50.0	<0.836	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese		2,3,4,5	24.9	mg/Kg	1	25.0	<0.0315	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Manganese		2,3,4,5	24.3	mg/Kg	1	25.0	<0.0315	97	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Uranium			48.9	mg/Kg	1	50.0	<0.823	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Uranium			48.5	mg/Kg	1	50.0	<0.823	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc		2,3,4,5	25.7	mg/Kg	1	25.0	<0.113	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc		2,3,4,5	25.4	mg/Kg	1	25.0	<0.113	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver		2,3,4,5	12.1	mg/Kg	1	12.5	<0.0356	97	85 - 115
Total Arsenic		2,3,4,5	48.3	mg/Kg	1	50.0	<0.568	97	85 - 115
Total Barium		2,3,4,5	98.9	mg/Kg	1	100	<0.105	99	85 - 115
Total Cadmium		2,3,4,5	25.2	mg/Kg	1	25.0	<0.0303	101	85 - 115
Total Chromium		2,3,4,5	10.4	mg/Kg	1	10.0	<0.118	104	85 - 115
Total Lead		2,3,4,5	47.3	mg/Kg	1	50.0	<0.140	95	85 - 115
Total Selenium		2,3,4,5	47.8	mg/Kg	1	50.0	<0.451	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver		2,3,4,5	12.0	mg/Kg	1	12.5	<0.0356	96	85 - 115	1	20
Total Arsenic		2,3,4,5	48.2	mg/Kg	1	50.0	<0.568	96	85 - 115	0	20

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Barium		2,3,4,5	97.0	mg/Kg	1	100	<0.105	97	85 - 115	2	20
Total Cadmium		2,3,4,5	25.0	mg/Kg	1	25.0	<0.0303	100	85 - 115	1	20
Total Chromium		2,3,4,5	10.3	mg/Kg	1	10.0	<0.118	103	85 - 115	1	20
Total Lead		2,3,4,5	48.9	mg/Kg	1	50.0	<0.140	98	85 - 115	3	20
Total Selenium		2,3,4,5	48.4	mg/Kg	1	50.0	<0.451	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124111 | Date Analyzed: 2015-08-17 | Analyzed By: TP
Prep Batch: 104926 | QC Preparation: 2015-08-17 | Prepared By: TP

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1,2,3,4,5	0.271	mg/Kg	1	0.250	<0.00325	108	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,5	0.255	mg/Kg	1	0.250	<0.00325	102	80 - 120	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124123 | Date Analyzed: 2015-08-17 | Analyzed By: JS
Prep Batch: 104948 | QC Preparation: 2015-08-17 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.70	mg/Kg	1	2.00	<0.00444	85	68.7 - 120
Toluene		1,2,3,4,5	1.67	mg/Kg	1	2.00	<0.00457	84	76.1 - 120
Ethylbenzene		1,2,3,4,5	1.64	mg/Kg	1	2.00	<0.00762	82	74.8 - 120
Xylene		1,2,3,4,5	4.96	mg/Kg	1	6.00	0.0052	83	75.3 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued . . .

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.66	mg/Kg	1	2.00	<0.00444	83	68.7 - 120	2	20
Toluene		1,2,3,4,5	1.66	mg/Kg	1	2.00	<0.00457	83	76.1 - 120	1	20
Ethylbenzene		1,2,3,4,5	1.63	mg/Kg	1	2.00	<0.00762	82	74.8 - 120	1	20
Xylene		1,2,3,4,5	4.91	mg/Kg	1	6.00	0.0052	82	75.3 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.84	1.58	mg/Kg	1	2.00	92	79	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	1.48	1.50	mg/Kg	1	2.00	74	75	71.2 - 123

Laboratory Control Spike (LCS-1)

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS
Prep Batch: 104987 | QC Preparation: 2015-08-18 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.89	mg/Kg	1	2.00	<0.00444	94	68.7 - 120
Toluene		1,2,3,4,5	1.91	mg/Kg	1	2.00	<0.00457	96	76.1 - 120
Ethylbenzene		1,2,3,4,5	1.93	mg/Kg	1	2.00	<0.00762	96	74.8 - 120
Xylene		1,2,3,4,5	5.78	mg/Kg	1	6.00	<0.00367	96	75.3 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.84	mg/Kg	1	2.00	<0.00444	92	68.7 - 120	3	20
Toluene		1,2,3,4,5	1.89	mg/Kg	1	2.00	<0.00457	94	76.1 - 120	1	20
Ethylbenzene		1,2,3,4,5	1.85	mg/Kg	1	2.00	<0.00762	92	74.8 - 120	4	20
Xylene		1,2,3,4,5	5.56	mg/Kg	1	6.00	<0.00367	93	75.3 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.78	1.77	mg/Kg	1	2.00	89	88	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	1.88	1.86	mg/Kg	1	2.00	94	93	71.2 - 123

Laboratory Control Spike (LCS-1)

QC Batch: 124201 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.68	mg/Kg	1	2.00	<0.00444	84	68.7 - 120
Toluene		1,2,3,4,5	1.76	mg/Kg	1	2.00	<0.00457	88	76.1 - 120
Ethylbenzene		1,2,3,4,5	1.83	mg/Kg	1	2.00	<0.00762	92	74.8 - 120
Xylene		1,2,3,4,5	5.36	mg/Kg	1	6.00	<0.00367	89	75.3 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.67	mg/Kg	1	2.00	<0.00444	84	68.7 - 120	1	20
Toluene		1,2,3,4,5	1.90	mg/Kg	1	2.00	<0.00457	95	76.1 - 120	8	20
Ethylbenzene		1,2,3,4,5	1.80	mg/Kg	1	2.00	<0.00762	90	74.8 - 120	2	20
Xylene		1,2,3,4,5	5.29	mg/Kg	1	6.00	<0.00367	88	75.3 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.77	1.80	mg/Kg	1	2.00	88	90	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	1.80	1.77	mg/Kg	1	2.00	90	88	71.2 - 123

Laboratory Control Spike (LCS-1)

QC Batch: 124202 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1,2,3,4	15.4	mg/Kg	1	20.0	<0.641	77	60.3 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1,2,3,4	15.4	mg/Kg	1	20.0	<0.641	77	60.3 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Surrogate		LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	3	1.66	1.64	mg/Kg	1	2.00	83	82	76.5 - 130
4-Bromofluorobenzene (4-BFB)	3	1.74	1.70	mg/Kg	1	2.00	87	85	68.4 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 124409 | Date Analyzed: 2015-08-25 | Analyzed By: RL
Prep Batch: 105200 | QC Preparation: 2015-08-25 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	244	mg/Kg	1	250	<4.69	98	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,5	244	mg/Kg	1	250	<4.69	98	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124410 | Date Analyzed: 2015-08-25 | Analyzed By: RL
Prep Batch: 105201 | QC Preparation: 2015-08-25 | Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	255	mg/Kg	1	250	6.99	99	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,5	249	mg/Kg	1	250	6.99	97	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 124418 | Date Analyzed: 2015-08-27 | Analyzed By: ZY
Prep Batch: 105210 | QC Preparation: 2015-08-27 | Prepared By: ZY

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			48.4	mg/Kg	1	50.0	<4.53	97	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			48.4	mg/Kg	1	50.0	<4.53	97	80 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 402043

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ
Prep Batch: 104907 | QC Preparation: 2015-08-14 | Prepared By: HJ

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1,2,3,4	638	mg/Kg	1	500	107	106	47.9 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1,2,3,4	615	mg/Kg	1	500	107	102	47.9 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	3	24.9	23.8	mg/Kg	1	25	100	95	48.9 - 172

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper		2,3,4,5	13.4	mg/Kg	1	12.5	2.42	88	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Copper		2,3,4,5	13.1	mg/Kg	1	12.5	2.42	85	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron	Qs Qs	2,3,4,5	4890	mg/Kg	1	50.0	4910	-40	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Iron		2,3,4,5	4970	mg/Kg	1	50.0	4910	120	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese		2,3,4,5	81.6	mg/Kg	1	25.0	62.2	78	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Manganese		2,3,4,5	83.9	mg/Kg	1	25.0	62.2	87	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Uranium			42.4	mg/Kg	1	50.0	<0.823	85	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Uranium			44.1	mg/Kg	1	50.0	<0.823	88	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc		2,3,4,5	33.0	mg/Kg	1	25.0	12.5	82	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc		2,3,4,5	32.2	mg/Kg	1	25.0	12.5	79	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR
Prep Batch: 104872 | QC Preparation: 2015-08-14 | Prepared By: PM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver		2,3,4,5	11.8	mg/Kg	1	12.5	<0.0356	94	75 - 125
Total Arsenic		2,3,4,5	48.2	mg/Kg	1	50.0	<0.568	96	75 - 125
Total Barium		2,3,4,5	228	mg/Kg	1	100	143	85	75 - 125
Total Cadmium		2,3,4,5	23.3	mg/Kg	1	25.0	<0.0303	93	75 - 125
Total Chromium		2,3,4,5	15.6	mg/Kg	1	10.0	6.18	94	75 - 125
Total Lead		2,3,4,5	38.8	mg/Kg	1	50.0	<0.140	78	75 - 125
Total Selenium		2,3,4,5	40.9	mg/Kg	1	50.0	<0.451	82	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver		2,3,4,5	11.4	mg/Kg	1	12.5	<0.0356	91	75 - 125	3	20
Total Arsenic		2,3,4,5	45.9	mg/Kg	1	50.0	<0.568	92	75 - 125	5	20

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Barium		2,3,4,5	231	mg/Kg	1	100	143	88	75 - 125	1	20
Total Cadmium		2,3,4,5	22.7	mg/Kg	1	25.0	<0.0303	91	75 - 125	3	20
Total Chromium		2,3,4,5	15.5	mg/Kg	1	10.0	6.18	93	75 - 125	1	20
Total Lead		2,3,4,5	38.8	mg/Kg	1	50.0	<0.140	78	75 - 125	0	20
Total Selenium		2,3,4,5	42.8	mg/Kg	1	50.0	<0.451	86	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124111 | Date Analyzed: 2015-08-17 | Analyzed By: TP
Prep Batch: 104926 | QC Preparation: 2015-08-17 | Prepared By: TP

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury	Qs	Qs	1,2,3,4,5	0.333	mg/Kg	1	0.250	0.0262	123	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury		1,2,3,4,5	0.273	mg/Kg	1	0.250	0.0262	99	80 - 120	20	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401961

QC Batch: 124123 | Date Analyzed: 2015-08-17 | Analyzed By: JS
Prep Batch: 104948 | QC Preparation: 2015-08-17 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.58	mg/Kg	1	2.00	<0.00444	79	61.8 - 120
Toluene		1,2,3,4,5	1.80	mg/Kg	1	2.00	<0.00457	90	64.6 - 122
Ethylbenzene		1,2,3,4,5	1.66	mg/Kg	1	2.00	<0.00762	83	62.2 - 130
Xylene		1,2,3,4,5	4.99	mg/Kg	1	6.00	<0.00367	83	62.2 - 126

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.48	mg/Kg	1	2.00	<0.00444	74	61.8 - 120	6	20
Toluene		1,2,3,4,5	1.53	mg/Kg	1	2.00	<0.00457	76	64.6 - 122	16	20
Ethylbenzene		1,2,3,4,5	1.56	mg/Kg	1	2.00	<0.00762	78	62.2 - 130	6	20
Xylene		1,2,3,4,5	4.71	mg/Kg	1	6.00	<0.00367	78	62.2 - 126	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.64	1.62	mg/Kg	1	2	82	81	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	1.51	1.47	mg/Kg	1	2	76	74	71.2 - 123

Matrix Spike (MS-1) Spiked Sample: 402285

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS
Prep Batch: 104987 | QC Preparation: 2015-08-18 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.88	mg/Kg	1	2.00	<0.00444	94	61.8 - 120
Toluene		1,2,3,4,5	2.00	mg/Kg	1	2.00	<0.00457	100	64.6 - 122
Ethylbenzene		1,2,3,4,5	2.11	mg/Kg	1	2.00	<0.00762	106	62.2 - 130
Xylene		1,2,3,4,5	6.36	mg/Kg	1	6.00	<0.00367	106	62.2 - 126

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.81	mg/Kg	1	2.00	<0.00444	90	61.8 - 120	4	20
Toluene		1,2,3,4,5	2.11	mg/Kg	1	2.00	<0.00457	106	64.6 - 122	5	20
Ethylbenzene		1,2,3,4,5	2.03	mg/Kg	1	2.00	<0.00762	102	62.2 - 130	4	20
Xylene		1,2,3,4,5	6.10	mg/Kg	1	6.00	<0.00367	102	62.2 - 126	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.96	1.97	mg/Kg	1	2	98	98	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	2.04	2.04	mg/Kg	1	2	102	102	71.2 - 123

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124201 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1,2,3,4,5	1.54	mg/Kg	1	2.00	<0.00444	77	61.8 - 120
Toluene		1,2,3,4,5	1.62	mg/Kg	1	2.00	<0.00457	81	64.6 - 122
Ethylbenzene		1,2,3,4,5	1.66	mg/Kg	1	2.00	<0.00762	83	62.2 - 130
Xylene		1,2,3,4,5	4.89	mg/Kg	1	6.00	<0.00367	82	62.2 - 126

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1,2,3,4,5	1.40	mg/Kg	1	2.00	<0.00444	70	61.8 - 120	9	20
Toluene		1,2,3,4,5	1.46	mg/Kg	1	2.00	<0.00457	73	64.6 - 122	10	20
Ethylbenzene		1,2,3,4,5	1.51	mg/Kg	1	2.00	<0.00762	75	62.2 - 130	10	20
Xylene		1,2,3,4,5	4.44	mg/Kg	1	6.00	<0.00367	74	62.2 - 126	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5	1.66	1.52	mg/Kg	1	2	83	76	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	1.70	1.52	mg/Kg	1	2	85	76	71.2 - 123

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124202 | Date Analyzed: 2015-08-19 | Analyzed By: JS
Prep Batch: 105019 | QC Preparation: 2015-08-19 | Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1,2,3,4	14.4	mg/Kg	1	20.0	<0.641	72	25 - 139

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr Qr	1,2,3,4	19.0	mg/Kg	1	20.0	<0.641	95	25 - 139	28	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued . . .

matrix spikes continued ...

Surrogate				MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate				MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	Qsr	Qsr	3	1.46	1.79	mg/Kg	1	2	73	90	76.5 - 130
4-Bromofluorobenzene (4-BFB)			3	1.58	1.94	mg/Kg	1	2	79	97	68.4 - 120

Matrix Spike (MS-1) Spiked Sample: 401950

QC Batch: 124409 | Date Analyzed: 2015-08-25 | Analyzed By: RL
Prep Batch: 105200 | QC Preparation: 2015-08-25 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	257	mg/Kg	1	250	22.1	94	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		3,4,5	254	mg/Kg	1	250	22.1	93	80 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401960

QC Batch: 124410 | Date Analyzed: 2015-08-25 | Analyzed By: RL
Prep Batch: 105201 | QC Preparation: 2015-08-25 | Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		3,4,5	276	mg/Kg	2	250	52.3	89	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	Qs	Qs	3,4,5	247	mg/Kg	2	250	52.3	78	80 - 120	11	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 401961

QC Batch: 124418 | Date Analyzed: 2015-08-27 | Analyzed By: ZY
Prep Batch: 105210 | QC Preparation: 2015-08-27 | Prepared By: ZY

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			48.4	mg/Kg	1	50.0	<4.53	97	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			50.4	mg/Kg	1	50.0	<4.53	101	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	424	85	80 - 120	2015-08-17

Standard (CCV-2)

QC Batch: 124090 | Date Analyzed: 2015-08-17 | Analyzed By: HJ

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1,2,3,4	mg/Kg	500	443	89	80 - 120	2015-08-17

Standard (ICV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		2,3,4,5	mg/Kg	1.00	1.02	102	90 - 110	2015-08-17

Standard (ICV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		2,3,4,5	mg/Kg	1.00	0.942	94	90 - 110	2015-08-17

Standard (ICV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		2,3,4,5	mg/Kg	1.00	0.946	95	90 - 110	2015-08-17

Standard (ICV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Uranium			mg/Kg	1.00	0.968	97	90 - 110	2015-08-17

Standard (ICV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		2,3,4,5	mg/Kg	1.00	0.936	94	90 - 110	2015-08-17

Standard (ICV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		2,3,4,5	mg/Kg	0.125	0.122	98	90 - 110	2015-08-17
Total Arsenic		2,3,4,5	mg/Kg	1.00	0.993	99	90 - 110	2015-08-17
Total Barium		2,3,4,5	mg/Kg	1.00	0.963	96	90 - 110	2015-08-17
Total Cadmium		2,3,4,5	mg/Kg	1.00	0.972	97	90 - 110	2015-08-17
Total Chromium		2,3,4,5	mg/Kg	1.00	0.930	93	90 - 110	2015-08-17
Total Lead		2,3,4,5	mg/Kg	1.00	0.960	96	90 - 110	2015-08-17
Total Selenium		2,3,4,5	mg/Kg	1.00	0.963	96	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		2,3,4,5	mg/Kg	1.00	1.01	101	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		2,3,4,5	mg/Kg	1.00	1.00	100	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		2,3,4,5	mg/Kg	1.00	0.967	97	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Uranium			mg/Kg	1.00	0.981	98	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124110 | Date Analyzed: 2015-08-17 | Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		2,3,4,5	mg/Kg	1.00	0.969	97	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124110 Date Analyzed: 2015-08-17 Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		2,3,4,5	mg/Kg	0.125	0.128	102	90 - 110	2015-08-17
Total Arsenic		2,3,4,5	mg/Kg	1.00	1.03	103	90 - 110	2015-08-17
Total Barium		2,3,4,5	mg/Kg	1.00	0.978	98	90 - 110	2015-08-17
Total Cadmium		2,3,4,5	mg/Kg	1.00	1.00	100	90 - 110	2015-08-17
Total Chromium		2,3,4,5	mg/Kg	1.00	0.992	99	90 - 110	2015-08-17
Total Lead		2,3,4,5	mg/Kg	1.00	0.972	97	90 - 110	2015-08-17
Total Selenium		2,3,4,5	mg/Kg	1.00	0.950	95	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124111 Date Analyzed: 2015-08-17 Analyzed By: TP

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1,2,3,4,5	mg/L	0.0100	0.0101	101	90 - 110	2015-08-17

Standard (CCV-2)

QC Batch: 124111 Date Analyzed: 2015-08-17 Analyzed By: TP

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1,2,3,4,5	mg/L	0.0100	0.0101	101	90 - 110	2015-08-17

Standard (CCV-1)

QC Batch: 124123 | Date Analyzed: 2015-08-17 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0851	85	80 - 120	2015-08-17
Toluene		1,2,3,4,5	mg/kg	0.100	0.0823	82	80 - 120	2015-08-17
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0828	83	80 - 120	2015-08-17
Xylene		1,2,3,4,5	mg/kg	0.300	0.249	83	80 - 120	2015-08-17

Standard (CCV-2)

QC Batch: 124123 | Date Analyzed: 2015-08-17 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0835	84	80 - 120	2015-08-17
Toluene		1,2,3,4,5	mg/kg	0.100	0.0832	83	80 - 120	2015-08-17
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0824	82	80 - 120	2015-08-17
Xylene		1,2,3,4,5	mg/kg	0.300	0.248	83	80 - 120	2015-08-17

Standard (CCV-2)

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0934	93	80 - 120	2015-08-18
Toluene		1,2,3,4,5	mg/kg	0.100	0.0944	94	80 - 120	2015-08-18
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0944	94	80 - 120	2015-08-18
Xylene		1,2,3,4,5	mg/kg	0.300	0.282	94	80 - 120	2015-08-18

Standard (CCV-3)

QC Batch: 124164 | Date Analyzed: 2015-08-18 | Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0938	94	80 - 120	2015-08-18
Toluene		1,2,3,4,5	mg/kg	0.100	0.0932	93	80 - 120	2015-08-18
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.105	105	80 - 120	2015-08-18
Xylene		1,2,3,4,5	mg/kg	0.300	0.280	93	80 - 120	2015-08-18

Standard (CCV-1)

QC Batch: 124201 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0860	86	80 - 120	2015-08-19
Toluene		1,2,3,4,5	mg/kg	0.100	0.0850	85	80 - 120	2015-08-19
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0849	85	80 - 120	2015-08-19
Xylene		1,2,3,4,5	mg/kg	0.300	0.250	83	80 - 120	2015-08-19

Standard (CCV-2)

QC Batch: 124201 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0837	84	80 - 120	2015-08-19
Toluene		1,2,3,4,5	mg/kg	0.100	0.0841	84	80 - 120	2015-08-19
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0840	84	80 - 120	2015-08-19
Xylene		1,2,3,4,5	mg/kg	0.300	0.246	82	80 - 120	2015-08-19

Standard (CCV-3)

QC Batch: 124201 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.0849	85	80 - 120	2015-08-19

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standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		1,2,3,4,5	mg/kg	0.100	0.0832	83	80 - 120	2015-08-19
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0827	83	80 - 120	2015-08-19
Xylene		1,2,3,4,5	mg/kg	0.300	0.252	84	80 - 120	2015-08-19

Standard (CCV-1)

QC Batch: 124202 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1,2,3,4	mg/Kg	1.00	0.949	95	80 - 120	2015-08-19

Standard (CCV-2)

QC Batch: 124202 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1,2,3,4	mg/Kg	1.00	0.888	89	80 - 120	2015-08-19

Standard (CCV-3)

QC Batch: 124202 Date Analyzed: 2015-08-19 Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1,2,3,4	mg/Kg	1.00	1.07	107	80 - 120	2015-08-19

Standard (CCV-1)

QC Batch: 124409 Date Analyzed: 2015-08-25 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	25.1	100	90 - 110	2015-08-25

Standard (CCV-2)

QC Batch: 124409 Date Analyzed: 2015-08-25 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	25.3	101	90 - 110	2015-08-25

Standard (CCV-1)

QC Batch: 124410 Date Analyzed: 2015-08-25 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	25.3	101	90 - 110	2015-08-25

Standard (CCV-2)

QC Batch: 124410 Date Analyzed: 2015-08-25 Analyzed By: RL

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		3,4,5	mg/Kg	25.0	25.2	101	90 - 110	2015-08-25

Standard (ICV-1)

QC Batch: 124418 Date Analyzed: 2015-08-27 Analyzed By: ZY

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	41.5	40.8	98	80 - 120	2015-08-27

Standard (CCV-1)

QC Batch: 124418 Date Analyzed: 2015-08-27 Analyzed By: ZY

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	50.0	52.2	104	80 - 120	2015-08-27

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	L-A-B	L2418	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-15-11	Lubbock
5		2014-018	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.

F	Description
U	The analyte is not detected above the SDL

Result Comments

1 Sample dilution due to surfactants.
2 Sample dilution due to surfactants.
3 Sample dilution due to surfactants.
4 Sample dilution due to surfactants.

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

WO #: 1508130

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N. Big Spring St. Suite 301 A Midland, TX 79707

Project Manager Liz Seaggs

Laboratory: Trace Analysis, Inc

Address: 6701 Aberdeen Ave. Lubbock, TX 79424

Contact: Liz Gibens

Phone: 806-794-1296

PO/SO #:

Sampler's Name: Ryan Darney

Sampler's Signature:

Proj. No.: 702014G075

Project Name: Regency-Jal Landfarm

No/Type of Containers: 2 / 4oz

Lab use only
Due Date:
Temp. of coolers when received (C°): 5.0 N/A, 1.2
1 | 2 | 3 | 4 | 5
Page 1 of 2

ANALYSIS REQUESTED

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH (8015 DRO/GRO)	Chloride (300.1)	Metals (6010C or 6020A)	TPH (418.1)	BTEX (8021B)	Lab Sample ID (Lab Use Only)
S	8/11/15	1710	X		TZ-6	1	1.5				X		X	X				401950
S	8/11/15	1735		X	VZ-6	3	3.5				X					X	X	401951
S	8/11/15	1810	X		TZ-5	1	1.5				X		X	X				401952
S	8/11/15	1830		X	VZ-5	3	3.5				X		X	X		X	RD X	401953
S	8/12/15	0805	X		TZ-4	1	1.5				X		X	X	X	X	X	401954
S	8/12/15	0830		X	VZ-4	3	3.5				X					X	X	401955
S	8/12/15	0900	X		TZ-3	1	1.5				X		X	X	X	X	X	401956
S	8/12/15	0930		X	VZ-3	3	3.5				X					X	X	401957
S	8/12/15	0955	X		TZ-2	1	1.5				X		X	X	X	X	X	401958
S	8/12/15	1020		X	VZ-2	3	3.5				X					X	X	401959

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8/12/15	1506	Nancy TA	8/13/15	15:06
Nancy TA	8/13/15	1457			
			DC TA	8-14-15	820

NOTES: See Table 7 for PQLs
TZ-4, TZ-3, TZ-2, + TZ-1 have 4 sample jars.
Samples were brought on ice. Corrected temp because temperature was checked from temp blank and not sample and temp blank read 5.0 N/A
FR3 2.1/2.3 C LS ZS807590

Matrix: Container
WW - Wastewater; VOA - 40 ml vial
W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
A/G - Amber / Or Glass 1 Liter
250 ml - Glass wide mouth
P/O - Plastic or other

WO#: 1508301

CHAIN OF CUSTODY RECORD

APEX

Office Location 505 N Big Spring St. Suite 301 A Midland, TX 79707

Project Manager Liz Scaggs

Laboratory: Trace Analysis, Inc

Address: 6701 Aberdeen Ave. Lubbock, TX 79424

Contact: Liz Gibens

Phone: 806-794-1296

PO/SO #:

Sampler's Name: Ryan Darney

Sampler's Signature:

Proj. No.: 702014G075

Project Name: Regency - Jal Landfarm

No/Type of Containers: #2 / 4oz

Lab use only
Due Date:

Temp. of coolers when received (C°): SO NH 15.2

1 | 2 | 3 | 4 | 5

Page 2 of 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	TPH (8015 DRO/GRO)	Chloride (300.1)	Metals (6010C or 6020A)	TPH (418.1)	BTEX (8021B)	Lab Sample ID (Lab Use Only)
S	8/12/15	1055	X		TZ-1	0	1.5'				X		X	X	X	X	X	401960
S	8/12/15	1125		X	VZ-1	3	3.5'				X					X	X	401961

RD

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	8/12/15	1606	TA	8/12/15	15:06
TA	8/13	9:57			
			SCTA	8-14-15	820

NOTES: IR3 2.1/2.3 c

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

LS 25 807590

Table 7
PQLs for Soil Compounds

Metals	Method	Matrix	mg/kg (ppm)
As	6010	Soil	2
Ba	6010	Soil	1
Cd	6010	Soil	0.5
Cr	6010	Soil	0.5
Cu	6010	Soil	0.5
Fe	6010	Soil	0.5
Mn	6010	Soil	2
Pb	6010	Soil	1
Se	6010	Soil	2
Ag	6010	Soil	0.5
U	6010	Soil	0.5
Zn	6010	Soil	1
Hg	6010	Soil	0.025
Wet Chemistry	Method	Matrix	mg/kg (ppm)
Nitrate	300	Soil	0.04
Chloride	300	Soil	2.5
Fluoride	300	Soil	0.5
Sulfate	300	Soil	2.5
Phenols	5530 D	Soil	0.13
Total Dissolved Solids	2540 C	Soil	25
Total Cyanide	4500 CN C, E	Soil	2
TPH	Method	Matrix	mg/kg (ppm)
TPH	418.1	Soil	10
TPH - GRO	8015	Soil	4
TPH - DRO	8015	Soil	10
PCBs	Method	Matrix	mg/kg (ppm)
PCBs	8082 A	Soil	0.00167
PAH			mg/kg (ppm)
Napthalene	8270 D	Soil	0.08
2-Methylnaphthalene	8270 D	Soil	0.08
1-Methylnaphthalene	8270 D	Soil	0.08
Acenaphthylene	8270 D	Soil	0.08
Acenaphthene	8270 D	Soil	0.08
Dibenzofuran	8270 D	Soil	0.08
Fluorene	8270 D	Soil	0.08
Anthracene	8270 D	Soil	0.08
Phenanthrene	8270 D	Soil	0.08
Fluoranthene	8270 D	Soil	0.08
Pyrene	8270 D	Soil	0.08
Benzo[a]anthracene	8270 D	Soil	0.08
Chrysene	8270 D	Soil	0.08
Benzo[b]fluoranthene	8270 D	Soil	0.08
Benzo[k]fluoranthene	8270 D	Soil	0.08
Benzo[a]pyrene	8270 D	Soil	0.08
Indeno[1,2,3-cd]pyrene	8270 D	Soil	0.08
Dibenz[a,h]anthracene	8270 D	Soil	0.08
Benzo[g,h,i]perylene	8270 D	Soil	0.08
Radioactivity-Pace (Outside Testing)			pCi/g
Radium 226			1
Radium 228			1
pH	9045	Soil	NA

* - PQL Practical Quantitation Limit

Table 7
PQLs for Volatiles by 8260 B in Soil

Test	Method	Matrix	PQL
Volatiles			µg/Kg (ppb)
Vinyl Chloride	8260 B	Soil	20
1,1-Dichloroethene	8260 B	Soil	20
Benzene	8260 B	Soil	20
Toluene	8260 B	Soil	20
Ethylbenzene	8260 B	Soil	20
Total Xylene	8260 B	Soil	20
1,1-Dichloroethane	8260 B	Soil	20
cis-1,2-Dichloroethene	8260 B	Soil	20
1,2-Dichloroethane (EDC)	8260 B	Soil	20
Chloroform	8260 B	Soil	20
1,1,1-Trichloroethane	8260 B	Soil	20
Carbon Tetrachloride	8260 B	Soil	20
Trichlorethene (TCE)	8260 B	Soil	20
1,1,2-Trichloroethane	8260 B	Soil	20
1,3-Dichloropropane	8260 B	Soil	20
Dibromochloromethane	8260 B	Soil	20
1,2-Dibromoethane (EDB)	8260 B	Soil	20
Tetrachloroethene (PCE)	8260 B	Soil	20
1,1,2,2-Tetrachloroethane	8260 B	Soil	20
Methylene chloride	8260 C	Soil	100

* - PQL Practical Quantitation Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 09, 2015

Bernie Bockish
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1511961

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/20/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1511961**
Date Reported: **12/9/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-01
Project: Jal Landfarm
Collection Date: 11/17/2015 11:45:00 AM
Lab ID: 1511961-001
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	13	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	2.7	0.34		mg/Kg-dry	1	11/25/2015 8:26:32 PM	22537
Chloride	36	1.7		mg/Kg-dry	1	11/25/2015 8:26:32 PM	22537
Nitrogen, Nitrate (As N)	3.4	0.34		mg/Kg-dry	1	11/25/2015 8:26:32 PM	22537
Sulfate	320	34		mg/Kg-dry	20	11/25/2015 9:03:46 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.038		mg/Kg-dry	1	11/25/2015 11:03:09 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.9		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Barium	130	0.11		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Cadmium	ND	0.11		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Chromium	5.9	0.34		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Copper	2.6	0.34		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Iron	7900	290		mg/Kg-dry	100	11/24/2015 10:03:38 AM	22489
Lead	1.6	0.29		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Manganese	83	0.11		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Selenium	ND	2.9		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Silver	ND	0.29		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Uranium	ND	5.7		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
Zinc	14	2.9		mg/Kg-dry	1	11/24/2015 10:54:53 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.056		mg/Kg-dry	1	11/23/2015 11:14:53 PM	22448
Toluene	ND	0.056		mg/Kg-dry	1	11/23/2015 11:14:53 PM	22448
Ethylbenzene	ND	0.056		mg/Kg-dry	1	11/23/2015 11:14:53 PM	22448
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/23/2015 11:14:53 PM	22448
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	11/23/2015 11:14:53 PM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-02
Project: Jal Landfarm
Collection Date: 11/17/2015 12:30:00 PM
Lab ID: 1511961-002
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	12	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	10	0.34		mg/Kg-dry	1	11/25/2015 9:16:10 PM	22537
Chloride	55	1.7		mg/Kg-dry	1	11/25/2015 9:16:10 PM	22537
Nitrogen, Nitrate (As N)	19	0.34		mg/Kg-dry	1	11/25/2015 9:16:10 PM	22537
Sulfate	350	34		mg/Kg-dry	20	11/25/2015 9:28:35 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.036		mg/Kg-dry	1	11/25/2015 11:04:59 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	6.7	2.9		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Barium	61	0.11		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Cadmium	ND	0.11		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Chromium	10	0.34		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Copper	1.0	0.34		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Iron	9900	290		mg/Kg-dry	100	11/24/2015 10:05:29 AM	22489
Lead	0.73	0.29		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Manganese	53	0.11		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Selenium	ND	2.9		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Silver	ND	0.29		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Uranium	ND	5.7		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
Zinc	22	2.9		mg/Kg-dry	1	11/24/2015 11:08:02 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.054		mg/Kg-dry	1	11/23/2015 11:39:09 PM	22448
Toluene	ND	0.054		mg/Kg-dry	1	11/23/2015 11:39:09 PM	22448
Ethylbenzene	ND	0.054		mg/Kg-dry	1	11/23/2015 11:39:09 PM	22448
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/23/2015 11:39:09 PM	22448
Surr: 4-Bromofluorobenzene	97.1	80-120		%REC	1	11/23/2015 11:39:09 PM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-03
Project: Jal Landfarm
Collection Date: 11/17/2015 1:10:00 PM
Lab ID: 1511961-003
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	12	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	25	6.9		mg/Kg-dry	20	11/25/2015 9:53:23 PM	22537
Chloride	ND	1.7		mg/Kg-dry	1	11/25/2015 9:40:59 PM	22537
Nitrogen, Nitrate (As N)	ND	0.34		mg/Kg-dry	1	11/25/2015 9:40:59 PM	22537
Sulfate	45	1.7		mg/Kg-dry	1	11/25/2015 9:40:59 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.037		mg/Kg-dry	1	11/25/2015 11:06:50 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	16	2.8		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Barium	98	0.11		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Cadmium	ND	0.11		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Chromium	10	0.33		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Copper	1.5	0.33		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Iron	10000	280		mg/Kg-dry	100	11/24/2015 10:07:17 AM	22489
Lead	0.67	0.28		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Manganese	55	0.11		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Selenium	ND	2.8		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Silver	ND	0.28		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Uranium	ND	5.6		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
Zinc	21	2.8		mg/Kg-dry	1	11/24/2015 11:09:46 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.055		mg/Kg-dry	1	11/24/2015 12:03:22 AM	22448
Toluene	ND	0.055		mg/Kg-dry	1	11/24/2015 12:03:22 AM	22448
Ethylbenzene	ND	0.055		mg/Kg-dry	1	11/24/2015 12:03:22 AM	22448
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/24/2015 12:03:22 AM	22448
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	11/24/2015 12:03:22 AM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-04
Project: Jal Landfarm
Collection Date: 11/17/2015 1:45:00 PM
Lab ID: 1511961-004
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	14	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	20	7.0		mg/Kg-dry	20	11/30/2015 4:51:16 PM	22537
Chloride	12	1.7		mg/Kg-dry	1	11/30/2015 4:38:52 PM	22537
Nitrogen, Nitrate (As N)	7.7	0.35		mg/Kg-dry	1	12/1/2015 1:08:17 PM	22578
Sulfate	130	1.7		mg/Kg-dry	1	11/30/2015 4:38:52 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.038		mg/Kg-dry	1	11/25/2015 11:08:40 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	6.6	2.9		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Barium	140	0.12		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Cadmium	ND	0.12		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Chromium	5.5	0.35		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Copper	1.9	0.35		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Iron	4600	290		mg/Kg-dry	100	11/24/2015 10:09:06 AM	22489
Lead	0.99	0.29		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Manganese	65	0.12		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Selenium	ND	2.9		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Silver	ND	0.29		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Uranium	ND	5.8		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
Zinc	11	2.9		mg/Kg-dry	1	11/24/2015 11:11:32 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.055		mg/Kg-dry	1	11/24/2015 12:27:33 AM	22448
Toluene	ND	0.055		mg/Kg-dry	1	11/24/2015 12:27:33 AM	22448
Ethylbenzene	ND	0.055		mg/Kg-dry	1	11/24/2015 12:27:33 AM	22448
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/24/2015 12:27:33 AM	22448
Surr: 4-Bromofluorobenzene	99.0	80-120		%REC	1	11/24/2015 12:27:33 AM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-05
Project: Jal Landfarm
Collection Date: 11/17/2015 2:25:00 PM
Lab ID: 1511961-005
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	9.2	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	5.7	0.33		mg/Kg-dry	1	11/30/2015 5:03:41 PM	22537
Chloride	ND	1.6		mg/Kg-dry	1	11/30/2015 5:03:41 PM	22537
Nitrogen, Nitrate (As N)	2.5	0.33		mg/Kg-dry	1	12/1/2015 1:45:29 PM	22578
Sulfate	24	1.6		mg/Kg-dry	1	11/30/2015 5:03:41 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.036		mg/Kg-dry	1	11/25/2015 11:10:32 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.8		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Barium	69	0.11		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Cadmium	ND	0.11		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Chromium	8.0	0.33		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Copper	1.4	0.33		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Iron	7800	280		mg/Kg-dry	100	11/24/2015 10:19:30 AM	22489
Lead	1.3	0.28		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Manganese	42	0.11		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Selenium	ND	2.8		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Silver	ND	0.28		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Uranium	ND	5.5		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
Zinc	18	2.8		mg/Kg-dry	1	11/24/2015 11:13:11 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.053		mg/Kg-dry	1	11/24/2015 2:04:06 AM	22448
Toluene	ND	0.053		mg/Kg-dry	1	11/24/2015 2:04:06 AM	22448
Ethylbenzene	ND	0.053		mg/Kg-dry	1	11/24/2015 2:04:06 AM	22448
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/24/2015 2:04:06 AM	22448
Surr: 4-Bromofluorobenzene	95.6	80-120		%REC	1	11/24/2015 2:04:06 AM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-06
Project: Jal Landfarm
Collection Date: 11/17/2015 2:56:00 PM
Lab ID: 1511961-006
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	8.9	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	3.8	0.33		mg/Kg-dry	1	11/30/2015 5:28:30 PM	22537
Chloride	ND	1.6		mg/Kg-dry	1	11/30/2015 5:28:30 PM	22537
Nitrogen, Nitrate (As N)	2.1	0.33		mg/Kg-dry	1	12/1/2015 1:57:54 PM	22578
Sulfate	300	33		mg/Kg-dry	20	11/30/2015 5:40:54 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.036		mg/Kg-dry	1	11/25/2015 11:12:15 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.8		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Barium	71	0.11		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Cadmium	ND	0.11		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Chromium	5.8	0.33		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Copper	2.1	0.33		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Iron	5700	280		mg/Kg-dry	100	11/24/2015 10:21:30 AM	22489
Lead	1.6	0.28		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Manganese	55	0.11		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Selenium	ND	2.8		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Silver	ND	0.28		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Uranium	ND	5.5		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
Zinc	15	2.8		mg/Kg-dry	1	11/24/2015 11:14:50 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.052		mg/Kg-dry	1	11/24/2015 2:28:11 AM	22448
Toluene	ND	0.052		mg/Kg-dry	1	11/24/2015 2:28:11 AM	22448
Ethylbenzene	ND	0.052		mg/Kg-dry	1	11/24/2015 2:28:11 AM	22448
Xylenes, Total	ND	0.10		mg/Kg-dry	1	11/24/2015 2:28:11 AM	22448
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	11/24/2015 2:28:11 AM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-07
Project: Jal Landfarm
Collection Date: 11/17/2015 3:30:00 PM
Lab ID: 1511961-007
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	11	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	5.5	0.34		mg/Kg-dry	1	11/30/2015 6:18:08 PM	22537
Chloride	ND	1.7		mg/Kg-dry	1	11/30/2015 6:18:08 PM	22537
Nitrogen, Nitrate (As N)	3.4	0.34		mg/Kg-dry	1	12/1/2015 2:10:19 PM	22578
Sulfate	130	1.7		mg/Kg-dry	1	11/30/2015 6:18:08 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.036		mg/Kg-dry	1	11/25/2015 11:14:00 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.8		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Barium	58	0.11		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Cadmium	ND	0.11		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Chromium	11	0.34		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Copper	0.88	0.34		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Iron	11000	280		mg/Kg-dry	100	11/24/2015 10:23:30 AM	22489
Lead	0.80	0.28		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Manganese	55	0.11		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Selenium	ND	2.8		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Silver	ND	0.28		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Uranium	ND	5.7		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
Zinc	25	2.8		mg/Kg-dry	1	11/24/2015 11:16:31 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.054		mg/Kg-dry	1	11/24/2015 2:52:14 AM	22448
Toluene	ND	0.054		mg/Kg-dry	1	11/24/2015 2:52:14 AM	22448
Ethylbenzene	ND	0.054		mg/Kg-dry	1	11/24/2015 2:52:14 AM	22448
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/24/2015 2:52:14 AM	22448
Surr: 4-Bromofluorobenzene	97.4	80-120		%REC	1	11/24/2015 2:52:14 AM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-111715-SP-08
Project: Jal Landfarm
Collection Date: 11/17/2015 3:55:00 PM
Lab ID: 1511961-008
Matrix: SOIL
Received Date: 11/20/2015 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	11/24/2015	22468
PERCENT MOISTURE						Analyst: **BCN**	
Percent Moisture	9.5	1.0		wt%	1	11/24/2015	R30460
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	3.8	0.33		mg/Kg-dry	1	11/30/2015 6:42:56 PM	22537
Chloride	39	1.7		mg/Kg-dry	1	11/30/2015 6:42:56 PM	22537
Nitrogen, Nitrate (As N)	16	0.33		mg/Kg-dry	1	12/1/2015 2:22:43 PM	22578
Sulfate	100	1.7		mg/Kg-dry	1	11/30/2015 6:42:56 PM	22537
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.035		mg/Kg-dry	1	11/25/2015 11:15:45 AM	22504
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.8		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Barium	72	0.11		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Cadmium	ND	0.11		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Chromium	7.2	0.33		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Copper	0.65	0.33		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Iron	6700	280		mg/Kg-dry	100	11/24/2015 10:25:19 AM	22489
Lead	1.5	0.28		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Manganese	36	0.11		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Selenium	ND	2.8		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Silver	ND	0.28		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Uranium	ND	5.6		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
Zinc	15	2.8		mg/Kg-dry	1	11/24/2015 11:18:24 AM	22489
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.054		mg/Kg-dry	1	11/24/2015 3:16:20 AM	22448
Toluene	ND	0.054		mg/Kg-dry	1	11/24/2015 3:16:20 AM	22448
Ethylbenzene	ND	0.054		mg/Kg-dry	1	11/24/2015 3:16:20 AM	22448
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/24/2015 3:16:20 AM	22448
Surr: 4-Bromofluorobenzene	96.8	80-120		%REC	1	11/24/2015 3:16:20 AM	22448

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 151124041
Project Name: 1511961

Analytical Results Report

Sample Number 151124041-001 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-001B / S-082148-111715-SP-01 **Sampling Time** 11:45 AM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.25	11/30/2015	MER	EPA 335.4	
%moisture	10.3	Percent		11/30/2015	MER	%moisture	

Sample Number 151124041-002 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-002B / S-082148-111715-SP-02 **Sampling Time** 12:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.283	11/30/2015	MER	EPA 335.4	
%moisture	11.7	Percent		11/30/2015	MER	%moisture	

Sample Number 151124041-003 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-003B / S-082148-111715-SP-03 **Sampling Time** 1:10 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.278	11/30/2015	MER	EPA 335.4	
%moisture	11.9	Percent		11/30/2015	MER	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 151124041
Project Name: 1511961

Analytical Results Report

Sample Number 151124041-004 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-004B / S-082148-111715-SP-04 **Sampling Time** 2:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.266	11/30/2015	MER	EPA 335.4	
%moisture	13	Percent		11/30/2015	MER	%moisture	

Sample Number 151124041-005 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-005B / S-082148-111715-SP-05 **Sampling Time** 2:25 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.265	11/30/2015	MER	EPA 335.4	
%moisture	8.4	Percent		11/30/2015	MER	%moisture	

Sample Number 151124041-006 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-006B / S-082148-111715-SP-06 **Sampling Time** 2:56 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.242	11/30/2015	MER	EPA 335.4	
%moisture	8.6	Percent		11/30/2015	MER	%moisture	

Sample Number 151124041-007 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-007B / S-082148-111715-SP-07 **Sampling Time** 3:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.263	11/30/2015	MER	EPA 335.4	
%moisture	10.7	Percent		11/30/2015	MER	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 151124041
Project Name: 1511961

Analytical Results Report

Sample Number 151124041-008 **Sampling Date** 11/17/2015 **Date/Time Received** 11/24/2015 12:00 PM
Client Sample ID 1511961-008B / S-082148-111715-SP-08 **Sampling Time** 3:55 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.242	11/30/2015	MER	EPA 335.4	
%moisture	9	Percent		11/30/2015	MER	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 151124041
Project Name: 1511961

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.458	mg/kg	0.5	91.6	80-120	11/30/2015	11/30/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
151124030-001	Cyanide	1.95	16.9	mg/kg	17.85	83.8	60-140	11/30/2015	11/30/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	13.9	mg/kg	17.85	66.9	19.5	0-25	11/30/2015	11/30/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	0.1	11/30/2015	11/30/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511961**

09-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID **MB-22537**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **22537**	RunNo: **30500**
Prep Date: **11/25/2015**	Analysis Date: **11/25/2015**	SeqNo: **931254** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Sample ID **LCS-22537**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **22537**	RunNo: **30500**
Prep Date: **11/25/2015**	Analysis Date: **11/25/2015**	SeqNo: **931255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.6	0.30	1.500	0	106	90	110			
Chloride	14	1.5	15.00	0	93.7	90	110			
Nitrogen, Nitrate (As N)	7.4	0.30	7.500	0	99.1	90	110			
Sulfate	29	1.5	30.00	0	96.6	90	110			

Sample ID **1511961-001AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-111715-SP**	Batch ID: **22537**	RunNo: **30500**
Prep Date: **11/25/2015**	Analysis Date: **11/25/2015**	SeqNo: **931257** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.5	0.35	1.717	2.703	44.1	13.6	100			
Chloride	53	1.7	17.17	36.15	96.4	64.2	131			
Nitrogen, Nitrate (As N)	12	0.35	8.585	3.359	98.1	87.6	109			

Sample ID **1511961-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-111715-SP**	Batch ID: **22537**	RunNo: **30500**
Prep Date: **11/25/2015**	Analysis Date: **11/25/2015**	SeqNo: **931258** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.4	0.34	1.717	2.703	41.4	13.6	100	1.34	20	
Chloride	52	1.7	17.17	36.15	94.5	64.2	131	0.648	20	
Nitrogen, Nitrate (As N)	12	0.34	8.585	3.359	98.7	87.6	109	0.377	20	

Sample ID **MB-22537**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **22537**	RunNo: **30531**
Prep Date: **11/25/2015**	Analysis Date: **11/30/2015**	SeqNo: **932154** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511961**

09-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID **MB-22537**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **22537**	RunNo: **30531**
Prep Date: **11/25/2015**	Analysis Date: **11/30/2015**	SeqNo: **932154** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Sample ID **LCS-22537**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **22537**	RunNo: **30531**
Prep Date: **11/25/2015**	Analysis Date: **11/30/2015**	SeqNo: **932155** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.30	1.500	0	100	90	110			
Chloride	14	1.5	15.00	0	93.8	90	110			
Nitrogen, Nitrate (As N)	7.3	0.30	7.500	0	97.1	90	110			
Sulfate	29	1.5	30.00	0	95.5	90	110			

Sample ID **MB-22578**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **22578**	RunNo: **30571**
Prep Date: **12/1/2015**	Analysis Date: **12/1/2015**	SeqNo: **933358** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	ND	0.30								

Sample ID **LCS-22578**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **22578**	RunNo: **30571**
Prep Date: **12/1/2015**	Analysis Date: **12/1/2015**	SeqNo: **933359** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	7.4	0.30	7.500	0	98.5	90	110			

Sample ID **1511961-004AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-111715-SP**	Batch ID: **22578**	RunNo: **30571**
Prep Date: **12/1/2015**	Analysis Date: **12/1/2015**	SeqNo: **933362** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	17	0.35	2.901	7.697	308	87.6	109			S

Sample ID **1511961-004AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-111715-SP**	Batch ID: **22578**	RunNo: **30571**
Prep Date: **12/1/2015**	Analysis Date: **12/1/2015**	SeqNo: **933363** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	16	0.35	2.901	7.697	303	87.6	109	0.879	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511961**

09-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-22468**	SampType:	**MBLK**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**PBS**	Batch ID:	**22468**	RunNo:	**30453**					
Prep Date:	**11/23/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**929512**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-22468**	SampType:	**LCS**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS**	Batch ID:	**22468**	RunNo:	**30453**					
Prep Date:	**11/23/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**929513**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	113	83.6	116			

Sample ID	**LCSD-22468**	SampType:	**LCSD**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS02**	Batch ID:	**22468**	RunNo:	**30453**					
Prep Date:	**11/23/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**929514**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	114	83.6	116	1.34	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511961**

09-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-22448**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**PBS**	Batch ID:	**22448**	RunNo:	**30417**
Prep Date:	**11/20/2015**	Analysis Date:	**11/23/2015**	SeqNo:	**928622** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	**LCS-22448**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**LCSS**	Batch ID:	**22448**	RunNo:	**30417**
Prep Date:	**11/20/2015**	Analysis Date:	**11/23/2015**	SeqNo:	**928623** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	95.5	80	120			
Toluene	0.92	0.050	1.000	0	92.2	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		128	80	120			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511961**

09-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-22504**	SampType:	**MBLK**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID:	**22504**	RunNo:	**30488**					
Prep Date:	**11/24/2015**	Analysis Date:	**11/25/2015**	SeqNo:	**930675**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-22504**	SampType:	**LCS**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID:	**22504**	RunNo:	**30488**					
Prep Date:	**11/24/2015**	Analysis Date:	**11/25/2015**	SeqNo:	**930676**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1667	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511961**

09-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-22489**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**22489**	RunNo:	**30443**
Prep Date:	**11/23/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**928965** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**LCS-22489**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**22489**	RunNo:	**30443**
Prep Date:	**11/23/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**928966** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0	102	80	120			
Barium	25	0.10	25.00	0	100	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	99.0	80	120			
Copper	26	0.30	25.00	0	105	80	120			
Iron	25	2.5	25.00	0	101	80	120			
Lead	24	0.25	25.00	0	97.1	80	120			
Manganese	25	0.10	25.00	0	101	80	120			
Selenium	27	2.5	25.00	0	109	80	120			
Silver	5.2	0.25	5.000	0	104	80	120			
Uranium	26	5.0	25.00	0	103	80	120			
Zinc	25	2.5	25.00	0	98.3	80	120			

Sample ID	**1511961-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**S-082148-111715-SP**	Batch ID:	**22489**	RunNo:	**30443**
Prep Date:	**11/23/2015**	Analysis Date:	**11/24/2015**	SeqNo:	**929136** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	29	2.8	28.13	0.9949	100	75	125			
Barium	140	0.11	28.13	125.5	59.0	75	125			S
Cadmium	28	0.11	28.13	0	98.0	75	125			
Chromium	31	0.34	28.13	5.893	90.5	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511961**

09-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID **1511961-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111715-SP** Batch ID: **22489** RunNo: **30443**

Prep Date: **11/23/2015** Analysis Date: **11/24/2015** SeqNo: **929136** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	32	0.34	28.13	2.634	105	75	125			
Lead	26	0.28	28.13	1.610	87.4	75	125			
Manganese	100	0.11	28.13	83.33	60.3	75	125			S
Selenium	25	2.8	28.13	0	87.1	75	125			
Silver	5.5	0.28	5.627	0	97.1	75	125			
Uranium	23	5.6	28.13	0	83.5	75	125			
Zinc	38	2.8	28.13	14.00	84.0	75	125			

Sample ID **1511961-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111715-SP** Batch ID: **22489** RunNo: **30443**

Prep Date: **11/23/2015** Analysis Date: **11/24/2015** SeqNo: **929137** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	30	2.8	28.17	0.9949	104	75	125	3.24	20	
Barium	150	0.11	28.17	125.5	78.7	75	125	3.85	20	
Cadmium	28	0.11	28.17	0	98.8	75	125	1.01	20	
Chromium	31	0.34	28.17	5.893	90.7	75	125	0.287	20	
Copper	33	0.34	28.17	2.634	107	75	125	1.64	20	
Lead	26	0.28	28.17	1.610	87.5	75	125	0.211	20	
Manganese	110	0.11	28.17	83.33	78.2	75	125	4.91	20	
Selenium	25	2.8	28.17	0	90.2	75	125	3.60	20	
Silver	5.5	0.28	5.634	0	98.0	75	125	1.03	20	
Uranium	23	5.6	28.17	0	82.5	75	125	1.13	20	
Zinc	38	2.8	28.17	14.00	84.4	75	125	0.341	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1511961 | RcptNo: 1

Received by/date: CS 11/20/15

Logged By: **Ashley Gallegos** 11/20/2015 9:20:00 AM

Completed By: **Ashley Gallegos** 11/20/2015 12:36:19 PM

Reviewed By: 11/20/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	FedEx		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: GHD-Albuquerque

Mailing Address: 6121 Indian School Rd NE
Ste 200, Albuquerque, NM, 87110

Phone #: 505-884-0672

email or Fax#: Bernard.Bocklisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bocklisch (505) 280-0572

Sampler: Steve Perez 575 689-5782

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511961	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX 8021B	WQCC Metals	Cyanide	% moisture	Air Bubbles (Y or N)
11-17-15	1145	Soil	S-082148-111715-SP-01	4oz glass-3	Ice	-001				X				X				X	X	X	X	
	1230		S-082148-111715-SP-02	4oz glass-3		-002																
	1310		S-082148-111715-SP-03			-003																
	1345		S-082148-111715-SP-04			-004																
	1425		S-082148-111715-SP-05			-005																
	1456		S-082148-111715-SP-06			-006																
	1530		S-082148-111715-SP-07			-007																
	1555		S-082148-111715-SP-08			-008																

Date: 11-19-15 Time: 710 am Relinquished by: Steven Perez
Received by: [signature] Date Time: 11/19/15 0715

Date: Time: Relinquished by:
Received by: Celina Sanchez Date Time: 11/20/15 0920

Remarks: Please refer to SSOW for Analytical parameters if unclear

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 18, 2015

Bernie Bockish
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1511B38

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/25/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-112415-SP-09
Project: Jal Landfarm
Collection Date: 11/24/2015 9:50:00 AM
Lab ID: 1511B38-001
Matrix: SOIL
Received Date: 11/25/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg-dry	1	12/2/2015	22570
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	17	1.0		wt%	1	11/25/2015 5:00:00 PM	R30520
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	3.1	0.36		mg/Kg-dry	1	12/7/2015 6:16:32 PM	22657
Chloride	ND	1.8		mg/Kg-dry	1	12/7/2015 6:16:32 PM	22657
Nitrogen, Nitrate (As N)	7.8	0.36		mg/Kg-dry	1	12/7/2015 6:16:32 PM	22657
Sulfate	410	36		mg/Kg-dry	20	12/7/2015 6:53:46 PM	22657
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.040		mg/Kg-dry	1	12/4/2015 3:22:45 PM	22597
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Arsenic	4.2	3.0		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Barium	220	0.12		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Cadmium	ND	0.12		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Chromium	6.0	0.36		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Copper	2.2	0.36		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Iron	5900	150		mg/Kg-dry	50	12/1/2015 1:19:51 PM	22538
Lead	0.56	0.30		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Manganese	97	0.12		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Selenium	ND	3.0		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Silver	ND	0.30		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
Uranium	ND	6.0		mg/Kg-dry	1	12/1/2015 1:18:38 PM	22538
Zinc	14	3.0		mg/Kg-dry	1	11/30/2015 3:38:55 PM	22538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.059		mg/Kg-dry	1	11/30/2015 3:55:50 PM	22531
Toluene	ND	0.059		mg/Kg-dry	1	11/30/2015 3:55:50 PM	22531
Ethylbenzene	ND	0.059		mg/Kg-dry	1	11/30/2015 3:55:50 PM	22531
Xylenes, Total	ND	0.12		mg/Kg-dry	1	11/30/2015 3:55:50 PM	22531
Surr: 4-Bromofluorobenzene	112	80-120		%REC	1	11/30/2015 3:55:50 PM	22531

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
R	RPD outside accepted recovery limits
RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-112415-SP-10
Project: Jal Landfarm
Collection Date: 11/24/2015 10:40:00 AM
Lab ID: 1511B38-002 **Matrix:** SOIL **Received Date:** 11/25/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg-dry	1	12/2/2015	22570
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	14	1.0		wt%	1	11/25/2015 5:00:00 PM	R30520
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	8.1	0.35		mg/Kg-dry	1	12/7/2015 7:06:10 PM	22657
Chloride	48	1.7		mg/Kg-dry	1	12/7/2015 7:06:10 PM	22657
Nitrogen, Nitrate (As N)	52	6.9		mg/Kg-dry	20	12/7/2015 7:18:35 PM	22657
Sulfate	270	35		mg/Kg-dry	20	12/7/2015 7:18:35 PM	22657
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.037		mg/Kg-dry	1	12/4/2015 3:24:31 PM	22597
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Arsenic	5.7	2.8		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Barium	150	0.11		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Cadmium	ND	0.11		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Chromium	5.8	0.34		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Copper	3.2	0.34		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Iron	5400	140		mg/Kg-dry	50	12/1/2015 1:22:47 PM	22538
Lead	0.96	0.28		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Manganese	62	0.11		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Selenium	ND	2.8		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Silver	ND	0.28		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
Uranium	ND	5.6		mg/Kg-dry	1	12/1/2015 1:21:33 PM	22538
Zinc	14	2.8		mg/Kg-dry	1	11/30/2015 3:40:26 PM	22538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.057		mg/Kg-dry	1	11/30/2015 10:26:59 PM	22531
Toluene	ND	0.057		mg/Kg-dry	1	11/30/2015 10:26:59 PM	22531
Ethylbenzene	ND	0.057		mg/Kg-dry	1	11/30/2015 10:26:59 PM	22531
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/30/2015 10:26:59 PM	22531
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	11/30/2015 10:26:59 PM	22531

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-112415-SP-11
Project: Jal Landfarm
Collection Date: 11/24/2015 11:15:00 AM
Lab ID: 1511B38-003
Matrix: SOIL
Received Date: 11/25/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg-dry	1	12/2/2015	22570
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	11	1.0		wt%	1	11/25/2015 5:00:00 PM	R30520
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	9.3	0.34		mg/Kg-dry	1	12/7/2015 7:31:00 PM	22657
Chloride	ND	1.7		mg/Kg-dry	1	12/7/2015 7:31:00 PM	22657
Nitrogen, Nitrate (As N)	3.5	0.34		mg/Kg-dry	1	12/7/2015 7:31:00 PM	22657
Sulfate	240	34		mg/Kg-dry	20	12/7/2015 7:43:24 PM	22657
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.036		mg/Kg-dry	1	12/4/2015 3:26:16 PM	22597
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Arsenic	9.6	2.8		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Barium	83	0.11		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Cadmium	ND	0.11		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Chromium	10	0.33		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Copper	1.6	0.33		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Iron	11000	280		mg/Kg-dry	100	12/1/2015 1:25:51 PM	22538
Lead	1.1	0.28		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Manganese	55	0.11		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Selenium	ND	2.8		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Silver	ND	0.28		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
Uranium	ND	5.6		mg/Kg-dry	1	12/1/2015 1:24:30 PM	22538
Zinc	23	2.8		mg/Kg-dry	1	11/30/2015 3:41:57 PM	22538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.055		mg/Kg-dry	1	11/30/2015 11:39:43 PM	22531
Toluene	ND	0.055		mg/Kg-dry	1	11/30/2015 11:39:43 PM	22531
Ethylbenzene	ND	0.055		mg/Kg-dry	1	11/30/2015 11:39:43 PM	22531
Xylenes, Total	ND	0.11		mg/Kg-dry	1	11/30/2015 11:39:43 PM	22531
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	11/30/2015 11:39:43 PM	22531

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-112415-SP-12
Project: Jal Landfarm
Collection Date: 11/24/2015 11:45:00 AM
Lab ID: 1511B38-004
Matrix: SOIL
Received Date: 11/25/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg-dry	1	12/2/2015	22570
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	12	1.0		wt%	1	11/25/2015 5:00:00 PM	R30520
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	11	0.34		mg/Kg-dry	1	12/7/2015 3:47:39 PM	22657
Chloride	ND	1.7		mg/Kg-dry	1	12/7/2015 3:47:39 PM	22657
Nitrogen, Nitrate (As N)	3.1	0.34		mg/Kg-dry	1	12/7/2015 3:47:39 PM	22657
Sulfate	350	34		mg/Kg-dry	20	12/7/2015 4:00:04 PM	22657
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.037		mg/Kg-dry	1	12/4/2015 3:28:02 PM	22597
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Arsenic	8.4	2.8		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Barium	110	0.11		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Cadmium	ND	0.11		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Chromium	11	0.34		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Copper	1.9	0.34		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Iron	11000	280		mg/Kg-dry	100	12/1/2015 1:33:50 PM	22538
Lead	0.74	0.28		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Manganese	65	0.11		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Selenium	ND	2.8		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Silver	ND	0.28		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
Uranium	ND	5.7		mg/Kg-dry	1	12/1/2015 1:32:30 PM	22538
Zinc	24	2.8		mg/Kg-dry	1	11/30/2015 3:43:33 PM	22538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.056		mg/Kg-dry	1	12/1/2015 12:03:56 AM	22531
Toluene	ND	0.056		mg/Kg-dry	1	12/1/2015 12:03:56 AM	22531
Ethylbenzene	ND	0.056		mg/Kg-dry	1	12/1/2015 12:03:56 AM	22531
Xylenes, Total	ND	0.11		mg/Kg-dry	1	12/1/2015 12:03:56 AM	22531
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	12/1/2015 12:03:56 AM	22531

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-112415-SP-13
Project: Jal Landfarm
Collection Date: 11/24/2015 12:30:00 PM
Lab ID: 1511B38-005
Matrix: SOIL
Received Date: 11/25/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg-dry	1	12/2/2015	22570
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	6.8	1.0		wt%	1	11/25/2015 5:00:00 PM	R30520
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	1.4	0.32		mg/Kg-dry	1	12/7/2015 4:12:28 PM	22657
Chloride	250	32		mg/Kg-dry	20	12/7/2015 4:24:52 PM	22657
Nitrogen, Nitrate (As N)	17	0.32		mg/Kg-dry	1	12/7/2015 4:12:28 PM	22657
Sulfate	19	1.6		mg/Kg-dry	1	12/7/2015 4:12:28 PM	22657
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.035		mg/Kg-dry	1	12/4/2015 3:29:49 PM	22597
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Arsenic	ND	2.7		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Barium	50	0.11		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Cadmium	ND	0.11		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Chromium	5.0	0.32		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Copper	1.9	0.32		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Iron	5000	130		mg/Kg-dry	50	12/1/2015 1:36:45 PM	22538
Lead	1.4	0.27		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Manganese	60	0.11		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Selenium	ND	2.7		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Silver	ND	0.27		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
Uranium	ND	5.3		mg/Kg-dry	1	12/1/2015 1:35:26 PM	22538
Zinc	12	2.7		mg/Kg-dry	1	11/30/2015 3:45:09 PM	22538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.052		mg/Kg-dry	1	12/1/2015 12:28:08 AM	22531
Toluene	ND	0.052		mg/Kg-dry	1	12/1/2015 12:28:08 AM	22531
Ethylbenzene	ND	0.052		mg/Kg-dry	1	12/1/2015 12:28:08 AM	22531
Xylenes, Total	ND	0.10		mg/Kg-dry	1	12/1/2015 12:28:08 AM	22531
Surr: 4-Bromofluorobenzene	98.6	80-120		%REC	1	12/1/2015 12:28:08 AM	22531

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-112415-SP-14
Project: Jal Landfarm
Collection Date: 11/24/2015 1:05:00 PM
Lab ID: 1511B38-006
Matrix: SOIL
Received Date: 11/25/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg-dry	1	12/2/2015	22570
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	14	1.0		wt%	1	11/25/2015 5:00:00 PM	R30520
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	4.5	0.35		mg/Kg-dry	1	12/7/2015 4:37:17 PM	22657
Chloride	ND	1.7		mg/Kg-dry	1	12/7/2015 4:37:17 PM	22657
Nitrogen, Nitrate (As N)	0.60	0.35		mg/Kg-dry	1	12/7/2015 4:37:17 PM	22657
Sulfate	25	1.7		mg/Kg-dry	1	12/7/2015 4:37:17 PM	22657
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.038		mg/Kg-dry	1	12/4/2015 3:31:36 PM	22597
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Arsenic	ND	2.9		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Barium	110	0.12		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Cadmium	ND	0.12		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Chromium	9.7	0.35		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Copper	5.5	0.35		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Iron	10000	290		mg/Kg-dry	100	12/1/2015 1:39:25 PM	22538
Lead	2.3	0.29		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Manganese	170	0.12		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Selenium	ND	2.9		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Silver	ND	0.29		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
Uranium	ND	5.8		mg/Kg-dry	1	12/1/2015 1:38:06 PM	22538
Zinc	27	2.9		mg/Kg-dry	1	11/30/2015 3:46:40 PM	22538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.056		mg/Kg-dry	1	12/1/2015 12:52:15 AM	22531
Toluene	ND	0.056		mg/Kg-dry	1	12/1/2015 12:52:15 AM	22531
Ethylbenzene	ND	0.056		mg/Kg-dry	1	12/1/2015 12:52:15 AM	22531
Xylenes, Total	ND	0.11		mg/Kg-dry	1	12/1/2015 12:52:15 AM	22531
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	12/1/2015 12:52:15 AM	22531

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-112415-SP-15
Project: Jal Landfarm
Collection Date: 11/24/2015 1:45:00 PM
Lab ID: 1511B38-007
Matrix: SOIL
Received Date: 11/25/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	34	20		mg/Kg-dry	1	12/2/2015	22570
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	11/25/2015 5:00:00 PM	R30520
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	3.7	0.35		mg/Kg-dry	1	12/7/2015 5:02:06 PM	22657
Chloride	15	1.7		mg/Kg-dry	1	12/7/2015 5:02:06 PM	22657
Nitrogen, Nitrate (As N)	14	0.35		mg/Kg-dry	1	12/7/2015 5:02:06 PM	22657
Sulfate	4100	87		mg/Kg-dry	50	12/8/2015 12:25:29 PM	22657
EPA METHOD 7471: MERCURY						Analyst: **DBD**	
Mercury	ND	0.038		mg/Kg-dry	1	12/4/2015 3:33:24 PM	22597
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Arsenic	ND	2.8		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Barium	99	0.11		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Cadmium	ND	0.11		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Chromium	8.6	0.34		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Copper	9.8	0.34		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Iron	9400	280		mg/Kg-dry	100	12/1/2015 1:45:06 PM	22538
Lead	2.7	0.28		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Manganese	160	0.11		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Selenium	ND	2.8		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Silver	ND	0.28		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
Uranium	ND	5.6		mg/Kg-dry	1	12/1/2015 1:41:03 PM	22538
Zinc	26	2.8		mg/Kg-dry	1	11/30/2015 3:54:31 PM	22538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.055		mg/Kg-dry	1	12/1/2015 1:16:19 AM	22531
Toluene	ND	0.055		mg/Kg-dry	1	12/1/2015 1:16:19 AM	22531
Ethylbenzene	ND	0.055		mg/Kg-dry	1	12/1/2015 1:16:19 AM	22531
Xylenes, Total	ND	0.11		mg/Kg-dry	1	12/1/2015 1:16:19 AM	22531
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	12/1/2015 1:16:19 AM	22531

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	151201034
Address:	4901 HAWKINS NE SUITE D	**Project Name:**	1511B38
	ALBUQUERQUE, NM 87109		
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number 151201034-001 **Sampling Date** 11/24/2015 **Date/Time Received** 12/1/2015 11:40 AM
Client Sample ID 1511B38-001C / S-082148-112415-SP-09 **Sampling Time** 9:50 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.297	12/8/2015	MER	EPA 335.4	
%moisture	17.1	Percent		12/2/2015	MER	%moisture	

Sample Number 151201034-002 **Sampling Date** 11/24/2015 **Date/Time Received** 12/1/2015 11:40 AM
Client Sample ID 1511B38-002C / S-082148-112415-SP-10 **Sampling Time** 10:40 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.292	12/8/2015	MER	EPA 335.4	
%moisture	15.0	Percent		12/2/2015	MER	%moisture	

Sample Number 151201034-003 **Sampling Date** 11/24/2015 **Date/Time Received** 12/1/2015 11:40 AM
Client Sample ID 1511B38-003C / S-082148-112415-SP-11 **Sampling Time** 11:15 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.275	12/8/2015	MER	EPA 335.4	
%moisture	10.8	Percent		12/2/2015	MER	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 151201034
Project Name: 1511B38

Analytical Results Report

Sample Number 151201034-004 **Sampling Date** 11/24/2015 **Date/Time Received** 12/1/2015 11:40 AM
Client Sample ID 1511B38-004C / S-082148-112415-SP-12 **Sampling Time** 11:45 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.274	12/8/2015	MER	EPA 335.4	
%moisture	12.4	Percent		12/2/2015	MER	%moisture	

Sample Number 151201034-005 **Sampling Date** 11/24/2015 **Date/Time Received** 12/1/2015 11:40 AM
Client Sample ID 1511B38-005C / S-082148-112415-SP-13 **Sampling Time** 12:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.257	12/8/2015	MER	EPA 335.4	
%moisture	6.7	Percent		12/2/2015	MER	%moisture	

Sample Number 151201034-006 **Sampling Date** 11/24/2015 **Date/Time Received** 12/1/2015 11:40 AM
Client Sample ID 1511B38-006C / S-082148-112415-SP-14 **Sampling Time** 1:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.286	12/8/2015	MER	EPA 335.4	
%moisture	13.0	Percent		12/2/2015	MER	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	151201034
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1511B38
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	151201034-007	**Sampling Date**	11/24/2015	**Date/Time Received**	12/1/2015 11:40 AM
Client Sample ID	1511B38-007C / S-082148-112415-SP-15			**Sampling Time**	1:45 PM
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.275	12/8/2015	MER	EPA 335.4	
%moisture	12.9	Percent		12/2/2015	MER	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 151201034
Project Name: 1511B38

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.522	mg/kg	0.5	104.4	90-110	12/8/2015	12/8/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
151201037-004	Cyanide	ND	14.7	mg/kg	14.2	103.5	70-130	12/8/2015	12/8/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	15.0	mg/kg	14.2	105.6	2.0	0-25	12/8/2015	12/8/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/Kg	0.1	12/8/2015	12/8/2015

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID **MB-22657**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **22657**	RunNo: **30664**
Prep Date: **12/7/2015**	Analysis Date: **12/7/2015**	SeqNo: **936838** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Sample ID **LCS-22657**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **22657**	RunNo: **30664**
Prep Date: **12/7/2015**	Analysis Date: **12/7/2015**	SeqNo: **936839** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.30	1.500	0	102	90	110			
Chloride	14	1.5	15.00	0	94.2	90	110			
Nitrogen, Nitrate (As N)	7.2	0.30	7.500	0	96.7	90	110			
Sulfate	29	1.5	30.00	0	96.3	90	110			

Sample ID **1511B38-001BMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-112415-SP**	Batch ID: **22657**	RunNo: **30664**
Prep Date: **12/7/2015**	Analysis Date: **12/7/2015**	SeqNo: **936873** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.7	0.36	1.811	3.080	32.4	13.6	100			
Chloride	17	1.8	18.11	0.8655	90.9	64.2	131			
Nitrogen, Nitrate (As N)	17	0.36	9.054	7.845	97.9	87.6	109			

Sample ID **1511B38-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-112415-SP**	Batch ID: **22657**	RunNo: **30664**
Prep Date: **12/7/2015**	Analysis Date: **12/7/2015**	SeqNo: **936874** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.7	0.36	1.811	3.080	33.1	13.6	100	0.316	20	
Chloride	17	1.8	18.11	0.8655	90.7	64.2	131	0.239	20	
Nitrogen, Nitrate (As N)	17	0.36	9.054	7.845	99.2	87.6	109	0.698	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-22570**	SampType:	**MBLK**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**PBS**	Batch ID:	**22570**	RunNo:	**30585**					
Prep Date:	**12/1/2015**	Analysis Date:	**12/2/2015**	SeqNo:	**933705**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-22570**	SampType:	**LCS**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS**	Batch ID:	**22570**	RunNo:	**30585**					
Prep Date:	**12/1/2015**	Analysis Date:	**12/2/2015**	SeqNo:	**933706**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	93	20	100.0	0	92.6	83.6	116			

Sample ID	**LCSD-22570**	SampType:	**LCSD**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS02**	Batch ID:	**22570**	RunNo:	**30585**					
Prep Date:	**12/1/2015**	Analysis Date:	**12/2/2015**	SeqNo:	**933707**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	99	20	100.0	0	99.4	83.6	116	7.10	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B30514**	RunNo: **30514**
Prep Date:	Analysis Date: **11/30/2015**	SeqNo: **931979** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B30514**	RunNo: **30514**
Prep Date:	Analysis Date: **11/30/2015**	SeqNo: **931980** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		123	80	120			S

Sample ID **MB-22531**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **22531**	RunNo: **30514**
Prep Date: **11/25/2015**	Analysis Date: **11/30/2015**	SeqNo: **931986** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Sample ID **LCS-22531**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **22531**	RunNo: **30514**
Prep Date: **11/25/2015**	Analysis Date: **11/30/2015**	SeqNo: **931987** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.2	80	120			
Toluene	0.91	0.050	1.000	0	91.3	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.7	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			

Sample ID **1511B38-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-112415-SP**	Batch ID: **22531**	RunNo: **30514**
Prep Date: **11/25/2015**	Analysis Date: **11/30/2015**	SeqNo: **931989** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.059	1.179	0	85.3	69.6	136			
Toluene	0.97	0.059	1.179	0.007796	81.9	76.2	134			
Ethylbenzene	1.0	0.059	1.179	0	87.1	75.8	137			
Xylenes, Total	3.0	0.12	3.537	0.02516	84.3	78.9	133			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID **1511B38-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-112415-SP** Batch ID: **22531** RunNo: **30514**

Prep Date: **11/25/2015** Analysis Date: **11/30/2015** SeqNo: **931989** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.5		1.179		125	80	120			S

Sample ID **1511B38-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-112415-SP** Batch ID: **22531** RunNo: **30514**

Prep Date: **11/25/2015** Analysis Date: **11/30/2015** SeqNo: **931990** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.059	1.182	0	83.8	69.6	136	1.42	20	
Toluene	0.96	0.059	1.182	0.007796	80.6	76.2	134	1.24	20	
Ethylbenzene	1.0	0.059	1.182	0	86.9	75.8	137	0.0980	20	
Xylenes, Total	3.0	0.12	3.547	0.02516	83.7	78.9	133	0.490	20	
Surr: 4-Bromofluorobenzene	1.5		1.182		127	80	120	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-22597**	SampType:	**MBLK**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID:	**22597**	RunNo:	**30635**					
Prep Date:	**12/2/2015**	Analysis Date:	**12/4/2015**	SeqNo:	**935703**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-22597**	SampType:	**LCS**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID:	**22597**	RunNo:	**30635**					
Prep Date:	**12/2/2015**	Analysis Date:	**12/4/2015**	SeqNo:	**935704**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1667	0	105	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-22538**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**22538**	RunNo:	**30518**
Prep Date:	**11/30/2015**	Analysis Date:	**11/30/2015**	SeqNo:	**931711** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Zinc	ND	2.5								

Sample ID	**LCS-22538**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**22538**	RunNo:	**30518**
Prep Date:	**11/30/2015**	Analysis Date:	**11/30/2015**	SeqNo:	**931712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	25.00	0	106	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Cadmium	25	0.10	25.00	0	102	80	120			
Chromium	25	0.30	25.00	0	100	80	120			
Copper	26	0.30	25.00	0	103	80	120			
Iron	27	2.5	25.00	0	106	80	120			
Lead	25	0.25	25.00	0	101	80	120			
Manganese	25	0.10	25.00	0	100	80	120			
Selenium	26	2.5	25.00	0	105	80	120			
Silver	5.2	0.25	5.000	0	105	80	120			
Zinc	25	2.5	25.00	0	99.4	80	120			

Sample ID	**1511B38-007BMS**	SampType:	**MS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**S-082148-112415-SP**	Batch ID:	**22538**	RunNo:	**30518**
Prep Date:	**11/30/2015**	Analysis Date:	**11/30/2015**	SeqNo:	**931812** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	29	2.8	27.80	1.210	102	75	125			
Barium	130	0.11	27.80	99.20	94.0	75	125			
Cadmium	27	0.11	27.80	0	96.2	75	125			
Chromium	34	0.33	27.80	8.613	92.3	75	125			
Copper	37	0.33	27.80	9.782	96.1	75	125			
Lead	28	0.28	27.80	2.655	90.5	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**1511B38-007BMS**	SampType:	**MS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112415-SP**	Batch ID:	**22538**		RunNo:	**30518**				
Prep Date:	**11/30/2015**	Analysis Date:	**11/30/2015**		SeqNo:	**931812**	Units:	**mg/Kg-dry**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	180	0.11	27.80	156.9	96.2	75	125			
Selenium	26	2.8	27.80	0	92.9	75	125			
Silver	5.3	0.28	5.560	0	95.6	75	125			
Zinc	52	2.8	27.80	25.95	92.5	75	125			

Sample ID	**1511B38-007BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112415-SP**	Batch ID:	**22538**		RunNo:	**30518**				
Prep Date:	**11/30/2015**	Analysis Date:	**11/30/2015**		SeqNo:	**931813**	Units:	**mg/Kg-dry**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	29	2.8	27.92	1.210	101	75	125	0.110	20	
Barium	120	0.11	27.92	99.20	85.6	75	125	1.79	20	
Cadmium	27	0.11	27.92	0	97.4	75	125	1.65	20	
Chromium	35	0.34	27.92	8.613	96.2	75	125	3.44	20	
Copper	41	0.34	27.92	9.782	111	75	125	10.9	20	
Lead	28	0.28	27.92	2.655	91.6	75	125	1.57	20	
Manganese	180	0.11	27.92	156.9	93.7	75	125	0.327	20	
Selenium	25	2.8	27.92	0	90.9	75	125	1.72	20	
Silver	5.3	0.28	5.585	0	95.1	75	125	0.111	20	
Zinc	51	2.8	27.92	25.95	89.6	75	125	1.38	20	

Sample ID	**MB-22538**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**PBS**	Batch ID:	**22538**		RunNo:	**30548**				
Prep Date:	**11/30/2015**	Analysis Date:	**12/1/2015**		SeqNo:	**932722**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	5.0								

Sample ID	**LCS-22538**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**LCSS**	Batch ID:	**22538**		RunNo:	**30548**				
Prep Date:	**11/30/2015**	Analysis Date:	**12/1/2015**		SeqNo:	**932723**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	26	5.0	25.00	0	103	80	120			

Sample ID	**1511B38-007BMS**	SampType:	**MS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112415-SP**	Batch ID:	**22538**		RunNo:	**30548**				
Prep Date:	**11/30/2015**	Analysis Date:	**12/1/2015**		SeqNo:	**932755**	Units:	**mg/Kg-dry**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1511B38**

18-Dec-15

Client: GHD

Project: Jal Landfarm

Sample ID	**1511B38-007BMS**	SampType:	**MS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112415-SP**	Batch ID:	**22538**		RunNo:	**30548**				
Prep Date:	**11/30/2015**	Analysis Date:	**12/1/2015**		SeqNo:	**932755**	Units:	**mg/Kg-dry**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	24	5.6	27.80	0	87.1	75	125			

Sample ID	**1511B38-007BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112415-SP**	Batch ID:	**22538**		RunNo:	**30548**				
Prep Date:	**11/30/2015**	Analysis Date:	**12/1/2015**		SeqNo:	**932756**	Units:	**mg/Kg-dry**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	25	5.6	27.92	0	87.9	75	125	1.28	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1511B38 | RcptNo: 1

Received by/date: JA 11/25/15

Logged By: **Anne Thorne** 11/25/2015 8:00:00 AM Anne Thorne

Completed By: **Anne Thorne** 11/25/2015 Anne Thorne

Reviewed By: CS 11/25/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	FedEx		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good	Yes			

Chain-of-Custody Record

Client: GHD - Albuquerque

Mailing Address: 6121 Indian School Rd NE Ste 200 Albuquerque, NM, 87110

Phone #: (505) 884-0672

email or Fax#: Bernard.Bocklisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bocklisch (505) 280-0572

Sampler: Steve Perez

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1511B38	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX 8021B	VOC Metals	Cyanide	Chloride 300.1	Air Bubbles (Y or N)	% moisture
11-24-15	950	Soil	S-082148-112415-SP-09	4oz glass x3	Ice	001				X				X				X	X	X	X		X
	1040		S-082148-112415-SP-10	3		002																	
	1115		S-082148-112415-SP-11	3		003																	
	1145		S-082148-112415-SP-12	3		004																	
	1230		S-082148-112415-SP-13	3		005																	
	1305		S-082148-112415-SP-14	3		006																	
	1345		S-082148-112415-SP-15	3		007																	

Date	Time	Relinquished by	Received by	Date	Time
11/24/15	16:00	Steven Perez	Jane Acker	11/25/15	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Analytical Data 2016

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 02, 2016

Bernie Bockish

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1602777

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 20 sample(s) on 2/18/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1602777**
Date Reported: **3/2/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-01
Project: Jal Landfarm
Collection Date: 2/16/2016 9:15:00 AM
Lab ID: 1602777-001
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	7.5		mg/Kg	5	2/29/2016 3:09:22 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	82	9.7		mg/Kg	1	2/23/2016 2:34:45 PM	23841
Surr: DNOP	77.7	70-130		%Rec	1	2/23/2016 2:34:45 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/22/2016 9:51:36 PM	23845
Surr: BFB	95.9	66.2-112		%Rec	1	2/22/2016 9:51:36 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-02
Project: Jal Landfarm
Collection Date: 2/16/2016 9:20:00 AM
Lab ID: 1602777-002
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/22/2016 10:15:11 PM	23845
Toluene	ND	0.024		mg/Kg	1	2/22/2016 10:15:11 PM	23845
Ethylbenzene	ND	0.024		mg/Kg	1	2/22/2016 10:15:11 PM	23845
Xylenes, Total	ND	0.048		mg/Kg	1	2/22/2016 10:15:11 PM	23845
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	2/22/2016 10:15:11 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-03
Project: Jal Landfarm
Collection Date: 2/16/2016 9:55:00 AM
Lab ID: 1602777-003
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	3.7	1.5		mg/Kg	1	2/29/2016 3:59:00 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	47	9.5		mg/Kg	1	2/23/2016 11:20:37 AM	23841
Surr: DNOP	89.9	70-130		%Rec	1	2/23/2016 11:20:37 AM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/22/2016 10:38:41 PM	23845
Surr: BFB	95.2	66.2-112		%Rec	1	2/22/2016 10:38:41 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-04
Project: Jal Landfarm
Collection Date: 2/16/2016 10:00:00 AM
Lab ID: 1602777-004
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	140	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/22/2016 11:02:08 PM	23845
Toluene	ND	0.025		mg/Kg	1	2/22/2016 11:02:08 PM	23845
Ethylbenzene	ND	0.025		mg/Kg	1	2/22/2016 11:02:08 PM	23845
Xylenes, Total	ND	0.049		mg/Kg	1	2/22/2016 11:02:08 PM	23845
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	2/22/2016 11:02:08 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-05
Project: Jal Landfarm
Collection Date: 2/16/2016 10:40:00 AM
Lab ID: 1602777-005
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/29/2016 4:23:50 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	630	97		mg/Kg	10	2/23/2016 11:42:02 AM	23841
Surr: DNOP	0	70-130	S	%Rec	10	2/23/2016 11:42:02 AM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/23/2016 12:35:57 AM	23845
Surr: BFB	94.0	66.2-112		%Rec	1	2/23/2016 12:35:57 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-06
Project: Jal Landfarm
Collection Date: 2/16/2016 10:45:00 AM
Lab ID: 1602777-006
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/23/2016 12:59:31 AM	23845
Toluene	ND	0.024		mg/Kg	1	2/23/2016 12:59:31 AM	23845
Ethylbenzene	ND	0.024		mg/Kg	1	2/23/2016 12:59:31 AM	23845
Xylenes, Total	ND	0.049		mg/Kg	1	2/23/2016 12:59:31 AM	23845
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	2/23/2016 12:59:31 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-07
Project: Jal Landfarm
Collection Date: 2/16/2016 11:20:00 AM
Lab ID: 1602777-007
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	2.9	1.5		mg/Kg	1	2/29/2016 4:48:39 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	420	96		mg/Kg	10	2/23/2016 12:03:34 PM	23841
Surr: DNOP	0	70-130	S	%Rec	10	2/23/2016 12:03:34 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/23/2016 1:23:03 AM	23845
Surr: BFB	94.8	66.2-112		%Rec	1	2/23/2016 1:23:03 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-08
Project: Jal Landfarm
Collection Date: 2/16/2016 11:25:00 AM
Lab ID: 1602777-008
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	2/23/2016 1:46:36 AM	23845
Toluene	ND	0.023		mg/Kg	1	2/23/2016 1:46:36 AM	23845
Ethylbenzene	ND	0.023		mg/Kg	1	2/23/2016 1:46:36 AM	23845
Xylenes, Total	ND	0.046		mg/Kg	1	2/23/2016 1:46:36 AM	23845
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	1	2/23/2016 1:46:36 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-09
Project: Jal Landfarm
Collection Date: 2/16/2016 12:10:00 PM
Lab ID: 1602777-009
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/29/2016 5:13:28 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/23/2016 12:24:59 PM	23841
Surr: DNOP	80.9	70-130		%Rec	1	2/23/2016 12:24:59 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/23/2016 2:10:03 AM	23845
Surr: BFB	94.7	66.2-112		%Rec	1	2/23/2016 2:10:03 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-10
Project: Jal Landfarm
Collection Date: 2/16/2016 12:15:00 PM
Lab ID: 1602777-010
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/23/2016 2:33:32 AM	23845
Toluene	ND	0.024		mg/Kg	1	2/23/2016 2:33:32 AM	23845
Ethylbenzene	ND	0.024		mg/Kg	1	2/23/2016 2:33:32 AM	23845
Xylenes, Total	ND	0.048		mg/Kg	1	2/23/2016 2:33:32 AM	23845
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	2/23/2016 2:33:32 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-11
Project: Jal Landfarm
Collection Date: 2/16/2016 12:45:00 PM
Lab ID: 1602777-011
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/29/2016 5:38:18 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	19	10		mg/Kg	1	2/23/2016 12:46:31 PM	23841
Surr: DNOP	84.1	70-130		%Rec	1	2/23/2016 12:46:31 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/23/2016 2:57:03 AM	23845
Surr: BFB	95.4	66.2-112		%Rec	1	2/23/2016 2:57:03 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-12
Project: Jal Landfarm
Collection Date: 2/16/2016 12:50:00 PM
Lab ID: 1602777-012
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/23/2016 3:20:26 AM	23845
Toluene	ND	0.025		mg/Kg	1	2/23/2016 3:20:26 AM	23845
Ethylbenzene	ND	0.025		mg/Kg	1	2/23/2016 3:20:26 AM	23845
Xylenes, Total	ND	0.049		mg/Kg	1	2/23/2016 3:20:26 AM	23845
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	2/23/2016 3:20:26 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-13
Project: Jal Landfarm
Collection Date: 2/16/2016 1:10:00 PM
Lab ID: 1602777-013
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/29/2016 6:27:57 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	17	9.9		mg/Kg	1	2/23/2016 1:09:33 PM	23841
Surr: DNOP	93.2	70-130		%Rec	1	2/23/2016 1:09:33 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/23/2016 3:44:05 AM	23845
Surr: BFB	91.8	66.2-112		%Rec	1	2/23/2016 3:44:05 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-14
Project: Jal Landfarm
Collection Date: 2/16/2016 1:15:00 PM
Lab ID: 1602777-014
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/23/2016 4:07:43 AM	23845
Toluene	ND	0.025		mg/Kg	1	2/23/2016 4:07:43 AM	23845
Ethylbenzene	ND	0.025		mg/Kg	1	2/23/2016 4:07:43 AM	23845
Xylenes, Total	ND	0.049		mg/Kg	1	2/23/2016 4:07:43 AM	23845
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	2/23/2016 4:07:43 AM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-15
Project: Jal Landfarm
Collection Date: 2/16/2016 1:40:00 PM
Lab ID: 1602777-015
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/29/2016 6:52:48 PM	23979
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	2/23/2016 3:58:49 PM	23841
Surr: DNOP	80.6	70-130		%Rec	1	2/23/2016 3:58:49 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/22/2016 9:40:44 PM	23845
Surr: BFB	84.0	66.2-112		%Rec	1	2/22/2016 9:40:44 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-16
Project: Jal Landfarm
Collection Date: 2/16/2016 1:45:00 PM
Lab ID: 1602777-016
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/22/2016 10:05:22 PM	23845
Toluene	ND	0.024		mg/Kg	1	2/22/2016 10:05:22 PM	23845
Ethylbenzene	ND	0.024		mg/Kg	1	2/22/2016 10:05:22 PM	23845
Xylenes, Total	ND	0.049		mg/Kg	1	2/22/2016 10:05:22 PM	23845
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	2/22/2016 10:05:22 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-17
Project: Jal Landfarm
Collection Date: 2/16/2016 2:30:00 PM
Lab ID: 1602777-017
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	3/1/2016 2:36:57 PM	24017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	9.6	9.6		mg/Kg	1	2/23/2016 1:52:13 PM	23841
Surr: DNOP	77.6	70-130		%Rec	1	2/23/2016 1:52:13 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/22/2016 10:29:58 PM	23845
Surr: BFB	86.4	66.2-112		%Rec	1	2/22/2016 10:29:58 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-18
Project: Jal Landfarm
Collection Date: 2/16/2016 2:35:00 PM
Lab ID: 1602777-018
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/22/2016 10:54:31 PM	23845
Toluene	ND	0.024		mg/Kg	1	2/22/2016 10:54:31 PM	23845
Ethylbenzene	ND	0.024		mg/Kg	1	2/22/2016 10:54:31 PM	23845
Xylenes, Total	ND	0.047		mg/Kg	1	2/22/2016 10:54:31 PM	23845
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	2/22/2016 10:54:31 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-19
Project: Jal Landfarm
Collection Date: 2/16/2016 3:25:00 PM
Lab ID: 1602777-019
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	3/1/2016 3:26:35 PM	24017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	43	9.9		mg/Kg	1	2/23/2016 2:13:35 PM	23841
Surr: DNOP	87.9	70-130		%Rec	1	2/23/2016 2:13:35 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/22/2016 11:19:04 PM	23845
Surr: BFB	87.4	66.2-112		%Rec	1	2/22/2016 11:19:04 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021616-SP-20
Project: Jal Landfarm
Collection Date: 2/16/2016 3:30:00 PM
Lab ID: 1602777-020
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/22/2016 11:43:32 PM	23845
Toluene	ND	0.025		mg/Kg	1	2/22/2016 11:43:32 PM	23845
Ethylbenzene	ND	0.025		mg/Kg	1	2/22/2016 11:43:32 PM	23845
Xylenes, Total	ND	0.050		mg/Kg	1	2/22/2016 11:43:32 PM	23845
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	2/22/2016 11:43:32 PM	23845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602777**

02-Mar-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23979**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **23979**			RunNo: **32483**					
Prep Date:	**2/29/2016**	Analysis Date: **2/29/2016**			SeqNo: **993599**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-23979**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **23979**			RunNo: **32483**					
Prep Date:	**2/29/2016**	Analysis Date: **2/29/2016**			SeqNo: **993600**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Sample ID	**MB-24017**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **24017**			RunNo: **32490**					
Prep Date:	**3/1/2016**	Analysis Date: **3/1/2016**			SeqNo: **994361**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-24017**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **24017**			RunNo: **32490**					
Prep Date:	**3/1/2016**	Analysis Date: **3/1/2016**			SeqNo: **994362**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	90	110			

Sample ID	**1602777-017AMS**	SampType: **MS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**S-082148-021616-SP**	Batch ID: **24017**			RunNo: **32490**					
Prep Date:	**3/1/2016**	Analysis Date: **3/1/2016**			SeqNo: **994378**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	64.2	131			

Sample ID	**1602777-017AMSD**	SampType: **MSD**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**S-082148-021616-SP**	Batch ID: **24017**			RunNo: **32490**					
Prep Date:	**3/1/2016**	Analysis Date: **3/1/2016**			SeqNo: **994379**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	64.2	131	0.868	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602777**

02-Mar-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23826**	SampType:	**MBLK**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**PBS**	Batch ID:	**23826**	RunNo:	**32340**					
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**988456**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-23826**	SampType:	**LCS**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS**	Batch ID:	**23826**	RunNo:	**32340**					
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**988457**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	96	20	100.0	0	96.2	83.4	127			

Sample ID	**LCSD-23826**	SampType:	**LCSD**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS02**	Batch ID:	**23826**	RunNo:	**32340**					
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**988458**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	83.4	127	5.15	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602777**

02-Mar-16

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-23841**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**23841**		RunNo:	**32326**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**		SeqNo:	**988157**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	65.8	136			
Surr: DNOP	5.5		5.000		110	70	130			

Sample ID	**MB-23841**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**23841**		RunNo:	**32326**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**		SeqNo:	**988159**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		114	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602777**

02-Mar-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23846**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **23846**			RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**			SeqNo: **987802**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		930		1000		93.3	66.2	112			

Sample ID	**LCS-23846**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **23846**			RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**			SeqNo: **987805**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		990		1000		99.3	66.2	112			

Sample ID	**MB-23845**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **23845**			RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**			SeqNo: **987821**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		ND	5.0								
Surr: BFB		940		1000		94.3	66.2	112			

Sample ID	**LCS-23845**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **23845**			RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**			SeqNo: **987822**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		27	5.0	25.00	0	109	79.6	122			
Surr: BFB		1000		1000		102	66.2	112			

Sample ID	**1602777-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-021616-SP**	Batch ID: **23845**			RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**			SeqNo: **987824**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		27	4.9	24.49	0	109	59.3	143			
Surr: BFB		1000		979.4		107	66.2	112			

Sample ID	**1602777-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-021616-SP**	Batch ID: **23845**			RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**			SeqNo: **987825**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		27	4.9	24.37	0	112	59.3	143	1.98	20	
Surr: BFB		1000		974.7		105	66.2	112	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602777**

02-Mar-16

Client: GHD

Project: Jal Landfarm

Sample ID **MB-23846**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **23846**	RunNo: **32301**
Prep Date: **2/19/2016**	Analysis Date: **2/22/2016**	SeqNo: **987873** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Sample ID **LCS-23846**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **23846**	RunNo: **32301**
Prep Date: **2/19/2016**	Analysis Date: **2/22/2016**	SeqNo: **987880** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID **MB-23845**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **23845**	RunNo: **32301**
Prep Date: **2/19/2016**	Analysis Date: **2/22/2016**	SeqNo: **987896** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		115	80	120			

Sample ID **LCS-23845**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **23845**	RunNo: **32301**
Prep Date: **2/19/2016**	Analysis Date: **2/22/2016**	SeqNo: **987897** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	80	120			
Toluene	1.1	0.050	1.000	0	110	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		123	80	120			S

Sample ID **1602777-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-021616-SP**	Batch ID: **23845**	RunNo: **32301**
Prep Date: **2/19/2016**	Analysis Date: **2/22/2016**	SeqNo: **987899** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.048	0.9662	0	99.1	71.5	122			
Toluene	0.96	0.048	0.9662	0	99.8	71.2	123			
Ethylbenzene	0.96	0.048	0.9662	0	99.7	75.2	130			
Xylenes, Total	2.9	0.097	2.899	0	100	72.4	131			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602777**

02-Mar-16

Client: GHD

Project: Jal Landfarm

Sample ID **1602777-002AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-021616-SP** Batch ID: **23845** RunNo: **32301**

Prep Date: **2/19/2016** Analysis Date: **2/22/2016** SeqNo: **987899** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		0.9662		114	80	120			

Sample ID **1602777-002AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-021616-SP** Batch ID: **23845** RunNo: **32301**

Prep Date: **2/19/2016** Analysis Date: **2/22/2016** SeqNo: **987900** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.048	0.9662	0	97.2	71.5	122	1.87	20	
Toluene	1.1	0.048	0.9662	0	109	71.2	123	8.66	20	
Ethylbenzene	1.1	0.048	0.9662	0	111	75.2	130	10.7	20	
Xylenes, Total	3.3	0.097	2.899	0	112	72.4	131	11.6	20	
Surr: 4-Bromofluorobenzene	1.2		0.9662		124	80	120	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1602777 | RcptNo: 1

Received by/date: LM 02/18/16

Logged By: Michelle Garcia 2/18/2016 9:10:00 AM Michelle Garcia

Completed By: Michelle Garcia 2/18/2016 2:25:45 PM Michelle Garcia

Reviewed By: 02/19/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

ent: GHD - Albuquerque

iling Address: 6121 Indian School Rd Ste 200,

uquerque, NM, 87110

one #: 505 884-0672

ail or Fax#: Bernard.Bockisch@ghd.com

VQC Package:

Standard ☐ Level 4 (Full Validation)

creditation

NELAP ☐ Other _____

EDD (Type) _____

Turn-Around Time:

☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch
505-280-0572

Sampler: Steve Perez

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1602777	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 300.0	TPH DRO/GRO 8015	BTEX 8021		Air Bubbles (Y or N)
2-16	915	Soil	S-082148-021616-SP-01	4ozglass-1	Ice	-001												X	X			
	920		S-082148-021616-SP-02			-002				X										X		
	955		S-082148-021616-SP-03			-003												X	X			
	1000		S-082148-021616-SP-04			-004				X										X		
	1040		S-082148-021616-SP-05			-005												X	X			
	1045		S-082148-021616-SP-06			-006				X										X		
	1120		S-082148-021616-SP-07			-007												X	X			
	1125		S-082148-021616-SP-08			-008				X										X		
	1210		S-082148-021616-SP-09			-009												X	X			
	1215		S-082148-021616-SP-10			-010				X										X		
	1245		S-082148-021616-SP-11			-011												X	X			
	1250		S-082148-021616-SP-12			-012				X										X		

Relinquished by: Steve Perez — Received by: [signature] — Date: 2/12/16 — Time: 1630

Relinquished by: — Received by: [signature] — Date: 02/13/16 — Time: 0910

Remarks: Please report BTEX Constituents at 0.025 mg/kg

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

ent: GHD-Albuquerque

iling Address: 6121 Indian School Rd Ste 200

uquerque NM 87110

one #: 505 884-0672

ail or Fax#: Bernard.Bockisch@ghd.com

/QC Package:

Standard ☐ Level 4 (Full Validation)

creditation

NELAP ☐ Other _____

EDD (Type) _____

Turn-Around Time:

☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

505-280-0512

Sampler: Steve Perez

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.6

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1602777	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 300.0	TPH DRO/GRO 8015	BTEX 8021		Air Bubbles (Y or N)
2-16	1310	Soil	S-082148-021616-SP-13	4oz glass-1	Ice	-013												X	X			
	1315		S-082148-021616-SP-14			-014				X										X		
	1340		S-082148-021616-SP-15			-015												X	X			
	1345		S-082148-021616-SP-16			-016				X										X		
	1430		S-082148-021616-SP-17			-017												X	X			
	1435		S-082148-021616-SP-18			-018				X										X		
	1525		S-082148-021616-SP-19			-019												X	X			
	1530		S-082148-021616-SP-20			-020				X										X		
	1540 SP																					

Date	Time	Relinquished by:	Received by:	Date	Time
2-16	1630	Steve Perez	[signature]	2/17/16	
			[signature]	2/18/16	0910

Remarks: Please report BTEX constituents at 0.025 mg/kg

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 25, 2016

Bernie Bockish
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1602779

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 10 sample(s) on 2/18/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1602779**
Date Reported: **2/25/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-01
Project: Jal Landfarm
Collection Date: 2/17/2016 10:40:00 AM
Lab ID: 1602779-001
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/23/2016 4:20:09 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	15	10		mg/Kg	1	2/23/2016 3:29:03 PM	23841
Surr: DNOP	93.3	70-130		%Rec	1	2/23/2016 3:29:03 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/22/2016 11:50:23 AM	23835
Surr: BFB	91.4	66.2-112		%Rec	1	2/22/2016 11:50:23 AM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-02
Project: Jal Landfarm
Collection Date: 2/17/2016 10:45:00 AM
Lab ID: 1602779-002
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	70	20		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/22/2016 1:04:05 PM	23835
Toluene	ND	0.025		mg/Kg	1	2/22/2016 1:04:05 PM	23835
Ethylbenzene	ND	0.025		mg/Kg	1	2/22/2016 1:04:05 PM	23835
Xylenes, Total	ND	0.049		mg/Kg	1	2/22/2016 1:04:05 PM	23835
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	1	2/22/2016 1:04:05 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-03
Project: Jal Landfarm
Collection Date: 2/17/2016 11:15:00 AM
Lab ID: 1602779-003
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/23/2016 4:44:59 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	10	10		mg/Kg	1	2/23/2016 4:11:50 PM	23841
Surr: DNOP	96.6	70-130		%Rec	1	2/23/2016 4:11:50 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/22/2016 1:28:45 PM	23835
Surr: BFB	91.0	66.2-112		%Rec	1	2/22/2016 1:28:45 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-04
Project: Jal Landfarm
Collection Date: 2/17/2016 11:20:00 AM
Lab ID: 1602779-004
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	2/22/2016 1:53:25 PM	23835
Toluene	ND	0.023		mg/Kg	1	2/22/2016 1:53:25 PM	23835
Ethylbenzene	ND	0.023		mg/Kg	1	2/22/2016 1:53:25 PM	23835
Xylenes, Total	ND	0.046		mg/Kg	1	2/22/2016 1:53:25 PM	23835
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	2/22/2016 1:53:25 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-05
Project: Jal Landfarm
Collection Date: 2/17/2016 11:45:00 AM
Lab ID: 1602779-005
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	8.3	1.5		mg/Kg	1	2/23/2016 5:09:48 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	47	9.9		mg/Kg	1	2/23/2016 4:54:51 PM	23841
Surr: DNOP	109	70-130		%Rec	1	2/23/2016 4:54:51 PM	23841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/22/2016 2:17:59 PM	23835
Surr: BFB	88.2	66.2-112		%Rec	1	2/22/2016 2:17:59 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-06
Project: Jal Landfarm
Collection Date: 2/17/2016 11:50:00 AM
Lab ID: 1602779-006
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	2/22/2016 2:42:44 PM	23835
Toluene	ND	0.023		mg/Kg	1	2/22/2016 2:42:44 PM	23835
Ethylbenzene	ND	0.023		mg/Kg	1	2/22/2016 2:42:44 PM	23835
Xylenes, Total	ND	0.047		mg/Kg	1	2/22/2016 2:42:44 PM	23835
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	2/22/2016 2:42:44 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-07
Project: Jal Landfarm
Collection Date: 2/17/2016 12:25:00 PM
Lab ID: 1602779-007
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/23/2016 5:34:38 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	12	9.8		mg/Kg	1	2/23/2016 5:37:43 PM	23859
Surr: DNOP	94.6	70-130		%Rec	1	2/23/2016 5:37:43 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/22/2016 3:07:17 PM	23835
Surr: BFB	88.2	66.2-112		%Rec	1	2/22/2016 3:07:17 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-08
Project: Jal Landfarm
Collection Date: 2/17/2016 12:30:00 PM
Lab ID: 1602779-008
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	2/22/2016 3:31:54 PM	23835
Toluene	ND	0.023		mg/Kg	1	2/22/2016 3:31:54 PM	23835
Ethylbenzene	ND	0.023		mg/Kg	1	2/22/2016 3:31:54 PM	23835
Xylenes, Total	ND	0.046		mg/Kg	1	2/22/2016 3:31:54 PM	23835
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	2/22/2016 3:31:54 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-09
Project: Jal Landfarm
Collection Date: 2/17/2016 12:50:00 PM
Lab ID: 1602779-009
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	3.2	1.5		mg/Kg	1	2/23/2016 5:59:28 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	67	10		mg/Kg	1	2/24/2016 10:30:18 AM	23859
Surr: DNOP	96.6	70-130		%Rec	1	2/24/2016 10:30:18 AM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/22/2016 3:56:23 PM	23835
Surr: BFB	89.4	66.2-112		%Rec	1	2/22/2016 3:56:23 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-10
Project: Jal Landfarm
Collection Date: 2/17/2016 12:55:00 PM
Lab ID: 1602779-010
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	2/23/2016	23826
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/22/2016 4:20:59 PM	23835
Toluene	ND	0.024		mg/Kg	1	2/22/2016 4:20:59 PM	23835
Ethylbenzene	ND	0.024		mg/Kg	1	2/22/2016 4:20:59 PM	23835
Xylenes, Total	ND	0.047		mg/Kg	1	2/22/2016 4:20:59 PM	23835
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	2/22/2016 4:20:59 PM	23835

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602779**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23908**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**23908**	RunNo:	**32364**					
Prep Date:	**2/23/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**989481**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-23908**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**23908**	RunNo:	**32364**					
Prep Date:	**2/23/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**989482**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602779**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23826**	SampType:	**MBLK**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**PBS**	Batch ID:	**23826**	RunNo:	**32340**					
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**988456**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-23826**	SampType:	**LCS**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS**	Batch ID:	**23826**	RunNo:	**32340**					
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**988457**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	96	20	100.0	0	96.2	83.4	127			

Sample ID	**LCSD-23826**	SampType:	**LCSD**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS02**	Batch ID:	**23826**	RunNo:	**32340**					
Prep Date:	**2/19/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**988458**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	83.4	127	5.15	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602779**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID **LCS-23841**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **23841**	RunNo: **32326**
Prep Date: **2/19/2016**	Analysis Date: **2/23/2016**	SeqNo: **988157** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	65.8	136			
Surr: DNOP	5.5		5.000		110	70	130			

Sample ID **LCS-23882**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **23882**	RunNo: **32326**
Prep Date: **2/23/2016**	Analysis Date: **2/23/2016**	SeqNo: **988158** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		106	70	130			

Sample ID **MB-23841**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **23841**	RunNo: **32326**
Prep Date: **2/19/2016**	Analysis Date: **2/23/2016**	SeqNo: **988159** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		114	70	130			

Sample ID **MB-23882**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **23882**	RunNo: **32326**
Prep Date: **2/23/2016**	Analysis Date: **2/23/2016**	SeqNo: **988160** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.4		10.00		94.0	70	130			

Sample ID **LCS-23859**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **23859**	RunNo: **32327**
Prep Date: **2/22/2016**	Analysis Date: **2/23/2016**	SeqNo: **988166** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.5	65.8	136			
Surr: DNOP	4.8		5.000		95.8	70	130			

Sample ID **MB-23859**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **23859**	RunNo: **32327**
Prep Date: **2/22/2016**	Analysis Date: **2/23/2016**	SeqNo: **988168** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.7		10.00		87.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602779**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**1602779-007AMS**	SampType:	**MS**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**S-082148-021716-SP**	Batch ID:	**23859**			RunNo:	**32326**			
Prep Date:	**2/22/2016**	Analysis Date:	**2/23/2016**			SeqNo:	**988932**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.9	49.55	12.39	74.9	31.2	162			
Surr: DNOP	5.1		4.955		102	70	130			

Sample ID	**1602779-007AMSD**	SampType:	**MSD**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**S-082148-021716-SP**	Batch ID:	**23859**			RunNo:	**32326**			
Prep Date:	**2/22/2016**	Analysis Date:	**2/23/2016**			SeqNo:	**988933**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.4	47.17	12.39	67.4	31.2	162	11.3	31.7	
Surr: DNOP	5.1		4.717		108	70	130	0	0	

Sample ID	**LCS-23901**	SampType:	**LCS**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**LCSS**	Batch ID:	**23901**			RunNo:	**32363**			
Prep Date:	**2/23/2016**	Analysis Date:	**2/24/2016**			SeqNo:	**989602**	Units:	**%Rec**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		99.6	70	130			

Sample ID	**MB-23901**	SampType:	**MBLK**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**PBS**	Batch ID:	**23901**			RunNo:	**32363**			
Prep Date:	**2/23/2016**	Analysis Date:	**2/24/2016**			SeqNo:	**989603**	Units:	**%Rec**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.7		10.00		97.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602779**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23835**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**23835**		RunNo:	**32318**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**		SeqNo:	**987911**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.1	66.2	112			

Sample ID	**LCS-23835**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**23835**		RunNo:	**32318**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**		SeqNo:	**987912**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	79.6	122			
Surr: BFB	1100		1000		108	66.2	112			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602779**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23835**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**PBS**	Batch ID:	**23835**	RunNo:	**32318**
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**	SeqNo:	**987936** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	**LCS-23835**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**LCSS**	Batch ID:	**23835**	RunNo:	**32318**
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**	SeqNo:	**987937** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	94.8	80	120			
Toluene	1.0	0.050	1.000	0	99.6	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		121	80	120			S

Sample ID	**1602779-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**S-082148-021716-SP**	Batch ID:	**23835**	RunNo:	**32318**
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**	SeqNo:	**987939** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.82	0.096	0.9625	0	84.9	69.2	128			
Benzene	0.87	0.048	0.9625	0	89.9	71.5	122			
Toluene	0.92	0.048	0.9625	0	95.7	71.2	123			
Ethylbenzene	0.95	0.048	0.9625	0	98.6	75.2	130			
Xylenes, Total	2.9	0.096	2.887	0	98.9	72.4	131			
Surr: 4-Bromofluorobenzene	1.2		0.9625		121	80	120			S

Sample ID	**1602779-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**S-082148-021716-SP**	Batch ID:	**23835**	RunNo:	**32318**
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**	SeqNo:	**987940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.050	0.9911	0	90.1	71.5	122	3.13	20	
Toluene	0.94	0.050	0.9911	0	95.2	71.2	123	2.40	20	
Ethylbenzene	0.97	0.050	0.9911	0	97.9	75.2	130	2.25	20	
Xylenes, Total	3.0	0.099	2.973	0	100	72.4	131	4.07	20	
Surr: 4-Bromofluorobenzene	1.2		0.9911		121	80	120	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: CHD | Work Order Number: 1602779 | RcptNo: 1

Received by/date: LM 02/18/16

Logged By: Michelle Garcia 2/18/2016 9:10:00 AM Michelle Garcia

Completed By: Michelle Garcia 2/18/2016 2:44:38 PM Michelle Garcia

Reviewed By: 02/19/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

Client: GHD - Albuquerque

Mailing Address: 6121 Indian School Rd

200, Albuquerque NM 87110

Phone #: 505-884-0672

Email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:

Standard ☐ Level 4 (Full Validation)

Accreditation

NELAP ☐ Other _____

EDD (Type) _____

Turn-Around Time:

☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

505-280-0572

Sampler: Steve Perez

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1602779	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 300.0	TPH DRO/GRO 8015	BTEX 8021		Air Bubbles (Y or N)
2-17-16	1040	Soil	S-082148-021716-SP-01	4oz glass-1	Ice	-001												X	X			
	1045		S-082148-021716-SP-02			-002				X										X		
	1115		S-082148-021716-SP-03			-003												X	X			
	1120		S-082148-021716-SP-04			-004				X										X		
	1145		S-082148-021716-SP-05			-005												X	X			
	1150		S-082148-021716-SP-06			-006				X										X		
	1225		S-082148-021716-SP-07			-007												X	X			
	1230		S-082148-021716-SP-08			-008				X										X		
	1250		S-082148-021716-SP-09			-009												X	X			
↓	1255	↓	S-082148-021716-SP-10	↓	↓	-010				X										X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
2-17-16	1630	Steve Perez	[signature]	2/17/16	
Date:	Time:	Relinquished by:	Received by:	Date	Time
			[signature]	02/18/16	0910

Remarks:

Please report BTEX constituents at 0.025 mg/kg

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 25, 2016

Bernie Bockish

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1602780

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/18/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-01-C
Project: Jal Landfarm
Collection Date: 2/17/2016 1:10:00 PM
Lab ID: 1602780-001
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	56	30		mg/Kg	20	2/23/2016 7:01:32 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	110	98		mg/Kg	10	2/23/2016 7:24:34 PM	23859
Surr: DNOP	0	70-130	S	%Rec	10	2/23/2016 7:24:34 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/22/2016 8:40:49 PM	23846
Surr: BFB	92.9	66.2-112		%Rec	1	2/22/2016 8:40:49 PM	23846
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/22/2016 8:40:49 PM	23846
Toluene	ND	0.024		mg/Kg	1	2/22/2016 8:40:49 PM	23846
Ethylbenzene	ND	0.024		mg/Kg	1	2/22/2016 8:40:49 PM	23846
Xylenes, Total	ND	0.048		mg/Kg	1	2/22/2016 8:40:49 PM	23846
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	2/22/2016 8:40:49 PM	23846

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-02-C
Project: Jal Landfarm
Collection Date: 2/17/2016 1:15:00 PM
Lab ID: 1602780-002
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/23/2016 7:13:56 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/23/2016 7:45:53 PM	23859
Surr: DNOP	111	70-130		%Rec	1	2/23/2016 7:45:53 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/22/2016 9:04:27 PM	23846
Surr: BFB	94.0	66.2-112		%Rec	1	2/22/2016 9:04:27 PM	23846
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/22/2016 9:04:27 PM	23846
Toluene	ND	0.024		mg/Kg	1	2/22/2016 9:04:27 PM	23846
Ethylbenzene	ND	0.024		mg/Kg	1	2/22/2016 9:04:27 PM	23846
Xylenes, Total	ND	0.047		mg/Kg	1	2/22/2016 9:04:27 PM	23846
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	2/22/2016 9:04:27 PM	23846

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-021716-SP-03-C
Project: Jal Landfarm
Collection Date: 2/17/2016 1:20:00 PM
Lab ID: 1602780-003
Matrix: SOIL
Received Date: 2/18/2016 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	1.5		mg/Kg	1	2/23/2016 7:38:46 PM	23908
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/23/2016 8:07:02 PM	23859
Surr: DNOP	101	70-130		%Rec	1	2/23/2016 8:07:02 PM	23859
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/22/2016 9:28:02 PM	23846
Surr: BFB	95.0	66.2-112		%Rec	1	2/22/2016 9:28:02 PM	23846
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/22/2016 9:28:02 PM	23846
Toluene	ND	0.024		mg/Kg	1	2/22/2016 9:28:02 PM	23846
Ethylbenzene	ND	0.024		mg/Kg	1	2/22/2016 9:28:02 PM	23846
Xylenes, Total	ND	0.048		mg/Kg	1	2/22/2016 9:28:02 PM	23846
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	1	2/22/2016 9:28:02 PM	23846

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602780**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23908**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**23908**	RunNo:	**32364**					
Prep Date:	**2/23/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**989481**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-23908**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**23908**	RunNo:	**32364**					
Prep Date:	**2/23/2016**	Analysis Date:	**2/23/2016**	SeqNo:	**989482**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602780**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-23882**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **23882**			RunNo: **32326**					
Prep Date:	**2/23/2016**	Analysis Date: **2/23/2016**			SeqNo: **988158**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.3		5.000		106	70	130			

Sample ID	**MB-23882**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **23882**			RunNo: **32326**					
Prep Date:	**2/23/2016**	Analysis Date: **2/23/2016**			SeqNo: **988160**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.4		10.00		94.0	70	130			

Sample ID	**LCS-23859**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **23859**			RunNo: **32327**					
Prep Date:	**2/22/2016**	Analysis Date: **2/23/2016**			SeqNo: **988166**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		43	10	50.00	0	86.5	65.8	136			
Surr: DNOP		4.8		5.000		95.8	70	130			

Sample ID	**MB-23859**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **23859**			RunNo: **32327**					
Prep Date:	**2/22/2016**	Analysis Date: **2/23/2016**			SeqNo: **988168**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		ND	10								
Surr: DNOP		8.7		10.00		87.0	70	130			

Sample ID	**LCS-23901**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **23901**			RunNo: **32363**					
Prep Date:	**2/23/2016**	Analysis Date: **2/24/2016**			SeqNo: **989602**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.0		5.000		99.6	70	130			

Sample ID	**MB-23901**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **23901**			RunNo: **32363**					
Prep Date:	**2/23/2016**	Analysis Date: **2/24/2016**			SeqNo: **989603**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.7		10.00		97.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602780**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23846**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**23846**		RunNo:	**32301**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**		SeqNo:	**987802**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.3	66.2	112			

Sample ID	**LCS-23846**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**23846**		RunNo:	**32301**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**		SeqNo:	**987805**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	79.6	122			
Surr: BFB	990		1000		99.3	66.2	112			

Sample ID	**1602780-002AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-021716-SP**	Batch ID:	**23846**		RunNo:	**32301**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**		SeqNo:	**987818**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.52	0	107	59.3	143			
Surr: BFB	970		940.7		103	66.2	112			

Sample ID	**1602780-002AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-021716-SP**	Batch ID:	**23846**		RunNo:	**32301**				
Prep Date:	**2/19/2016**	Analysis Date:	**2/22/2016**		SeqNo:	**987819**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.50	0	109	59.3	143	1.13	20	
Surr: BFB	970		939.8		103	66.2	112	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1602780**

25-Feb-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-23846**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **23846**		RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**		SeqNo: **987873**		Units: **mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Sample ID	**LCS-23846**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **23846**		RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**		SeqNo: **987880**		Units: **mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	**1602780-001AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-021716-SP**	Batch ID: **23846**		RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**		SeqNo: **987892**		Units: **mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.048	0.9606	0	84.7	71.5	122			
Toluene	0.93	0.048	0.9606	0	96.5	71.2	123			
Ethylbenzene	0.98	0.048	0.9606	0	102	75.2	130			
Xylenes, Total	3.0	0.096	2.882	0	105	72.4	131			
Surr: 4-Bromofluorobenzene	1.1		0.9606		119	80	120			

Sample ID	**1602780-001AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-021716-SP**	Batch ID: **23846**		RunNo: **32301**					
Prep Date:	**2/19/2016**	Analysis Date: **2/22/2016**		SeqNo: **987893**		Units: **mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.048	0.9634	0	101	71.5	122	18.1	20	
Toluene	1.1	0.048	0.9634	0	110	71.2	123	13.2	20	
Ethylbenzene	1.0	0.048	0.9634	0	108	75.2	130	6.34	20	
Xylenes, Total	3.2	0.096	2.890	0	110	72.4	131	5.44	20	
Surr: 4-Bromofluorobenzene	1.2		0.9634		120	80	120	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1602780 | RcptNo: 1

Received by/date: LM 02/18/16

Logged By: **Michelle Garcia** 2/18/2016 9:10:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 2/18/2016 3:01:56 PM Michelle Garcia

Reviewed By: 02/19/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

Client: GHD - Albuquerque

Mailing Address: 6121 Indian School Rd NE

Ste 200, Albuquerque, NM, 87110

Phone #: 505-884-0672

Email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:

☑ Standard ☐ Level 4 (Full Validation)

Accreditation

☑ NELAP ☐ Other _____

☑ EDD (Type) _____

Turn-Around Time:

☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

505-280-0572

Sampler: Steve Perez

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX x 8021	Chloride 300.0	TPH 8015 (GRO/DRO)		Air Bubbles (Y or N)
						1602780																
2-16	1310	Soil	S-082148-021716-SP-01-C	4oz glass-1	Ice	-001												X	X	X		
↓	1315	↓	S-082148-021716-SP-02-C	↓	↓	-002												X	X	X		
↓	1320	↓	S-082148-021716-SP-03-C	↓	↓	-003												X	X	X		

Date: 2/16 Time: 1430/1630 Relinquished by: Steve Perez

Received by: Nora Stevens Date: 2/17/16 Time:

Date: Time: Relinquished by:

Received by: Date: 02/18/16 Time: 0945

Remarks: Please report BTEX constituents at 0.025 mg/kg

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 25, 2016

Bernie Bockish

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1605916

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 15 sample(s) on 5/19/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1605916**
Date Reported: **5/25/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-01
Project: Jal Landfarm
Collection Date: 5/17/2016 11:00:00 AM
Lab ID: 1605916-001
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	22	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 2:01:51 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/23/2016 11:50:58 AM	25418
Toluene	ND	0.046		mg/Kg	1	5/23/2016 11:50:58 AM	25418
Ethylbenzene	ND	0.046		mg/Kg	1	5/23/2016 11:50:58 AM	25418
Xylenes, Total	ND	0.092		mg/Kg	1	5/23/2016 11:50:58 AM	25418
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	5/23/2016 11:50:58 AM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-02
Project: Jal Landfarm
Collection Date: 5/17/2016 11:30:00 AM
Lab ID: 1605916-002
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 2:14:15 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/23/2016 1:01:35 PM	25418
Toluene	ND	0.050		mg/Kg	1	5/23/2016 1:01:35 PM	25418
Ethylbenzene	ND	0.050		mg/Kg	1	5/23/2016 1:01:35 PM	25418
Xylenes, Total	ND	0.099		mg/Kg	1	5/23/2016 1:01:35 PM	25418
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	5/23/2016 1:01:35 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-03
Project: Jal Landfarm
Collection Date: 5/17/2016 11:50:00 AM
Lab ID: 1605916-003
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 2:26:40 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2016 1:25:05 PM	25418
Toluene	ND	0.048		mg/Kg	1	5/23/2016 1:25:05 PM	25418
Ethylbenzene	ND	0.048		mg/Kg	1	5/23/2016 1:25:05 PM	25418
Xylenes, Total	ND	0.097		mg/Kg	1	5/23/2016 1:25:05 PM	25418
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	5/23/2016 1:25:05 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-04
Project: Jal Landfarm
Collection Date: 5/17/2016 12:12:00 PM
Lab ID: 1605916-004
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	32	30		mg/Kg	20	5/24/2016 2:39:04 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2016 1:48:28 PM	25418
Toluene	ND	0.049		mg/Kg	1	5/23/2016 1:48:28 PM	25418
Ethylbenzene	ND	0.049		mg/Kg	1	5/23/2016 1:48:28 PM	25418
Xylenes, Total	ND	0.098		mg/Kg	1	5/23/2016 1:48:28 PM	25418
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	5/23/2016 1:48:28 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-05
Project: Jal Landfarm
Collection Date: 5/17/2016 12:30:00 PM
Lab ID: 1605916-005
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 2:51:29 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/23/2016 2:11:59 PM	25418
Toluene	ND	0.050		mg/Kg	1	5/23/2016 2:11:59 PM	25418
Ethylbenzene	ND	0.050		mg/Kg	1	5/23/2016 2:11:59 PM	25418
Xylenes, Total	ND	0.099		mg/Kg	1	5/23/2016 2:11:59 PM	25418
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	5/23/2016 2:11:59 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-06
Project: Jal Landfarm
Collection Date: 5/17/2016 12:49:00 PM
Lab ID: 1605916-006
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 3:03:54 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/23/2016 2:35:33 PM	25418
Toluene	ND	0.050		mg/Kg	1	5/23/2016 2:35:33 PM	25418
Ethylbenzene	ND	0.050		mg/Kg	1	5/23/2016 2:35:33 PM	25418
Xylenes, Total	ND	0.10		mg/Kg	1	5/23/2016 2:35:33 PM	25418
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	5/23/2016 2:35:33 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-07
Project: Jal Landfarm
Collection Date: 5/17/2016 1:20:00 PM
Lab ID: 1605916-007
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 3:16:18 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2016 2:59:02 PM	25418
Toluene	ND	0.047		mg/Kg	1	5/23/2016 2:59:02 PM	25418
Ethylbenzene	ND	0.047		mg/Kg	1	5/23/2016 2:59:02 PM	25418
Xylenes, Total	ND	0.095		mg/Kg	1	5/23/2016 2:59:02 PM	25418
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	5/23/2016 2:59:02 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-08
Project: Jal Landfarm
Collection Date: 5/17/2016 1:47:00 PM
Lab ID: 1605916-008
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	76	30		mg/Kg	20	5/24/2016 3:28:43 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2016 3:22:30 PM	25418
Toluene	ND	0.049		mg/Kg	1	5/23/2016 3:22:30 PM	25418
Ethylbenzene	ND	0.049		mg/Kg	1	5/23/2016 3:22:30 PM	25418
Xylenes, Total	ND	0.098		mg/Kg	1	5/23/2016 3:22:30 PM	25418
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	5/23/2016 3:22:30 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-09
Project: Jal Landfarm
Collection Date: 5/17/2016 2:16:00 PM
Lab ID: 1605916-009
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 4:05:57 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2016 8:27:54 PM	25418
Toluene	ND	0.048		mg/Kg	1	5/23/2016 8:27:54 PM	25418
Ethylbenzene	ND	0.048		mg/Kg	1	5/23/2016 8:27:54 PM	25418
Xylenes, Total	ND	0.096		mg/Kg	1	5/23/2016 8:27:54 PM	25418
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	5/23/2016 8:27:54 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-10
Project: Jal Landfarm
Collection Date: 5/17/2016 2:40:00 PM
Lab ID: 1605916-010
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	48	19		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 4:18:22 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2016 8:51:19 PM	25418
Toluene	ND	0.047		mg/Kg	1	5/23/2016 8:51:19 PM	25418
Ethylbenzene	ND	0.047		mg/Kg	1	5/23/2016 8:51:19 PM	25418
Xylenes, Total	ND	0.095		mg/Kg	1	5/23/2016 8:51:19 PM	25418
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	5/23/2016 8:51:19 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-11
Project: Jal Landfarm
Collection Date: 5/17/2016 3:05:00 PM
Lab ID: 1605916-011
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 4:30:46 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/23/2016 9:14:57 PM	25418
Toluene	ND	0.047		mg/Kg	1	5/23/2016 9:14:57 PM	25418
Ethylbenzene	ND	0.047		mg/Kg	1	5/23/2016 9:14:57 PM	25418
Xylenes, Total	ND	0.094		mg/Kg	1	5/23/2016 9:14:57 PM	25418
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	5/23/2016 9:14:57 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-12
Project: Jal Landfarm
Collection Date: 5/17/2016 3:28:00 PM
Lab ID: 1605916-012
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 4:43:11 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/23/2016 9:38:22 PM	25418
Toluene	ND	0.046		mg/Kg	1	5/23/2016 9:38:22 PM	25418
Ethylbenzene	ND	0.046		mg/Kg	1	5/23/2016 9:38:22 PM	25418
Xylenes, Total	ND	0.093		mg/Kg	1	5/23/2016 9:38:22 PM	25418
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	5/23/2016 9:38:22 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-13
Project: Jal Landfarm
Collection Date: 5/17/2016 3:46:00 PM
Lab ID: 1605916-013
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	66	30		mg/Kg	20	5/24/2016 4:55:36 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/23/2016 10:01:49 PM	25418
Toluene	ND	0.047		mg/Kg	1	5/23/2016 10:01:49 PM	25418
Ethylbenzene	ND	0.047		mg/Kg	1	5/23/2016 10:01:49 PM	25418
Xylenes, Total	ND	0.094		mg/Kg	1	5/23/2016 10:01:49 PM	25418
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	5/23/2016 10:01:49 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-14
Project: Jal Landfarm
Collection Date: 5/17/2016 4:10:00 PM
Lab ID: 1605916-014
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 5:08:01 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/23/2016 10:25:18 PM	25418
Toluene	ND	0.050		mg/Kg	1	5/23/2016 10:25:18 PM	25418
Ethylbenzene	ND	0.050		mg/Kg	1	5/23/2016 10:25:18 PM	25418
Xylenes, Total	ND	0.10		mg/Kg	1	5/23/2016 10:25:18 PM	25418
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	5/23/2016 10:25:18 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-051716-SP-Cell-15
Project: Jal Landfarm
Collection Date: 5/17/2016 4:30:00 PM
Lab ID: 1605916-015
Matrix: SOIL
Received Date: 5/19/2016 9:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	5/24/2016	25438
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/24/2016 5:20:25 PM	25479
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2016 10:48:49 PM	25418
Toluene	ND	0.048		mg/Kg	1	5/23/2016 10:48:49 PM	25418
Ethylbenzene	ND	0.048		mg/Kg	1	5/23/2016 10:48:49 PM	25418
Xylenes, Total	ND	0.097		mg/Kg	1	5/23/2016 10:48:49 PM	25418
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	5/23/2016 10:48:49 PM	25418

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605916**

25-May-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-25479**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**25479**	RunNo:	**34455**					
Prep Date:	**5/24/2016**	Analysis Date:	**5/24/2016**	SeqNo:	**1062588**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-25479**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**25479**	RunNo:	**34455**					
Prep Date:	**5/24/2016**	Analysis Date:	**5/24/2016**	SeqNo:	**1062590**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605916**

25-May-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-25438**	SampType:	**MBLK**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**PBS**	Batch ID:	**25438**	RunNo:	**34441**					
Prep Date:	**5/23/2016**	Analysis Date:	**5/24/2016**	SeqNo:	**1061977**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-25438**	SampType:	**LCS**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS**	Batch ID:	**25438**	RunNo:	**34441**					
Prep Date:	**5/23/2016**	Analysis Date:	**5/24/2016**	SeqNo:	**1061978**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	96	20	100.0	0	95.7	83.4	127			

Sample ID	**LCSD-25438**	SampType:	**LCSD**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS02**	Batch ID:	**25438**	RunNo:	**34441**					
Prep Date:	**5/23/2016**	Analysis Date:	**5/24/2016**	SeqNo:	**1061979**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	83.4	127	5.60	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1605916**

25-May-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-25418**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**25418**	RunNo:	**34421**					
Prep Date:	**5/20/2016**	Analysis Date:	**5/23/2016**	SeqNo:	**1061391**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID	**LCS-25418**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**25418**	RunNo:	**34421**					
Prep Date:	**5/20/2016**	Analysis Date:	**5/23/2016**	SeqNo:	**1061392**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.7	75.3	123			
Toluene	0.97	0.050	1.000	0	97.3	80	124			
Ethylbenzene	0.96	0.050	1.000	0	96.0	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	96.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID	**1605916-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-051716-SP**	Batch ID:	**25418**	RunNo:	**34421**					
Prep Date:	**5/20/2016**	Analysis Date:	**5/23/2016**	SeqNo:	**1061394**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9569	0	88.2	71.5	122			
Toluene	0.86	0.048	0.9569	0	89.5	71.2	123			
Ethylbenzene	0.87	0.048	0.9569	0	90.5	75.2	130			
Xylenes, Total	2.6	0.096	2.871	0	91.4	72.4	131			
Surr: 4-Bromofluorobenzene	1.1		0.9569		115	80	120			

Sample ID	**1605916-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-051716-SP**	Batch ID:	**25418**	RunNo:	**34421**					
Prep Date:	**5/20/2016**	Analysis Date:	**5/23/2016**	SeqNo:	**1061395**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	0.9970	0	88.5	71.5	122	4.46	20	
Toluene	0.94	0.050	0.9970	0	94.0	71.2	123	9.05	20	
Ethylbenzene	0.95	0.050	0.9970	0	95.7	75.2	130	9.64	20	
Xylenes, Total	2.9	0.10	2.991	0	95.8	72.4	131	8.74	20	
Surr: 4-Bromofluorobenzene	1.2		0.9970		118	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1605916 | RcptNo: 1

Received by/date: CA 05/19/16

Logged By: Lindsay Mangin 5/19/2016 9:25:00 AM

Completed By: Lindsay Mangin 5/19/2016 2:30:34 PM

Reviewed By: 05/19/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Not Present			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: GHD-Albuquerque	Turn-Around Time: ☑ Standard ☐ Rush
	Project Name: Jal Landfarm
Mailing Address: 6121 Indian School Rd NE	
te 200, Albuquerque, NM, 87110	Project #: 082148
Phone #: 505-884-0672	
Email or Fax#: Bernard.Bockisch@ghd.com	Project Manager: Bernard.Bockisch@ghd.com
QA/QC Package:] Standard ☐ Level 4 (Full Validation)	
Accreditation] NELAP ☐ Other	Sampler: Steve Perez
	On Ice: ☒ Yes ☐ No
] EDD (Type)	Sample Temperature: 2.9

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1605916	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH EPA method 418.1	BTEX 8021	Chloride 300.0		Air Bubbles (Y or N)
5/16	11:00	Soil	S-082148-051716-SP-cell-01	4oz glass-1	ICE	-001												X	X	X		
	1130		S-082148-051716-SP-cell-02			-002																
	1150		S-082148-051716-SP-cell-03			-003																
	1212		S-082148-051716-SP-cell-04			-004																
	1230		S-082148-051716-SP-cell-05			-005																
	1249		S-082148-051716-SP-cell-06			-006																
	1320		S-082148-051716-SP-cell-07			-007																
	1347		S-082148-051716-SP-cell-08			-008																
	1416		S-082148-051716-SP-cell-09			-009																
	1440		S-082148-051716-SP-cell-10			-010																
	1505		S-082148-051716-SP-cell-11			-011																
	1528		S-082148-051716-SP-cell-12			-012																

Date	Time	Relinquished by:	Received by:	Date	Time
5/18	7:00	Steven Perez	[signature]	5/18/16	0700
5/18/16	1900	[signature]	Jane Kent	05/19/16	0925

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD - Albuquerque

Mailing Address: 6121 Indian School Rd NE
Ste 200, Albuquerque, NM 87110

Phone #: 505-884-0672

Email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☑ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch
505-280-0572

Sampler: Steve Perez

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5/17/16	1546	Soil	S-082148-051716-SP-cell1-13	4oz glass - 1	ICE	1605916 -013
↓	1610	↓	S-082148-051716-SP-cell1-14	↓	↓	-014
↓	1630	↓	S-082148-051716-SP-cell1-15	↓	↓	-015

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	~~TPH 418.1~~ + BTEX 8021	Chloride 300.0			Air Bubbles (Y or N)
			X								X	X			
			X								X	X			
			X								X	X			

Date	Time	Relinquished by:	Received by:	Date	Time
5/18/16	7:00	Steven Perez			
5/18/16	1900			05/19/16	0925

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 09, 2016

Bernie Bockish

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1609126

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 15 sample(s) on 9/2/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 1
Project: Jal Landfarm
Collection Date: 8/31/2016 11:50:00 AM
Lab ID: 1609126-001 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	140	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2016 5:46:12 PM	27353
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/7/2016 12:42:41 PM	27347
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/7/2016 12:42:41 PM	27347
Surr: DNOP	97.6	70-130		%Rec	1	9/7/2016 12:42:41 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2016 1:08:28 PM	27356
Surr: BFB	88.6	68.3-144		%Rec	1	9/7/2016 1:08:28 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 1:08:28 PM	27356
Toluene	ND	0.047		mg/Kg	1	9/7/2016 1:08:28 PM	27356
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2016 1:08:28 PM	27356
Xylenes, Total	ND	0.095		mg/Kg	1	9/7/2016 1:08:28 PM	27356
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	9/7/2016 1:08:28 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 2
Project: Jal Landfarm
Collection Date: 8/31/2016 12:18:00 PM
Lab ID: 1609126-002
Matrix: SOIL
Received Date: 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	120	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2016 6:23:26 PM	27353
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	10	9.8		mg/Kg	1	9/7/2016 1:56:14 PM	27347
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/7/2016 1:56:14 PM	27347
Surr: DNOP	90.7	70-130		%Rec	1	9/7/2016 1:56:14 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2016 2:18:59 PM	27356
Surr: BFB	85.5	68.3-144		%Rec	1	9/7/2016 2:18:59 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 2:18:59 PM	27356
Toluene	ND	0.048		mg/Kg	1	9/7/2016 2:18:59 PM	27356
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2016 2:18:59 PM	27356
Xylenes, Total	ND	0.097		mg/Kg	1	9/7/2016 2:18:59 PM	27356
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	9/7/2016 2:18:59 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 3
Project: Jal Landfarm
Collection Date: 8/31/2016 12:41:00 PM
Lab ID: 1609126-003 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	1700	200		mg/Kg	10	9/9/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2016 6:35:51 PM	27353
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	48	9.9		mg/Kg	1	9/7/2016 2:23:46 PM	27347
Motor Oil Range Organics (MRO)	88	50		mg/Kg	1	9/7/2016 2:23:46 PM	27347
Surr: DNOP	86.9	70-130		%Rec	1	9/7/2016 2:23:46 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2016 3:29:29 PM	27356
Surr: BFB	86.2	68.3-144		%Rec	1	9/7/2016 3:29:29 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 3:29:29 PM	27356
Toluene	ND	0.048		mg/Kg	1	9/7/2016 3:29:29 PM	27356
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2016 3:29:29 PM	27356
Xylenes, Total	ND	0.095		mg/Kg	1	9/7/2016 3:29:29 PM	27356
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	9/7/2016 3:29:29 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 4
Project: Jal Landfarm
Collection Date: 8/31/2016 1:06:00 PM
Lab ID: 1609126-004 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	880	190		mg/Kg	10	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2016 6:48:16 PM	27353
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/7/2016 2:51:39 PM	27347
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/7/2016 2:51:39 PM	27347
Surr: DNOP	74.9	70-130		%Rec	1	9/7/2016 2:51:39 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2016 3:53:02 PM	27356
Surr: BFB	86.7	68.3-144		%Rec	1	9/7/2016 3:53:02 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 3:53:02 PM	27356
Toluene	ND	0.049		mg/Kg	1	9/7/2016 3:53:02 PM	27356
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2016 3:53:02 PM	27356
Xylenes, Total	ND	0.098		mg/Kg	1	9/7/2016 3:53:02 PM	27356
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	9/7/2016 3:53:02 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 5
Project: Jal Landfarm
Collection Date: 8/31/2016 1:13:00 PM
Lab ID: 1609126-005 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	140	19		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 4:41:49 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/7/2016 3:19:16 PM	27347
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/7/2016 3:19:16 PM	27347
Surr: DNOP	82.0	70-130		%Rec	1	9/7/2016 3:19:16 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2016 4:16:32 PM	27356
Surr: BFB	86.3	68.3-144		%Rec	1	9/7/2016 4:16:32 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	9/7/2016 4:16:32 PM	27356
Toluene	ND	0.049		mg/Kg	1	9/7/2016 4:16:32 PM	27356
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2016 4:16:32 PM	27356
Xylenes, Total	ND	0.099		mg/Kg	1	9/7/2016 4:16:32 PM	27356
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/7/2016 4:16:32 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 6
Project: Jal Landfarm
Collection Date: 8/31/2016 1:50:00 PM
Lab ID: 1609126-006 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	61	19		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 5:19:04 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2016 3:47:16 PM	27347
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/7/2016 3:47:16 PM	27347
Surr: DNOP	82.7	70-130		%Rec	1	9/7/2016 3:47:16 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2016 4:39:59 PM	27356
Surr: BFB	85.1	68.3-144		%Rec	1	9/7/2016 4:39:59 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 4:39:59 PM	27356
Toluene	ND	0.048		mg/Kg	1	9/7/2016 4:39:59 PM	27356
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2016 4:39:59 PM	27356
Xylenes, Total	ND	0.097		mg/Kg	1	9/7/2016 4:39:59 PM	27356
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/7/2016 4:39:59 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell7
Project: Jal Landfarm
Collection Date: 8/31/2016 2:10:00 PM
Lab ID: 1609126-007
Matrix: SOIL
Received Date: 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	45	19		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 5:31:28 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/7/2016 4:15:04 PM	27347
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/7/2016 4:15:04 PM	27347
Surr: DNOP	81.6	70-130		%Rec	1	9/7/2016 4:15:04 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2016 5:03:30 PM	27356
Surr: BFB	87.0	68.3-144		%Rec	1	9/7/2016 5:03:30 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 5:03:30 PM	27356
Toluene	ND	0.047		mg/Kg	1	9/7/2016 5:03:30 PM	27356
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2016 5:03:30 PM	27356
Xylenes, Total	ND	0.095		mg/Kg	1	9/7/2016 5:03:30 PM	27356
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/7/2016 5:03:30 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 8
Project: Jal Landfarm
Collection Date: 8/31/2016 2:30:00 PM
Lab ID: 1609126-008 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	34	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 5:43:53 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/7/2016 4:42:37 PM	27347
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/7/2016 4:42:37 PM	27347
Surr: DNOP	81.5	70-130		%Rec	1	9/7/2016 4:42:37 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2016 5:27:00 PM	27356
Surr: BFB	88.0	68.3-144		%Rec	1	9/7/2016 5:27:00 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 5:27:00 PM	27356
Toluene	ND	0.048		mg/Kg	1	9/7/2016 5:27:00 PM	27356
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2016 5:27:00 PM	27356
Xylenes, Total	ND	0.095		mg/Kg	1	9/7/2016 5:27:00 PM	27356
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	9/7/2016 5:27:00 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 9
Project: Jal Landfarm
Collection Date: 8/31/2016 2:50:00 PM
Lab ID: 1609126-009 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	42	19		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 6:21:08 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2016 5:10:10 PM	27347
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/7/2016 5:10:10 PM	27347
Surr: DNOP	82.7	70-130		%Rec	1	9/7/2016 5:10:10 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2016 7:24:15 PM	27356
Surr: BFB	87.8	68.3-144		%Rec	1	9/7/2016 7:24:15 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 7:24:15 PM	27356
Toluene	ND	0.049		mg/Kg	1	9/7/2016 7:24:15 PM	27356
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2016 7:24:15 PM	27356
Xylenes, Total	ND	0.097		mg/Kg	1	9/7/2016 7:24:15 PM	27356
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	9/7/2016 7:24:15 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-083116-SP-Cell 10
Project: Jal Landfarm
Collection Date: 8/31/2016 3:15:00 PM
Lab ID: 1609126-010 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	57	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 6:33:32 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/7/2016 5:37:39 PM	27347
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/7/2016 5:37:39 PM	27347
Surr: DNOP	84.5	70-130		%Rec	1	9/7/2016 5:37:39 PM	27347
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2016 7:47:43 PM	27356
Surr: BFB	87.7	68.3-144		%Rec	1	9/7/2016 7:47:43 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	9/7/2016 7:47:43 PM	27356
Toluene	ND	0.049		mg/Kg	1	9/7/2016 7:47:43 PM	27356
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2016 7:47:43 PM	27356
Xylenes, Total	ND	0.098		mg/Kg	1	9/7/2016 7:47:43 PM	27356
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	9/7/2016 7:47:43 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-090116-SP-Cell 11
Project: Jal Landfarm
Collection Date: 9/1/2016 10:05:00 AM
Lab ID: 1609126-011
Matrix: SOIL
Received Date: 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 6:45:56 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/7/2016 7:00:00 PM	27351
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/7/2016 7:00:00 PM	27351
Surr: DNOP	83.8	70-130		%Rec	1	9/7/2016 7:00:00 PM	27351
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2016 8:11:10 PM	27356
Surr: BFB	86.6	68.3-144		%Rec	1	9/7/2016 8:11:10 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	9/7/2016 8:11:10 PM	27356
Toluene	ND	0.047		mg/Kg	1	9/7/2016 8:11:10 PM	27356
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2016 8:11:10 PM	27356
Xylenes, Total	ND	0.094		mg/Kg	1	9/7/2016 8:11:10 PM	27356
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/7/2016 8:11:10 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-090116-SP-Cell 12
Project: Jal Landfarm
Collection Date: 9/1/2016 10:20:00 AM
Lab ID: 1609126-012
Matrix: SOIL
Received Date: 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	52	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 6:58:21 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/7/2016 8:22:37 PM	27351
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/7/2016 8:22:37 PM	27351
Surr: DNOP	79.3	70-130		%Rec	1	9/7/2016 8:22:37 PM	27351
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2016 8:34:39 PM	27356
Surr: BFB	86.9	68.3-144		%Rec	1	9/7/2016 8:34:39 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2016 8:34:39 PM	27356
Toluene	ND	0.048		mg/Kg	1	9/7/2016 8:34:39 PM	27356
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2016 8:34:39 PM	27356
Xylenes, Total	ND	0.096		mg/Kg	1	9/7/2016 8:34:39 PM	27356
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/7/2016 8:34:39 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-090116-SP-Cell 13
Project: Jal Landfarm
Collection Date: 9/1/2016 10:42:00 AM
Lab ID: 1609126-013 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	52	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	79	30		mg/Kg	20	9/7/2016 7:10:46 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/7/2016 8:49:51 PM	27351
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/7/2016 8:49:51 PM	27351
Surr: DNOP	78.6	70-130		%Rec	1	9/7/2016 8:49:51 PM	27351
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2016 8:58:05 PM	27356
Surr: BFB	87.5	68.3-144		%Rec	1	9/7/2016 8:58:05 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	9/7/2016 8:58:05 PM	27356
Toluene	ND	0.049		mg/Kg	1	9/7/2016 8:58:05 PM	27356
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2016 8:58:05 PM	27356
Xylenes, Total	ND	0.099		mg/Kg	1	9/7/2016 8:58:05 PM	27356
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	9/7/2016 8:58:05 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-090116-SP-Cell 14
Project: Jal Landfarm
Collection Date: 9/1/2016 11:02:00 AM
Lab ID: 1609126-014 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 7:23:10 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/8/2016 4:37:49 PM	27351
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/8/2016 4:37:49 PM	27351
Surr: DNOP	106	70-130		%Rec	1	9/8/2016 4:37:49 PM	27351
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/7/2016 9:21:27 PM	27356
Surr: BFB	86.6	68.3-144		%Rec	1	9/7/2016 9:21:27 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	9/7/2016 9:21:27 PM	27356
Toluene	ND	0.046		mg/Kg	1	9/7/2016 9:21:27 PM	27356
Ethylbenzene	ND	0.046		mg/Kg	1	9/7/2016 9:21:27 PM	27356
Xylenes, Total	ND	0.092		mg/Kg	1	9/7/2016 9:21:27 PM	27356
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/7/2016 9:21:27 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-090116-SP-Cell 15
Project: Jal Landfarm
Collection Date: 9/1/2016 11:20:00 AM
Lab ID: 1609126-015 **Matrix:** SOIL **Received Date:** 9/2/2016 12:54:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	580	20		mg/Kg	1	9/8/2016	27384
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/7/2016 7:35:35 PM	27363
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/8/2016 4:16:13 PM	27351
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/8/2016 4:16:13 PM	27351
Surr: DNOP	115	70-130		%Rec	1	9/8/2016 4:16:13 PM	27351
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2016 9:44:52 PM	27356
Surr: BFB	91.1	68.3-144		%Rec	1	9/7/2016 9:44:52 PM	27356
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	9/7/2016 9:44:52 PM	27356
Toluene	ND	0.049		mg/Kg	1	9/7/2016 9:44:52 PM	27356
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2016 9:44:52 PM	27356
Xylenes, Total	ND	0.098		mg/Kg	1	9/7/2016 9:44:52 PM	27356
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	9/7/2016 9:44:52 PM	27356

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1609126**

09-Sep-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-27353**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**27353**		RunNo:	**37022**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/6/2016**		SeqNo:	**1147575**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-27353**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**27353**		RunNo:	**37022**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/6/2016**		SeqNo:	**1147576**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Sample ID	**MB-27363**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**27363**		RunNo:	**37058**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148856**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-27363**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**27363**		RunNo:	**37058**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148857**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1609126**

09-Sep-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-27384**	SampType:	**MBLK**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**PBS**	Batch ID:	**27384**	RunNo:	**37074**					
Prep Date:	**9/7/2016**	Analysis Date:	**9/8/2016**	SeqNo:	**1149375**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-27384**	SampType:	**LCS**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS**	Batch ID:	**27384**	RunNo:	**37074**					
Prep Date:	**9/7/2016**	Analysis Date:	**9/8/2016**	SeqNo:	**1149376**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	113	80.7	121			

Sample ID	**LCSD-27384**	SampType:	**LCSD**	TestCode:	**EPA Method 418.1: TPH**					
Client ID:	**LCSS02**	Batch ID:	**27384**	RunNo:	**37074**					
Prep Date:	**9/7/2016**	Analysis Date:	**9/8/2016**	SeqNo:	**1149377**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	107	80.7	121	5.07	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1609126**

09-Sep-16

Client: GHD

Project: Jal Landfarm

Sample ID **LCS-27368**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **27368**	RunNo: **37024**
Prep Date: **9/7/2016**	Analysis Date: **9/7/2016**	SeqNo: **1147691** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	70	130			

Sample ID **MB-27368**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **27368**	RunNo: **37024**
Prep Date: **9/7/2016**	Analysis Date: **9/7/2016**	SeqNo: **1147692** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		113	70	130			

Sample ID **LCS-27347**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **27347**	RunNo: **37025**
Prep Date: **9/6/2016**	Analysis Date: **9/7/2016**	SeqNo: **1147694** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	62.6	124			
Surr: DNOP	4.7		5.000		94.1	70	130			

Sample ID **MB-27347**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **27347**	RunNo: **37025**
Prep Date: **9/6/2016**	Analysis Date: **9/7/2016**	SeqNo: **1147695** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.2	70	130			

Sample ID **1609126-011AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-090116-SP**	Batch ID: **27351**	RunNo: **37025**
Prep Date: **9/6/2016**	Analysis Date: **9/7/2016**	SeqNo: **1148376** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.8	49.02	0	101	33.9	141			
Surr: DNOP	4.2		4.902		84.7	70	130			

Sample ID **1609126-011AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-090116-SP**	Batch ID: **27351**	RunNo: **37025**
Prep Date: **9/6/2016**	Analysis Date: **9/7/2016**	SeqNo: **1148377** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.6	48.12	0	102	33.9	141	1.14	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1609126**

09-Sep-16

Client: GHD

Project: Jal Landfarm

Sample ID	**1609126-011AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**S-082148-090116-SP**	Batch ID:	**27351**		RunNo:	**37025**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148377**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		4.812		85.5	70	130	0	0	

Sample ID	**LCS-27351**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**27351**		RunNo:	**37025**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148382**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	109	62.6	124			
Surr: DNOP	4.4		5.000		88.3	70	130			

Sample ID	**MB-27351**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**27351**		RunNo:	**37025**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148383**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.3		10.00		82.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1609126**

09-Sep-16

Client: GHD

Project: Jal Landfarm

Sample ID	**1609126-002AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-083116-SP**	Batch ID:	**27356**		RunNo:	**37033**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148277**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.80	0	92.6	59.3	143			
Surr: BFB	960		992.1		96.6	68.3	144			

Sample ID	**1609126-002AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-083116-SP**	Batch ID:	**27356**		RunNo:	**37033**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148278**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.61	0	102	59.3	143	5.09	20	
Surr: BFB	920		944.3		97.5	68.3	144	0	0	

Sample ID	**LCS-27356**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**27356**		RunNo:	**37033**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148297**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.5	80	120			
Surr: BFB	950		1000		95.1	68.3	144			

Sample ID	**MB-27356**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**27356**		RunNo:	**37033**				
Prep Date:	**9/6/2016**	Analysis Date:	**9/7/2016**		SeqNo:	**1148299**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	860		1000		86.5	68.3	144			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1609126**

09-Sep-16

Client: GHD

Project: Jal Landfarm

Sample ID	**1609126-001AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-083116-SP**	Batch ID: **27356**		RunNo: **37033**					
Prep Date:	**9/6/2016**	Analysis Date: **9/7/2016**		SeqNo: **1148342**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.024	0.9407	0	86.5	71.5	122			
Toluene	0.92	0.047	0.9407	0	97.5	71.2	123			
Ethylbenzene	0.99	0.047	0.9407	0	106	75.2	130			
Xylenes, Total	3.0	0.094	2.822	0	106	72.4	131			
Surr: 4-Bromofluorobenzene	1.0		0.9407		109	80	120			

Sample ID	**1609126-001AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-083116-SP**	Batch ID: **27356**		RunNo: **37033**					
Prep Date:	**9/6/2016**	Analysis Date: **9/7/2016**		SeqNo: **1148343**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9671	0	91.9	71.5	122	8.91	20	
Toluene	0.93	0.048	0.9671	0	96.2	71.2	123	1.40	20	
Ethylbenzene	0.97	0.048	0.9671	0	100	75.2	130	2.64	20	
Xylenes, Total	2.9	0.097	2.901	0	98.9	72.4	131	4.12	20	
Surr: 4-Bromofluorobenzene	1.1		0.9671		110	80	120	0	0	

Sample ID	**LCS-27356**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **27356**		RunNo: **37033**					
Prep Date:	**9/6/2016**	Analysis Date: **9/7/2016**		SeqNo: **1148359**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.025	1.000	0	79.4	75.3	123			
Toluene	0.91	0.050	1.000	0	90.7	80	124			
Ethylbenzene	0.98	0.050	1.000	0	98.1	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	98.0	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID	**MB-27356**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **27356**		RunNo: **37033**					
Prep Date:	**9/6/2016**	Analysis Date: **9/7/2016**		SeqNo: **1148360**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD Work Order Number: 1609126 RcptNo: 1

Received by/date: AT 09/02/16

Logged By: Lindsay Mangin 9/2/2016 12:54:00 PM

Completed By: Lindsay Mangin 9/2/2016 2:31:03 PM

Reviewed By: JC 09/06/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Client: GHD-Albuquerque

Mailing Address: 6121 Indian School Rd NE Ste 200, Albuquerque, NM, 87110

Phone #: 505-884-0672

email or Fax#: Bernard.Bocklisch@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bocklisch 505-280-0572

Sampler: Steve Perez

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No 1609126	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	See SSM for sampleID	TPH 8015	BTEX 8021	Chloride 300	Air Bubbles (Y or N)
31-16	1150	Soil	S-082148-083116-SP-cell1-A	4oz glass-1	Ice	-001												X	X		X	
	1150		S-082148-083116-SP-cell1-B			-001				X										X		
	1218		S-082148-083116-SP-cell2-A			-002													X		X	
	1218		S-082148-083116-SP-cell2-B			-002				X										X		
	1241		S-082148-083116-SP-cell3-A			-003													X		X	
	1241		S-082148-083116-SP-cell3-B			-003				X										X		
	1306		S-082148-083116-SP-cell4-A			-004													X		X	
	1306		S-082148-083116-SP-cell4-B			-004				X										X		
	1313		S-082148-083116-SP-cell5-A			-005													X		X	
	1313		S-082148-083116-SP-cell5-B			-005				X										X		
	1350		S-082148-083116-SP-cell6-A			-006													X		X	
	1350		S-082148-083116-SP-cell6-B			-006				X										X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/1/16	1415	Steve Perez	Bernard Bocklisch	9/1/16	1415
9/2/16	8:40	Bernard Bocklisch		09/02/16	1254

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD - Albuquerque

Mailing Address: 6121 Indian School Rd NE Ste 200, Albuquerque NM 87110

Phone #: 505-884-0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch 505-280-0572

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1609126	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH 8015	BTEX 8021	Chloride 300.0		Air Bubbles (Y or N)
9-31-16	1410	Soil	S-082148-083116-SP-cell7-A	4oz glass-1	Ice	-007												X		X		
	1410		S-082148-083116-SP-cell7-B			-007				X									X			
	1430		S-082148-083116-SP-cell8-A			-008												X		X		
	1430		S-082148-083116-SP-cell8-B			-008				X									X			
	1450		S-082148-083116-SP-cell9-A			-009												X		X		
	1450		S-082148-083116-SP-cell9-B			-009				X									X			
	1515		S-082148-083116-SP-cell10-A			-010												X		X		
	1515		S-082148-083116-SP-cell10-B			-010				X									X			
9-2-16	1005		S-082148-083116-SP-cell11-A			-011												X		X		
	1005		S-082148-083116-SP-cell11-B			-011				X									X			
	1020		S-082148-083116-SP-cell12-A			-012												X		X		
	1020		S-082148-083116-SP-cell12-B			-012				X									X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
9-1-16	1415				
9/2/16	8:54			09/02/16	1254

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD-Albuquerque

Mailing Address: 6121 Indian School Rd NE Ste 200 Albuquerque NM 87110

Phone #: 505-884-0672

email or Fax#: Bernard.Bochisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bochisch 505-280-0572

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH 8015	Chlorides 300.0	~~TMSP~~	BTEX 8021	Air Bubbles (Y or N)
9-1-16	1042	Soil	S-082148-090116-SP-COMP13-A	4oz glass-1	ICE	-013												X	X			
	1042		S-082148-090116-SP-COMP13-B			-013				X											X	
	1102		S-082148-090116-SP-COMP14-A			-014												X	X			
	1102		S-082148-090116-SP-COMP14-B			-014				X											X	
	1120		S-082148-090116-SP-COMP15-A			-015												X	X			
	1120	↓	S-082148-090116-SP-COMP15-B	↓	↓	-015				X											X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
9-1-16	1415	Steven Perez	Bernard Bochisch	9/1/16	14:15
9/2/16	9:40	Bernard Bochisch		09/02/16	1254

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 20, 2016

Bernie Bockish
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1611D18

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 30 sample(s) on 11/28/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112116-CN-V-1
Project: Jal Landfarm
Collection Date: 11/21/2016 2:32:00 PM
Lab ID: 1611D18-001
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 2:43:28 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.034		mg/Kg	1	11/30/2016 3:29:11 PM	28907
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Barium	44	0.099		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Cadmium	ND	0.099		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Chromium	5.8	0.30		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Copper	2.2	0.30		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Iron	6200	120		mg/Kg	50	12/5/2016 1:57:32 PM	28886
Lead	1.0	0.25		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Manganese	60	0.099		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Selenium	ND	2.5		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Silver	ND	0.25		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Uranium	ND	5.0		mg/Kg	1	11/30/2016 11:40:51 AM	28886
Zinc	13	2.5		mg/Kg	1	11/30/2016 11:40:51 AM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/30/2016 1:10:31 PM	28883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2016 1:10:31 PM	28883
Surr: DNOP	89.8	70-130		%Rec	1	11/30/2016 1:10:31 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/30/2016 5:49:15 PM	28881
Surr: BFB	83.4	68.3-144		%Rec	1	11/30/2016 5:49:15 PM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	11/30/2016 5:49:15 PM	28881
Benzene	ND	0.024		mg/Kg	1	11/30/2016 5:49:15 PM	28881
Toluene	ND	0.048		mg/Kg	1	11/30/2016 5:49:15 PM	28881
Ethylbenzene	ND	0.048		mg/Kg	1	11/30/2016 5:49:15 PM	28881
Xylenes, Total	ND	0.097		mg/Kg	1	11/30/2016 5:49:15 PM	28881
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	1	11/30/2016 5:49:15 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112116-CN-T-1
Project: Jal Landfarm
Collection Date: 11/21/2016 2:39:00 PM
Lab ID: 1611D18-002
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 3:20:41 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	36	10		mg/Kg	1	12/1/2016 3:30:05 PM	28883
Motor Oil Range Organics (MRO)	110	50		mg/Kg	1	12/1/2016 3:30:05 PM	28883
Surr: DNOP	96.4	70-130		%Rec	1	12/1/2016 3:30:05 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2016 6:59:47 PM	28881
Surr: BFB	82.3	68.3-144		%Rec	1	11/30/2016 6:59:47 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112116-CN-V-2
Project: Jal Landfarm
Collection Date: 11/21/2016 4:01:00 PM
Lab ID: 1611D18-003
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 10:11:55 AM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	11/30/2016 3:30:58 PM	28907
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.4		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Barium	55	0.097		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Cadmium	ND	0.097		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Chromium	6.1	0.29		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Copper	2.7	0.29		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Iron	6500	120		mg/Kg	50	12/5/2016 1:58:51 PM	28886
Lead	1.8	0.24		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Manganese	60	0.097		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Selenium	ND	2.4		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Silver	ND	0.24		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Uranium	ND	4.9		mg/Kg	1	11/30/2016 11:44:37 AM	28886
Zinc	14	2.4		mg/Kg	1	11/30/2016 11:44:37 AM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/30/2016 2:43:03 PM	28883
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/30/2016 2:43:03 PM	28883
Surr: DNOP	88.4	70-130		%Rec	1	11/30/2016 2:43:03 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2016 8:10:15 PM	28881
Surr: BFB	81.1	68.3-144		%Rec	1	11/30/2016 8:10:15 PM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/30/2016 8:10:15 PM	28881
Benzene	ND	0.025		mg/Kg	1	11/30/2016 8:10:15 PM	28881
Toluene	ND	0.050		mg/Kg	1	11/30/2016 8:10:15 PM	28881
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2016 8:10:15 PM	28881
Xylenes, Total	ND	0.10		mg/Kg	1	11/30/2016 8:10:15 PM	28881
Surr: 4-Bromofluorobenzene	95.0	80-120		%Rec	1	11/30/2016 8:10:15 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112116-CN-T-2
Project: Jal Landfarm
Collection Date: 11/21/2016 3:07:00 PM
Lab ID: 1611D18-004
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 3:57:55 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	17	9.4		mg/Kg	1	12/1/2016 4:16:17 PM	28883
Motor Oil Range Organics (MRO)	52	47		mg/Kg	1	12/1/2016 4:16:17 PM	28883
Surr: DNOP	93.1	70-130		%Rec	1	12/1/2016 4:16:17 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/30/2016 8:33:48 PM	28881
Surr: BFB	82.1	68.3-144		%Rec	1	11/30/2016 8:33:48 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112116-CN-V-3
Project: Jal Landfarm
Collection Date: 11/21/2016 3:24:00 PM
Lab ID: 1611D18-005
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 4:10:20 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **pmf**	
Mercury	0.032	0.032		mg/Kg	1	12/7/2016 7:25:39 AM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	3.0	2.5		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Barium	54	0.099		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Cadmium	ND	0.099		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Chromium	5.5	0.30		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Copper	1.7	0.30		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Iron	5600	120		mg/Kg	50	12/5/2016 2:00:13 PM	28886
Lead	1.1	0.25		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Manganese	42	0.099		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Selenium	ND	2.5		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Silver	ND	0.25		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Uranium	ND	5.0		mg/Kg	1	11/30/2016 11:48:36 AM	28886
Zinc	11	2.5		mg/Kg	1	11/30/2016 11:48:36 AM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2016 3:29:21 PM	28883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2016 3:29:21 PM	28883
Surr: DNOP	83.9	70-130		%Rec	1	11/30/2016 3:29:21 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/30/2016 8:57:18 PM	28881
Surr: BFB	80.7	68.3-144		%Rec	1	11/30/2016 8:57:18 PM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	11/30/2016 8:57:18 PM	28881
Benzene	ND	0.023		mg/Kg	1	11/30/2016 8:57:18 PM	28881
Toluene	ND	0.046		mg/Kg	1	11/30/2016 8:57:18 PM	28881
Ethylbenzene	ND	0.046		mg/Kg	1	11/30/2016 8:57:18 PM	28881
Xylenes, Total	ND	0.092		mg/Kg	1	11/30/2016 8:57:18 PM	28881
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	11/30/2016 8:57:18 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112116-CN-T-3
Project: Jal Landfarm
Collection Date: 11/21/2016 3:38:00 PM
Lab ID: 1611D18-006
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 4:22:45 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	270	10		mg/Kg	1	12/1/2016 5:02:29 PM	28883
Motor Oil Range Organics (MRO)	630	50		mg/Kg	1	12/1/2016 5:02:29 PM	28883
Surr: DNOP	99.3	70-130		%Rec	1	12/1/2016 5:02:29 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/30/2016 9:20:46 PM	28881
Surr: BFB	82.6	68.3-144		%Rec	1	11/30/2016 9:20:46 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-4
Project: Jal Landfarm
Collection Date: 11/22/2016 9:47:00 AM
Lab ID: 1611D18-007
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 4:35:10 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	11/30/2016 3:55:30 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Barium	31	0.099		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Cadmium	ND	0.099		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Chromium	4.6	0.30		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Copper	2.4	0.30		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Iron	4700	120		mg/Kg	50	12/5/2016 2:01:34 PM	28886
Lead	1.5	0.25		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Manganese	55	0.099		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Selenium	ND	2.5		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Silver	ND	0.25		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Uranium	ND	4.9		mg/Kg	1	11/30/2016 11:52:19 AM	28886
Zinc	10	2.5		mg/Kg	1	11/30/2016 11:52:19 AM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	18	10		mg/Kg	1	11/30/2016 4:23:40 PM	28883
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/30/2016 4:23:40 PM	28883
Surr: DNOP	89.4	70-130		%Rec	1	11/30/2016 4:23:40 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/30/2016 9:44:19 PM	28881
Surr: BFB	80.5	68.3-144		%Rec	1	11/30/2016 9:44:19 PM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	11/30/2016 9:44:19 PM	28881
Benzene	ND	0.024		mg/Kg	1	11/30/2016 9:44:19 PM	28881
Toluene	ND	0.047		mg/Kg	1	11/30/2016 9:44:19 PM	28881
Ethylbenzene	ND	0.047		mg/Kg	1	11/30/2016 9:44:19 PM	28881
Xylenes, Total	ND	0.095		mg/Kg	1	11/30/2016 9:44:19 PM	28881
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	11/30/2016 9:44:19 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-4
Project: Jal Landfarm
Collection Date: 11/22/2016 9:56:00 AM
Lab ID: 1611D18-008
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 4:47:35 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	300	100		mg/Kg	10	11/30/2016 4:46:44 PM	28883
Motor Oil Range Organics (MRO)	510	500		mg/Kg	10	11/30/2016 4:46:44 PM	28883
Surr: DNOP	0	70-130	S	%Rec	10	11/30/2016 4:46:44 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/30/2016 10:07:48 PM	28881
Surr: BFB	81.0	68.3-144		%Rec	1	11/30/2016 10:07:48 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-5
Project: Jal Landfarm
Collection Date: 11/22/2016 10:10:00 AM
Lab ID: 1611D18-009
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 5:00:00 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.034	0.031		mg/Kg	1	11/30/2016 3:57:20 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Barium	35	0.10		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Cadmium	ND	0.10		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Chromium	5.8	0.30		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Copper	3.0	0.30		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Iron	5600	120		mg/Kg	50	12/5/2016 2:08:08 PM	28886
Lead	2.3	0.25		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Manganese	55	0.10		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Selenium	ND	2.5		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Silver	ND	0.25		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Uranium	ND	5.0		mg/Kg	1	11/30/2016 12:02:54 PM	28886
Zinc	14	2.5		mg/Kg	1	11/30/2016 12:02:54 PM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/30/2016 5:10:02 PM	28883
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/30/2016 5:10:02 PM	28883
Surr: DNOP	83.9	70-130		%Rec	1	11/30/2016 5:10:02 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/30/2016 10:31:20 PM	28881
Surr: BFB	80.7	68.3-144		%Rec	1	11/30/2016 10:31:20 PM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	11/30/2016 10:31:20 PM	28881
Benzene	ND	0.024		mg/Kg	1	11/30/2016 10:31:20 PM	28881
Toluene	ND	0.048		mg/Kg	1	11/30/2016 10:31:20 PM	28881
Ethylbenzene	ND	0.048		mg/Kg	1	11/30/2016 10:31:20 PM	28881
Xylenes, Total	ND	0.095		mg/Kg	1	11/30/2016 10:31:20 PM	28881
Surr: 4-Bromofluorobenzene	91.5	80-120		%Rec	1	11/30/2016 10:31:20 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-5
Project: Jal Landfarm
Collection Date: 11/22/2016 10:18:00 AM
Lab ID: 1611D18-010
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 5:12:24 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2016 5:33:02 PM	28883
Motor Oil Range Organics (MRO)	61	49		mg/Kg	1	11/30/2016 5:33:02 PM	28883
Surr: DNOP	93.2	70-130		%Rec	1	11/30/2016 5:33:02 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/30/2016 10:54:48 PM	28881
Surr: BFB	81.0	68.3-144		%Rec	1	11/30/2016 10:54:48 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-6
Project: Jal Landfarm
Collection Date: 11/22/2016 10:32:00 AM
Lab ID: 1611D18-011
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 5:24:49 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.033		mg/Kg	1	11/30/2016 3:59:11 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Barium	52	0.10		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Cadmium	ND	0.10		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Chromium	4.7	0.30		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Copper	2.0	0.30		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Iron	4600	120		mg/Kg	50	12/5/2016 2:09:30 PM	28886
Lead	1.1	0.25		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Manganese	41	0.10		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Selenium	ND	2.5		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Silver	ND	0.25		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Uranium	ND	5.0		mg/Kg	1	11/30/2016 12:06:37 PM	28886
Zinc	9.2	2.5		mg/Kg	1	11/30/2016 12:06:37 PM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/30/2016 5:56:09 PM	28883
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/30/2016 5:56:09 PM	28883
Surr: DNOP	78.0	70-130		%Rec	1	11/30/2016 5:56:09 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/1/2016 12:29:03 AM	28881
Surr: BFB	82.0	68.3-144		%Rec	1	12/1/2016 12:29:03 AM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	12/1/2016 12:29:03 AM	28881
Benzene	ND	0.025		mg/Kg	1	12/1/2016 12:29:03 AM	28881
Toluene	ND	0.049		mg/Kg	1	12/1/2016 12:29:03 AM	28881
Ethylbenzene	ND	0.049		mg/Kg	1	12/1/2016 12:29:03 AM	28881
Xylenes, Total	ND	0.098		mg/Kg	1	12/1/2016 12:29:03 AM	28881
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	12/1/2016 12:29:03 AM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-6
Project: Jal Landfarm
Collection Date: 11/22/2016 10:40:00 AM
Lab ID: 1611D18-012
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 5:37:13 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	30	9.8		mg/Kg	1	12/1/2016 5:48:40 PM	28883
Motor Oil Range Organics (MRO)	170	49		mg/Kg	1	12/1/2016 5:48:40 PM	28883
Surr: DNOP	94.5	70-130		%Rec	1	12/1/2016 5:48:40 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/1/2016 12:52:42 AM	28881
Surr: BFB	82.2	68.3-144		%Rec	1	12/1/2016 12:52:42 AM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-7
Project: Jal Landfarm
Collection Date: 11/22/2016 11:09:00 AM
Lab ID: 1611D18-013
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 5:49:38 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.034		mg/Kg	1	11/30/2016 4:06:21 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Barium	65	0.10		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Cadmium	ND	0.10		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Chromium	5.2	0.30		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Copper	3.0	0.30		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Iron	5400	130		mg/Kg	50	12/5/2016 2:10:52 PM	28886
Lead	1.1	0.25		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Manganese	66	0.10		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Selenium	ND	2.5		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Silver	ND	0.25		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Uranium	ND	5.0		mg/Kg	1	11/30/2016 12:10:13 PM	28886
Zinc	12	2.5		mg/Kg	1	11/30/2016 12:10:13 PM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/30/2016 6:42:11 PM	28883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2016 6:42:11 PM	28883
Surr: DNOP	91.4	70-130		%Rec	1	11/30/2016 6:42:11 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 1:16:18 AM	28881
Surr: BFB	81.5	68.3-144		%Rec	1	12/1/2016 1:16:18 AM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	12/1/2016 1:16:18 AM	28881
Benzene	ND	0.024		mg/Kg	1	12/1/2016 1:16:18 AM	28881
Toluene	ND	0.047		mg/Kg	1	12/1/2016 1:16:18 AM	28881
Ethylbenzene	ND	0.047		mg/Kg	1	12/1/2016 1:16:18 AM	28881
Xylenes, Total	ND	0.094		mg/Kg	1	12/1/2016 1:16:18 AM	28881
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	12/1/2016 1:16:18 AM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-7
Project: Jal Landfarm
Collection Date: 11/22/2016 11:20:00 AM
Lab ID: 1611D18-014
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 6:26:51 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	25	9.9		mg/Kg	1	12/1/2016 6:34:47 PM	28883
Motor Oil Range Organics (MRO)	97	50		mg/Kg	1	12/1/2016 6:34:47 PM	28883
Surr: DNOP	96.5	70-130		%Rec	1	12/1/2016 6:34:47 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 1:39:50 AM	28881
Surr: BFB	82.4	68.3-144		%Rec	1	12/1/2016 1:39:50 AM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-8
Project: Jal Landfarm
Collection Date: 11/22/2016 11:35:00 AM
Lab ID: 1611D18-015
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 6:39:15 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	11/30/2016 4:08:06 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	3.2	2.4		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Barium	140	0.096		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Cadmium	ND	0.096		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Chromium	4.4	0.29		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Copper	2.3	0.29		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Iron	4300	120		mg/Kg	50	12/5/2016 2:12:15 PM	28886
Lead	0.59	0.24		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Manganese	57	0.096		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Selenium	ND	2.4		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Silver	ND	0.24		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Uranium	ND	4.8		mg/Kg	1	11/30/2016 12:14:01 PM	28886
Zinc	9.0	2.4		mg/Kg	1	11/30/2016 12:14:01 PM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/30/2016 7:28:19 PM	28883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2016 7:28:19 PM	28883
Surr: DNOP	75.9	70-130		%Rec	1	11/30/2016 7:28:19 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2016 9:48:37 PM	28881
Surr: BFB	101	68.3-144		%Rec	1	11/30/2016 9:48:37 PM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	11/30/2016 9:48:37 PM	28881
Benzene	ND	0.025		mg/Kg	1	11/30/2016 9:48:37 PM	28881
Toluene	ND	0.050		mg/Kg	1	11/30/2016 9:48:37 PM	28881
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2016 9:48:37 PM	28881
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2016 9:48:37 PM	28881
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	11/30/2016 9:48:37 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-8
Project: Jal Landfarm
Collection Date: 11/22/2016 11:43:00 AM
Lab ID: 1611D18-016
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 6:51:40 PM	28924
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/30/2016 7:51:19 PM	28883
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/30/2016 7:51:19 PM	28883
Surr: DNOP	89.7	70-130		%Rec	1	11/30/2016 7:51:19 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/30/2016 11:25:53 PM	28881
Surr: BFB	102	68.3-144		%Rec	1	11/30/2016 11:25:53 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-9
Project: Jal Landfarm
Collection Date: 11/22/2016 12:11:00 PM
Lab ID: 1611D18-017
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/30/2016 7:04:05 PM	28924
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	11/30/2016 4:09:51 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Barium	45	0.099		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Cadmium	ND	0.099		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Chromium	4.7	0.30		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Copper	2.4	0.30		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Iron	4800	120		mg/Kg	50	12/5/2016 2:13:36 PM	28886
Lead	1.1	0.25		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Manganese	60	0.099		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Selenium	ND	2.5		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Silver	ND	0.25		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Uranium	ND	4.9		mg/Kg	1	11/30/2016 12:17:54 PM	28886
Zinc	10	2.5		mg/Kg	1	11/30/2016 12:17:54 PM	28886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/30/2016 8:14:27 PM	28883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2016 8:14:27 PM	28883
Surr: DNOP	86.4	70-130		%Rec	1	11/30/2016 8:14:27 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/30/2016 11:50:08 PM	28881
Surr: BFB	100	68.3-144		%Rec	1	11/30/2016 11:50:08 PM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	11/30/2016 11:50:08 PM	28881
Benzene	ND	0.023		mg/Kg	1	11/30/2016 11:50:08 PM	28881
Toluene	ND	0.046		mg/Kg	1	11/30/2016 11:50:08 PM	28881
Ethylbenzene	ND	0.046		mg/Kg	1	11/30/2016 11:50:08 PM	28881
Xylenes, Total	ND	0.092		mg/Kg	1	11/30/2016 11:50:08 PM	28881
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	11/30/2016 11:50:08 PM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-9
Project: Jal Landfarm
Collection Date: 11/22/2016 12:30:00 PM
Lab ID: 1611D18-018
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 12:02:38 PM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	43	9.6		mg/Kg	1	12/1/2016 7:20:33 PM	28883
Motor Oil Range Organics (MRO)	170	48		mg/Kg	1	12/1/2016 7:20:33 PM	28883
Surr: DNOP	99.5	70-130		%Rec	1	12/1/2016 7:20:33 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 12:14:24 AM	28881
Surr: BFB	102	68.3-144		%Rec	1	12/1/2016 12:14:24 AM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-10
Project: Jal Landfarm
Collection Date: 11/22/2016 12:51:00 PM
Lab ID: 1611D18-019
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 12:39:52 PM	28951
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	11/30/2016 4:11:35 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Barium	45	0.099		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Cadmium	ND	0.099		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Chromium	4.6	0.30		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Copper	1.8	0.30		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Iron	4800	120		mg/Kg	50	12/5/2016 2:47:21 PM	28887
Lead	1.8	0.25		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Manganese	53	0.099		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Selenium	ND	2.5		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Silver	ND	0.25		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Uranium	ND	4.9		mg/Kg	1	12/5/2016 2:20:34 PM	28887
Zinc	12	2.5		mg/Kg	1	12/5/2016 4:46:27 PM	28887
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	33	10		mg/Kg	1	12/1/2016 8:06:05 PM	28883
Motor Oil Range Organics (MRO)	110	50		mg/Kg	1	12/1/2016 8:06:05 PM	28883
Surr: DNOP	93.6	70-130		%Rec	1	12/1/2016 8:06:05 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/1/2016 12:38:36 AM	28881
Surr: BFB	104	68.3-144		%Rec	1	12/1/2016 12:38:36 AM	28881
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	12/1/2016 12:38:36 AM	28881
Benzene	ND	0.023		mg/Kg	1	12/1/2016 12:38:36 AM	28881
Toluene	ND	0.046		mg/Kg	1	12/1/2016 12:38:36 AM	28881
Ethylbenzene	ND	0.046		mg/Kg	1	12/1/2016 12:38:36 AM	28881
Xylenes, Total	ND	0.093		mg/Kg	1	12/1/2016 12:38:36 AM	28881
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	12/1/2016 12:38:36 AM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-10
Project: Jal Landfarm
Collection Date: 11/22/2016 1:07:00 PM
Lab ID: 1611D18-020
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 1:17:07 PM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	69	9.6		mg/Kg	1	12/1/2016 8:51:46 PM	28883
Motor Oil Range Organics (MRO)	300	48		mg/Kg	1	12/1/2016 8:51:46 PM	28883
Surr: DNOP	108	70-130		%Rec	1	12/1/2016 8:51:46 PM	28883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 2:03:20 AM	28881
Surr: BFB	83.0	68.3-144		%Rec	1	12/1/2016 2:03:20 AM	28881

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-11
Project: Jal Landfarm
Collection Date: 11/22/2016 1:29:00 PM
Lab ID: 1611D18-021
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 1:29:32 PM	28951
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.034		mg/Kg	1	11/30/2016 4:28:08 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	2.6	2.4		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Barium	66	0.098		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Cadmium	ND	0.098		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Chromium	4.8	0.29		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Copper	1.5	0.29		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Iron	4600	120		mg/Kg	50	12/5/2016 2:48:43 PM	28887
Lead	0.84	0.24		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Manganese	41	0.098		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Selenium	ND	2.4		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Silver	ND	0.24		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Uranium	ND	4.9		mg/Kg	1	12/5/2016 2:28:24 PM	28887
Zinc	9.4	2.4		mg/Kg	1	12/5/2016 4:47:41 PM	28887
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/30/2016 1:21:26 PM	28884
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/30/2016 1:21:26 PM	28884
Surr: DNOP	81.0	70-130		%Rec	1	11/30/2016 1:21:26 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 10:04:48 AM	28882
Surr: BFB	96.0	68.3-144		%Rec	1	12/1/2016 10:04:48 AM	28882
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	12/1/2016 10:04:48 AM	28882
Benzene	ND	0.024		mg/Kg	1	12/1/2016 10:04:48 AM	28882
Toluene	ND	0.047		mg/Kg	1	12/1/2016 10:04:48 AM	28882
Ethylbenzene	ND	0.047		mg/Kg	1	12/1/2016 10:04:48 AM	28882
Xylenes, Total	ND	0.094		mg/Kg	1	12/1/2016 10:04:48 AM	28882
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/1/2016 10:04:48 AM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-11
Project: Jal Landfarm
Collection Date: 11/22/2016 1:46:00 PM
Lab ID: 1611D18-022
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 1:41:57 PM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/1/2016 9:37:19 PM	28884
Motor Oil Range Organics (MRO)	60	49		mg/Kg	1	12/1/2016 9:37:19 PM	28884
Surr: DNOP	93.7	70-130		%Rec	1	12/1/2016 9:37:19 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 11:18:24 AM	28882
Surr: BFB	101	68.3-144		%Rec	1	12/1/2016 11:18:24 AM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-12
Project: Jal Landfarm
Collection Date: 11/22/2016 2:10:00 PM
Lab ID: 1611D18-023
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 1:54:21 PM	28951
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	11/30/2016 4:29:54 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	4.3	2.4		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Barium	92	0.097		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Cadmium	ND	0.097		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Chromium	5.6	0.29		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Copper	3.8	0.29		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Iron	5600	120		mg/Kg	50	12/5/2016 2:50:04 PM	28887
Lead	0.83	0.24		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Manganese	54	0.097		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Selenium	ND	2.4		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Silver	ND	0.24		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Uranium	ND	4.9		mg/Kg	1	12/5/2016 2:31:11 PM	28887
Zinc	12	2.4		mg/Kg	1	12/5/2016 4:48:55 PM	28887
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/30/2016 3:08:49 PM	28884
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2016 3:08:49 PM	28884
Surr: DNOP	90.3	70-130		%Rec	1	11/30/2016 3:08:49 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/1/2016 12:32:00 PM	28882
Surr: BFB	99.3	68.3-144		%Rec	1	12/1/2016 12:32:00 PM	28882
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	12/1/2016 12:32:00 PM	28882
Benzene	ND	0.023		mg/Kg	1	12/1/2016 12:32:00 PM	28882
Toluene	ND	0.046		mg/Kg	1	12/1/2016 12:32:00 PM	28882
Ethylbenzene	ND	0.046		mg/Kg	1	12/1/2016 12:32:00 PM	28882
Xylenes, Total	ND	0.092		mg/Kg	1	12/1/2016 12:32:00 PM	28882
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	12/1/2016 12:32:00 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-12
Project: Jal Landfarm
Collection Date: 11/22/2016 2:28:00 PM
Lab ID: 1611D18-024
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 8:43:45 PM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/1/2016 10:22:47 PM	28884
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/1/2016 10:22:47 PM	28884
Surr: DNOP	95.6	70-130		%Rec	1	12/1/2016 10:22:47 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 12:56:29 PM	28882
Surr: BFB	100	68.3-144		%Rec	1	12/1/2016 12:56:29 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-V-13
Project: Jal Landfarm
Collection Date: 11/22/2016 2:51:00 PM
Lab ID: 1611D18-025
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 2:19:10 PM	28951
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.12	0.032		mg/Kg	1	11/30/2016 4:16:54 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Barium	48	0.099		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Cadmium	ND	0.099		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Chromium	5.5	0.30		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Copper	2.4	0.30		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Iron	5600	120		mg/Kg	50	12/5/2016 2:51:27 PM	28887
Lead	1.1	0.25		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Manganese	58	0.099		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Selenium	ND	2.5		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Silver	ND	0.25		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Uranium	ND	4.9		mg/Kg	1	12/5/2016 2:33:57 PM	28887
Zinc	12	2.5		mg/Kg	1	12/5/2016 4:50:11 PM	28887
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2016 4:03:29 PM	28884
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2016 4:03:29 PM	28884
Surr: DNOP	87.7	70-130		%Rec	1	11/30/2016 4:03:29 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/1/2016 1:21:07 PM	28882
Surr: BFB	99.3	68.3-144		%Rec	1	12/1/2016 1:21:07 PM	28882
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	12/1/2016 1:21:07 PM	28882
Benzene	ND	0.023		mg/Kg	1	12/1/2016 1:21:07 PM	28882
Toluene	ND	0.046		mg/Kg	1	12/1/2016 1:21:07 PM	28882
Ethylbenzene	ND	0.046		mg/Kg	1	12/1/2016 1:21:07 PM	28882
Xylenes, Total	ND	0.092		mg/Kg	1	12/1/2016 1:21:07 PM	28882
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	12/1/2016 1:21:07 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112216-CN-T-13
Project: Jal Landfarm
Collection Date: 11/22/2016 3:21:00 PM
Lab ID: 1611D18-026
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	41	30		mg/Kg	20	12/2/2016 6:17:28 PM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	32	9.3		mg/Kg	1	12/1/2016 11:08:12 PM	28884
Motor Oil Range Organics (MRO)	120	46		mg/Kg	1	12/1/2016 11:08:12 PM	28884
Surr: DNOP	98.5	70-130		%Rec	1	12/1/2016 11:08:12 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/1/2016 1:45:31 PM	28882
Surr: BFB	101	68.3-144		%Rec	1	12/1/2016 1:45:31 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112316-CN-V-14
Project: Jal Landfarm
Collection Date: 11/23/2016 8:37:00 AM
Lab ID: 1611D18-027
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 2:43:58 PM	28951
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.034		mg/Kg	1	11/30/2016 4:18:42 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Barium	51	0.099		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Cadmium	ND	0.099		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Chromium	6.6	0.30		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Copper	3.9	0.30		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Iron	7500	120		mg/Kg	50	12/5/2016 2:52:51 PM	28887
Lead	1.5	0.25		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Manganese	110	0.099		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Selenium	ND	2.5		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Silver	ND	0.25		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Uranium	ND	4.9		mg/Kg	1	12/5/2016 2:36:44 PM	28887
Zinc	17	2.5		mg/Kg	1	12/5/2016 4:51:23 PM	28887
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	11/30/2016 4:58:05 PM	28884
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/30/2016 4:58:05 PM	28884
Surr: DNOP	93.0	70-130		%Rec	1	11/30/2016 4:58:05 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/1/2016 2:09:54 PM	28882
Surr: BFB	103	68.3-144		%Rec	1	12/1/2016 2:09:54 PM	28882
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	12/1/2016 2:09:54 PM	28882
Benzene	ND	0.025		mg/Kg	1	12/1/2016 2:09:54 PM	28882
Toluene	ND	0.050		mg/Kg	1	12/1/2016 2:09:54 PM	28882
Ethylbenzene	ND	0.050		mg/Kg	1	12/1/2016 2:09:54 PM	28882
Xylenes, Total	ND	0.099		mg/Kg	1	12/1/2016 2:09:54 PM	28882
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	12/1/2016 2:09:54 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112316-CN-T-14
Project: Jal Landfarm
Collection Date: 11/23/2016 8:52:00 AM
Lab ID: 1611D18-028
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 2:56:22 PM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/1/2016 11:53:45 PM	28884
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	12/1/2016 11:53:45 PM	28884
Surr: DNOP	89.6	70-130		%Rec	1	12/1/2016 11:53:45 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/1/2016 2:34:31 PM	28882
Surr: BFB	98.4	68.3-144		%Rec	1	12/1/2016 2:34:31 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112316-CN-V-15
Project: Jal Landfarm
Collection Date: 11/23/2016 9:21:00 AM
Lab ID: 1611D18-029
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 3:08:47 PM	28951
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	11/30/2016 4:20:29 PM	28908
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Barium	45	0.10		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Cadmium	ND	0.10		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Chromium	5.3	0.30		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Copper	3.0	0.30		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Iron	5500	120		mg/Kg	50	12/5/2016 2:54:12 PM	28887
Lead	1.3	0.25		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Manganese	74	0.10		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Selenium	ND	2.5		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Silver	ND	0.25		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Uranium	ND	5.0		mg/Kg	1	12/5/2016 2:39:30 PM	28887
Zinc	13	2.5		mg/Kg	1	12/5/2016 4:52:40 PM	28887
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/30/2016 5:52:05 PM	28884
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/30/2016 5:52:05 PM	28884
Surr: DNOP	96.0	70-130		%Rec	1	11/30/2016 5:52:05 PM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/1/2016 2:59:06 PM	28882
Surr: BFB	104	68.3-144		%Rec	1	12/1/2016 2:59:06 PM	28882
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	12/1/2016 2:59:06 PM	28882
Benzene	ND	0.023		mg/Kg	1	12/1/2016 2:59:06 PM	28882
Toluene	ND	0.047		mg/Kg	1	12/1/2016 2:59:06 PM	28882
Ethylbenzene	ND	0.047		mg/Kg	1	12/1/2016 2:59:06 PM	28882
Xylenes, Total	ND	0.093		mg/Kg	1	12/1/2016 2:59:06 PM	28882
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	12/1/2016 2:59:06 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-081248-112316-CN-T-15
Project: Jal Landfarm
Collection Date: 11/23/2016 9:37:00 AM
Lab ID: 1611D18-030
Matrix: SOIL
Received Date: 11/28/2016 12:30:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	12/1/2016 3:46:00 PM	28951
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	150	10		mg/Kg	1	12/2/2016 12:39:36 AM	28884
Motor Oil Range Organics (MRO)	450	50		mg/Kg	1	12/2/2016 12:39:36 AM	28884
Surr: DNOP	90.7	70-130		%Rec	1	12/2/2016 12:39:36 AM	28884
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/1/2016 3:23:46 PM	28882
Surr: BFB	105	68.3-144		%Rec	1	12/1/2016 3:23:46 PM	28882

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-28924**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**28924**		RunNo:	**39076**				
Prep Date:	**11/30/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1222391**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-28924**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**28924**		RunNo:	**39076**				
Prep Date:	**11/30/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1222392**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.5	90	110			

Sample ID	**MB-28951**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**28951**		RunNo:	**39109**				
Prep Date:	**12/1/2016**	Analysis Date:	**12/1/2016**		SeqNo:	**1223465**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	2.5	1.5								

Sample ID	**LCS-28951**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**28951**		RunNo:	**39109**				
Prep Date:	**12/1/2016**	Analysis Date:	**12/1/2016**		SeqNo:	**1223466**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			B

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID **1611D18-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-081248-112116-C**	Batch ID: **28883**	RunNo: **39041**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221608** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.8	49.12	1.966	85.9	51.6	130			
Surr: DNOP	4.3		4.912		86.9	70	130			

Sample ID **1611D18-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-081248-112116-C**	Batch ID: **28883**	RunNo: **39041**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221609** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.9	49.31	1.966	88.2	51.6	130	2.93	20	
Surr: DNOP	4.5		4.931		90.5	70	130	0	0	

Sample ID **LCS-28883**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **28883**	RunNo: **39041**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221613** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.9	62.6	124			
Surr: DNOP	4.2		5.000		84.0	70	130			

Sample ID **MB-28883**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **28883**	RunNo: **39041**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221614** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		86.6	70	130			

Sample ID **1611D18-021AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-081248-112216-C**	Batch ID: **28884**	RunNo: **39042**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221616** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	9.8	48.92	0	122	51.6	130			
Surr: DNOP	5.1		4.892		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**1611D18-021AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**S-081248-112216-C**	Batch ID:	**28884**		RunNo:	**39042**				
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1221617**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.8	49.07	0	106	51.6	130	14.2	20	
Surr: DNOP	4.6		4.907		92.8	70	130	0	0	

Sample ID	**LCS-28884**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**28884**		RunNo:	**39042**				
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1221620**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	62.6	124			
Surr: DNOP	4.8		5.000		95.3	70	130			

Sample ID	**MB-28884**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**28884**		RunNo:	**39042**				
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1221621**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		88.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-28881**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**28881**		RunNo:	**39049**				
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1221783**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	820		1000		81.6	68.3	144			

Sample ID	**LCS-28881**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**28881**		RunNo:	**39049**				
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1221784**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	74.6	123			
Surr: BFB	900		1000		90.2	68.3	144			

Sample ID	**1611D18-002AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-081248-112116-C**	Batch ID:	**28881**		RunNo:	**39049**				
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1221787**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.51	0	112	61.3	150			
Surr: BFB	900		980.4		91.7	68.3	144			

Sample ID	**1611D18-002AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-081248-112116-C**	Batch ID:	**28881**		RunNo:	**39049**				
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**		SeqNo:	**1221788**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.45	0	107	61.3	150	8.88	20	
Surr: BFB	870		938.1		92.6	68.3	144	0	0	

Sample ID	**MB-28882**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**28882**		RunNo:	**39087**				
Prep Date:	**11/29/2016**	Analysis Date:	**12/1/2016**		SeqNo:	**1222926**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		105	68.3	144			

Sample ID	**LCS-28882**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**28882**		RunNo:	**39087**				
Prep Date:	**11/29/2016**	Analysis Date:	**12/1/2016**		SeqNo:	**1222927**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-28882**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**28882**		RunNo:	**39087**				
Prep Date:	**11/29/2016**	Analysis Date:	**12/1/2016**		SeqNo:	**1222927**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.2	74.6	123			
Surr: BFB	960		1000		96.2	68.3	144			

Sample ID	**1611D18-021AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-081248-112216-C**	Batch ID:	**28882**		RunNo:	**39087**				
Prep Date:	**11/29/2016**	Analysis Date:	**12/1/2016**		SeqNo:	**1222929**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.95	0	98.5	61.3	150			
Surr: BFB	1000		998.0		100	68.3	144			

Sample ID	**1611D18-021AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-081248-112216-C**	Batch ID:	**28882**		RunNo:	**39087**				
Prep Date:	**11/29/2016**	Analysis Date:	**12/1/2016**		SeqNo:	**1222930**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	24.80	0	98.0	61.3	150	1.13	20	
Surr: BFB	1000		992.1		101	68.3	144	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID **MB-28881**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **28881**	RunNo: **39049**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221811** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.0	80	120			

Sample ID **LCS-28881**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **28881**	RunNo: **39049**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221812** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.99	0.10	1.000	0	99.1	65.7	116			
Benzene	1.0	0.025	1.000	0	102	75.2	115			
Toluene	0.99	0.050	1.000	0	98.7	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.5	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	97.4	79.2	115			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	80	120			

Sample ID **1611D18-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-081248-112116-C**	Batch ID: **28881**	RunNo: **39049**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221814** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.093	0.9320	0	118	42.5	143			
Benzene	1.0	0.023	0.9320	0	110	61.5	138			
Toluene	0.99	0.047	0.9320	0	107	71.4	127			
Ethylbenzene	0.99	0.047	0.9320	0	106	70.9	132			
Xylenes, Total	2.9	0.093	2.796	0	105	76.2	123			
Surr: 4-Bromofluorobenzene	0.96		0.9320		103	80	120			

Sample ID **1611D18-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-081248-112116-C**	Batch ID: **28881**	RunNo: **39049**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221815** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.097	0.9699	0	104	42.5	143	8.71	20	
Benzene	1.0	0.024	0.9699	0	104	61.5	138	1.88	20	
Toluene	1.0	0.048	0.9699	0	105	71.4	127	2.36	20	
Ethylbenzene	1.0	0.048	0.9699	0	107	70.9	132	4.51	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID **1611D18-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-081248-112116-C**	Batch ID: **28881**	RunNo: **39049**
Prep Date: **11/29/2016**	Analysis Date: **11/30/2016**	SeqNo: **1221815** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.1	0.097	2.910	0	106	76.2	123	4.93	20	
Surr: 4-Bromofluorobenzene	1.0		0.9699		104	80	120	0	0	

Sample ID **MB-28882**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **28882**	RunNo: **39087**
Prep Date: **11/29/2016**	Analysis Date: **12/1/2016**	SeqNo: **1222950** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120			

Sample ID **LCS-28882**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **28882**	RunNo: **39087**
Prep Date: **11/29/2016**	Analysis Date: **12/1/2016**	SeqNo: **1222951** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.84	0.10	1.000	0	84.0	65.7	116			
Benzene	0.96	0.025	1.000	0	96.0	75.2	115			
Toluene	0.98	0.050	1.000	0	98.4	80.7	112			
Ethylbenzene	0.90	0.050	1.000	0	90.3	78.9	117			
Xylenes, Total	2.6	0.10	3.000	0	88.2	79.2	115			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID **1611D18-022AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-081248-112216-C**	Batch ID: **28882**	RunNo: **39087**
Prep Date: **11/29/2016**	Analysis Date: **12/1/2016**	SeqNo: **1222958** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.79	0.092	0.9200	0	85.6	42.5	143			
Benzene	0.89	0.023	0.9200	0	96.4	61.5	138			
Toluene	0.85	0.046	0.9200	0	92.7	71.4	127			
Ethylbenzene	0.80	0.046	0.9200	0	86.5	70.9	132			
Xylenes, Total	2.4	0.092	2.760	0	85.7	76.2	123			
Surr: 4-Bromofluorobenzene	0.91		0.9200		98.9	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**1611D18-022AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**S-081248-112216-C**	Batch ID:	**28882**	RunNo:	**39087**
Prep Date:	**11/29/2016**	Analysis Date:	**12/1/2016**	SeqNo:	**1222964** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.83	0.097	0.9737	0	85.3	42.5	143	5.24	20	
Benzene	0.94	0.024	0.9737	0	96.1	61.5	138	5.39	20	
Toluene	0.92	0.049	0.9737	0	94.4	71.4	127	7.45	20	
Ethylbenzene	0.87	0.049	0.9737	0	89.5	70.9	132	9.01	20	
Xylenes, Total	2.6	0.097	2.921	0	88.1	76.2	123	8.45	20	
Surr: 4-Bromofluorobenzene	1.0		0.9737		105	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-28907**	SampType:	**MBLK**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID:	**28907**	RunNo:	**39072**					
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**	SeqNo:	**1222151**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-28907**	SampType:	**LCS**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID:	**28907**	RunNo:	**39072**					
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**	SeqNo:	**1222152**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID	**LCS-28908**	SampType:	**LCS**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID:	**28908**	RunNo:	**39072**					
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**	SeqNo:	**1222182**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	95.6	80	120			

Sample ID	**MB-28908**	SampType:	**MBLK**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID:	**28908**	RunNo:	**39072**					
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**	SeqNo:	**1222188**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-28886**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**28886**	RunNo:	**39039**
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**	SeqNo:	**1221126** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**LCS-28886**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**28886**	RunNo:	**39039**
Prep Date:	**11/29/2016**	Analysis Date:	**11/30/2016**	SeqNo:	**1221127** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	25.00	0	94.0	80	120			
Barium	24	0.10	25.00	0	96.6	80	120			
Cadmium	24	0.10	25.00	0	95.1	80	120			
Chromium	24	0.30	25.00	0	95.7	80	120			
Copper	26	0.30	25.00	0	103	80	120			
Iron	25	2.5	25.00	0	99.6	80	120			
Lead	23	0.25	25.00	0	91.1	80	120			
Manganese	24	0.10	25.00	0	96.2	80	120			
Selenium	23	2.5	25.00	0	91.7	80	120			
Silver	4.8	0.25	5.000	0	96.2	80	120			
Uranium	25	5.0	25.00	0	99.5	80	120			
Zinc	23	2.5	25.00	0	93.4	80	120			

Sample ID	**MB-28887**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**28887**	RunNo:	**39147**
Prep Date:	**11/29/2016**	Analysis Date:	**12/5/2016**	SeqNo:	**1224723** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611D18**

20-Dec-16

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-28887**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**28887**	RunNo:	**39147**
Prep Date:	**11/29/2016**	Analysis Date:	**12/5/2016**	SeqNo:	**1224723** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								

Sample ID	**LCS-28887**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**28887**	RunNo:	**39147**
Prep Date:	**11/29/2016**	Analysis Date:	**12/5/2016**	SeqNo:	**1224724** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	95.8	80	120			
Barium	24	0.10	25.00	0	97.4	80	120			
Cadmium	24	0.10	25.00	0	96.1	80	120			
Chromium	24	0.30	25.00	0	97.3	80	120			
Copper	26	0.30	25.00	0	103	80	120			
Iron	26	2.5	25.00	0	104	80	120			
Lead	23	0.25	25.00	0	92.6	80	120			
Manganese	24	0.10	25.00	0	97.4	80	120			
Selenium	23	2.5	25.00	0	93.9	80	120			
Silver	4.9	0.25	5.000	0	97.3	80	120			
Uranium	26	5.0	25.00	0	103	80	120			

Sample ID	**MB-28887**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**28887**	RunNo:	**39147**
Prep Date:	**11/29/2016**	Analysis Date:	**12/5/2016**	SeqNo:	**1224915** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	2.5								

Sample ID	**LCS-28887**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**28887**	RunNo:	**39147**
Prep Date:	**11/29/2016**	Analysis Date:	**12/5/2016**	SeqNo:	**1224916** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	24	2.5	25.00	0	97.4	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1611D18 | RcptNo: 1

Received by/date: 11/28/16

Logged By: Ashley Gallegos 11/28/2016 12:30:00 PM

Completed By: Ashley Gallegos 11/28/2016 3:28:12 PM

Reviewed By: 11/28/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes	No	Not Present ✔
2. Is Chain of Custody complete?	Yes ✔	No	Not Present
3. How was the sample delivered?	Client		

Log In

4. Was an attempt made to cool the samples?	Yes ✔	No	NA
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA
6. Sample(s) in proper container(s)?	Yes ✔	No	
7. Sufficient sample volume for indicated test(s)?	Yes ✔	No	
8. Are samples (except VOA and ONG) properly preserved?	Yes ✔	No	
9. Was preservative added to bottles?	Yes	No ✔	NA
10. VOA vials have zero headspace?	Yes	No	No VOA Vials ✔
11. Were any sample containers received broken?	Yes	No ✔	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	Adjusted?
14. Is it clear what analyses were requested?	Yes ✔	No	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Not Present			

Chain-of-Custody Record

Client: GHD Services

Mailing Address: 6121 Indian School Rd. #200
Albuquerque, NM. 87110

Phone #: (505) 884-0672

Email or Fax#: Charles.Neligh@GHD.com

QA/QC Package:
Standard ☐ Level 4 (Full Validation)

Accreditation
NELAP ☐ Other _____

EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Land farm

Project #: 082148

Project Manager: Bernard Backisch

Sampler: C. Neligh

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1611D18	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides 300.1	Metals by 6010/6020 (Hg, As, Ba, Cd, Cr, Cu, Fe, Pb, Mn, Se, Ag, U, Zn)	Air Bubbles (Y or N)
11-28-16	1432	S	S-081248-112816-CN-V-1	4oz glass #3	—	-001	X		X									X	X	
11-28-16	1439	S	S-081248-112816-CN-T-1	#1 4oz Glass	—	-002			X									X		
11-28-16	1601	S	S-081248-112816-CN-V-2	4oz glass #3	—	-003	X		X									X	X	
11-28-16	1507	S	S-081248-112816-CN-T-2	4oz glass #1	—	-004			X									X		
11-28-16	1524	S	S-081248-112816-CN-V-3	4oz glass #3	—	-005	X		X									X	X	
11-28-16	1538	S	S-081248-112816-CN-T-3	4oz glass #1	—	-006			X									X		
11-28-16	0947	S	S-081248-112216-CN-V-4	4oz glass #3	—	-007	X		X									X	X	
11-28-16	0956	S	S-081248-112216-CN-T-4	4oz glass #1	—	-008			X									X		
11-28-16	1010	S	S-081248-112216-CN-V-5	4oz glass #3	—	-009	X		X									X	X	
11-28-16	1018	S	S-081248-112216-CN-T-5	4oz glass #1	—	-010			X									X		
11-28-16	1032	S	S-081248-112216-CN-V-6	4oz glass #3	—	-011	X		X									X	X	
11-28-16	1040	S	S-081248-112216-CN-T-6	4oz glass #1	—	-012	X		X									X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-28-16	0935		Melissa Cummings	11/28/16	935
11/28/16	1230	Melissa Cummings		11/28/16	1230

Remarks:
V = Vadose zone samples
T = Treatment Zone Samples.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services

Mailing Address: 6121 Indian School Rd NE, #200 Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Charles.Neligh@ghd.com

QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☑ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 081248

Project Manager: Bernard Backisch

Sampler: C. Neligh

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1611D18	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 300.1	Metals 6g 6010/6020 (Ba, Be, B, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Tl, V, Zn)	Air Bubbles (Y or N)
11-28-16	1109	S	S-081248-112716-CN-V-7	4oz glass #3		-013	X		X									X	X	
11-28-16	1120	S	S-081248-112716-CN-T-7	4oz glass #1		-014			X									X		
11-28-16	1135	S	S-081248-112716-CN-V-8	4oz glass #3		-015	X		X									X	X	
11-28-16	1143	S	S-081248-112716-CN-T-8	4oz glass #1		-016	X		X									X		
11-28-16	1211	S	S-081248-112716-CN-V-9	4oz glass #3		-017	X		X									X	X	
11-28-16	1230	S	S-081248-112716-CN-T-9	4oz glass #1		-018			X									X		
11-28-16	1251	S	S-081248-112716-CN-V-10	4oz glass #3		-019	X		X									X	X	
11-28-16	1307	S	S-081248-112716-CN-T-10	4oz glass #1		-020			X									X		
11-28-16	1329	S	S-081248-112716-CN-V-11	4oz glass #3		-021	X		X									X	X	
11-28-16	1346	S	S-081248-112716-CN-T-11	4oz glass #1		-022			X									X		
11-28-16	1410	S	S-081248-112716-CN-V-12	4oz glass #3		-023	X		X									X	X	
11-28-16	1428	S	S-081248-112716-CN-T-12	4oz glass #1		-024			X									X		

Date: 11-28-16 Time: 0935 Relinquished by: Charles Neligh

Received by: Melissa Cummings Date: 11/28/16 Time: 935

Date: 11/28/16 Time: 1230 Relinquished by: Melissa Cummings

Received by: [signature] Date: 11/28/16 Time: 1230

Remarks:

V = Vadose zone Sample

T = Treatment Zone Sample.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services

Mailing Address: 6121 Indian School Rd NE

Albuquerque, NM. 87110

Phone #: 505 884 0672

email or Fax#: charles.neligh@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☑ Standard ☐ Rush _____

Project Name: Jal Land farm

Project #: 081248

Project Manager: Bernard Bockisch

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1611D18	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides 300.1	Metals 6010/6020	Hg As, Ba, Cd, Cr, Pb, Mn, Se, Ag, U, Zn, Fe, Ni	Air Bubbles (Y or N)
22-16	1451	S	S-081248-112216-CN-V-13	4oz glass #3		-025	X		X									X	X		
22-16	1521	S	S-081248-112216-CN-T-13	4oz glass #1		-026			X									X			
23-16	0837	S	S-081248-112316-CN-V-14	4oz glass #3		-027	X		X									X	X		
3-16	0852	S	S-081248-112316-CN-T-14	4oz glass #1		-028			X									X			
3-16	0921	S	S-08248-112316-CN-V-15	4oz glass #3		-029	X		X									X	X		
-16	0937	S	S-05248-112316-CN-T-15	4oz glass #1		-030	X		X									X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
28-16	0935		Melisa Cummy	11/28/16	935
28/16	1230	Melisa Cummy		11/28/16	1230

Remarks:

V = Vadose Zone Samples

T = Treatment Zone Samples

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Analytical Data 2017

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 07, 2017

Chris Knight
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1702C29

Dear Chris Knight:

Hall Environmental Analysis Laboratory received 30 sample(s) on 2/28/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T1
Project: Jal Landfarm
Collection Date: 2/24/2017 10:14:00 AM
Lab ID: 1702C29-001
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 1:09:47 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	52	9.7		mg/Kg	1	3/2/2017 5:07:56 PM	30465
Motor Oil Range Organics (MRO)	100	48		mg/Kg	1	3/2/2017 5:07:56 PM	30465
Surr: DNOP	121	70-130		%Rec	1	3/2/2017 5:07:56 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 10:05:30 AM	30458
Surr: BFB	79.7	54-150		%Rec	1	3/2/2017 10:05:30 AM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 10:05:30 AM	30458
Toluene	ND	0.049		mg/Kg	1	3/2/2017 10:05:30 AM	30458
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 10:05:30 AM	30458
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2017 10:05:30 AM	30458
Surr: 4-Bromofluorobenzene	88.2	66.6-132		%Rec	1	3/2/2017 10:05:30 AM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V1
Project: Jal Landfarm
Collection Date: 2/24/2017 10:21:00 AM
Lab ID: 1702C29-002
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	220	9.7		mg/Kg	1	3/2/2017 5:29:13 PM	30465
Motor Oil Range Organics (MRO)	490	49		mg/Kg	1	3/2/2017 5:29:13 PM	30465
Surr: DNOP	113	70-130		%Rec	1	3/2/2017 5:29:13 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 11:24:43 AM	30458
Surr: BFB	86.2	54-150		%Rec	1	3/2/2017 11:24:43 AM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 11:24:43 AM	30458
Toluene	ND	0.049		mg/Kg	1	3/2/2017 11:24:43 AM	30458
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 11:24:43 AM	30458
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2017 11:24:43 AM	30458
Surr: 4-Bromofluorobenzene	95.0	66.6-132		%Rec	1	3/2/2017 11:24:43 AM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T2
Project: Jal Landfarm
Collection Date: 2/24/2017 10:43:00 AM
Lab ID: 1702C29-003
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 1:47:00 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	34	9.7		mg/Kg	1	3/2/2017 5:50:40 PM	30465
Motor Oil Range Organics (MRO)	150	49		mg/Kg	1	3/2/2017 5:50:40 PM	30465
Surr: DNOP	104	70-130		%Rec	1	3/2/2017 5:50:40 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 12:43:40 PM	30458
Surr: BFB	87.4	54-150		%Rec	1	3/2/2017 12:43:40 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 12:43:40 PM	30458
Toluene	ND	0.050		mg/Kg	1	3/2/2017 12:43:40 PM	30458
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 12:43:40 PM	30458
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2017 12:43:40 PM	30458
Surr: 4-Bromofluorobenzene	95.8	66.6-132		%Rec	1	3/2/2017 12:43:40 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V2
Project: Jal Landfarm
Collection Date: 2/24/2017 10:51:00 AM
Lab ID: 1702C29-004
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/2/2017 1:54:09 PM	30465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 1:54:09 PM	30465
Surr: DNOP	103	70-130		%Rec	1	3/2/2017 1:54:09 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/2/2017 1:10:01 PM	30458
Surr: BFB	80.2	54-150		%Rec	1	3/2/2017 1:10:01 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/2/2017 1:10:01 PM	30458
Toluene	ND	0.046		mg/Kg	1	3/2/2017 1:10:01 PM	30458
Ethylbenzene	ND	0.046		mg/Kg	1	3/2/2017 1:10:01 PM	30458
Xylenes, Total	ND	0.092		mg/Kg	1	3/2/2017 1:10:01 PM	30458
Surr: 4-Bromofluorobenzene	86.8	66.6-132		%Rec	1	3/2/2017 1:10:01 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T3
Project: Jal Landfarm
Collection Date: 2/24/2017 11:02:00 AM
Lab ID: 1702C29-005
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 1:59:24 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	1100	100		mg/Kg	10	3/2/2017 12:06:48 PM	30465
Motor Oil Range Organics (MRO)	1800	500		mg/Kg	10	3/2/2017 12:06:48 PM	30465
Surr: DNOP	0	70-130	S	%Rec	10	3/2/2017 12:06:48 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/2/2017 1:36:06 PM	30458
Surr: BFB	86.8	54-150		%Rec	1	3/2/2017 1:36:06 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/2/2017 1:36:06 PM	30458
Toluene	ND	0.047		mg/Kg	1	3/2/2017 1:36:06 PM	30458
Ethylbenzene	ND	0.047		mg/Kg	1	3/2/2017 1:36:06 PM	30458
Xylenes, Total	ND	0.093		mg/Kg	1	3/2/2017 1:36:06 PM	30458
Surr: 4-Bromofluorobenzene	94.9	66.6-132		%Rec	1	3/2/2017 1:36:06 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V3
Project: Jal Landfarm
Collection Date: 2/24/2017 11:18:00 AM
Lab ID: 1702C29-006
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/2/2017 2:15:39 PM	30465
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/2/2017 2:15:39 PM	30465
Surr: DNOP	106	70-130		%Rec	1	3/2/2017 2:15:39 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/2/2017 2:02:15 PM	30458
Surr: BFB	83.6	54-150		%Rec	1	3/2/2017 2:02:15 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/2/2017 2:02:15 PM	30458
Toluene	ND	0.047		mg/Kg	1	3/2/2017 2:02:15 PM	30458
Ethylbenzene	ND	0.047		mg/Kg	1	3/2/2017 2:02:15 PM	30458
Xylenes, Total	ND	0.094		mg/Kg	1	3/2/2017 2:02:15 PM	30458
Surr: 4-Bromofluorobenzene	90.9	66.6-132		%Rec	1	3/2/2017 2:02:15 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T4
Project: Jal Landfarm
Collection Date: 2/24/2017 11:38:00 AM
Lab ID: 1702C29-007
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 2:11:48 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	140	9.9		mg/Kg	1	3/2/2017 6:12:04 PM	30465
Motor Oil Range Organics (MRO)	250	49		mg/Kg	1	3/2/2017 6:12:04 PM	30465
Surr: DNOP	112	70-130		%Rec	1	3/2/2017 6:12:04 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 2:28:31 PM	30458
Surr: BFB	87.4	54-150		%Rec	1	3/2/2017 2:28:31 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 2:28:31 PM	30458
Toluene	ND	0.048		mg/Kg	1	3/2/2017 2:28:31 PM	30458
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 2:28:31 PM	30458
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2017 2:28:31 PM	30458
Surr: 4-Bromofluorobenzene	96.5	66.6-132		%Rec	1	3/2/2017 2:28:31 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V4
Project: Jal Landfarm
Collection Date: 2/24/2017 11:44:00 AM
Lab ID: 1702C29-008
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/2/2017 2:37:09 PM	30465
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/2/2017 2:37:09 PM	30465
Surr: DNOP	105	70-130		%Rec	1	3/2/2017 2:37:09 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 2:54:49 PM	30458
Surr: BFB	86.3	54-150		%Rec	1	3/2/2017 2:54:49 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 2:54:49 PM	30458
Toluene	ND	0.049		mg/Kg	1	3/2/2017 2:54:49 PM	30458
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 2:54:49 PM	30458
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2017 2:54:49 PM	30458
Surr: 4-Bromofluorobenzene	93.5	66.6-132		%Rec	1	3/2/2017 2:54:49 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T5
Project: Jal Landfarm
Collection Date: 2/24/2017 11:51:00 AM
Lab ID: 1702C29-009
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 2:24:13 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/2/2017 3:20:18 PM	30465
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	3/2/2017 3:20:18 PM	30465
Surr: DNOP	109	70-130		%Rec	1	3/2/2017 3:20:18 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 3:21:08 PM	30458
Surr: BFB	89.6	54-150		%Rec	1	3/2/2017 3:21:08 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 3:21:08 PM	30458
Toluene	ND	0.050		mg/Kg	1	3/2/2017 3:21:08 PM	30458
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 3:21:08 PM	30458
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2017 3:21:08 PM	30458
Surr: 4-Bromofluorobenzene	98.1	66.6-132		%Rec	1	3/2/2017 3:21:08 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V5
Project: Jal Landfarm
Collection Date: 2/24/2017 11:56:00 AM
Lab ID: 1702C29-010
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/2/2017 3:41:53 PM	30465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 3:41:53 PM	30465
Surr: DNOP	101	70-130		%Rec	1	3/2/2017 3:41:53 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/2/2017 3:47:28 PM	30458
Surr: BFB	87.7	54-150		%Rec	1	3/2/2017 3:47:28 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 3:47:28 PM	30458
Toluene	ND	0.047		mg/Kg	1	3/2/2017 3:47:28 PM	30458
Ethylbenzene	ND	0.047		mg/Kg	1	3/2/2017 3:47:28 PM	30458
Xylenes, Total	ND	0.095		mg/Kg	1	3/2/2017 3:47:28 PM	30458
Surr: 4-Bromofluorobenzene	96.5	66.6-132		%Rec	1	3/2/2017 3:47:28 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T6
Project: Jal Landfarm
Collection Date: 2/24/2017 12:11:00 PM
Lab ID: 1702C29-011
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 2:36:37 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	15	9.8		mg/Kg	1	3/2/2017 6:33:38 PM	30465
Motor Oil Range Organics (MRO)	120	49		mg/Kg	1	3/2/2017 6:33:38 PM	30465
Surr: DNOP	113	70-130		%Rec	1	3/2/2017 6:33:38 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 5:58:30 PM	30458
Surr: BFB	86.9	54-150		%Rec	1	3/2/2017 5:58:30 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 5:58:30 PM	30458
Toluene	ND	0.049		mg/Kg	1	3/2/2017 5:58:30 PM	30458
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 5:58:30 PM	30458
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2017 5:58:30 PM	30458
Surr: 4-Bromofluorobenzene	95.4	66.6-132		%Rec	1	3/2/2017 5:58:30 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V6
Project: Jal Landfarm
Collection Date: 2/24/2017 12:16:00 PM
Lab ID: 1702C29-012
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/2/2017 4:03:23 PM	30465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 4:03:23 PM	30465
Surr: DNOP	105	70-130		%Rec	1	3/2/2017 4:03:23 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 6:24:43 PM	30458
Surr: BFB	82.2	54-150		%Rec	1	3/2/2017 6:24:43 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 6:24:43 PM	30458
Toluene	ND	0.048		mg/Kg	1	3/2/2017 6:24:43 PM	30458
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 6:24:43 PM	30458
Xylenes, Total	ND	0.095		mg/Kg	1	3/2/2017 6:24:43 PM	30458
Surr: 4-Bromofluorobenzene	90.7	66.6-132		%Rec	1	3/2/2017 6:24:43 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T7
Project: Jal Landfarm
Collection Date: 2/24/2017 12:27:00 PM
Lab ID: 1702C29-013
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 3:13:51 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	11	9.6		mg/Kg	1	3/2/2017 6:54:58 PM	30465
Motor Oil Range Organics (MRO)	59	48		mg/Kg	1	3/2/2017 6:54:58 PM	30465
Surr: DNOP	118	70-130		%Rec	1	3/2/2017 6:54:58 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/2/2017 6:50:57 PM	30458
Surr: BFB	82.3	54-150		%Rec	1	3/2/2017 6:50:57 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/2/2017 6:50:57 PM	30458
Toluene	ND	0.046		mg/Kg	1	3/2/2017 6:50:57 PM	30458
Ethylbenzene	ND	0.046		mg/Kg	1	3/2/2017 6:50:57 PM	30458
Xylenes, Total	ND	0.091		mg/Kg	1	3/2/2017 6:50:57 PM	30458
Surr: 4-Bromofluorobenzene	89.9	66.6-132		%Rec	1	3/2/2017 6:50:57 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V7
Project: Jal Landfarm
Collection Date: 2/24/2017 12:34:00 PM
Lab ID: 1702C29-014
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/2/2017 4:25:02 PM	30465
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/2/2017 4:25:02 PM	30465
Surr: DNOP	111	70-130		%Rec	1	3/2/2017 4:25:02 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 7:17:18 PM	30458
Surr: BFB	80.8	54-150		%Rec	1	3/2/2017 7:17:18 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 7:17:18 PM	30458
Toluene	ND	0.048		mg/Kg	1	3/2/2017 7:17:18 PM	30458
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 7:17:18 PM	30458
Xylenes, Total	ND	0.096		mg/Kg	1	3/2/2017 7:17:18 PM	30458
Surr: 4-Bromofluorobenzene	88.0	66.6-132		%Rec	1	3/2/2017 7:17:18 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T8
Project: Jal Landfarm
Collection Date: 2/24/2017 1:10:00 PM
Lab ID: 1702C29-015 **Matrix:** SOIL **Received Date:** 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 3:26:15 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/2/2017 7:16:27 PM	30465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 7:16:27 PM	30465
Surr: DNOP	101	70-130		%Rec	1	3/2/2017 7:16:27 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/2/2017 7:43:35 PM	30458
Surr: BFB	81.8	54-150		%Rec	1	3/2/2017 7:43:35 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 7:43:35 PM	30458
Toluene	ND	0.047		mg/Kg	1	3/2/2017 7:43:35 PM	30458
Ethylbenzene	ND	0.047		mg/Kg	1	3/2/2017 7:43:35 PM	30458
Xylenes, Total	ND	0.095		mg/Kg	1	3/2/2017 7:43:35 PM	30458
Surr: 4-Bromofluorobenzene	88.9	66.6-132		%Rec	1	3/2/2017 7:43:35 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V8
Project: Jal Landfarm
Collection Date: 2/24/2017 1:15:00 PM
Lab ID: 1702C29-016
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/2/2017 4:46:28 PM	30465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 4:46:28 PM	30465
Surr: DNOP	107	70-130		%Rec	1	3/2/2017 4:46:28 PM	30465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 8:09:50 PM	30458
Surr: BFB	81.8	54-150		%Rec	1	3/2/2017 8:09:50 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 8:09:50 PM	30458
Toluene	ND	0.048		mg/Kg	1	3/2/2017 8:09:50 PM	30458
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 8:09:50 PM	30458
Xylenes, Total	ND	0.096		mg/Kg	1	3/2/2017 8:09:50 PM	30458
Surr: 4-Bromofluorobenzene	89.2	66.6-132		%Rec	1	3/2/2017 8:09:50 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T9
Project: Jal Landfarm
Collection Date: 2/24/2017 12:48:00 PM
Lab ID: 1702C29-017
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 3:38:40 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	3/2/2017 10:07:47 AM	30466
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/2/2017 10:07:47 AM	30466
Surr: DNOP	98.1	70-130		%Rec	1	3/2/2017 10:07:47 AM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 8:36:03 PM	30458
Surr: BFB	79.5	54-150		%Rec	1	3/2/2017 8:36:03 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 8:36:03 PM	30458
Toluene	ND	0.048		mg/Kg	1	3/2/2017 8:36:03 PM	30458
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 8:36:03 PM	30458
Xylenes, Total	ND	0.095		mg/Kg	1	3/2/2017 8:36:03 PM	30458
Surr: 4-Bromofluorobenzene	86.9	66.6-132		%Rec	1	3/2/2017 8:36:03 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V9
Project: Jal Landfarm
Collection Date: 2/24/2017 12:57:00 PM
Lab ID: 1702C29-018
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/2/2017 12:08:56 PM	30466
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 12:08:56 PM	30466
Surr: DNOP	97.5	70-130		%Rec	1	3/2/2017 12:08:56 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 9:02:11 PM	30458
Surr: BFB	76.2	54-150		%Rec	1	3/2/2017 9:02:11 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 9:02:11 PM	30458
Toluene	ND	0.049		mg/Kg	1	3/2/2017 9:02:11 PM	30458
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 9:02:11 PM	30458
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2017 9:02:11 PM	30458
Surr: 4-Bromofluorobenzene	82.1	66.6-132		%Rec	1	3/2/2017 9:02:11 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T10
Project: Jal Landfarm
Collection Date: 2/24/2017 1:31:00 PM
Lab ID: 1702C29-019
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 3:51:05 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/2/2017 12:33:11 PM	30466
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 12:33:11 PM	30466
Surr: DNOP	91.7	70-130		%Rec	1	3/2/2017 12:33:11 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 9:28:18 PM	30458
Surr: BFB	74.9	54-150		%Rec	1	3/2/2017 9:28:18 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 9:28:18 PM	30458
Toluene	ND	0.048		mg/Kg	1	3/2/2017 9:28:18 PM	30458
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 9:28:18 PM	30458
Xylenes, Total	ND	0.096		mg/Kg	1	3/2/2017 9:28:18 PM	30458
Surr: 4-Bromofluorobenzene	81.7	66.6-132		%Rec	1	3/2/2017 9:28:18 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V10
Project: Jal Landfarm
Collection Date: 2/24/2017 1:43:00 PM
Lab ID: 1702C29-020
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	21	9.8		mg/Kg	1	3/2/2017 12:57:35 PM	30466
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/2/2017 12:57:35 PM	30466
Surr: DNOP	95.8	70-130		%Rec	1	3/2/2017 12:57:35 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/2/2017 9:54:23 PM	30458
Surr: BFB	75.0	54-150		%Rec	1	3/2/2017 9:54:23 PM	30458
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/2/2017 9:54:23 PM	30458
Toluene	ND	0.046		mg/Kg	1	3/2/2017 9:54:23 PM	30458
Ethylbenzene	ND	0.046		mg/Kg	1	3/2/2017 9:54:23 PM	30458
Xylenes, Total	ND	0.092		mg/Kg	1	3/2/2017 9:54:23 PM	30458
Surr: 4-Bromofluorobenzene	80.7	66.6-132		%Rec	1	3/2/2017 9:54:23 PM	30458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T11
Project: Jal Landfarm
Collection Date: 2/24/2017 2:36:00 PM
Lab ID: 1702C29-021
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 4:03:30 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/2/2017 1:21:42 PM	30466
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/2/2017 1:21:42 PM	30466
Surr: DNOP	105	70-130		%Rec	1	3/2/2017 1:21:42 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 3:02:33 PM	30459
Surr: BFB	86.9	54-150		%Rec	1	3/2/2017 3:02:33 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 3:02:33 PM	30459
Toluene	ND	0.049		mg/Kg	1	3/2/2017 3:02:33 PM	30459
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 3:02:33 PM	30459
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 3:02:33 PM	30459
Surr: 4-Bromofluorobenzene	107	66.6-132		%Rec	1	3/2/2017 3:02:33 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
R	RPD outside accepted recovery limits
RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix
W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V11
Project: Jal Landfarm
Collection Date: 2/24/2017 2:43:00 PM
Lab ID: 1702C29-022
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/2/2017 1:45:55 PM	30466
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/2/2017 1:45:55 PM	30466
Surr: DNOP	88.5	70-130		%Rec	1	3/2/2017 1:45:55 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/2/2017 4:13:11 PM	30459
Surr: BFB	89.1	54-150		%Rec	1	3/2/2017 4:13:11 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 4:13:11 PM	30459
Toluene	ND	0.047		mg/Kg	1	3/2/2017 4:13:11 PM	30459
Ethylbenzene	ND	0.047		mg/Kg	1	3/2/2017 4:13:11 PM	30459
Xylenes, Total	ND	0.094		mg/Kg	1	3/2/2017 4:13:11 PM	30459
Surr: 4-Bromofluorobenzene	111	66.6-132		%Rec	1	3/2/2017 4:13:11 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T12
Project: Jal Landfarm
Collection Date: 2/24/2017 2:50:00 PM
Lab ID: 1702C29-023
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 4:15:55 PM	30512
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/2/2017 2:10:05 PM	30466
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 2:10:05 PM	30466
Surr: DNOP	95.2	70-130		%Rec	1	3/2/2017 2:10:05 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 5:23:40 PM	30459
Surr: BFB	88.9	54-150		%Rec	1	3/2/2017 5:23:40 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 5:23:40 PM	30459
Toluene	ND	0.050		mg/Kg	1	3/2/2017 5:23:40 PM	30459
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 5:23:40 PM	30459
Xylenes, Total	ND	0.10		mg/Kg	1	3/2/2017 5:23:40 PM	30459
Surr: 4-Bromofluorobenzene	110	66.6-132		%Rec	1	3/2/2017 5:23:40 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V12
Project: Jal Landfarm
Collection Date: 2/24/2017 2:55:00 PM
Lab ID: 1702C29-024
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/2/2017 2:34:24 PM	30466
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/2/2017 2:34:24 PM	30466
Surr: DNOP	96.8	70-130		%Rec	1	3/2/2017 2:34:24 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/2/2017 5:47:02 PM	30459
Surr: BFB	88.8	54-150		%Rec	1	3/2/2017 5:47:02 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 5:47:02 PM	30459
Toluene	ND	0.047		mg/Kg	1	3/2/2017 5:47:02 PM	30459
Ethylbenzene	ND	0.047		mg/Kg	1	3/2/2017 5:47:02 PM	30459
Xylenes, Total	ND	0.094		mg/Kg	1	3/2/2017 5:47:02 PM	30459
Surr: 4-Bromofluorobenzene	109	66.6-132		%Rec	1	3/2/2017 5:47:02 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T13
Project: Jal Landfarm
Collection Date: 2/24/2017 1:51:00 PM
Lab ID: 1702C29-025
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 5:03:06 PM	30520
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	26	9.5		mg/Kg	1	3/2/2017 3:22:57 PM	30466
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 3:22:57 PM	30466
Surr: DNOP	99.0	70-130		%Rec	1	3/2/2017 3:22:57 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 6:10:30 PM	30459
Surr: BFB	88.3	54-150		%Rec	1	3/2/2017 6:10:30 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 6:10:30 PM	30459
Toluene	ND	0.049		mg/Kg	1	3/2/2017 6:10:30 PM	30459
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 6:10:30 PM	30459
Xylenes, Total	ND	0.098		mg/Kg	1	3/2/2017 6:10:30 PM	30459
Surr: 4-Bromofluorobenzene	108	66.6-132		%Rec	1	3/2/2017 6:10:30 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V13
Project: Jal Landfarm
Collection Date: 2/24/2017 1:56:00 PM
Lab ID: 1702C29-026
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	120	10		mg/Kg	1	3/2/2017 3:47:15 PM	30466
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	3/2/2017 3:47:15 PM	30466
Surr: DNOP	98.9	70-130		%Rec	1	3/2/2017 3:47:15 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/2/2017 6:33:52 PM	30459
Surr: BFB	88.5	54-150		%Rec	1	3/2/2017 6:33:52 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/2/2017 6:33:52 PM	30459
Toluene	ND	0.047		mg/Kg	1	3/2/2017 6:33:52 PM	30459
Ethylbenzene	ND	0.047		mg/Kg	1	3/2/2017 6:33:52 PM	30459
Xylenes, Total	ND	0.094		mg/Kg	1	3/2/2017 6:33:52 PM	30459
Surr: 4-Bromofluorobenzene	109	66.6-132		%Rec	1	3/2/2017 6:33:52 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T14
Project: Jal Landfarm
Collection Date: 2/24/2017 2:15:00 PM
Lab ID: 1702C29-027
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 5:40:20 PM	30520
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/2/2017 5:00:07 PM	30466
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/2/2017 5:00:07 PM	30466
Surr: DNOP	102	70-130		%Rec	1	3/2/2017 5:00:07 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/2/2017 8:31:01 PM	30459
Surr: BFB	88.4	54-150		%Rec	1	3/2/2017 8:31:01 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 8:31:01 PM	30459
Toluene	ND	0.048		mg/Kg	1	3/2/2017 8:31:01 PM	30459
Ethylbenzene	ND	0.048		mg/Kg	1	3/2/2017 8:31:01 PM	30459
Xylenes, Total	ND	0.096		mg/Kg	1	3/2/2017 8:31:01 PM	30459
Surr: 4-Bromofluorobenzene	108	66.6-132		%Rec	1	3/2/2017 8:31:01 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V14
Project: Jal Landfarm
Collection Date: 2/24/2017 2:22:00 PM
Lab ID: 1702C29-028
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/2/2017 4:11:41 PM	30466
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/2/2017 4:11:41 PM	30466
Surr: DNOP	88.7	70-130		%Rec	1	3/2/2017 4:11:41 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 8:54:19 PM	30459
Surr: BFB	88.1	54-150		%Rec	1	3/2/2017 8:54:19 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 8:54:19 PM	30459
Toluene	ND	0.050		mg/Kg	1	3/2/2017 8:54:19 PM	30459
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 8:54:19 PM	30459
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2017 8:54:19 PM	30459
Surr: 4-Bromofluorobenzene	109	66.6-132		%Rec	1	3/2/2017 8:54:19 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-T15
Project: Jal Landfarm
Collection Date: 2/24/2017 3:32:00 PM
Lab ID: 1702C29-029
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/3/2017 5:52:44 PM	30520
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	200	9.7		mg/Kg	1	3/2/2017 5:24:16 PM	30466
Motor Oil Range Organics (MRO)	230	49		mg/Kg	1	3/2/2017 5:24:16 PM	30466
Surr: DNOP	98.7	70-130		%Rec	1	3/2/2017 5:24:16 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/2/2017 9:17:42 PM	30459
Surr: BFB	90.4	54-150		%Rec	1	3/2/2017 9:17:42 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/2/2017 9:17:42 PM	30459
Toluene	ND	0.050		mg/Kg	1	3/2/2017 9:17:42 PM	30459
Ethylbenzene	ND	0.050		mg/Kg	1	3/2/2017 9:17:42 PM	30459
Xylenes, Total	ND	0.099		mg/Kg	1	3/2/2017 9:17:42 PM	30459
Surr: 4-Bromofluorobenzene	107	66.6-132		%Rec	1	3/2/2017 9:17:42 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-022417-CN-V15
Project: Jal Landfarm
Collection Date: 2/24/2017 3:41:00 PM
Lab ID: 1702C29-030
Matrix: SOIL
Received Date: 2/28/2017 3:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/2/2017 4:35:53 PM	30466
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/2/2017 4:35:53 PM	30466
Surr: DNOP	105	70-130		%Rec	1	3/2/2017 4:35:53 PM	30466
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/2/2017 9:41:06 PM	30459
Surr: BFB	87.6	54-150		%Rec	1	3/2/2017 9:41:06 PM	30459
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/2/2017 9:41:06 PM	30459
Toluene	ND	0.049		mg/Kg	1	3/2/2017 9:41:06 PM	30459
Ethylbenzene	ND	0.049		mg/Kg	1	3/2/2017 9:41:06 PM	30459
Xylenes, Total	ND	0.097		mg/Kg	1	3/2/2017 9:41:06 PM	30459
Surr: 4-Bromofluorobenzene	108	66.6-132		%Rec	1	3/2/2017 9:41:06 PM	30459

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702C29**

07-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-30520**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**30520**	RunNo:	**41146**				
Prep Date:	**3/3/2017**	Analysis Date:	**3/3/2017**	SeqNo:	**1288725**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	30								

Sample ID	**LCS-30520**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**30520**	RunNo:	**41146**				
Prep Date:	**3/3/2017**	Analysis Date:	**3/3/2017**	SeqNo:	**1288726**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Sample ID	**MB-30512**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**30512**	RunNo:	**41154**				
Prep Date:	**3/3/2017**	Analysis Date:	**3/3/2017**	SeqNo:	**1289028**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-30512**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**30512**	RunNo:	**41154**				
Prep Date:	**3/3/2017**	Analysis Date:	**3/3/2017**	SeqNo:	**1289029**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702C29**

07-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-30465**	SampType:	**MBLK**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**PBS**	Batch ID:	**30465**			RunNo:	**41098**			
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**			SeqNo:	**1287372**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		82.4	70	130			

Sample ID	**LCS-30465**	SampType:	**LCS**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**LCSS**	Batch ID:	**30465**			RunNo:	**41098**			
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**			SeqNo:	**1287376**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	63.8	116			
Surr: DNOP	4.2		5.000		83.7	70	130			

Sample ID	**LCS-30466**	SampType:	**LCS**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**LCSS**	Batch ID:	**30466**			RunNo:	**41101**			
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**			SeqNo:	**1287383**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.1	63.8	116			
Surr: DNOP	4.2		5.000		84.9	70	130			

Sample ID	**MB-30466**	SampType:	**MBLK**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**PBS**	Batch ID:	**30466**			RunNo:	**41101**			
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**			SeqNo:	**1287384**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.3	70	130			

Sample ID	**1702C29-017AMS**	SampType:	**MS**			TestCode:	**EPA Method 8015M/D: Diesel Range Organics**			
Client ID:	**S-082148-022417-C**	Batch ID:	**30466**			RunNo:	**41101**			
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**			SeqNo:	**1287583**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.56	10.75	72.4	51.6	130			
Surr: DNOP	4.6		5.056		91.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702C29**

07-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID **1702C29-017AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-082148-022417-C** Batch ID: **30466** RunNo: **41101**

Prep Date: **3/1/2017** Analysis Date: **3/2/2017** SeqNo: **1287584** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.7	48.54	10.75	75.0	51.6	130	0.360	20	
Surr: DNOP	4.4		4.854		91.0	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702C29**

07-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-30458**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**30458**		RunNo:	**41124**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1287983**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.6	54	150			

Sample ID	**LCS-30458**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**30458**		RunNo:	**41124**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1287984**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	120	76.4	125			
Surr: BFB	1100		1000		112	54	150			

Sample ID	**1702C29-002AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-022417-C**	Batch ID:	**30458**		RunNo:	**41124**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1287987**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.7	23.61	0	114	61.3	150			
Surr: BFB	980		944.3		103	54	150			

Sample ID	**1702C29-002AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-022417-C**	Batch ID:	**30458**		RunNo:	**41124**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1287988**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	24.85	0	117	61.3	150	7.49	20	
Surr: BFB	1100		994.0		107	54	150	0	0	

Sample ID	**MB-30459**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**30459**		RunNo:	**41125**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1288050**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	860		1000		86.2	54	150			

Sample ID	**LCS-30459**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**30459**		RunNo:	**41125**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1288051**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702C29**

07-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-30459**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**30459**		RunNo:	**41125**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1288051**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	76.4	125			
Surr: BFB	950		1000		94.9	54	150			

Sample ID	**1702C29-022AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-022417-C**	Batch ID:	**30459**		RunNo:	**41125**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1288054**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.8	23.83	0	127	61.3	150			
Surr: BFB	950		953.3		100	54	150			

Sample ID	**1702C29-022AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-022417-C**	Batch ID:	**30459**		RunNo:	**41125**				
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**		SeqNo:	**1288055**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.8	24.20	0	125	61.3	150	0.528	20	
Surr: BFB	970		968.1		100	54	150	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702C29**

07-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-30458**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**30458**	RunNo:	**41124**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288010**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.5	66.6	132			

Sample ID	**LCS-30458**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**30458**	RunNo:	**41124**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288011**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.4	75.2	115			
Toluene	0.96	0.050	1.000	0	96.1	80.7	112			
Ethylbenzene	0.96	0.050	1.000	0	96.4	78.9	117			
Xylenes, Total	3.0	0.10	3.000	0	98.8	79.2	115			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.6	66.6	132			

Sample ID	**1702C29-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-022417-C**	Batch ID:	**30458**	RunNo:	**41124**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288013**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.024	0.9662	0	102	61.5	138			
Toluene	1.0	0.048	0.9662	0.005320	104	71.4	127			
Ethylbenzene	1.0	0.048	0.9662	0	104	70.9	132			
Xylenes, Total	3.1	0.097	2.899	0	107	76.2	123			
Surr: 4-Bromofluorobenzene	0.83		0.9662		86.1	66.6	132			

Sample ID	**1702C29-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-022417-C**	Batch ID:	**30458**	RunNo:	**41124**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288014**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9690	0	105	61.5	138	3.14	20	
Toluene	1.0	0.048	0.9690	0.005320	106	71.4	127	2.48	20	
Ethylbenzene	1.1	0.048	0.9690	0	109	70.9	132	4.38	20	
Xylenes, Total	3.3	0.097	2.907	0	113	76.2	123	5.72	20	
Surr: 4-Bromofluorobenzene	0.91		0.9690		93.6	66.6	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702C29**

07-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-30459**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**30459**	RunNo:	**41125**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288073**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	66.6	132			

Sample ID	**LCS-30459**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**30459**	RunNo:	**41125**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288074**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.8	75.2	115			
Toluene	0.95	0.050	1.000	0	94.9	80.7	112			
Ethylbenzene	0.95	0.050	1.000	0	95.3	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	95.8	79.2	115			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	66.6	132			

Sample ID	**1702C29-021AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-022417-C**	Batch ID:	**30459**	RunNo:	**41125**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288076**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9747	0	108	61.5	138			
Toluene	1.0	0.049	0.9747	0	107	71.4	127			
Ethylbenzene	1.1	0.049	0.9747	0	108	70.9	132			
Xylenes, Total	3.2	0.097	2.924	0	109	76.2	123			
Surr: 4-Bromofluorobenzene	1.1		0.9747		112	66.6	132			

Sample ID	**1702C29-021AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-022417-C**	Batch ID:	**30459**	RunNo:	**41125**					
Prep Date:	**3/1/2017**	Analysis Date:	**3/2/2017**	SeqNo:	**1288077**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9911	0	105	61.5	138	1.11	20	
Toluene	1.1	0.050	0.9911	0	109	71.4	127	3.41	20	
Ethylbenzene	1.1	0.050	0.9911	0	111	70.9	132	4.40	20	
Xylenes, Total	3.3	0.099	2.973	0	111	76.2	123	3.77	20	
Surr: 4-Bromofluorobenzene	1.1		0.9911		112	66.6	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1702C29 | RcptNo: 1

Received by/date: AT 02/28/17

Logged By: **Anne Thorne** 2/28/2017 3:00:00 PM

Completed By: **Anne Thorne** 2/28/2017 3:28:45 PM

Reviewed By: JO 3/1/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

CHAIN OF CUSTODY RECORD

COC NO.: 55550

Address: 6121 Indian School Rd NE #200, Albuquerque NM 87110 PAGE 1 OF 3
Phone: 505 884 0672 Fax:

Project No/ Phase/Task Code: 082148	Laboratory Name: Hall	Lab Location: Albuquerque	SSOW ID: 082148-2017-001
Project Name: Jal Land farm	Lab Contact:		Cooler No:
Project Location: Jal, NM			Carrier:
GHD Chemistry Contact: Chris Knight			Airbill No:
Sampler(s): CN			Total # of Containers: 12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	BTEX x 8021	Full Range TPH x 8015	Chloride x 300.0	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)											
1	S-082148-022417-CN-T1	2-24-17	1014				X	X	X			1702C29-001
2	S-082148-022417-CN-V1	2-24-17	1021				X	X				002
3	S-082148-022417-CN-T2	2-24-17	1043				X	X	X			003
4	S-082148-022417-CN-V2	2-24-17	1051				X	X				004
5	S-082148-022417-CN-T3	2-24-17	1102				X	X	X			005
6	S-082148-022417-CN-V3	2-24-17	1118				X	X				006
7	S-082148-022417-CN-T4	2-24-17	1138				X	X	X			007
8	S-082148-022417-CN-V4	2-24-17	1144				X	X				008
9	S-082148-022417-CN-T5	2-24-17	1161				X	X	X			009
10	S-082148-022417-CN-V5	2-24-17	1156				X	X				010
11	S-082148-022417-CN-T6	2-24-17	1211				X	X	X			011
12	S-082148-022417-CN-V6	2-24-17	1216				X	X				012

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements: T samples = Treatment Zone 1.0' V Samples = Jadose zone Analyze as separate Sa

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	GHD	0937	2-27-17	1. Melissa Cummings	GHD	2/28/17	[redacted]
2. Melissa Cummings	GHD	2/28/17	1420	2.	GHD	2/28/17	1420
3.	GHD	2/28/17	1500	3.	HEAL	02/28/17	1420 1500

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (CPA) YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampling Co

CHAIN OF CUSTODY RECORD

COC NO.: 55551

Address: 6121 Indian School Rd NE #200, Albuquerque, NM 87110
Phone: 505 884 0672 Fax:

Project No/ Phase/Task Code: 082148	Laboratory Name: Hall	Lab Location: Albuquerque	SSOW ID: 09214-2017-00
Project Name: Jal Landfarm	Lab Contact:		Cooler No:
Project Location: Jal, NM			Carrier:
GHD Chemistry Contact: Chris Knight			Airbill No:
Sampler(s): CN			Total # of Containers: 12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	BTEX x 8021	Full Range TPH x 8015	Chloride x 300.0	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)											
1	S-082148-022417-CN-T7	2-24-17	1327				X	X	X			1702129-013
2	S-082148-022417-CN-V7	2-24-17	1234				X	X				014
3	S-082148-022417-CN-T8	2-24-17	1310				X	X	X			015
4	S-082148-022417-CN-V8	2-24-17	1315				X	X				016
5	S-082148-022417-CN-T9	2-24-17	1248				X	X	X			017
6	S-082146-022417-CN-V9	2-24-17	1257				X	X				018
7	S-082148-022417-CN-T10	2-24-17	1331				X	X	X			019
8	S-082148-022417-CN-V10	2-24-17	1343				X	X				020
9	S-082148-022417-CN-T11	2-24-17	1436				X	X	X			021
10	S-082148-022417-CN-V11	2-24-17	1443				X	X				022
11	S-082148-022417-CN-T12	2-24-17	1460				X	X	X			023
12	S-082148-022417-CN-V12	2-24-17	1455				X	X				024

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements:
T = Treatment zone
V = Vadose zone
Analyze as separate samples. 1.0

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	GHD	2-24-17	0837	1. Melissa Cummings	GHD	2/28/17	0837
2. Melissa Cummings	GHD	2/28/17	1420	2.	GHD	2/28/17	1420
3.	GHD	2/28/17	1500	3.	HEAL	02/28/17	~~1423~~ 1500

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

AT 02/28/

CHAIN OF CUSTODY RECORD

COC NO.: 55552

Address: 6121 Indian School Rd NE #200, Albuquerque, NM, 87110 PAGE 3 OF 3
Phone: 505 884 0672 Fax:

Project No/ Phase/Task Code: 082148	Laboratory Name: Hall	Lab Location: Albuquerque	SSOW ID: 082148 - 2017
Project Name: Jal landfarm	Lab Contact:		Cooler No:
Project Location: Jal, NM			Carrier:
GHD Chemistry Contact: Chris Knight			Airbill No:
Sampler(s): CN			Total # of Containers: 6

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	BTEX 8021	Full Range TPH 8015	Chloride 300.0	Total Containers/sample	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)											
1	S-082148-022417-CN-T13.	2-24-17	1351				X	X	X			1702C29 T
2	S-082148-022417-CN-V13	2-24-17	1356				X	X				T024
3	S-082148-022417-CN-T14	2-24-17	1415				X	X	X			T027
4	S-082148-022417-CN-V14	2-24-17	1422				X	X				T028
5	S-082148-022417-CN-T15	2-24-17	1532				X	X	X			T029
6	S-082148-022417-CN-V15	2-24-17	1541				X	X				T030
7												T040
8												AT 02/28
9												
10												
11												
12												

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements: T= Treatment Zone V= Vadose Zone Analyze as Separate Samples. 1.0

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1.	GHD	637	2-28-17	1. Melissa Cummings	GHD	2/28/17	0837
2. Melissa Cummings	GHD	2/28/17	1420	2.	GHD	2/28/17	1420
3.	GHD	2/28/17	1500	3.	HEAL	02/28/17	1500

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (ORA) YELLOW - Receiving Laboratory Copy PINK - GHD GOLDENROD - Sampling Crew

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 22, 2017

Bernie Bockish

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1703A01

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/20/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1703A01**
Date Reported: **3/22/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-031717-CN-V1R
Project: Jal Landfarm
Collection Date: 3/17/2017 3:37:00 PM
Lab ID: 1703A01-001
Matrix: SOIL
Received Date: 3/20/2017 12:04:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/21/2017 11:21:43 AM	30802
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2017 11:21:43 AM	30802
Surr: DNOP	100	70-130		%Rec	1	3/21/2017 11:21:43 AM	30802
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2017 9:56:01 AM	30800
Surr: BFB	73.4	54-150		%Rec	1	3/21/2017 9:56:01 AM	30800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-031717-CN-V13R
Project: Jal Landfarm
Collection Date: 3/17/2017 4:01:00 PM
Lab ID: 1703A01-002 **Matrix:** SOIL **Received Date:** 3/20/2017 12:04:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/21/2017 11:44:10 AM	30802
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/21/2017 11:44:10 AM	30802
Surr: DNOP	98.0	70-130		%Rec	1	3/21/2017 11:44:10 AM	30802
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2017 10:22:37 AM	30800
Surr: BFB	78.0	54-150		%Rec	1	3/21/2017 10:22:37 AM	30800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-031717-CN-V10R
Project: Jal Landfarm
Collection Date: 3/17/2017 4:30:00 PM
Lab ID: 1703A01-003 **Matrix:** SOIL **Received Date:** 3/20/2017 12:04:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/21/2017 12:06:29 PM	30802
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/21/2017 12:06:29 PM	30802
Surr: DNOP	100	70-130		%Rec	1	3/21/2017 12:06:29 PM	30802
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2017 10:48:53 AM	30800
Surr: BFB	77.0	54-150		%Rec	1	3/21/2017 10:48:53 AM	30800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703A01**

22-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-30802**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**30802**		RunNo:	**41527**				
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**		SeqNo:	**1302356**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.9	63.8	116			
Surr: DNOP	5.2		5.000		104	70	130			

Sample ID	**MB-30802**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**30802**		RunNo:	**41527**				
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**		SeqNo:	**1302360**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		105	70	130			

Sample ID	**MB-30783**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**30783**		RunNo:	**41527**				
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**		SeqNo:	**1302594**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		104	70	130			

Sample ID	**LCS-30783**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**30783**		RunNo:	**41527**				
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**		SeqNo:	**1302630**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703A01**

22-Mar-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-30800**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**30800**	RunNo:	**41546**					
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**	SeqNo:	**1303061**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	780		1000		78.3	54	150			

Sample ID	**LCS-30800**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**30800**	RunNo:	**41546**					
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**	SeqNo:	**1303062**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	76.4	125			
Surr: BFB	900		1000		90.0	54	150			

Sample ID	**MB-30782**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**30782**	RunNo:	**41546**					
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**	SeqNo:	**1303073**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	740		1000		73.8	54	150			

Sample ID	**LCS-30782**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**30782**	RunNo:	**41546**					
Prep Date:	**3/20/2017**	Analysis Date:	**3/21/2017**	SeqNo:	**1303076**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	870		1000		87.4	54	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1703A01 | RcptNo: 1

Received by/date: 03/20/17

Logged By: Lindsay Mangin 3/20/2017 12:04:00 PM

Completed By: Lindsay Mangin 3/20/2017 12:47:43 PM

Reviewed By: 03/20/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: ____ ____ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? ____
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: ____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: ____ Date ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Not Present			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian school Rd NE #200
Albuquerque NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush 24 hour

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler: C. Neligh

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1703A01	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
3-17-17	1537	S	S-082148-031717-CN-V11R	4oz Jar	N/A	-001			✓									
3-17-17	1601	S	S-082148-031717-CN-V13R	4oz Jar	N/A	-002			✓									
3-17-17	1630	S	S-082148-31717-CN-V10R	4oz Jar	N/A	-003			✓									

Date	Time	Relinquished by	Received by	Date	Time
3-20-17	0840		Melissa Cummings	3.20.17	840
3.20.17	1204	Melissa Cummings		03/20/17	1204

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 15, 2017

Bernie Bockish
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1706170

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 28 sample(s) on 6/3/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-5
Project: Jal Landfarm
Collection Date: 5/31/2017 9:20:00 AM
Lab ID: 1706170-001
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/7/2017 3:45:46 PM	32135
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 3:45:46 PM	32135
Surr: DNOP	96.1	70-130		%Rec	1	6/7/2017 3:45:46 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 10:04:36 AM	32134
Surr: BFB	106	54-150		%Rec	1	6/7/2017 10:04:36 AM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-6
Project: Jal Landfarm
Collection Date: 5/31/2017 9:40:00 AM
Lab ID: 1706170-002
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/7/2017 5:10:20 PM	32135
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2017 5:10:20 PM	32135
Surr: DNOP	80.9	70-130		%Rec	1	6/7/2017 5:10:20 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/7/2017 11:15:45 AM	32134
Surr: BFB	108	54-150		%Rec	1	6/7/2017 11:15:45 AM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-7
Project: Jal Landfarm
Collection Date: 5/31/2017 10:00:00 AM
Lab ID: 1706170-003
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/7/2017 5:38:55 PM	32135
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2017 5:38:55 PM	32135
Surr: DNOP	83.4	70-130		%Rec	1	6/7/2017 5:38:55 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/7/2017 11:39:30 AM	32134
Surr: BFB	108	54-150		%Rec	1	6/7/2017 11:39:30 AM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-8
Project: Jal Landfarm
Collection Date: 5/31/2017 11:00:00 AM
Lab ID: 1706170-004
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/7/2017 6:07:49 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 6:07:49 PM	32135
Surr: DNOP	117	70-130		%Rec	1	6/7/2017 6:07:49 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 12:03:13 PM	32134
Surr: BFB	107	54-150		%Rec	1	6/7/2017 12:03:13 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-9
Project: Jal Landfarm
Collection Date: 5/31/2017 12:00:00 PM
Lab ID: 1706170-005
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/7/2017 6:36:52 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 6:36:52 PM	32135
Surr: DNOP	74.6	70-130		%Rec	1	6/7/2017 6:36:52 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 12:26:55 PM	32134
Surr: BFB	107	54-150		%Rec	1	6/7/2017 12:26:55 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-10
Project: Jal Landfarm
Collection Date: 5/31/2017 2:20:00 PM
Lab ID: 1706170-006
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/7/2017 7:05:57 PM	32135
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 7:05:57 PM	32135
Surr: DNOP	76.2	70-130		%Rec	1	6/7/2017 7:05:57 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 12:50:34 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 12:50:34 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-11
Project: Jal Landfarm
Collection Date: 5/31/2017 3:00:00 PM
Lab ID: 1706170-007
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/7/2017 7:35:01 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 7:35:01 PM	32135
Surr: DNOP	71.4	70-130		%Rec	1	6/7/2017 7:35:01 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 1:14:17 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 1:14:17 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-12
Project: Jal Landfarm
Collection Date: 5/31/2017 3:45:00 PM
Lab ID: 1706170-008
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/8/2017 4:33:53 PM	32135
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/8/2017 4:33:53 PM	32135
Surr: DNOP	93.2	70-130		%Rec	1	6/8/2017 4:33:53 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 1:37:57 PM	32134
Surr: BFB	110	54-150		%Rec	1	6/7/2017 1:37:57 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-9
Project: Jal Landfarm
Collection Date: 6/1/2017 12:50:00 PM
Lab ID: 1706170-009
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 11:41:41 AM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/7/2017 8:33:11 PM	32135
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 8:33:11 PM	32135
Surr: DNOP	78.2	70-130		%Rec	1	6/7/2017 8:33:11 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 2:01:41 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 2:01:41 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	6/7/2017 2:01:41 PM	32134
Benzene	ND	0.024		mg/Kg	1	6/7/2017 2:01:41 PM	32134
Toluene	ND	0.048		mg/Kg	1	6/7/2017 2:01:41 PM	32134
Ethylbenzene	ND	0.048		mg/Kg	1	6/7/2017 2:01:41 PM	32134
Xylenes, Total	ND	0.096		mg/Kg	1	6/7/2017 2:01:41 PM	32134
Surr: 4-Bromofluorobenzene	106	66.6-132		%Rec	1	6/7/2017 2:01:41 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-10
Project: Jal Landfarm
Collection Date: 6/1/2017 1:10:00 PM
Lab ID: 1706170-010
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 12:18:55 PM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/8/2017 5:23:48 PM	32135
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/8/2017 5:23:48 PM	32135
Surr: DNOP	74.1	70-130		%Rec	1	6/8/2017 5:23:48 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 3:12:58 PM	32134
Surr: BFB	110	54-150		%Rec	1	6/7/2017 3:12:58 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	6/7/2017 3:12:58 PM	32134
Benzene	ND	0.024		mg/Kg	1	6/7/2017 3:12:58 PM	32134
Toluene	ND	0.048		mg/Kg	1	6/7/2017 3:12:58 PM	32134
Ethylbenzene	ND	0.048		mg/Kg	1	6/7/2017 3:12:58 PM	32134
Xylenes, Total	ND	0.097		mg/Kg	1	6/7/2017 3:12:58 PM	32134
Surr: 4-Bromofluorobenzene	109	66.6-132		%Rec	1	6/7/2017 3:12:58 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-11
Project: Jal Landfarm
Collection Date: 6/1/2017 3:00:00 PM
Lab ID: 1706170-011
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 2:22:08 PM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/8/2017 6:14:17 PM	32135
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/8/2017 6:14:17 PM	32135
Surr: DNOP	88.8	70-130		%Rec	1	6/8/2017 6:14:17 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 5:11:22 PM	32134
Surr: BFB	110	54-150		%Rec	1	6/7/2017 5:11:22 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	6/7/2017 5:11:22 PM	32134
Benzene	ND	0.024		mg/Kg	1	6/7/2017 5:11:22 PM	32134
Toluene	ND	0.049		mg/Kg	1	6/7/2017 5:11:22 PM	32134
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2017 5:11:22 PM	32134
Xylenes, Total	ND	0.097		mg/Kg	1	6/7/2017 5:11:22 PM	32134
Surr: 4-Bromofluorobenzene	109	66.6-132		%Rec	1	6/7/2017 5:11:22 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-12
Project: Jal Landfarm
Collection Date: 6/1/2017 3:20:00 PM
Lab ID: 1706170-012
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 2:34:32 PM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/7/2017 6:32:43 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 6:32:43 PM	32135
Surr: DNOP	84.0	70-130		%Rec	1	6/7/2017 6:32:43 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/7/2017 5:35:02 PM	32134
Surr: BFB	108	54-150		%Rec	1	6/7/2017 5:35:02 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	6/7/2017 5:35:02 PM	32134
Benzene	ND	0.023		mg/Kg	1	6/7/2017 5:35:02 PM	32134
Toluene	ND	0.046		mg/Kg	1	6/7/2017 5:35:02 PM	32134
Ethylbenzene	ND	0.046		mg/Kg	1	6/7/2017 5:35:02 PM	32134
Xylenes, Total	ND	0.092		mg/Kg	1	6/7/2017 5:35:02 PM	32134
Surr: 4-Bromofluorobenzene	107	66.6-132		%Rec	1	6/7/2017 5:35:02 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-13
Project: Jal Landfarm
Collection Date: 6/1/2017 3:40:00 PM
Lab ID: 1706170-013
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 2:46:56 PM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/7/2017 6:55:22 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 6:55:22 PM	32135
Surr: DNOP	100	70-130		%Rec	1	6/7/2017 6:55:22 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/7/2017 5:58:39 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 5:58:39 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	6/7/2017 5:58:39 PM	32134
Benzene	ND	0.023		mg/Kg	1	6/7/2017 5:58:39 PM	32134
Toluene	ND	0.046		mg/Kg	1	6/7/2017 5:58:39 PM	32134
Ethylbenzene	ND	0.046		mg/Kg	1	6/7/2017 5:58:39 PM	32134
Xylenes, Total	ND	0.093		mg/Kg	1	6/7/2017 5:58:39 PM	32134
Surr: 4-Bromofluorobenzene	107	66.6-132		%Rec	1	6/7/2017 5:58:39 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-14
Project: Jal Landfarm
Collection Date: 6/1/2017 3:50:00 PM
Lab ID: 1706170-014
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 2:59:21 PM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/7/2017 7:17:43 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 7:17:43 PM	32135
Surr: DNOP	76.5	70-130		%Rec	1	6/7/2017 7:17:43 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/7/2017 6:22:16 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 6:22:16 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	6/7/2017 6:22:16 PM	32134
Benzene	ND	0.023		mg/Kg	1	6/7/2017 6:22:16 PM	32134
Toluene	ND	0.047		mg/Kg	1	6/7/2017 6:22:16 PM	32134
Ethylbenzene	ND	0.047		mg/Kg	1	6/7/2017 6:22:16 PM	32134
Xylenes, Total	ND	0.094		mg/Kg	1	6/7/2017 6:22:16 PM	32134
Surr: 4-Bromofluorobenzene	108	66.6-132		%Rec	1	6/7/2017 6:22:16 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-15
Project: Jal Landfarm
Collection Date: 6/1/2017 4:00:00 PM
Lab ID: 1706170-015
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 3:11:46 PM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/7/2017 7:40:12 PM	32135
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2017 7:40:12 PM	32135
Surr: DNOP	79.0	70-130		%Rec	1	6/7/2017 7:40:12 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2017 6:45:58 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 6:45:58 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	6/7/2017 6:45:58 PM	32134
Benzene	ND	0.025		mg/Kg	1	6/7/2017 6:45:58 PM	32134
Toluene	ND	0.050		mg/Kg	1	6/7/2017 6:45:58 PM	32134
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2017 6:45:58 PM	32134
Xylenes, Total	ND	0.099		mg/Kg	1	6/7/2017 6:45:58 PM	32134
Surr: 4-Bromofluorobenzene	107	66.6-132		%Rec	1	6/7/2017 6:45:58 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-DUP-V
Project: Jal Landfarm
Collection Date: 6/1/2017 4:20:00 PM
Lab ID: 1706170-016
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 3:24:10 PM	32151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/7/2017 8:02:37 PM	32135
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2017 8:02:37 PM	32135
Surr: DNOP	78.0	70-130		%Rec	1	6/7/2017 8:02:37 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/7/2017 7:09:35 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 7:09:35 PM	32134
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	6/7/2017 7:09:35 PM	32134
Benzene	ND	0.023		mg/Kg	1	6/7/2017 7:09:35 PM	32134
Toluene	ND	0.046		mg/Kg	1	6/7/2017 7:09:35 PM	32134
Ethylbenzene	ND	0.046		mg/Kg	1	6/7/2017 7:09:35 PM	32134
Xylenes, Total	ND	0.092		mg/Kg	1	6/7/2017 7:09:35 PM	32134
Surr: 4-Bromofluorobenzene	107	66.6-132		%Rec	1	6/7/2017 7:09:35 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053017-MG-B-1
Project: Jal Landfarm
Collection Date: 5/30/2017 3:00:00 PM
Lab ID: 1706170-017
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/7/2017 8:25:05 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 8:25:05 PM	32135
Surr: DNOP	80.9	70-130		%Rec	1	6/7/2017 8:25:05 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 7:33:16 PM	32134
Surr: BFB	110	54-150		%Rec	1	6/7/2017 7:33:16 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053017-MG-B-2
Project: Jal Landfarm
Collection Date: 5/30/2017 3:25:00 PM
Lab ID: 1706170-018
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2017 8:47:41 PM	32135
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 8:47:41 PM	32135
Surr: DNOP	74.3	70-130		%Rec	1	6/7/2017 8:47:41 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2017 7:56:50 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 7:56:50 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053017-MG-B-3
Project: Jal Landfarm
Collection Date: 5/30/2017 3:55:00 PM
Lab ID: 1706170-019
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/7/2017 9:10:15 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 9:10:15 PM	32135
Surr: DNOP	71.0	70-130		%Rec	1	6/7/2017 9:10:15 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 8:20:25 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 8:20:25 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-053117-MG-B-4
Project: Jal Landfarm
Collection Date: 5/31/2017 8:50:00 AM
Lab ID: 1706170-020
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/8/2017 7:04:49 PM	32135
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/8/2017 7:04:49 PM	32135
Surr: DNOP	39.1	70-130	S	%Rec	1	6/8/2017 7:04:49 PM	32135
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/7/2017 8:44:05 PM	32134
Surr: BFB	109	54-150		%Rec	1	6/7/2017 8:44:05 PM	32134

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-1
Project: Jal Landfarm
Collection Date: 6/1/2017 9:20:00 AM
Lab ID: 1706170-021
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 3:36:34 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/7/2017 1:09:30 PM	32137
Surr: BFB	91.4	70-130		%Rec	1	6/7/2017 1:09:30 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/7/2017 3:34:26 PM	32127
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 3:34:26 PM	32127
Surr: DNOP	92.1	70-130		%Rec	1	6/7/2017 3:34:26 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	6/7/2017 1:09:30 PM	32137
Benzene	ND	0.024		mg/Kg	1	6/7/2017 1:09:30 PM	32137
Toluene	ND	0.047		mg/Kg	1	6/7/2017 1:09:30 PM	32137
Ethylbenzene	ND	0.047		mg/Kg	1	6/7/2017 1:09:30 PM	32137
Xylenes, Total	ND	0.094		mg/Kg	1	6/7/2017 1:09:30 PM	32137
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	6/7/2017 1:09:30 PM	32137
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/7/2017 1:09:30 PM	32137
Surr: Dibromofluoromethane	122	70-130		%Rec	1	6/7/2017 1:09:30 PM	32137
Surr: Toluene-d8	112	70-130		%Rec	1	6/7/2017 1:09:30 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-2
Project: Jal Landfarm
Collection Date: 6/1/2017 9:50:00 AM
Lab ID: 1706170-022
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 3:48:58 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 2:36:57 PM	32137
Surr: BFB	90.8	70-130		%Rec	1	6/7/2017 2:36:57 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/7/2017 3:56:50 PM	32127
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 3:56:50 PM	32127
Surr: DNOP	92.6	70-130		%Rec	1	6/7/2017 3:56:50 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	6/7/2017 2:36:57 PM	32137
Benzene	ND	0.025		mg/Kg	1	6/7/2017 2:36:57 PM	32137
Toluene	ND	0.049		mg/Kg	1	6/7/2017 2:36:57 PM	32137
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2017 2:36:57 PM	32137
Xylenes, Total	ND	0.098		mg/Kg	1	6/7/2017 2:36:57 PM	32137
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	6/7/2017 2:36:57 PM	32137
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/7/2017 2:36:57 PM	32137
Surr: Dibromofluoromethane	121	70-130		%Rec	1	6/7/2017 2:36:57 PM	32137
Surr: Toluene-d8	108	70-130		%Rec	1	6/7/2017 2:36:57 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-3
Project: Jal Landfarm
Collection Date: 6/1/2017 10:20:00 AM
Lab ID: 1706170-023
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 4:01:23 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2017 4:04:47 PM	32137
Surr: BFB	93.8	70-130		%Rec	1	6/7/2017 4:04:47 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/7/2017 4:18:51 PM	32127
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2017 4:18:51 PM	32127
Surr: DNOP	85.5	70-130		%Rec	1	6/7/2017 4:18:51 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	6/7/2017 4:04:47 PM	32137
Benzene	ND	0.025		mg/Kg	1	6/7/2017 4:04:47 PM	32137
Toluene	ND	0.050		mg/Kg	1	6/7/2017 4:04:47 PM	32137
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2017 4:04:47 PM	32137
Xylenes, Total	ND	0.099		mg/Kg	1	6/7/2017 4:04:47 PM	32137
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	6/7/2017 4:04:47 PM	32137
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	6/7/2017 4:04:47 PM	32137
Surr: Dibromofluoromethane	120	70-130		%Rec	1	6/7/2017 4:04:47 PM	32137
Surr: Toluene-d8	112	70-130		%Rec	1	6/7/2017 4:04:47 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-4
Project: Jal Landfarm
Collection Date: 6/1/2017 10:45:00 AM
Lab ID: 1706170-024
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 4:13:48 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 4:33:52 PM	32137
Surr: BFB	91.4	70-130		%Rec	1	6/7/2017 4:33:52 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2017 4:41:01 PM	32127
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 4:41:01 PM	32127
Surr: DNOP	92.0	70-130		%Rec	1	6/7/2017 4:41:01 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	6/7/2017 4:33:52 PM	32137
Benzene	ND	0.024		mg/Kg	1	6/7/2017 4:33:52 PM	32137
Toluene	ND	0.048		mg/Kg	1	6/7/2017 4:33:52 PM	32137
Ethylbenzene	ND	0.048		mg/Kg	1	6/7/2017 4:33:52 PM	32137
Xylenes, Total	ND	0.096		mg/Kg	1	6/7/2017 4:33:52 PM	32137
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	6/7/2017 4:33:52 PM	32137
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/7/2017 4:33:52 PM	32137
Surr: Dibromofluoromethane	117	70-130		%Rec	1	6/7/2017 4:33:52 PM	32137
Surr: Toluene-d8	109	70-130		%Rec	1	6/7/2017 4:33:52 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-5
Project: Jal Landfarm
Collection Date: 6/1/2017 11:00:00 AM
Lab ID: 1706170-025
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 4:51:02 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 5:02:48 PM	32137
Surr: BFB	95.7	70-130		%Rec	1	6/7/2017 5:02:48 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/7/2017 5:02:58 PM	32127
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 5:02:58 PM	32127
Surr: DNOP	88.6	70-130		%Rec	1	6/7/2017 5:02:58 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	6/7/2017 5:02:48 PM	32137
Benzene	ND	0.024		mg/Kg	1	6/7/2017 5:02:48 PM	32137
Toluene	ND	0.049		mg/Kg	1	6/7/2017 5:02:48 PM	32137
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2017 5:02:48 PM	32137
Xylenes, Total	ND	0.097		mg/Kg	1	6/7/2017 5:02:48 PM	32137
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	6/7/2017 5:02:48 PM	32137
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/7/2017 5:02:48 PM	32137
Surr: Dibromofluoromethane	115	70-130		%Rec	1	6/7/2017 5:02:48 PM	32137
Surr: Toluene-d8	109	70-130		%Rec	1	6/7/2017 5:02:48 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-6
Project: Jal Landfarm
Collection Date: 6/1/2017 11:45:00 AM
Lab ID: 1706170-026
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 5:03:27 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2017 5:31:44 PM	32137
Surr: BFB	90.5	70-130		%Rec	1	6/7/2017 5:31:44 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/7/2017 5:25:21 PM	32127
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2017 5:25:21 PM	32127
Surr: DNOP	88.8	70-130		%Rec	1	6/7/2017 5:25:21 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	6/7/2017 5:31:44 PM	32137
Benzene	ND	0.024		mg/Kg	1	6/7/2017 5:31:44 PM	32137
Toluene	ND	0.049		mg/Kg	1	6/7/2017 5:31:44 PM	32137
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2017 5:31:44 PM	32137
Xylenes, Total	ND	0.098		mg/Kg	1	6/7/2017 5:31:44 PM	32137
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	6/7/2017 5:31:44 PM	32137
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	6/7/2017 5:31:44 PM	32137
Surr: Dibromofluoromethane	120	70-130		%Rec	1	6/7/2017 5:31:44 PM	32137
Surr: Toluene-d8	108	70-130		%Rec	1	6/7/2017 5:31:44 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-7
Project: Jal Landfarm
Collection Date: 6/1/2017 12:05:00 PM
Lab ID: 1706170-027
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 5:15:52 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2017 6:00:36 PM	32137
Surr: BFB	90.3	70-130		%Rec	1	6/7/2017 6:00:36 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/7/2017 5:47:37 PM	32127
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2017 5:47:37 PM	32127
Surr: DNOP	91.0	70-130		%Rec	1	6/7/2017 5:47:37 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	6/7/2017 6:00:36 PM	32137
Benzene	ND	0.024		mg/Kg	1	6/7/2017 6:00:36 PM	32137
Toluene	ND	0.048		mg/Kg	1	6/7/2017 6:00:36 PM	32137
Ethylbenzene	ND	0.048		mg/Kg	1	6/7/2017 6:00:36 PM	32137
Xylenes, Total	ND	0.096		mg/Kg	1	6/7/2017 6:00:36 PM	32137
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	6/7/2017 6:00:36 PM	32137
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/7/2017 6:00:36 PM	32137
Surr: Dibromofluoromethane	112	70-130		%Rec	1	6/7/2017 6:00:36 PM	32137
Surr: Toluene-d8	111	70-130		%Rec	1	6/7/2017 6:00:36 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: 082148-060117-MG-V-8
Project: Jal Landfarm
Collection Date: 6/1/2017 12:25:00 PM
Lab ID: 1706170-028
Matrix: SOIL
Received Date: 6/3/2017 10:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	6/7/2017 5:28:16 PM	32151
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/7/2017 6:29:31 PM	32137
Surr: BFB	92.3	70-130		%Rec	1	6/7/2017 6:29:31 PM	32137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/7/2017 6:10:15 PM	32127
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/7/2017 6:10:15 PM	32127
Surr: DNOP	88.1	70-130		%Rec	1	6/7/2017 6:10:15 PM	32127
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	6/7/2017 6:29:31 PM	32137
Benzene	ND	0.024		mg/Kg	1	6/7/2017 6:29:31 PM	32137
Toluene	ND	0.047		mg/Kg	1	6/7/2017 6:29:31 PM	32137
Ethylbenzene	ND	0.047		mg/Kg	1	6/7/2017 6:29:31 PM	32137
Xylenes, Total	ND	0.095		mg/Kg	1	6/7/2017 6:29:31 PM	32137
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	6/7/2017 6:29:31 PM	32137
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/7/2017 6:29:31 PM	32137
Surr: Dibromofluoromethane	118	70-130		%Rec	1	6/7/2017 6:29:31 PM	32137
Surr: Toluene-d8	109	70-130		%Rec	1	6/7/2017 6:29:31 PM	32137

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-32151**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**32151**	RunNo:	**43316**					
Prep Date:	**6/7/2017**	Analysis Date:	**6/7/2017**	SeqNo:	**1363806**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-32151**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**32151**	RunNo:	**43316**					
Prep Date:	**6/7/2017**	Analysis Date:	**6/7/2017**	SeqNo:	**1363807**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-32127**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **32127**			RunNo: **43305**					
Prep Date:	**6/6/2017**	Analysis Date: **6/7/2017**			SeqNo: **1363486**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.4	73.2	114			
Surr: DNOP	3.6		5.000		72.1	70	130			

Sample ID	**MB-32127**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **32127**			RunNo: **43305**					
Prep Date:	**6/6/2017**	Analysis Date: **6/7/2017**			SeqNo: **1363487**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.1		10.00		80.6	70	130			

Sample ID	**MB-32135**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **32135**			RunNo: **43306**					
Prep Date:	**6/6/2017**	Analysis Date: **6/7/2017**			SeqNo: **1363836**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.3		10.00		83.1	70	130			

Sample ID	**1706170-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**082148-053117-MG-**	Batch ID: **32135**			RunNo: **43306**					
Prep Date:	**6/6/2017**	Analysis Date: **6/7/2017**			SeqNo: **1364352**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.3	46.69	0	105	55.8	122			
Surr: DNOP	4.3		4.669		92.5	70	130			

Sample ID	**1706170-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**082148-053117-MG-**	Batch ID: **32135**			RunNo: **43306**					
Prep Date:	**6/6/2017**	Analysis Date: **6/7/2017**			SeqNo: **1364353**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	49.95	0	114	55.8	122	14.8	20	
Surr: DNOP	4.8		4.995		95.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-32135**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**
Client ID:	**LCSS**	Batch ID:	**32135**	RunNo:	**43306**
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**	SeqNo:	**1364364** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	103	73.2	114			
Surr: DNOP	4.6		5.000		91.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-32134**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**32134**		RunNo:	**43318**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364094**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		106	54	150			

Sample ID	**LCS-32134**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**32134**		RunNo:	**43318**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364095**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	76.4	125			
Surr: BFB	1200		1000		119	54	150			

Sample ID	**1706170-001AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**082148-053117-MG-**	Batch ID:	**32134**		RunNo:	**43318**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364097**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.6	23.00	0	109	77.8	128			
Surr: BFB	1100		920.0		121	54	150			

Sample ID	**1706170-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**082148-053117-MG-**	Batch ID:	**32134**		RunNo:	**43318**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364098**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	23.92	0	108	77.8	128	3.02	20	
Surr: BFB	1200		956.9		123	54	150	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID **MB-32134**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **32134**	RunNo: **43318**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364121** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	66.6	132			

Sample ID **LCS-32134**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **32134**	RunNo: **43318**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364122** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.93	0.10	1.000	0	93.2	66.5	120			
Benzene	1.0	0.025	1.000	0	105	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	66.6	132			

Sample ID **1706170-009AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **082148-060117-MG-**	Batch ID: **32134**	RunNo: **43318**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364124** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.096	0.9606	0	107	42.5	143			
Benzene	1.1	0.024	0.9606	0	116	61.5	138			
Toluene	1.1	0.048	0.9606	0	118	71.4	127			
Ethylbenzene	1.1	0.048	0.9606	0	118	70.9	132			
Xylenes, Total	3.4	0.096	2.882	0	118	76.2	123			
Surr: 4-Bromofluorobenzene	1.1		0.9606		111	66.6	132			

Sample ID **1706170-009AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **082148-060117-MG-**	Batch ID: **32134**	RunNo: **43318**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364125** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.092	0.9234	0	116	42.5	143	4.19	20	
Benzene	1.1	0.023	0.9234	0	123	61.5	138	1.99	20	
Toluene	1.1	0.046	0.9234	0	122	71.4	127	0.442	20	
Ethylbenzene	1.1	0.046	0.9234	0	123	70.9	132	0.226	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID	**1706170-009AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**082148-060117-MG-**	Batch ID:	**32134**	RunNo:	**43318**
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**	SeqNo:	**1364125** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.4	0.092	2.770	0	122	76.2	123	0.884	20	
Surr: 4-Bromofluorobenzene	1.0		0.9234		113	66.6	132	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID **mb-32137**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **32137**	RunNo: **43336**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364427** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.050								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.55		0.5000		109	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.59		0.5000		117	70	130			
Surr: Toluene-d8	0.55		0.5000		110	70	130			

Sample ID **lcs-32137**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **32137**	RunNo: **43336**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364428** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.050	1.000	0	113	70	130			
Benzene	1.1	0.025	1.000	0	108	70	130			
Toluene	1.1	0.050	1.000	0	107	70	130			
Ethylbenzene	0.98	0.050	1.000	0	98.3	70	130			
Xylenes, Total	2.9	0.10	3.000	0	97.3	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.57		0.5000		114	70	130			

Sample ID **1706170-022ams**	SampType: **MS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **082148-060117-MG-**	Batch ID: **32137**	RunNo: **43336**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364438** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.3	0.049	0.9862	0	129	70	130			
Benzene	1.2	0.025	0.9862	0	118	70	130			
Toluene	1.2	0.049	0.9862	0.006951	119	70	130			
Ethylbenzene	1.1	0.049	0.9862	0	111	70	130			
Xylenes, Total	3.3	0.099	2.959	0	111	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.4931		110	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.4931		97.9	70	130			
Surr: Dibromofluoromethane	0.59		0.4931		120	70	130			
Surr: Toluene-d8	0.57		0.4931		115	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID **1706170-022amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **082148-060117-MG-**	Batch ID: **32137**	RunNo: **43336**
Prep Date: **6/6/2017**	Analysis Date: **6/7/2017**	SeqNo: **1364439** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.3	0.048	0.9606	0	132	70	130	0.281	0	S
Benzene	1.1	0.024	0.9606	0	119	70	130	2.20	20	
Toluene	1.1	0.048	0.9606	0.006951	118	70	130	3.46	20	
Ethylbenzene	1.1	0.048	0.9606	0	110	70	130	3.62	0	
Xylenes, Total	3.1	0.096	2.882	0	109	70	130	5.03	0	
Surr: 1,2-Dichloroethane-d4	0.52		0.4803		107	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.46		0.4803		95.2	70	130	0	0	
Surr: Dibromofluoromethane	0.55		0.4803		115	70	130	0	0	
Surr: Toluene-d8	0.54		0.4803		112	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706170**

15-Jun-17

Client: GHD

Project: Jal Landfarm

Sample ID	**mb-32137**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**32137**		RunNo:	**43336**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364496**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	470		500.0		93.7	70	130			

Sample ID	**1706170-021ams**	SampType:	**MS**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**082148-060117-MG-**	Batch ID:	**32137**		RunNo:	**43336**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364506**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	4.6	23.02	1.836	125	63.2	128			
Surr: BFB	420		460.4		91.8	70	130			

Sample ID	**1706170-021amsd**	SampType:	**MSD**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**082148-060117-MG-**	Batch ID:	**32137**		RunNo:	**43336**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364508**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.7	23.26	1.836	135	63.2	128	8.16	20	S
Surr: BFB	430		465.1		93.4	70	130	0	0	

Sample ID	**lcs-32137**	SampType:	**LCS**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**32137**		RunNo:	**43336**				
Prep Date:	**6/6/2017**	Analysis Date:	**6/7/2017**		SeqNo:	**1364820**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	5.0	25.00	0	122	70	130			
Surr: BFB	460		500.0		92.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1706170 | RcptNo: 1

Received By: Anne Thorne | 6/3/2017 ~~9:15:00 AM~~ 10:40 | Anne Thorne

Completed By: Richie Eriacho | 6/5/2017 1:08:17 PM | RE

Reviewed By: SRE 06/05/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good				

Chain-of-Custody Record

Client: GHD Services, Inc.

Mailing Address: 6121 Indian School Rd NE Ste 200 Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1706170	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
5/31/17	0920	S	S-082148-053117-MG-B-5	4oz Soil Jar	ICE	-001			X								X	
5/31/17	0940	S	S-082148-053117-MG-B-6			-002			X								X	
5/31/17	1000	S	S-082148-053117-MG-B-7			-003			X								X	
5/31/17	1100	S	S-082148-053117-MG-B-8			-004			X								X	
5/31/17	1200	S	S-082148-053117-MG-B-9			-005			X								X	
5/31/17	1420	S	S-082148-053117-MG-B-10			-006			X								X	
5/31/17	1500	S	S-082148-053117-MG-B-11			-007			X								X	
5/31/17	1545	S	S-082148-053117-MG-B-12			-008			X								X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/2/17	915			6/2/17	0915
6/2/17	1400			06/03/17	1040

Remarks: B= background composite sample

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services, Inc

Mailing Address: 6121 Indian School Rd NE Ste 200 Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler:

On Ice: X Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1706170	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.1)				Air Bubbles (Y or N)
6/1/17	1250	S	S-082148-060117-MG-V-9	4oz Soil Jar	ICE	-009	X		X									X				
6/1/17	1310	S	S-082148-060117-MG-V10			-010	X		X									X				
6/1/17	1500	S	S-082148-060117-MG-V-11			-011	X		X									X				
6/1/17	1520	S	S-082148-060117-MG-V-12			-012	X		X									X				
6/1/17	1540	S	S-082148-060117-MG-V-13			-013	X		X									X				
6/1/17	1550	S	S-082148-060117-MG-V-14			-014	X		X									X				
6/1/17	1600	S	S-082148-060117-MG-V-15			-015	X		X									X				
6/1/17	1620	S	S-082148-060117-MG-DUP-V			-016	X		X									X				
5/30/17	1500	S	S-082148-053017-MG-B-1			-017			X													
5/30/17	1525	S	S-082148-053017-MG-B-2			-018			X													
5/30/17	1555	S	S-082148-053017-MG-B-3			-019			X													
5/31/17	0850	S	S-082148-053117-MG-B-4			-020			X													

Date	Time	Relinquished by:	Received by:	Date	Time
6/2/17	9:15			6/2/17	0915
6/2/17	0900			06/03/17	1040

Remarks:
V= vadose zone sample
B= background composite sample

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services, Inc.

Mailing Address: 6121 Indian School Rd Ste200 NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1706170	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (SOIL)				Air Bubbles (Y or N)
6/1/17	1545	S	S-082148-060117-MG-T-13	4oz Soil Jar	ICE				X									X				
6/1/17	1555	S	S-082148-060117-MG-T-14						X									X				
6/1/17	1605	S	S-082148-060117-MG-T-15						X									X				
6/1/17	1625	S	S-082148-060117-MG-DUPT						X									X				
6/1/17	0920	S	S-082148-060117-MG-V-1			-021	X		X									X				
6/1/17	0950	S	S-082148-060117-MG-V-2			-022	X		X									X				
6/1/17	1020	S	S-082148-060117-MG-V-3			-023	X		X									X				
6/1/17	1045	S	S-082148-060117-MG-V-4			-024	X		X									X				
6/1/17	1100	S	S-082148-060117-MG-V-5			-025	X		X									X				
6/1/17	1145	S	S-082148-060117-MG-V-6			-026	X		X									X				
6/1/17	1205	S	S-082148-060117-MG-V-7			-027	X		X									X				
6/1/17	1225	S	S-082148-060117-MG-V-8			-028	X		X									X				

Date: 6/2/17 Time: 915 Relinquished by: Received by: Date: 6/2/17 Time: 0915

Date: 6/2/17 Time: 1900 Relinquished by: Received by: Date: 06/03/17 Time: 1040

Remarks:
T = treatment zone composite sample
V = vadose zone ~~composite~~ sample

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services, Inc.

Mailing Address: 6121 Indian School Rd Ste 200 NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)				Air Bubbles (Y or N)
~~6/1/17~~																						
6/1/17	0940	S	S-082148-060117-MG-T-1	4oz Soil Jar	ICE				X									X				
6/1/17	0955	S	S-082148-060117-MG-T-2						X									X				
6/1/17	1015	S	S-082148-060117-MG-T-3						X									X				
6/1/17	1050	S	S-082148-060117-MG-T-4			Cancel			X									X				
6/1/17	1100	S	S-082148-060117-MG-T-5			All			X									X				
6/1/17	1140	S	S-082148-060117-MG-T-6			per			X									X				
6/1/17	1200	S	S-082148-060117-MG-T-7			Christa			X									X				
6/1/17	1220	S	S-082148-060117-MG-T-8			6/6/17			X									X				
6/1/17	1255	S	S-082148-060117-MG-T-9						X									X				
6/1/17	1315	S	S-082148-060117-MG-T-10						X									X				
6/1/17	1505	S	S-082148-060117-MG-T-11						X									X				
6/1/17	1525	S	S-082148-060117-MG-T-12						X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/2/17	915			6/2/17	0915
6/2/17	1900			06/03/17	0840

Remarks:
T = treatment zone composite sample

If necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 04, 2017

Bernie Bockisch

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1709C71

Dear Bernie Bockisch:

Hall Environmental Analysis Laboratory received 30 sample(s) on 9/22/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-001 **Collection Date:** 9/21/2017 9:20:00 AM
Client Sample ID: S-082148-092117-SP-V1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/26/2017 3:41:57 PM	34050
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/26/2017 3:41:57 PM	34050
Surr: DNOP	106	70-130		%Rec	1	9/26/2017 3:41:57 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2017 2:37:06 AM	34033
Surr: BFB	88.0	54-150		%Rec	1	9/27/2017 2:37:06 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/27/2017 2:37:06 AM	34033
Toluene	ND	0.047		mg/Kg	1	9/27/2017 2:37:06 AM	34033
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2017 2:37:06 AM	34033
Xylenes, Total	ND	0.094		mg/Kg	1	9/27/2017 2:37:06 AM	34033
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	9/27/2017 2:37:06 AM	34033

Lab ID: 1709C71-002 **Collection Date:** 9/21/2017 9:25:00 AM
Client Sample ID: S-082148-092117-SP-T1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 3:58:02 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	100	9.7		mg/Kg	1	9/27/2017 12:05:01 PM	34050
Motor Oil Range Organics (MRO)	290	48		mg/Kg	1	9/27/2017 12:05:01 PM	34050
Surr: DNOP	117	70-130		%Rec	1	9/27/2017 12:05:01 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/27/2017 3:00:38 AM	34033
Surr: BFB	87.0	54-150		%Rec	1	9/27/2017 3:00:38 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 3:00:38 AM	34033
Toluene	ND	0.048		mg/Kg	1	9/27/2017 3:00:38 AM	34033
Ethylbenzene	ND	0.048		mg/Kg	1	9/27/2017 3:00:38 AM	34033
Xylenes, Total	ND	0.096		mg/Kg	1	9/27/2017 3:00:38 AM	34033
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	9/27/2017 3:00:38 AM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1709C71

Lab ID: 1709C71-003 **Collection Date:** 9/21/2017 9:40:00 AM
Client Sample ID: S-082148-092117-SP-T2 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 4:10:27 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	39	9.8		mg/Kg	1	9/27/2017 12:27:08 PM	34050
Motor Oil Range Organics (MRO)	200	49		mg/Kg	1	9/27/2017 12:27:08 PM	34050
Surr: DNOP	99.1	70-130		%Rec	1	9/27/2017 12:27:08 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2017 3:24:10 AM	34033
Surr: BFB	87.4	54-150		%Rec	1	9/27/2017 3:24:10 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 3:24:10 AM	34033
Toluene	ND	0.047		mg/Kg	1	9/27/2017 3:24:10 AM	34033
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2017 3:24:10 AM	34033
Xylenes, Total	ND	0.094		mg/Kg	1	9/27/2017 3:24:10 AM	34033
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	9/27/2017 3:24:10 AM	34033

Lab ID: 1709C71-004 **Collection Date:** 9/21/2017 10:00:00 AM
Client Sample ID: S-082148-092117-SP-V2 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/26/2017 5:32:32 PM	34050
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/26/2017 5:32:32 PM	34050
Surr: DNOP	108	70-130		%Rec	1	9/26/2017 5:32:32 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/27/2017 3:47:31 AM	34033
Surr: BFB	88.8	54-150		%Rec	1	9/27/2017 3:47:31 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 3:47:31 AM	34033
Toluene	ND	0.048		mg/Kg	1	9/27/2017 3:47:31 AM	34033
Ethylbenzene	ND	0.048		mg/Kg	1	9/27/2017 3:47:31 AM	34033
Xylenes, Total	ND	0.095		mg/Kg	1	9/27/2017 3:47:31 AM	34033
Surr: 4-Bromofluorobenzene	102	66.6-132		%Rec	1	9/27/2017 3:47:31 AM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1709C71

Lab ID: 1709C71-005 **Collection Date:** 9/21/2017 10:19:00 AM
Client Sample ID: S-082148-092117-SP-V3 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/26/2017 5:54:54 PM	34050
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/26/2017 5:54:54 PM	34050
Surr: DNOP	106	70-130		%Rec	1	9/26/2017 5:54:54 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2017 4:10:58 AM	34033
Surr: BFB	87.8	54-150		%Rec	1	9/27/2017 4:10:58 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 4:10:58 AM	34033
Toluene	ND	0.047		mg/Kg	1	9/27/2017 4:10:58 AM	34033
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2017 4:10:58 AM	34033
Xylenes, Total	ND	0.094		mg/Kg	1	9/27/2017 4:10:58 AM	34033
Surr: 4-Bromofluorobenzene	102	66.6-132		%Rec	1	9/27/2017 4:10:58 AM	34033

Lab ID: 1709C71-006 **Collection Date:** 9/21/2017 10:20:00 AM
Client Sample ID: S-082148-092117-SP-T3 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 4:47:40 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	850	96		mg/Kg	10	9/26/2017 6:17:04 PM	34050
Motor Oil Range Organics (MRO)	1600	480		mg/Kg	10	9/26/2017 6:17:04 PM	34050
Surr: DNOP	0	70-130	S	%Rec	10	9/26/2017 6:17:04 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2017 10:29:49 PM	34033
Surr: BFB	88.0	54-150		%Rec	1	9/27/2017 10:29:49 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/27/2017 10:29:49 PM	34033
Toluene	ND	0.047		mg/Kg	1	9/27/2017 10:29:49 PM	34033
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2017 10:29:49 PM	34033
Xylenes, Total	ND	0.094		mg/Kg	1	9/27/2017 10:29:49 PM	34033
Surr: 4-Bromofluorobenzene	102	66.6-132		%Rec	1	9/27/2017 10:29:49 PM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1709C71

Lab ID: 1709C71-007 **Collection Date:** 9/21/2017 10:33:00 AM
Client Sample ID: S-082148-092117-SP-T4 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 5:00:05 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	180	9.5		mg/Kg	1	9/27/2017 12:49:06 PM	34050
Motor Oil Range Organics (MRO)	390	48		mg/Kg	1	9/27/2017 12:49:06 PM	34050
Surr: DNOP	107	70-130		%Rec	1	9/27/2017 12:49:06 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/27/2017 10:53:15 PM	34033
Surr: BFB	86.5	54-150		%Rec	1	9/27/2017 10:53:15 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 10:53:15 PM	34033
Toluene	ND	0.049		mg/Kg	1	9/27/2017 10:53:15 PM	34033
Ethylbenzene	ND	0.049		mg/Kg	1	9/27/2017 10:53:15 PM	34033
Xylenes, Total	ND	0.097		mg/Kg	1	9/27/2017 10:53:15 PM	34033
Surr: 4-Bromofluorobenzene	99.3	66.6-132		%Rec	1	9/27/2017 10:53:15 PM	34033

Lab ID: 1709C71-008 **Collection Date:** 9/21/2017 10:35:00 AM
Client Sample ID: S-082148-092117-SP-V4 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/26/2017 7:01:36 PM	34050
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/26/2017 7:01:36 PM	34050
Surr: DNOP	94.2	70-130		%Rec	1	9/26/2017 7:01:36 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/27/2017 11:16:44 PM	34033
Surr: BFB	89.0	54-150		%Rec	1	9/27/2017 11:16:44 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 11:16:44 PM	34033
Toluene	ND	0.048		mg/Kg	1	9/27/2017 11:16:44 PM	34033
Ethylbenzene	ND	0.048		mg/Kg	1	9/27/2017 11:16:44 PM	34033
Xylenes, Total	ND	0.096		mg/Kg	1	9/27/2017 11:16:44 PM	34033
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	9/27/2017 11:16:44 PM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1709C71

Lab ID: 1709C71-009 **Collection Date:** 9/21/2017 11:05:00 AM
Client Sample ID: S-082148-092117-SP-V5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/26/2017 7:23:56 PM	34050
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/26/2017 7:23:56 PM	34050
Surr: DNOP	107	70-130		%Rec	1	9/26/2017 7:23:56 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/27/2017 11:40:02 PM	34033
Surr: BFB	87.1	54-150		%Rec	1	9/27/2017 11:40:02 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/27/2017 11:40:02 PM	34033
Toluene	ND	0.046		mg/Kg	1	9/27/2017 11:40:02 PM	34033
Ethylbenzene	ND	0.046		mg/Kg	1	9/27/2017 11:40:02 PM	34033
Xylenes, Total	ND	0.091		mg/Kg	1	9/27/2017 11:40:02 PM	34033
Surr: 4-Bromofluorobenzene	98.1	66.6-132		%Rec	1	9/27/2017 11:40:02 PM	34033

Lab ID: 1709C71-010 **Collection Date:** 9/21/2017 11:06:00 AM
Client Sample ID: S-082148-092117-SP-T5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 5:12:30 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/28/2017 1:28:53 PM	34050
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	9/28/2017 1:28:53 PM	34050
Surr: DNOP	108	70-130		%Rec	1	9/28/2017 1:28:53 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/28/2017 12:03:29 AM	34033
Surr: BFB	87.5	54-150		%Rec	1	9/28/2017 12:03:29 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/28/2017 12:03:29 AM	34033
Toluene	ND	0.046		mg/Kg	1	9/28/2017 12:03:29 AM	34033
Ethylbenzene	ND	0.046		mg/Kg	1	9/28/2017 12:03:29 AM	34033
Xylenes, Total	ND	0.092		mg/Kg	1	9/28/2017 12:03:29 AM	34033
Surr: 4-Bromofluorobenzene	102	66.6-132		%Rec	1	9/28/2017 12:03:29 AM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-011 **Collection Date:** 9/21/2017 11:20:00 AM
Client Sample ID: S-082148-092117-SP-T6 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 5:24:54 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/28/2017 1:06:58 PM	34050
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/28/2017 1:06:58 PM	34050
Surr: DNOP	87.1	70-130		%Rec	1	9/28/2017 1:06:58 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2017 12:26:54 AM	34033
Surr: BFB	86.7	54-150		%Rec	1	9/28/2017 12:26:54 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/28/2017 12:26:54 AM	34033
Toluene	ND	0.049		mg/Kg	1	9/28/2017 12:26:54 AM	34033
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2017 12:26:54 AM	34033
Xylenes, Total	ND	0.097		mg/Kg	1	9/28/2017 12:26:54 AM	34033
Surr: 4-Bromofluorobenzene	100	66.6-132		%Rec	1	9/28/2017 12:26:54 AM	34033

Lab ID: 1709C71-012 **Collection Date:** 9/21/2017 11:22:00 AM
Client Sample ID: S-082148-092117-SP-V6 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/26/2017 8:30:37 PM	34050
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/26/2017 8:30:37 PM	34050
Surr: DNOP	94.1	70-130		%Rec	1	9/26/2017 8:30:37 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/28/2017 12:50:20 AM	34033
Surr: BFB	90.0	54-150		%Rec	1	9/28/2017 12:50:20 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/28/2017 12:50:20 AM	34033
Toluene	ND	0.047		mg/Kg	1	9/28/2017 12:50:20 AM	34033
Ethylbenzene	ND	0.047		mg/Kg	1	9/28/2017 12:50:20 AM	34033
Xylenes, Total	ND	0.095		mg/Kg	1	9/28/2017 12:50:20 AM	34033
Surr: 4-Bromofluorobenzene	105	66.6-132		%Rec	1	9/28/2017 12:50:20 AM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-013 **Collection Date:** 9/21/2017 11:45:00 AM
Client Sample ID: S-082148-092117-SP-T7 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 5:37:19 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	14	9.2		mg/Kg	1	9/28/2017 12:44:51 PM	34050
Motor Oil Range Organics (MRO)	47	46		mg/Kg	1	9/28/2017 12:44:51 PM	34050
Surr: DNOP	108	70-130		%Rec	1	9/28/2017 12:44:51 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/28/2017 1:13:49 AM	34033
Surr: BFB	87.8	54-150		%Rec	1	9/28/2017 1:13:49 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/28/2017 1:13:49 AM	34033
Toluene	ND	0.048		mg/Kg	1	9/28/2017 1:13:49 AM	34033
Ethylbenzene	ND	0.048		mg/Kg	1	9/28/2017 1:13:49 AM	34033
Xylenes, Total	ND	0.096		mg/Kg	1	9/28/2017 1:13:49 AM	34033
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	9/28/2017 1:13:49 AM	34033

Lab ID: 1709C71-014 **Collection Date:** 9/21/2017 11:48:00 AM
Client Sample ID: S-082148-092117-SP-V7 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/26/2017 9:14:59 PM	34050
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/26/2017 9:14:59 PM	34050
Surr: DNOP	84.8	70-130		%Rec	1	9/26/2017 9:14:59 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/28/2017 1:37:10 AM	34033
Surr: BFB	88.3	54-150		%Rec	1	9/28/2017 1:37:10 AM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/28/2017 1:37:10 AM	34033
Toluene	ND	0.048		mg/Kg	1	9/28/2017 1:37:10 AM	34033
Ethylbenzene	ND	0.048		mg/Kg	1	9/28/2017 1:37:10 AM	34033
Xylenes, Total	ND	0.097		mg/Kg	1	9/28/2017 1:37:10 AM	34033
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	9/28/2017 1:37:10 AM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-015 **Collection Date:** 9/21/2017 12:33:00 PM
Client Sample ID: S-082148-092117-SP-T8 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 5:49:43 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/26/2017 9:37:15 PM	34050
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/26/2017 9:37:15 PM	34050
Surr: DNOP	91.3	70-130		%Rec	1	9/26/2017 9:37:15 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2017 5:48:52 PM	34033
Surr: BFB	107	54-150		%Rec	1	9/27/2017 5:48:52 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/27/2017 5:48:52 PM	34033
Toluene	ND	0.047		mg/Kg	1	9/27/2017 5:48:52 PM	34033
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2017 5:48:52 PM	34033
Xylenes, Total	ND	0.093		mg/Kg	1	9/27/2017 5:48:52 PM	34033
Surr: 4-Bromofluorobenzene	119	66.6-132		%Rec	1	9/27/2017 5:48:52 PM	34033

Lab ID: 1709C71-016 **Collection Date:** 9/21/2017 12:35:00 PM
Client Sample ID: S-082148-092117-SP-V8 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/26/2017 9:59:21 PM	34050
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/26/2017 9:59:21 PM	34050
Surr: DNOP	93.7	70-130		%Rec	1	9/26/2017 9:59:21 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/27/2017 6:12:19 PM	34033
Surr: BFB	109	54-150		%Rec	1	9/27/2017 6:12:19 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 6:12:19 PM	34033
Toluene	ND	0.049		mg/Kg	1	9/27/2017 6:12:19 PM	34033
Ethylbenzene	ND	0.049		mg/Kg	1	9/27/2017 6:12:19 PM	34033
Xylenes, Total	ND	0.097		mg/Kg	1	9/27/2017 6:12:19 PM	34033
Surr: 4-Bromofluorobenzene	122	66.6-132		%Rec	1	9/27/2017 6:12:19 PM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-017 **Collection Date:** 9/21/2017 12:58:00 PM
Client Sample ID: S-082148-092117-SP-V9 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/26/2017 10:21:41 PM	34050
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/26/2017 10:21:41 PM	34050
Surr: DNOP	94.6	70-130		%Rec	1	9/26/2017 10:21:41 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/27/2017 6:35:52 PM	34033
Surr: BFB	108	54-150		%Rec	1	9/27/2017 6:35:52 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/27/2017 6:35:52 PM	34033
Toluene	ND	0.046		mg/Kg	1	9/27/2017 6:35:52 PM	34033
Ethylbenzene	ND	0.046		mg/Kg	1	9/27/2017 6:35:52 PM	34033
Xylenes, Total	ND	0.093		mg/Kg	1	9/27/2017 6:35:52 PM	34033
Surr: 4-Bromofluorobenzene	120	66.6-132		%Rec	1	9/27/2017 6:35:52 PM	34033

Lab ID: 1709C71-018 **Collection Date:** 9/21/2017 12:55:00 PM
Client Sample ID: S-082148-092117-SP-T9 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 6:02:08 PM	34183
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	13	9.5		mg/Kg	1	9/27/2017 2:17:24 PM	34050
Motor Oil Range Organics (MRO)	130	48		mg/Kg	1	9/27/2017 2:17:24 PM	34050
Surr: DNOP	106	70-130		%Rec	1	9/27/2017 2:17:24 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/27/2017 6:59:26 PM	34033
Surr: BFB	105	54-150		%Rec	1	9/27/2017 6:59:26 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/27/2017 6:59:26 PM	34033
Toluene	ND	0.049		mg/Kg	1	9/27/2017 6:59:26 PM	34033
Ethylbenzene	ND	0.049		mg/Kg	1	9/27/2017 6:59:26 PM	34033
Xylenes, Total	ND	0.098		mg/Kg	1	9/27/2017 6:59:26 PM	34033
Surr: 4-Bromofluorobenzene	117	66.6-132		%Rec	1	9/27/2017 6:59:26 PM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1709C71

Lab ID: 1709C71-019 **Collection Date:** 9/21/2017 1:13:00 PM
Client Sample ID: S-082148-092117-SP-T10 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 10:22:47 PM	34202
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	55	9.9		mg/Kg	1	9/27/2017 2:39:38 PM	34050
Motor Oil Range Organics (MRO)	400	49		mg/Kg	1	9/27/2017 2:39:38 PM	34050
Surr: DNOP	113	70-130		%Rec	1	9/27/2017 2:39:38 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2017 7:23:01 PM	34033
Surr: BFB	107	54-150		%Rec	1	9/27/2017 7:23:01 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2017 7:23:01 PM	34033
Toluene	ND	0.047		mg/Kg	1	9/27/2017 7:23:01 PM	34033
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2017 7:23:01 PM	34033
Xylenes, Total	ND	0.094		mg/Kg	1	9/27/2017 7:23:01 PM	34033
Surr: 4-Bromofluorobenzene	118	66.6-132		%Rec	1	9/27/2017 7:23:01 PM	34033

Lab ID: 1709C71-020 **Collection Date:** 9/21/2017 1:15:00 PM
Client Sample ID: S-082148-092117-SP-V10 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/26/2017 11:28:07 PM	34050
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/26/2017 11:28:07 PM	34050
Surr: DNOP	91.8	70-130		%Rec	1	9/26/2017 11:28:07 PM	34050
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/27/2017 7:46:40 PM	34033
Surr: BFB	111	54-150		%Rec	1	9/27/2017 7:46:40 PM	34033
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/27/2017 7:46:40 PM	34033
Toluene	ND	0.050		mg/Kg	1	9/27/2017 7:46:40 PM	34033
Ethylbenzene	ND	0.050		mg/Kg	1	9/27/2017 7:46:40 PM	34033
Xylenes, Total	ND	0.10		mg/Kg	1	9/27/2017 7:46:40 PM	34033
Surr: 4-Bromofluorobenzene	123	66.6-132		%Rec	1	9/27/2017 7:46:40 PM	34033

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-021 **Collection Date:** 9/21/2017 1:43:00 PM
Client Sample ID: S-082148-092117-SP-T11 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 11:00:01 PM	34202
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/27/2017 3:23:36 PM	34051
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/27/2017 3:23:36 PM	34051
Surr: DNOP	104	70-130		%Rec	1	9/27/2017 3:23:36 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2017 2:07:48 PM	34035
Surr: BFB	88.3	54-150		%Rec	1	9/26/2017 2:07:48 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2017 2:07:48 PM	34035
Toluene	ND	0.048		mg/Kg	1	9/26/2017 2:07:48 PM	34035
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2017 2:07:48 PM	34035
Xylenes, Total	ND	0.096		mg/Kg	1	9/26/2017 2:07:48 PM	34035
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	9/26/2017 2:07:48 PM	34035

Lab ID: 1709C71-022 **Collection Date:** 9/21/2017 1:45:00 PM
Client Sample ID: S-082148-092117-SP-V11 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/26/2017 5:39:01 PM	34051
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/26/2017 5:39:01 PM	34051
Surr: DNOP	98.3	70-130		%Rec	1	9/26/2017 5:39:01 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/26/2017 3:18:02 PM	34035
Surr: BFB	92.3	54-150		%Rec	1	9/26/2017 3:18:02 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/26/2017 3:18:02 PM	34035
Toluene	ND	0.049		mg/Kg	1	9/26/2017 3:18:02 PM	34035
Ethylbenzene	ND	0.049		mg/Kg	1	9/26/2017 3:18:02 PM	34035
Xylenes, Total	ND	0.098		mg/Kg	1	9/26/2017 3:18:02 PM	34035
Surr: 4-Bromofluorobenzene	108	66.6-132		%Rec	1	9/26/2017 3:18:02 PM	34035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-023 **Collection Date:** 9/21/2017 1:59:00 PM
Client Sample ID: S-082148-092117-SP-T12 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 11:12:26 PM	34202
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/26/2017 6:04:01 PM	34051
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/26/2017 6:04:01 PM	34051
Surr: DNOP	99.5	70-130		%Rec	1	9/26/2017 6:04:01 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/26/2017 4:28:08 PM	34035
Surr: BFB	90.8	54-150		%Rec	1	9/26/2017 4:28:08 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/26/2017 4:28:08 PM	34035
Toluene	ND	0.049		mg/Kg	1	9/26/2017 4:28:08 PM	34035
Ethylbenzene	ND	0.049		mg/Kg	1	9/26/2017 4:28:08 PM	34035
Xylenes, Total	ND	0.099		mg/Kg	1	9/26/2017 4:28:08 PM	34035
Surr: 4-Bromofluorobenzene	106	66.6-132		%Rec	1	9/26/2017 4:28:08 PM	34035

Lab ID: 1709C71-024 **Collection Date:** 9/21/2017 2:02:00 PM
Client Sample ID: S-082148-092117-SP-V12 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/26/2017 6:28:49 PM	34051
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/26/2017 6:28:49 PM	34051
Surr: DNOP	101	70-130		%Rec	1	9/26/2017 6:28:49 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2017 4:51:33 PM	34035
Surr: BFB	88.2	54-150		%Rec	1	9/26/2017 4:51:33 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2017 4:51:33 PM	34035
Toluene	ND	0.047		mg/Kg	1	9/26/2017 4:51:33 PM	34035
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2017 4:51:33 PM	34035
Xylenes, Total	ND	0.095		mg/Kg	1	9/26/2017 4:51:33 PM	34035
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	9/26/2017 4:51:33 PM	34035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-025 **Collection Date:** 9/21/2017 2:17:00 PM
Client Sample ID: S-082148-092117-SP-V13 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/26/2017 6:53:45 PM	34051
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	9/26/2017 6:53:45 PM	34051
Surr: DNOP	95.9	70-130		%Rec	1	9/26/2017 6:53:45 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2017 8:45:52 PM	34035
Surr: BFB	87.3	54-150		%Rec	1	9/26/2017 8:45:52 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2017 8:45:52 PM	34035
Toluene	ND	0.047		mg/Kg	1	9/26/2017 8:45:52 PM	34035
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2017 8:45:52 PM	34035
Xylenes, Total	ND	0.094		mg/Kg	1	9/26/2017 8:45:52 PM	34035
Surr: 4-Bromofluorobenzene	101	66.6-132		%Rec	1	9/26/2017 8:45:52 PM	34035

Lab ID: 1709C71-026 **Collection Date:** 9/21/2017 2:22:00 PM
Client Sample ID: S-082148-092117-SP-T13 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/2/2017 11:24:51 PM	34202
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	19	9.5		mg/Kg	1	9/27/2017 4:29:55 PM	34051
Motor Oil Range Organics (MRO)	79	48		mg/Kg	1	9/27/2017 4:29:55 PM	34051
Surr: DNOP	115	70-130		%Rec	1	9/27/2017 4:29:55 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/26/2017 9:09:15 PM	34035
Surr: BFB	88.5	54-150		%Rec	1	9/26/2017 9:09:15 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/26/2017 9:09:15 PM	34035
Toluene	ND	0.049		mg/Kg	1	9/26/2017 9:09:15 PM	34035
Ethylbenzene	ND	0.049		mg/Kg	1	9/26/2017 9:09:15 PM	34035
Xylenes, Total	ND	0.099		mg/Kg	1	9/26/2017 9:09:15 PM	34035
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	9/26/2017 9:09:15 PM	34035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1709C71

Lab ID: 1709C71-027 **Collection Date:** 9/21/2017 2:40:00 PM
Client Sample ID: S-082148-092117-SP-T14 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/3/2017 12:02:04 AM	34202
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/27/2017 4:52:09 PM	34051
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/27/2017 4:52:09 PM	34051
Surr: DNOP	107	70-130		%Rec	1	9/27/2017 4:52:09 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2017 9:32:34 PM	34035
Surr: BFB	86.4	54-150		%Rec	1	9/26/2017 9:32:34 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2017 9:32:34 PM	34035
Toluene	ND	0.047		mg/Kg	1	9/26/2017 9:32:34 PM	34035
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2017 9:32:34 PM	34035
Xylenes, Total	ND	0.095		mg/Kg	1	9/26/2017 9:32:34 PM	34035
Surr: 4-Bromofluorobenzene	102	66.6-132		%Rec	1	9/26/2017 9:32:34 PM	34035

Lab ID: 1709C71-028 **Collection Date:** 9/21/2017 2:42:00 PM
Client Sample ID: S-082148-092117-SP-V14 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/26/2017 8:08:00 PM	34051
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/26/2017 8:08:00 PM	34051
Surr: DNOP	95.1	70-130		%Rec	1	9/26/2017 8:08:00 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2017 9:56:02 PM	34035
Surr: BFB	88.4	54-150		%Rec	1	9/26/2017 9:56:02 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2017 9:56:02 PM	34035
Toluene	ND	0.047		mg/Kg	1	9/26/2017 9:56:02 PM	34035
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2017 9:56:02 PM	34035
Xylenes, Total	ND	0.094		mg/Kg	1	9/26/2017 9:56:02 PM	34035
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	9/26/2017 9:56:02 PM	34035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1709C71

Lab ID: 1709C71-029 **Collection Date:** 9/21/2017 3:00:00 PM
Client Sample ID: S-082148-092117-SP-V15 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/27/2017 5:14:20 PM	34051
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/27/2017 5:14:20 PM	34051
Surr: DNOP	118	70-130		%Rec	1	9/27/2017 5:14:20 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/26/2017 10:19:31 PM	34035
Surr: BFB	88.9	54-150		%Rec	1	9/26/2017 10:19:31 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/26/2017 10:19:31 PM	34035
Toluene	ND	0.046		mg/Kg	1	9/26/2017 10:19:31 PM	34035
Ethylbenzene	ND	0.046		mg/Kg	1	9/26/2017 10:19:31 PM	34035
Xylenes, Total	ND	0.092		mg/Kg	1	9/26/2017 10:19:31 PM	34035
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	1	9/26/2017 10:19:31 PM	34035

Lab ID: 1709C71-030 **Collection Date:** 9/21/2017 3:02:00 PM
Client Sample ID: S-082148-092117-SP-T15 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/3/2017 12:14:29 AM	34202
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	130	9.8		mg/Kg	1	9/27/2017 5:36:29 PM	34051
Motor Oil Range Organics (MRO)	290	49		mg/Kg	1	9/27/2017 5:36:29 PM	34051
Surr: DNOP	104	70-130		%Rec	1	9/27/2017 5:36:29 PM	34051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/26/2017 10:42:52 PM	34035
Surr: BFB	91.7	54-150		%Rec	1	9/26/2017 10:42:52 PM	34035
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2017 10:42:52 PM	34035
Toluene	ND	0.049		mg/Kg	1	9/26/2017 10:42:52 PM	34035
Ethylbenzene	ND	0.049		mg/Kg	1	9/26/2017 10:42:52 PM	34035
Xylenes, Total	ND	0.097		mg/Kg	1	9/26/2017 10:42:52 PM	34035
Surr: 4-Bromofluorobenzene	105	66.6-132		%Rec	1	9/26/2017 10:42:52 PM	34035

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-34183**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**34183**		RunNo:	**46030**				
Prep Date:	**10/2/2017**	Analysis Date:	**10/2/2017**		SeqNo:	**1464457**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-34183**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**34183**		RunNo:	**46030**				
Prep Date:	**10/2/2017**	Analysis Date:	**10/2/2017**		SeqNo:	**1464458**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

Sample ID	**MB-34202**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**34202**		RunNo:	**46030**				
Prep Date:	**10/2/2017**	Analysis Date:	**10/2/2017**		SeqNo:	**1464498**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-34202**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**34202**		RunNo:	**46030**				
Prep Date:	**10/2/2017**	Analysis Date:	**10/2/2017**		SeqNo:	**1464499**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-34051**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **34051**			RunNo: **45872**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458097**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.5	73.2	114			
Surr: DNOP	4.7		5.000		94.3	70	130			

Sample ID	**MB-34051**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **34051**			RunNo: **45872**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458098**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.6	70	130			

Sample ID	**1709C71-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**S-082148-092117-SP**	Batch ID: **34050**			RunNo: **45871**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458676**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	49.75	0	93.4	55.8	122			
Surr: DNOP	5.1		4.975		103	70	130			

Sample ID	**1709C71-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**S-082148-092117-SP**	Batch ID: **34050**			RunNo: **45871**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458677**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.76	0	92.8	55.8	122	1.42	20	
Surr: DNOP	5.1		5.076		99.7	70	130	0	0	

Sample ID	**LCS-34050**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **34050**			RunNo: **45871**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458697**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	87.0	73.2	114			
Surr: DNOP	4.9		5.000		98.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-34050**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**34050**		RunNo:	**45871**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458698**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	70	130			

Sample ID	**1709C71-021AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**S-082148-092117-SP**	Batch ID:	**34051**		RunNo:	**45918**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/27/2017**		SeqNo:	**1460070**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.6	47.76	7.153	72.4	55.8	122			
Surr: DNOP	4.5		4.776		94.2	70	130			

Sample ID	**1709C71-021AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**S-082148-092117-SP**	Batch ID:	**34051**		RunNo:	**45918**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/27/2017**		SeqNo:	**1460071**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.5	47.39	7.153	81.6	55.8	122	9.36	20	
Surr: DNOP	5.2		4.739		111	70	130	0	0	

Sample ID	**LCS-34111**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**34111**		RunNo:	**45950**				
Prep Date:	**9/27/2017**	Analysis Date:	**9/28/2017**		SeqNo:	**1460547**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.7	70	130			

Sample ID	**MB-34111**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**34111**		RunNo:	**45950**				
Prep Date:	**9/27/2017**	Analysis Date:	**9/28/2017**		SeqNo:	**1460548**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		98.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-34035**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**34035**		RunNo:	**45887**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458582**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		89.7	54	150			

Sample ID	**LCS-34035**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**34035**		RunNo:	**45887**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458583**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	76.4	125			
Surr: BFB	1100		1000		105	54	150			

Sample ID	**1709C71-022AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-092117-SP**	Batch ID:	**34035**		RunNo:	**45887**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458586**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.9	24.73	0	118	77.8	128			
Surr: BFB	1100		989.1		108	54	150			

Sample ID	**1709C71-022AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-092117-SP**	Batch ID:	**34035**		RunNo:	**45887**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458587**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	24.15	0	116	77.8	128	4.05	20	
Surr: BFB	1000		966.2		104	54	150	0	0	

Sample ID	**MB-34033**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**34033**		RunNo:	**45887**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458605**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		89.9	54	150			

Sample ID	**LCS-34033**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**34033**		RunNo:	**45887**				
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458606**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-34033**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **34033**			RunNo: **45887**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458606**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	76.4	125			
Surr: BFB	1100		1000		106	54	150			

Sample ID	**1709C71-002AMS**	SampType: **MS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-092117-SP**	Batch ID: **34033**			RunNo: **45887**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458609**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	24.18	0	107	77.8	128			
Surr: BFB	970		967.1		100	54	150			

Sample ID	**1709C71-002AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-092117-SP**	Batch ID: **34033**			RunNo: **45887**					
Prep Date:	**9/25/2017**	Analysis Date: **9/26/2017**			SeqNo: **1458610**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.32	0	107	77.8	128	1.25	20	
Surr: BFB	1000		972.8		103	54	150	0	0	

Sample ID	**MB-34082**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **34082**			RunNo: **45928**					
Prep Date:	**9/26/2017**	Analysis Date: **9/27/2017**			SeqNo: **1459919**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		91.6	54	150			

Sample ID	**LCS-34082**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **34082**			RunNo: **45928**					
Prep Date:	**9/26/2017**	Analysis Date: **9/27/2017**			SeqNo: **1459930**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	54	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-34035**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**34035**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458618**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 4-Bromofluorobenzene	1.1		1.000		106	66.6	132				

Sample ID	**LCS-34035**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**34035**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458619**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	1.000	0	107	80	120				
Toluene	1.1	0.050	1.000	0	108	80	120				
Ethylbenzene	1.1	0.050	1.000	0	111	80	120				
Xylenes, Total	3.4	0.10	3.000	0	112	80	120				
Surr: 4-Bromofluorobenzene	1.1		1.000		110	66.6	132				

Sample ID	**1709C71-021AMS**	SampType:	**MS**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-092117-SP**	Batch ID:	**34035**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458621**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	0.9814	0	117	80.9	132				
Toluene	1.1	0.049	0.9814	0.01103	115	79.8	136				
Ethylbenzene	1.2	0.049	0.9814	0	122	79.4	140				
Xylenes, Total	3.6	0.098	2.944	0	122	78.5	142				
Surr: 4-Bromofluorobenzene	1.0		0.9814		106	66.6	132				

Sample ID	**1709C71-021AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-092117-SP**	Batch ID:	**34035**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458622**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.024	0.9653	0	110	80.9	132	7.54	20		
Toluene	1.1	0.048	0.9653	0.01103	109	79.8	136	6.93	20		
Ethylbenzene	1.1	0.048	0.9653	0	114	79.4	140	7.92	20		
Xylenes, Total	3.3	0.097	2.896	0	115	78.5	142	8.03	20		
Surr: 4-Bromofluorobenzene	1.0		0.9653		108	66.6	132	0	0		

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-34033**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**34033**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458634**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 4-Bromofluorobenzene	1.1		1.000		105	66.6	132				

Sample ID	**LCS-34033**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**34033**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458635**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	1.000	0	110	80	120				
Toluene	1.1	0.050	1.000	0	109	80	120				
Ethylbenzene	1.1	0.050	1.000	0	112	80	120				
Xylenes, Total	3.4	0.10	3.000	0	114	80	120				
Surr: 4-Bromofluorobenzene	1.1		1.000		109	66.6	132				

Sample ID	**1709C71-001AMS**	SampType:	**MS**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-092117-SP**	Batch ID:	**34033**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458637**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.024	0.9662	0	116	80.9	132				
Toluene	1.1	0.048	0.9662	0.01029	114	79.8	136				
Ethylbenzene	1.2	0.048	0.9662	0	119	79.4	140				
Xylenes, Total	3.5	0.097	2.899	0	121	78.5	142				
Surr: 4-Bromofluorobenzene	1.0		0.9662		106	66.6	132				

Sample ID	**1709C71-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-092117-SP**	Batch ID:	**34033**		RunNo:	**45887**					
Prep Date:	**9/25/2017**	Analysis Date:	**9/26/2017**		SeqNo:	**1458638**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	0.9804	0	116	80.9	132	1.47	20		
Toluene	1.1	0.049	0.9804	0.01029	115	79.8	136	1.72	20		
Ethylbenzene	1.2	0.049	0.9804	0	121	79.4	140	3.07	20		
Xylenes, Total	3.6	0.098	2.941	0	122	78.5	142	2.41	20		
Surr: 4-Bromofluorobenzene	1.1		0.9804		110	66.6	132	0	0		

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709C71**

04-Oct-17

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-34082**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**34082**	RunNo:	**45928**					
Prep Date:	**9/26/2017**	Analysis Date:	**9/27/2017**	SeqNo:	**1459967**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	66.6	132			

Sample ID	**LCS-34082**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**34082**	RunNo:	**45928**					
Prep Date:	**9/26/2017**	Analysis Date:	**9/27/2017**	SeqNo:	**1459968**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	66.6	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1709C71 | RcptNo: 1

Received By: Isaiah Ortiz 9/22/2017 9:15:00 AM

Completed By: Ashley Gallegos 9/22/2017 12:33:58 PM

Reviewed By: 9/22/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			

Chain-of-Custody Record

Client: GHD-Albuquerque

Mailing Address: 6121 Indian School Rd NE Ste 200, Albuquerque, NM 87110

Phone #: 505-884-0672

email or Fax#: ~~Alan.Brandon@ghd.com~~

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148/2017

Project Manager: Bernard.Bochisch@ghd.com
Bernie Bochisch

Sampler: Steven Perez

On Ice: ☑ Yes ☐ No

Sample Temperature: @ 3 + 2.8 (CF) 3.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1709C71	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.0 Chloride	BTEX 8021B			Air Bubbles (Y or N)
9-21-17	920	Soil	S-082148-092117-SP-V1	4oz glass-1	ICE	-001			X										X			
	925	Soil	S-082148-092117-SP-T1			-002			X									X				
	940	Soil	S-082148-092117-SP-T2			-003			X									X				
	1000	Soil	S-082148-092117-SP-V2			-004			X										X			
	1019	Soil	S-082148-092117-SP-V3			-005			X										X			
	1020		S-082148-092117-SP-T3			-006			X									X				
	1033		S-082148-092117-SP-T4			-007			X									X				
	1035		S-082148-092117-SP-V4			-008			X										X			
	1105		S-082148-092117-SP-V5			-009			X										X			
	1106		S-082148-092117-SP-T5			-010			X									X				
	1120		S-082148-092117-SP-T6			-011			X									X				
	1122		S-082148-092117-SP-V6			-012			X										X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/21/17	17:10	Steven Perez	Kandyce Mar	9-21-17	17:10
Date:	Time:	Relinquished by:	Received by:	Date	Time
			I. Ortiz	09/22/2017	09:15

Remarks: Please See SSOW To confirm Analysis

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD-Albuquerque

Mailing Address: 6121 Indian School Rd NE Ste 200, Albuquerque, NM 87110

Phone #: 505-884-0672

email or Fax#: ~~Alan.Bradley@ghd.com~~ Bernard.Bochisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148/2017

Project Manager: Bernard Bochisch

Sampler: Steve Perez

On Ice: ☑ Yes ☐ No

Sample Temperature: 0.3+0.8(CF) = 3.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1709071	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.0 Chloride	BTEX 8021			Air Bubbles (Y or N)
9-21-17	1145	Soil	S-082148-092117-SP-T7	4oz glass-1	ICE	-013			X									X	X			
	1148		S-082148-092117-SP-V7			-014													X			
	1233		S-082148-092117-SP-T8			-015												X				
	1235		S-082148-092117-SP-V8			-016													X			
	1258		S-082148-092117-SP-V9			-017													X			
	1255		S-082148-092117-SP-T9			-018												X				
	1313		S-082148-092117-SP-T10			-019												X				
	1315		S-082148-092117-SP-V10			-020													X			
	1343		S-082148-092117-SP-T11			-021												X				
	1345		S-082148-092117-SP-V11			-022													X			
	1359		S-082148-092117-SP-T12			-023												X				
	1402		S-082148-092117-SP-V12			-024													X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/21/17	17:10	Steven Perez	Randy de Mar	9-21-17	17:10
Date:	Time:	Relinquished by:	Received by:	Date	Time
			I. Ortiz	09/22/2017	09:15

Remarks:
See SSOW to Confirm Analysis

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD - Albuquerque

Mailing Address: On file

Phone #: 595-884-0672

email or Fax#: ~~Alan.Brandon@ghd.com~~ SP

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148/2017

Project Manager: Bernard.Bochisch@ghd.com
Bernie Bochisch

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 0.3+2.8 (CF) 3.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1709C71	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.0 Chloride	8021 BTEX - SP	8021 BTEX		Air Bubbles (Y or N)
9/21/17	1417	Soil	S-082148-092117-SP-V13	4oz Jars-1	ICE	-025			X										X	X		
	1422		S-082148-092117-SP-T13			-026												X				
	1440		S-082148-092117-SP-T14			-027												X				
	1442		S-082148-092117-SP-V14			-028														X		
	1500		S-082148-092117-SP-V15			-029														X		
	1502		S-082148-092117-SP-T15			-030												X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/21/17	17:10			9-21-17	17:10
Date:	Time:	Relinquished by:	Received by:	Date	Time
				09/22/2017	09:15

Remarks:
See SOW to confirm Analysis

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 03, 2018

Bernie Bockish

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1712028

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 28 sample(s) on 12/1/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-001
Collection Date: 11/27/2017 11:15:00 AM
Client Sample ID: S-082148-112717-MG-V1
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 1:57:29 PM	35456
Sulfate	100	30		mg/Kg	20	12/12/2017 1:57:29 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	12/15/2017 3:06:57 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	8.3	2.4		mg/Kg	1	12/18/2017 12:43:20 PM	35506
Barium	64	0.19		mg/Kg	2	12/20/2017 4:16:14 PM	35506
Cadmium	ND	0.096		mg/Kg	1	12/18/2017 12:43:20 PM	35506
Chromium	8.6	0.29		mg/Kg	1	12/18/2017 12:43:20 PM	35506
Copper	2.1	0.29		mg/Kg	1	12/18/2017 12:43:20 PM	35506
Iron	8500	1200		mg/Kg	500	12/20/2017 3:52:09 PM	35506
Lead	ND	0.24		mg/Kg	1	12/20/2017 3:41:03 PM	35506
Manganese	65	0.19		mg/Kg	2	12/20/2017 4:16:14 PM	35506
Selenium	ND	2.4		mg/Kg	1	12/20/2017 3:41:03 PM	35506
Silver	ND	0.24		mg/Kg	1	12/18/2017 12:43:20 PM	35506
Uranium	ND	4.8		mg/Kg	1	12/18/2017 12:43:20 PM	35506
Zinc	17	2.4		mg/Kg	1	12/20/2017 3:41:03 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/6/2017 1:42:13 AM	35298
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2017 1:42:13 AM	35298
Surr: DNOP	102	70-130		%Rec	1	12/6/2017 1:42:13 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/5/2017 7:06:26 PM	35285
Surr: BFB	109	15-316		%Rec	1	12/5/2017 7:06:26 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 7:06:26 PM	35285
Toluene	ND	0.048		mg/Kg	1	12/5/2017 7:06:26 PM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/5/2017 7:06:26 PM	35285
Xylenes, Total	ND	0.096		mg/Kg	1	12/5/2017 7:06:26 PM	35285
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	12/5/2017 7:06:26 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-002
Collection Date: 11/27/2017 11:35:00 AM
Client Sample ID: S-082148-112717-MG-V2
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 2:09:54 PM	35456
Sulfate	ND	30		mg/Kg	20	12/12/2017 2:09:54 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	12/15/2017 3:12:07 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	3.7	2.5		mg/Kg	1	12/18/2017 12:48:34 PM	35506
Barium	100	0.49		mg/Kg	5	12/21/2017 1:01:01 PM	35506
Cadmium	ND	0.098		mg/Kg	1	12/18/2017 12:48:34 PM	35506
Chromium	9.2	0.29		mg/Kg	1	12/18/2017 12:48:34 PM	35506
Copper	2.8	0.29		mg/Kg	1	12/18/2017 12:48:34 PM	35506
Iron	9600	1200		mg/Kg	500	12/20/2017 4:13:50 PM	35506
Lead	ND	0.25		mg/Kg	1	12/20/2017 4:12:11 PM	35506
Manganese	60	0.49		mg/Kg	5	12/21/2017 1:01:01 PM	35506
Selenium	5.4	2.5		mg/Kg	1	12/20/2017 4:12:11 PM	35506
Silver	ND	0.25		mg/Kg	1	12/18/2017 12:48:34 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 12:48:34 PM	35506
Zinc	19	2.5		mg/Kg	1	12/20/2017 4:12:11 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/6/2017 2:54:49 AM	35298
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/6/2017 2:54:49 AM	35298
Surr: DNOP	101	70-130		%Rec	1	12/6/2017 2:54:49 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/5/2017 8:17:10 PM	35285
Surr: BFB	109	15-316		%Rec	1	12/5/2017 8:17:10 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/5/2017 8:17:10 PM	35285
Toluene	ND	0.046		mg/Kg	1	12/5/2017 8:17:10 PM	35285
Ethylbenzene	ND	0.046		mg/Kg	1	12/5/2017 8:17:10 PM	35285
Xylenes, Total	ND	0.093		mg/Kg	1	12/5/2017 8:17:10 PM	35285
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	12/5/2017 8:17:10 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1712028

Lab ID: 1712028-003
Collection Date: 11/27/2017 12:00:00 PM
Client Sample ID: S-082148-112717-MG-V4
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 2:22:18 PM	35456
Sulfate	120	30		mg/Kg	20	12/12/2017 2:22:18 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 4:37:57 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.4		mg/Kg	1	12/18/2017 12:50:19 PM	35506
Barium	46	0.096		mg/Kg	1	12/18/2017 12:50:19 PM	35506
Cadmium	ND	0.096		mg/Kg	1	12/18/2017 12:50:19 PM	35506
Chromium	4.7	0.29		mg/Kg	1	12/18/2017 12:50:19 PM	35506
Copper	2.7	0.29		mg/Kg	1	12/18/2017 12:50:19 PM	35506
Iron	4300	480		mg/Kg	200	12/20/2017 4:20:41 PM	35506
Lead	2.0	0.24		mg/Kg	1	12/20/2017 4:17:43 PM	35506
Manganese	53	0.19		mg/Kg	2	12/20/2017 4:19:13 PM	35506
Selenium	2.8	2.4		mg/Kg	1	12/20/2017 4:17:43 PM	35506
Silver	ND	0.24		mg/Kg	1	12/18/2017 12:50:19 PM	35506
Uranium	ND	4.8		mg/Kg	1	12/18/2017 12:50:19 PM	35506
Zinc	11	2.4		mg/Kg	1	12/20/2017 4:17:43 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	32	9.2		mg/Kg	1	12/11/2017 9:36:57 PM	35298
Motor Oil Range Organics (MRO)	130	46		mg/Kg	1	12/11/2017 9:36:57 PM	35298
Surr: DNOP	96.3	70-130		%Rec	1	12/11/2017 9:36:57 PM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/5/2017 9:27:45 PM	35285
Surr: BFB	106	15-316		%Rec	1	12/5/2017 9:27:45 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 9:27:45 PM	35285
Toluene	ND	0.048		mg/Kg	1	12/5/2017 9:27:45 PM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/5/2017 9:27:45 PM	35285
Xylenes, Total	ND	0.096		mg/Kg	1	12/5/2017 9:27:45 PM	35285
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/5/2017 9:27:45 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-004
Collection Date: 11/27/2017 12:10:00 PM
Client Sample ID: S-082148-112717-MG-V5
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 2:34:43 PM	35456
Sulfate	ND	30		mg/Kg	20	12/12/2017 2:34:43 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 3:19:12 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 4:25:52 PM	35506
Barium	44	0.098		mg/Kg	1	12/18/2017 1:00:35 PM	35506
Cadmium	ND	0.098		mg/Kg	1	12/18/2017 1:00:35 PM	35506
Chromium	6.4	0.30		mg/Kg	1	12/18/2017 1:00:35 PM	35506
Copper	2.3	0.30		mg/Kg	1	12/18/2017 1:00:35 PM	35506
Iron	7300	490		mg/Kg	200	12/20/2017 5:12:25 PM	35506
Lead	0.46	0.25		mg/Kg	1	12/20/2017 4:25:52 PM	35506
Manganese	47	0.098		mg/Kg	1	12/18/2017 1:00:35 PM	35506
Selenium	ND	2.5		mg/Kg	1	12/20/2017 4:25:52 PM	35506
Silver	ND	0.25		mg/Kg	1	12/18/2017 1:00:35 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:00:35 PM	35506
Zinc	16	2.5		mg/Kg	1	12/18/2017 1:00:35 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/6/2017 4:07:32 AM	35298
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2017 4:07:32 AM	35298
Surr: DNOP	102	70-130		%Rec	1	12/6/2017 4:07:32 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/5/2017 9:51:17 PM	35285
Surr: BFB	108	15-316		%Rec	1	12/5/2017 9:51:17 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 9:51:17 PM	35285
Toluene	ND	0.048		mg/Kg	1	12/5/2017 9:51:17 PM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/5/2017 9:51:17 PM	35285
Xylenes, Total	ND	0.095		mg/Kg	1	12/5/2017 9:51:17 PM	35285
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/5/2017 9:51:17 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-005
Collection Date: 11/27/2017 12:20:00 PM
Client Sample ID: S-082148-112717-MG-V6
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 3:36:45 PM	35456
Sulfate	ND	30		mg/Kg	20	12/12/2017 3:36:45 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.033		mg/Kg	1	12/15/2017 3:20:57 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 4:27:07 PM	35506
Barium	41	0.099		mg/Kg	1	12/18/2017 1:02:19 PM	35506
Cadmium	ND	0.099		mg/Kg	1	12/18/2017 1:02:19 PM	35506
Chromium	5.7	0.30		mg/Kg	1	12/18/2017 1:02:19 PM	35506
Copper	2.5	0.30		mg/Kg	1	12/18/2017 1:02:19 PM	35506
Iron	5800	1200		mg/Kg	500	12/20/2017 5:33:02 PM	35506
Lead	1.1	0.25		mg/Kg	1	12/20/2017 4:27:07 PM	35506
Manganese	61	0.20		mg/Kg	2	12/20/2017 4:28:22 PM	35506
Selenium	ND	2.5		mg/Kg	1	12/20/2017 4:27:07 PM	35506
Silver	ND	0.25		mg/Kg	1	12/18/2017 1:02:19 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:02:19 PM	35506
Zinc	14	2.5		mg/Kg	1	12/18/2017 1:02:19 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/6/2017 4:31:58 AM	35298
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2017 4:31:58 AM	35298
Surr: DNOP	102	70-130		%Rec	1	12/6/2017 4:31:58 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/5/2017 10:14:50 PM	35285
Surr: BFB	107	15-316		%Rec	1	12/5/2017 10:14:50 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 10:14:50 PM	35285
Toluene	ND	0.048		mg/Kg	1	12/5/2017 10:14:50 PM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/5/2017 10:14:50 PM	35285
Xylenes, Total	ND	0.096		mg/Kg	1	12/5/2017 10:14:50 PM	35285
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/5/2017 10:14:50 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1712028

Lab ID: 1712028-006
Collection Date: 11/27/2017 1:20:00 PM
Client Sample ID: S-082148-112717-MG-V7
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 3:49:09 PM	35456
Sulfate	75	30		mg/Kg	20	12/12/2017 3:49:09 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.033		mg/Kg	1	12/15/2017 3:22:43 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	3.3	2.5		mg/Kg	1	12/20/2017 4:29:37 PM	35506
Barium	79	0.20		mg/Kg	2	12/20/2017 4:31:09 PM	35506
Cadmium	ND	0.098		mg/Kg	1	12/18/2017 1:04:02 PM	35506
Chromium	8.8	0.30		mg/Kg	1	12/18/2017 1:04:02 PM	35506
Copper	2.3	0.30		mg/Kg	1	12/18/2017 1:04:02 PM	35506
Iron	9100	490		mg/Kg	200	12/20/2017 5:14:20 PM	35506
Lead	ND	0.25		mg/Kg	1	12/20/2017 4:29:37 PM	35506
Manganese	62	0.20		mg/Kg	2	12/20/2017 4:31:09 PM	35506
Selenium	3.7	2.5		mg/Kg	1	12/20/2017 4:29:37 PM	35506
Silver	ND	0.25		mg/Kg	1	12/18/2017 1:04:02 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:04:02 PM	35506
Zinc	19	2.5		mg/Kg	1	12/18/2017 1:04:02 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/6/2017 4:56:14 AM	35298
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/6/2017 4:56:14 AM	35298
Surr: DNOP	103	70-130		%Rec	1	12/6/2017 4:56:14 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/5/2017 10:38:18 PM	35285
Surr: BFB	107	15-316		%Rec	1	12/5/2017 10:38:18 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 10:38:18 PM	35285
Toluene	ND	0.048		mg/Kg	1	12/5/2017 10:38:18 PM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/5/2017 10:38:18 PM	35285
Xylenes, Total	ND	0.096		mg/Kg	1	12/5/2017 10:38:18 PM	35285
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/5/2017 10:38:18 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1712028

Lab ID: 1712028-007
Collection Date: 11/27/2017 1:40:00 PM
Client Sample ID: S-082148-112717-MG-V8
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 4:01:34 PM	35456
Sulfate	ND	30		mg/Kg	20	12/12/2017 4:01:34 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 3:24:29 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 4:32:22 PM	35506
Barium	74	0.20		mg/Kg	2	12/20/2017 4:33:43 PM	35506
Cadmium	ND	0.10		mg/Kg	1	12/18/2017 1:05:47 PM	35506
Chromium	9.0	0.30		mg/Kg	1	12/18/2017 1:05:47 PM	35506
Copper	1.6	0.30		mg/Kg	1	12/18/2017 1:05:47 PM	35506
Iron	9200	500		mg/Kg	200	12/20/2017 5:15:18 PM	35506
Lead	ND	0.25		mg/Kg	1	12/20/2017 4:32:22 PM	35506
Manganese	49	0.10		mg/Kg	1	12/18/2017 1:05:47 PM	35506
Selenium	ND	2.5		mg/Kg	1	12/20/2017 4:32:22 PM	35506
Silver	ND	0.25		mg/Kg	1	12/18/2017 1:05:47 PM	35506
Uranium	ND	5.0		mg/Kg	1	12/18/2017 1:05:47 PM	35506
Zinc	20	2.5		mg/Kg	1	12/18/2017 1:05:47 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/6/2017 5:20:43 AM	35298
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/6/2017 5:20:43 AM	35298
Surr: DNOP	105	70-130		%Rec	1	12/6/2017 5:20:43 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/5/2017 11:01:46 PM	35285
Surr: BFB	107	15-316		%Rec	1	12/5/2017 11:01:46 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/5/2017 11:01:46 PM	35285
Toluene	ND	0.047		mg/Kg	1	12/5/2017 11:01:46 PM	35285
Ethylbenzene	ND	0.047		mg/Kg	1	12/5/2017 11:01:46 PM	35285
Xylenes, Total	ND	0.093		mg/Kg	1	12/5/2017 11:01:46 PM	35285
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	12/5/2017 11:01:46 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-008
Collection Date: 11/27/2017 1:30:00 PM
Client Sample ID: S-082148-112717-MG-V9
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 4:13:58 PM	35456
Sulfate	160	30		mg/Kg	20	12/12/2017 4:13:58 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	12/15/2017 3:26:16 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 4:34:57 PM	35506
Barium	110	0.48		mg/Kg	5	12/21/2017 1:02:33 PM	35506
Cadmium	ND	0.096		mg/Kg	1	12/18/2017 1:07:31 PM	35506
Chromium	4.4	0.29		mg/Kg	1	12/18/2017 1:07:31 PM	35506
Copper	2.2	0.29		mg/Kg	1	12/18/2017 1:07:31 PM	35506
Iron	4000	240		mg/Kg	100	12/20/2017 5:16:15 PM	35506
Lead	ND	0.24		mg/Kg	1	12/20/2017 4:34:57 PM	35506
Manganese	64	0.19		mg/Kg	2	12/20/2017 4:36:29 PM	35506
Selenium	7.7	2.4		mg/Kg	1	12/20/2017 4:34:57 PM	35506
Silver	0.51	0.24		mg/Kg	1	12/18/2017 1:07:31 PM	35506
Uranium	ND	4.8		mg/Kg	1	12/18/2017 1:07:31 PM	35506
Zinc	7.5	2.4		mg/Kg	1	12/18/2017 1:07:31 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/6/2017 5:44:55 AM	35298
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2017 5:44:55 AM	35298
Surr: DNOP	106	70-130		%Rec	1	12/6/2017 5:44:55 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/5/2017 11:25:14 PM	35285
Surr: BFB	106	15-316		%Rec	1	12/5/2017 11:25:14 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 11:25:14 PM	35285
Toluene	ND	0.048		mg/Kg	1	12/5/2017 11:25:14 PM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/5/2017 11:25:14 PM	35285
Xylenes, Total	ND	0.097		mg/Kg	1	12/5/2017 11:25:14 PM	35285
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	12/5/2017 11:25:14 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1712028

Lab ID: 1712028-009
Collection Date: 11/27/2017 1:50:00 PM
Client Sample ID: S-082148-112717-MG-V10
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/12/2017 4:26:23 PM	35456
Sulfate	ND	30		mg/Kg	20	12/12/2017 4:26:23 PM	35456
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	12/15/2017 3:28:03 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	4.6	2.4		mg/Kg	1	12/20/2017 4:37:48 PM	35506
Barium	150	0.48		mg/Kg	5	12/20/2017 4:41:32 PM	35506
Cadmium	ND	0.096		mg/Kg	1	12/18/2017 1:09:20 PM	35506
Chromium	4.6	0.29		mg/Kg	1	12/18/2017 1:09:20 PM	35506
Copper	3.6	0.29		mg/Kg	1	12/18/2017 1:09:20 PM	35506
Iron	4300	240		mg/Kg	100	12/20/2017 5:21:23 PM	35506
Lead	ND	0.24		mg/Kg	1	12/20/2017 4:37:48 PM	35506
Manganese	61	0.48		mg/Kg	5	12/20/2017 4:41:32 PM	35506
Selenium	8.7	2.4		mg/Kg	1	12/20/2017 4:37:48 PM	35506
Silver	0.30	0.24		mg/Kg	1	12/18/2017 1:09:20 PM	35506
Uranium	ND	4.8		mg/Kg	1	12/18/2017 1:09:20 PM	35506
Zinc	9.8	2.4		mg/Kg	1	12/18/2017 1:09:20 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/6/2017 6:08:55 AM	35298
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/6/2017 6:08:55 AM	35298
Surr: DNOP	96.4	70-130		%Rec	1	12/6/2017 6:08:55 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/5/2017 11:48:37 PM	35285
Surr: BFB	106	15-316		%Rec	1	12/5/2017 11:48:37 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/5/2017 11:48:37 PM	35285
Toluene	ND	0.047		mg/Kg	1	12/5/2017 11:48:37 PM	35285
Ethylbenzene	ND	0.047		mg/Kg	1	12/5/2017 11:48:37 PM	35285
Xylenes, Total	ND	0.093		mg/Kg	1	12/5/2017 11:48:37 PM	35285
Surr: 4-Bromofluorobenzene	97.5	80-120		%Rec	1	12/5/2017 11:48:37 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-010
Collection Date: 11/27/2017 2:40:00 PM
Client Sample ID: S-082148-112717-MG-V11
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 2:34:12 PM	35482
Sulfate	82	30		mg/Kg	20	12/13/2017 2:34:12 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 3:29:42 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 4:42:46 PM	35506
Barium	71	0.19		mg/Kg	2	12/20/2017 4:44:08 PM	35506
Cadmium	ND	0.097		mg/Kg	1	12/18/2017 1:11:04 PM	35506
Chromium	7.7	0.29		mg/Kg	1	12/18/2017 1:11:04 PM	35506
Copper	1.3	0.29		mg/Kg	1	12/18/2017 1:11:04 PM	35506
Iron	8300	490		mg/Kg	200	12/20/2017 5:22:27 PM	35506
Lead	ND	0.24		mg/Kg	1	12/20/2017 4:42:46 PM	35506
Manganese	47	0.097		mg/Kg	1	12/20/2017 4:42:46 PM	35506
Selenium	3.0	2.4		mg/Kg	1	12/20/2017 4:42:46 PM	35506
Silver	ND	0.24		mg/Kg	1	12/18/2017 1:11:04 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:11:04 PM	35506
Zinc	17	2.4		mg/Kg	1	12/18/2017 1:11:04 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/6/2017 6:32:52 AM	35298
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/6/2017 6:32:52 AM	35298
Surr: DNOP	99.4	70-130		%Rec	1	12/6/2017 6:32:52 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/6/2017 12:12:01 AM	35285
Surr: BFB	106	15-316		%Rec	1	12/6/2017 12:12:01 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/6/2017 12:12:01 AM	35285
Toluene	ND	0.047		mg/Kg	1	12/6/2017 12:12:01 AM	35285
Ethylbenzene	ND	0.047		mg/Kg	1	12/6/2017 12:12:01 AM	35285
Xylenes, Total	ND	0.094		mg/Kg	1	12/6/2017 12:12:01 AM	35285
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/6/2017 12:12:01 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-011
Collection Date: 11/27/2017 2:30:00 PM
Client Sample ID: S-082148-112717-MG-V12
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 3:11:27 PM	35482
Sulfate	530	30		mg/Kg	20	12/13/2017 3:11:27 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.033		mg/Kg	1	12/15/2017 3:31:22 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	12	2.5		mg/Kg	1	12/20/2017 4:45:22 PM	35506
Barium	77	0.49		mg/Kg	5	12/20/2017 4:47:59 PM	35506
Cadmium	ND	0.099		mg/Kg	1	12/18/2017 1:12:48 PM	35506
Chromium	11	0.30		mg/Kg	1	12/18/2017 1:12:48 PM	35506
Copper	3.3	0.30		mg/Kg	1	12/18/2017 1:12:48 PM	35506
Iron	12000	1200		mg/Kg	500	12/20/2017 5:23:24 PM	35506
Lead	ND	0.25		mg/Kg	1	12/20/2017 4:45:22 PM	35506
Manganese	130	0.49		mg/Kg	5	12/20/2017 4:47:59 PM	35506
Selenium	ND	2.5		mg/Kg	1	12/20/2017 4:45:22 PM	35506
Silver	ND	0.25		mg/Kg	1	12/18/2017 1:12:48 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:12:48 PM	35506
Zinc	24	2.5		mg/Kg	1	12/18/2017 1:12:48 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/6/2017 6:57:01 AM	35298
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2017 6:57:01 AM	35298
Surr: DNOP	107	70-130		%Rec	1	12/6/2017 6:57:01 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/5/2017 10:55:41 PM	35285
Surr: BFB	84.7	15-316		%Rec	1	12/5/2017 10:55:41 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/5/2017 10:55:41 PM	35285
Toluene	ND	0.047		mg/Kg	1	12/5/2017 10:55:41 PM	35285
Ethylbenzene	ND	0.047		mg/Kg	1	12/5/2017 10:55:41 PM	35285
Xylenes, Total	ND	0.093		mg/Kg	1	12/5/2017 10:55:41 PM	35285
Surr: 4-Bromofluorobenzene	83.8	80-120		%Rec	1	12/5/2017 10:55:41 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-012
Collection Date: 11/27/2017 2:00:00 PM
Client Sample ID: S-082148-112717-MG-V13
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 3:23:51 PM	35482
Sulfate	ND	30		mg/Kg	20	12/13/2017 3:23:51 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	12/15/2017 4:39:41 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 4:49:14 PM	35506
Barium	76	0.19		mg/Kg	2	12/20/2017 4:50:29 PM	35506
Cadmium	ND	0.097		mg/Kg	1	12/18/2017 1:14:38 PM	35506
Chromium	5.6	0.29		mg/Kg	1	12/18/2017 1:14:38 PM	35506
Copper	3.3	0.29		mg/Kg	1	12/18/2017 1:14:38 PM	35506
Iron	5500	490		mg/Kg	200	12/20/2017 5:24:21 PM	35506
Lead	0.54	0.24		mg/Kg	1	12/20/2017 4:49:14 PM	35506
Manganese	73	0.19		mg/Kg	2	12/20/2017 4:50:29 PM	35506
Selenium	3.8	2.4		mg/Kg	1	12/20/2017 4:49:14 PM	35506
Silver	ND	0.24		mg/Kg	1	12/18/2017 1:14:38 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:14:38 PM	35506
Zinc	13	2.4		mg/Kg	1	12/18/2017 1:14:38 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/6/2017 7:21:09 AM	35298
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2017 7:21:09 AM	35298
Surr: DNOP	96.7	70-130		%Rec	1	12/6/2017 7:21:09 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2017 11:18:39 PM	35285
Surr: BFB	88.1	15-316		%Rec	1	12/5/2017 11:18:39 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	12/5/2017 11:18:39 PM	35285
Toluene	ND	0.049		mg/Kg	1	12/5/2017 11:18:39 PM	35285
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2017 11:18:39 PM	35285
Xylenes, Total	ND	0.098		mg/Kg	1	12/5/2017 11:18:39 PM	35285
Surr: 4-Bromofluorobenzene	85.5	80-120		%Rec	1	12/5/2017 11:18:39 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-013
Collection Date: 11/27/2017 2:15:00 PM
Client Sample ID: S-082148-112717-MG-V14
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 3:36:15 PM	35482
Sulfate	49	30		mg/Kg	20	12/13/2017 3:36:15 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 3:34:44 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 4:51:44 PM	35506
Barium	130	0.49		mg/Kg	5	12/20/2017 4:52:59 PM	35506
Cadmium	ND	0.098		mg/Kg	1	12/18/2017 1:16:21 PM	35506
Chromium	5.9	0.29		mg/Kg	1	12/18/2017 1:16:21 PM	35506
Copper	3.9	0.29		mg/Kg	1	12/18/2017 1:16:21 PM	35506
Iron	6100	490		mg/Kg	200	12/20/2017 5:25:18 PM	35506
Lead	ND	0.24		mg/Kg	1	12/20/2017 4:51:44 PM	35506
Manganese	82	0.49		mg/Kg	5	12/20/2017 4:52:59 PM	35506
Selenium	8.2	2.4		mg/Kg	1	12/20/2017 4:51:44 PM	35506
Silver	ND	0.24		mg/Kg	1	12/18/2017 1:16:21 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:16:21 PM	35506
Zinc	13	2.4		mg/Kg	1	12/18/2017 1:16:21 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/6/2017 7:45:28 AM	35298
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/6/2017 7:45:28 AM	35298
Surr: DNOP	93.6	70-130		%Rec	1	12/6/2017 7:45:28 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2017 11:41:37 PM	35285
Surr: BFB	87.1	15-316		%Rec	1	12/5/2017 11:41:37 PM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	12/5/2017 11:41:37 PM	35285
Toluene	ND	0.049		mg/Kg	1	12/5/2017 11:41:37 PM	35285
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2017 11:41:37 PM	35285
Xylenes, Total	ND	0.099		mg/Kg	1	12/5/2017 11:41:37 PM	35285
Surr: 4-Bromofluorobenzene	85.1	80-120		%Rec	1	12/5/2017 11:41:37 PM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1712028

Lab ID: 1712028-014
Collection Date: 11/27/2017 2:50:00 PM
Client Sample ID: S-082148-112717-MG-V15
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 3:48:40 PM	35482
Sulfate	940	30		mg/Kg	20	12/13/2017 3:48:40 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	12/15/2017 3:40:02 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 4:54:14 PM	35506
Barium	120	0.49		mg/Kg	5	12/20/2017 4:57:59 PM	35506
Cadmium	ND	0.097		mg/Kg	1	12/18/2017 1:26:53 PM	35506
Chromium	5.7	0.29		mg/Kg	1	12/18/2017 1:26:53 PM	35506
Copper	3.8	0.29		mg/Kg	1	12/18/2017 1:26:53 PM	35506
Iron	5600	1200		mg/Kg	500	12/20/2017 5:36:43 PM	35506
Lead	ND	0.24		mg/Kg	1	12/20/2017 4:54:14 PM	35506
Manganese	66	0.49		mg/Kg	5	12/20/2017 4:57:59 PM	35506
Selenium	6.0	2.4		mg/Kg	1	12/20/2017 4:54:14 PM	35506
Silver	ND	0.24		mg/Kg	1	12/18/2017 1:26:53 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:26:53 PM	35506
Zinc	11	2.4		mg/Kg	1	12/18/2017 1:26:53 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/6/2017 8:11:22 AM	35298
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/6/2017 8:11:22 AM	35298
Surr: DNOP	97.7	70-130		%Rec	1	12/6/2017 8:11:22 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/6/2017 12:04:35 AM	35285
Surr: BFB	88.0	15-316		%Rec	1	12/6/2017 12:04:35 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	12/6/2017 12:04:35 AM	35285
Toluene	ND	0.049		mg/Kg	1	12/6/2017 12:04:35 AM	35285
Ethylbenzene	ND	0.049		mg/Kg	1	12/6/2017 12:04:35 AM	35285
Xylenes, Total	ND	0.098		mg/Kg	1	12/6/2017 12:04:35 AM	35285
Surr: 4-Bromofluorobenzene	85.5	80-120		%Rec	1	12/6/2017 12:04:35 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-015
Collection Date: 11/29/2017 9:50:00 AM
Client Sample ID: S-082148-112917-MG-T1
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 4:25:54 PM	35482
Sulfate	60	30		mg/Kg	20	12/13/2017 4:25:54 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.15	0.032		mg/Kg	1	12/15/2017 3:41:44 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 4:59:14 PM	35506
Barium	160	0.49		mg/Kg	5	12/20/2017 5:00:28 PM	35506
Cadmium	ND	0.099		mg/Kg	1	12/18/2017 1:28:35 PM	35506
Chromium	5.5	0.30		mg/Kg	1	12/18/2017 1:28:35 PM	35506
Copper	3.8	0.30		mg/Kg	1	12/18/2017 1:28:35 PM	35506
Iron	5800	1200		mg/Kg	500	12/20/2017 5:34:20 PM	35506
Lead	ND	0.25		mg/Kg	1	12/20/2017 4:59:14 PM	35506
Manganese	75	0.49		mg/Kg	5	12/20/2017 5:00:28 PM	35506
Selenium	7.6	2.5		mg/Kg	1	12/20/2017 4:59:14 PM	35506
Silver	0.25	0.25		mg/Kg	1	12/18/2017 1:28:35 PM	35506
Uranium	ND	4.9		mg/Kg	1	12/18/2017 1:28:35 PM	35506
Zinc	12	2.5		mg/Kg	1	12/18/2017 1:28:35 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	61	9.9		mg/Kg	1	12/7/2017 12:43:43 AM	35298
Motor Oil Range Organics (MRO)	230	49		mg/Kg	1	12/7/2017 12:43:43 AM	35298
Surr: DNOP	109	70-130		%Rec	1	12/7/2017 12:43:43 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/6/2017 1:36:22 AM	35285
Surr: BFB	80.7	15-316		%Rec	1	12/6/2017 1:36:22 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	12/6/2017 1:36:22 AM	35285
Toluene	ND	0.049		mg/Kg	1	12/6/2017 1:36:22 AM	35285
Ethylbenzene	ND	0.049		mg/Kg	1	12/6/2017 1:36:22 AM	35285
Xylenes, Total	ND	0.098		mg/Kg	1	12/6/2017 1:36:22 AM	35285
Surr: 4-Bromofluorobenzene	76.3	80-120	S	%Rec	1	12/6/2017 1:36:22 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-016
Collection Date: 11/29/2017 9:55:00 AM
Client Sample ID: S-082148-112917-MG-T2
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 4:38:19 PM	35482
Sulfate	130	30		mg/Kg	20	12/13/2017 4:38:19 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.095	0.031		mg/Kg	1	12/15/2017 3:43:27 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 5:01:43 PM	35506
Barium	100	0.48		mg/Kg	5	12/20/2017 5:03:44 PM	35506
Cadmium	ND	0.096		mg/Kg	1	12/18/2017 1:30:18 PM	35506
Chromium	5.5	0.29		mg/Kg	1	12/18/2017 1:30:18 PM	35506
Copper	4.4	0.29		mg/Kg	1	12/18/2017 1:30:18 PM	35506
Iron	6000	1200		mg/Kg	500	12/20/2017 5:31:12 PM	35506
Lead	1.2	0.24		mg/Kg	1	12/20/2017 5:01:43 PM	35506
Manganese	60	0.48		mg/Kg	5	12/20/2017 5:03:44 PM	35506
Selenium	2.4	2.4		mg/Kg	1	12/20/2017 5:01:43 PM	35506
Silver	ND	0.24		mg/Kg	1	12/18/2017 1:30:18 PM	35506
Uranium	ND	4.8		mg/Kg	1	12/18/2017 1:30:18 PM	35506
Zinc	12	2.4		mg/Kg	1	12/18/2017 1:30:18 PM	35506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	41	9.9		mg/Kg	1	12/7/2017 1:07:35 AM	35298
Motor Oil Range Organics (MRO)	190	49		mg/Kg	1	12/7/2017 1:07:35 AM	35298
Surr: DNOP	106	70-130		%Rec	1	12/7/2017 1:07:35 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/6/2017 1:59:17 AM	35285
Surr: BFB	84.0	15-316		%Rec	1	12/6/2017 1:59:17 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/6/2017 1:59:17 AM	35285
Toluene	ND	0.047		mg/Kg	1	12/6/2017 1:59:17 AM	35285
Ethylbenzene	ND	0.047		mg/Kg	1	12/6/2017 1:59:17 AM	35285
Xylenes, Total	ND	0.094		mg/Kg	1	12/6/2017 1:59:17 AM	35285
Surr: 4-Bromofluorobenzene	79.9	80-120	S	%Rec	1	12/6/2017 1:59:17 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-017
Collection Date: 11/29/2017 10:20:00 AM
Client Sample ID: S-082148-112917-MG-T4
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 4:50:43 PM	35482
Sulfate	76	30		mg/Kg	20	12/13/2017 4:50:43 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.031		mg/Kg	1	12/15/2017 3:45:10 PM	35508
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Arsenic	ND	2.4		mg/Kg	1	12/21/2017 9:06:49 AM	35507
Barium	92	0.49		mg/Kg	5	12/20/2017 10:26:53 PM	35507
Cadmium	ND	0.098		mg/Kg	1	12/21/2017 8:20:14 AM	35507
Chromium	5.6	0.29		mg/Kg	1	12/21/2017 8:20:14 AM	35507
Copper	3.1	0.29		mg/Kg	1	12/21/2017 8:20:14 AM	35507
Iron	6100	1200		mg/Kg	500	12/21/2017 7:53:51 AM	35507
Lead	0.97	0.24		mg/Kg	1	12/21/2017 8:20:14 AM	35507
Manganese	58	0.49		mg/Kg	5	12/20/2017 10:26:53 PM	35507
Selenium	ND	2.4		mg/Kg	1	12/21/2017 8:20:14 AM	35507
Silver	ND	0.24		mg/Kg	1	12/21/2017 9:06:49 AM	35507
Uranium	ND	4.9		mg/Kg	1	12/21/2017 8:20:14 AM	35507
Zinc	12	2.4		mg/Kg	1	12/21/2017 8:20:14 AM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	390	9.4		mg/Kg	1	12/11/2017 10:31:09 PM	35298
Motor Oil Range Organics (MRO)	620	47		mg/Kg	1	12/11/2017 10:31:09 PM	35298
Surr: DNOP	88.8	70-130		%Rec	1	12/11/2017 10:31:09 PM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/6/2017 2:22:10 AM	35285
Surr: BFB	80.1	15-316		%Rec	1	12/6/2017 2:22:10 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/6/2017 2:22:10 AM	35285
Toluene	ND	0.048		mg/Kg	1	12/6/2017 2:22:10 AM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/6/2017 2:22:10 AM	35285
Xylenes, Total	ND	0.097		mg/Kg	1	12/6/2017 2:22:10 AM	35285
Surr: 4-Bromofluorobenzene	78.3	80-120	S	%Rec	1	12/6/2017 2:22:10 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-018
Collection Date: 11/29/2017 10:30:00 AM
Client Sample ID: S-082148-112917-MG-T5
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 5:03:08 PM	35482
Sulfate	ND	30		mg/Kg	20	12/13/2017 5:03:08 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.15		mg/Kg	5	12/15/2017 4:44:57 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Barium	42	0.098		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Cadmium	ND	0.098		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Chromium	6.3	0.29		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Copper	4.8	0.29		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Iron	5000	1200		mg/Kg	500	12/21/2017 7:55:33 AM	35507
Lead	3.9	0.24		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Manganese	61	0.49		mg/Kg	5	12/20/2017 10:33:13 PM	35507
Selenium	ND	2.4		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Silver	ND	0.24		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Uranium	ND	4.9		mg/Kg	1	12/20/2017 10:31:57 PM	35507
Zinc	18	2.4		mg/Kg	1	12/20/2017 10:31:57 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/7/2017 1:55:20 AM	35298
Motor Oil Range Organics (MRO)	82	49		mg/Kg	1	12/7/2017 1:55:20 AM	35298
Surr: DNOP	107	70-130		%Rec	1	12/7/2017 1:55:20 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/6/2017 2:45:07 AM	35285
Surr: BFB	88.1	15-316		%Rec	1	12/6/2017 2:45:07 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/6/2017 2:45:07 AM	35285
Toluene	ND	0.048		mg/Kg	1	12/6/2017 2:45:07 AM	35285
Ethylbenzene	ND	0.048		mg/Kg	1	12/6/2017 2:45:07 AM	35285
Xylenes, Total	ND	0.096		mg/Kg	1	12/6/2017 2:45:07 AM	35285
Surr: 4-Bromofluorobenzene	85.1	80-120		%Rec	1	12/6/2017 2:45:07 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-019
Collection Date: 11/29/2017 10:35:00 AM
Client Sample ID: S-082148-112917-MG-T6
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 5:15:33 PM	35482
Sulfate	36	30		mg/Kg	20	12/13/2017 5:15:33 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.065	0.032		mg/Kg	1	12/15/2017 4:03:01 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Barium	99	0.50		mg/Kg	5	12/20/2017 10:35:45 PM	35507
Cadmium	ND	0.10		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Chromium	4.5	0.30		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Copper	3.4	0.30		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Iron	4800	1200		mg/Kg	500	12/21/2017 7:57:13 AM	35507
Lead	0.70	0.25		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Manganese	56	0.50		mg/Kg	5	12/20/2017 10:35:45 PM	35507
Selenium	7.3	2.5		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Silver	0.28	0.25		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Uranium	ND	5.0		mg/Kg	1	12/20/2017 10:34:28 PM	35507
Zinc	11	2.5		mg/Kg	1	12/20/2017 10:34:28 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/7/2017 2:19:22 AM	35298
Motor Oil Range Organics (MRO)	63	46		mg/Kg	1	12/7/2017 2:19:22 AM	35298
Surr: DNOP	110	70-130		%Rec	1	12/7/2017 2:19:22 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/6/2017 3:08:00 AM	35285
Surr: BFB	82.8	15-316		%Rec	1	12/6/2017 3:08:00 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/6/2017 3:08:00 AM	35285
Toluene	ND	0.046		mg/Kg	1	12/6/2017 3:08:00 AM	35285
Ethylbenzene	ND	0.046		mg/Kg	1	12/6/2017 3:08:00 AM	35285
Xylenes, Total	ND	0.091		mg/Kg	1	12/6/2017 3:08:00 AM	35285
Surr: 4-Bromofluorobenzene	81.7	80-120		%Rec	1	12/6/2017 3:08:00 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-020
Collection Date: 11/29/2017 10:50:00 AM
Client Sample ID: S-082148-112917-MG-T7
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/13/2017 5:27:57 PM	35482
Sulfate	ND	30		mg/Kg	20	12/13/2017 5:27:57 PM	35482
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 4:04:47 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Barium	120	0.49		mg/Kg	5	12/20/2017 10:38:14 PM	35507
Cadmium	ND	0.099		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Chromium	4.1	0.30		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Copper	2.9	0.30		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Iron	4300	1200		mg/Kg	500	12/21/2017 7:58:55 AM	35507
Lead	ND	0.25		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Manganese	45	0.099		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Selenium	11	2.5		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Silver	0.56	0.25		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Uranium	ND	4.9		mg/Kg	1	12/20/2017 10:36:59 PM	35507
Zinc	9.4	2.5		mg/Kg	1	12/20/2017 10:36:59 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	18	9.8		mg/Kg	1	12/7/2017 2:43:29 AM	35298
Motor Oil Range Organics (MRO)	95	49		mg/Kg	1	12/7/2017 2:43:29 AM	35298
Surr: DNOP	116	70-130		%Rec	1	12/7/2017 2:43:29 AM	35298
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/6/2017 3:30:54 AM	35285
Surr: BFB	83.8	15-316		%Rec	1	12/6/2017 3:30:54 AM	35285
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	12/6/2017 3:30:54 AM	35285
Toluene	ND	0.050		mg/Kg	1	12/6/2017 3:30:54 AM	35285
Ethylbenzene	ND	0.050		mg/Kg	1	12/6/2017 3:30:54 AM	35285
Xylenes, Total	ND	0.099		mg/Kg	1	12/6/2017 3:30:54 AM	35285
Surr: 4-Bromofluorobenzene	80.7	80-120		%Rec	1	12/6/2017 3:30:54 AM	35285

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-021
Collection Date: 11/29/2017 11:10:00 AM
Client Sample ID: S-082148-112917-MG-T8
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/18/2017 1:40:24 PM	35566
Sulfate	ND	30		mg/Kg	20	12/18/2017 1:40:24 PM	35566
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 4:06:34 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Barium	87	0.50		mg/Kg	5	12/20/2017 10:44:33 PM	35507
Cadmium	ND	0.099		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Chromium	4.5	0.30		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Copper	2.7	0.30		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Iron	4400	1200		mg/Kg	500	12/21/2017 8:00:35 AM	35507
Lead	0.71	0.25		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Manganese	50	0.099		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Selenium	7.6	2.5		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Silver	ND	0.25		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Uranium	ND	5.0		mg/Kg	1	12/20/2017 10:43:17 PM	35507
Zinc	10	2.5		mg/Kg	1	12/20/2017 10:43:17 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/7/2017 3:07:47 AM	35299
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2017 3:07:47 AM	35299
Surr: DNOP	103	70-130		%Rec	1	12/7/2017 3:07:47 AM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/5/2017 2:46:18 PM	35286
Surr: BFB	91.0	15-316		%Rec	1	12/5/2017 2:46:18 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 2:46:18 PM	35286
Toluene	ND	0.047		mg/Kg	1	12/5/2017 2:46:18 PM	35286
Ethylbenzene	ND	0.047		mg/Kg	1	12/5/2017 2:46:18 PM	35286
Xylenes, Total	ND	0.095		mg/Kg	1	12/5/2017 2:46:18 PM	35286
Surr: 4-Bromofluorobenzene	84.9	80-120		%Rec	1	12/5/2017 2:46:18 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-022
Collection Date: 11/29/2017 10:55:00 AM
Client Sample ID: S-082148-112917-MG-T9
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	12/20/2017 1:50:02 PM	35626
Sulfate	260	30		mg/Kg	20	12/20/2017 1:50:02 PM	35626
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.061	0.031		mg/Kg	1	12/15/2017 4:08:15 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Barium	90	0.50		mg/Kg	5	12/20/2017 10:47:03 PM	35507
Cadmium	ND	0.10		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Chromium	5.0	0.30		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Copper	2.7	0.30		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Iron	5600	1200		mg/Kg	500	12/21/2017 8:02:16 AM	35507
Lead	0.74	0.25		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Manganese	58	0.50		mg/Kg	5	12/20/2017 10:47:03 PM	35507
Selenium	6.0	2.5		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Silver	ND	0.25		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Uranium	ND	5.0		mg/Kg	1	12/20/2017 10:45:47 PM	35507
Zinc	14	2.5		mg/Kg	1	12/20/2017 10:45:47 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/7/2017 3:32:02 AM	35299
Motor Oil Range Organics (MRO)	60	47		mg/Kg	1	12/7/2017 3:32:02 AM	35299
Surr: DNOP	109	70-130		%Rec	1	12/7/2017 3:32:02 AM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/5/2017 3:56:53 PM	35286
Surr: BFB	91.5	15-316		%Rec	1	12/5/2017 3:56:53 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/5/2017 3:56:53 PM	35286
Toluene	ND	0.046		mg/Kg	1	12/5/2017 3:56:53 PM	35286
Ethylbenzene	ND	0.046		mg/Kg	1	12/5/2017 3:56:53 PM	35286
Xylenes, Total	ND	0.092		mg/Kg	1	12/5/2017 3:56:53 PM	35286
Surr: 4-Bromofluorobenzene	82.8	80-120		%Rec	1	12/5/2017 3:56:53 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-023
Collection Date: 11/29/2017 11:15:00 AM
Client Sample ID: S-082148-112917-MG-T10
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	12/20/2017 4:25:48 PM	35626
Sulfate	ND	30		mg/Kg	20	12/20/2017 4:25:48 PM	35626
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.040	0.031		mg/Kg	1	12/15/2017 4:09:54 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Barium	44	0.097		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Cadmium	ND	0.097		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Chromium	4.6	0.29		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Copper	1.7	0.29		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Iron	4800	1200		mg/Kg	500	12/21/2017 8:03:56 AM	35507
Lead	0.90	0.24		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Manganese	37	0.097		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Selenium	3.6	2.4		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Silver	ND	0.24		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Uranium	ND	4.9		mg/Kg	1	12/20/2017 10:48:19 PM	35507
Zinc	9.5	2.4		mg/Kg	1	12/20/2017 10:48:19 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	28	10		mg/Kg	1	12/7/2017 3:56:28 AM	35299
Motor Oil Range Organics (MRO)	100	50		mg/Kg	1	12/7/2017 3:56:28 AM	35299
Surr: DNOP	105	70-130		%Rec	1	12/7/2017 3:56:28 AM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2017 5:07:38 PM	35286
Surr: BFB	90.8	15-316		%Rec	1	12/5/2017 5:07:38 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 5:07:38 PM	35286
Toluene	ND	0.049		mg/Kg	1	12/5/2017 5:07:38 PM	35286
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2017 5:07:38 PM	35286
Xylenes, Total	ND	0.097		mg/Kg	1	12/5/2017 5:07:38 PM	35286
Surr: 4-Bromofluorobenzene	84.6	80-120		%Rec	1	12/5/2017 5:07:38 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-024
Collection Date: 11/29/2017 11:50:00 AM
Client Sample ID: S-082148-112917-MG-T11
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	12/20/2017 4:38:13 PM	35626
Sulfate	580	30		mg/Kg	20	12/20/2017 4:38:13 PM	35626
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.078	0.032		mg/Kg	1	12/15/2017 4:11:35 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Barium	91	0.49		mg/Kg	5	12/20/2017 10:52:08 PM	35507
Cadmium	ND	0.097		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Chromium	4.1	0.29		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Copper	2.9	0.29		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Iron	5300	1200		mg/Kg	500	12/21/2017 8:11:51 AM	35507
Lead	0.67	0.24		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Manganese	56	0.49		mg/Kg	5	12/20/2017 10:52:08 PM	35507
Selenium	6.3	2.4		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Silver	ND	0.24		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Uranium	ND	4.9		mg/Kg	1	12/20/2017 10:50:50 PM	35507
Zinc	9.4	2.4		mg/Kg	1	12/20/2017 10:50:50 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/7/2017 4:20:41 AM	35299
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2017 4:20:41 AM	35299
Surr: DNOP	101	70-130		%Rec	1	12/7/2017 4:20:41 AM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/5/2017 5:31:04 PM	35286
Surr: BFB	89.4	15-316		%Rec	1	12/5/2017 5:31:04 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/5/2017 5:31:04 PM	35286
Toluene	ND	0.046		mg/Kg	1	12/5/2017 5:31:04 PM	35286
Ethylbenzene	ND	0.046		mg/Kg	1	12/5/2017 5:31:04 PM	35286
Xylenes, Total	ND	0.093		mg/Kg	1	12/5/2017 5:31:04 PM	35286
Surr: 4-Bromofluorobenzene	83.5	80-120		%Rec	1	12/5/2017 5:31:04 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-025
Collection Date: 11/29/2017 11:45:00 AM
Client Sample ID: S-082148-112917-MG-T12
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	12/20/2017 4:50:37 PM	35626
Sulfate	2900	30		mg/Kg	20	12/20/2017 4:50:37 PM	35626
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.18	0.031		mg/Kg	1	12/15/2017 4:13:16 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 10:53:24 PM	35507
Barium	81	0.50		mg/Kg	5	12/20/2017 10:54:47 PM	35507
Cadmium	ND	0.099		mg/Kg	1	12/20/2017 10:53:24 PM	35507
Chromium	8.8	0.30		mg/Kg	1	12/20/2017 10:53:24 PM	35507
Copper	63	1.5		mg/Kg	5	12/20/2017 10:54:47 PM	35507
Iron	8100	1200		mg/Kg	500	12/21/2017 8:13:30 AM	35507
Lead	1.7	0.25		mg/Kg	1	12/20/2017 10:53:24 PM	35507
Manganese	73	0.50		mg/Kg	5	12/20/2017 10:54:47 PM	35507
Selenium	5.0	2.5		mg/Kg	1	12/20/2017 10:53:24 PM	35507
Silver	ND	0.25		mg/Kg	1	12/20/2017 10:53:24 PM	35507
Uranium	ND	5.0		mg/Kg	1	12/20/2017 10:53:24 PM	35507
Zinc	14	2.5		mg/Kg	1	12/20/2017 10:53:24 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	30	9.0		mg/Kg	1	12/7/2017 4:45:03 AM	35299
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/7/2017 4:45:03 AM	35299
Surr: DNOP	100	70-130		%Rec	1	12/7/2017 4:45:03 AM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/5/2017 5:54:26 PM	35286
Surr: BFB	90.8	15-316		%Rec	1	12/5/2017 5:54:26 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 5:54:26 PM	35286
Toluene	ND	0.049		mg/Kg	1	12/5/2017 5:54:26 PM	35286
Ethylbenzene	ND	0.049		mg/Kg	1	12/5/2017 5:54:26 PM	35286
Xylenes, Total	ND	0.097		mg/Kg	1	12/5/2017 5:54:26 PM	35286
Surr: 4-Bromofluorobenzene	85.6	80-120		%Rec	1	12/5/2017 5:54:26 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-026
Collection Date: 11/29/2017 11:35:00 AM
Client Sample ID: S-082148-112917-MG-T13
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	35	30		mg/Kg	20	12/20/2017 5:03:01 PM	35626
Sulfate	720	30		mg/Kg	20	12/20/2017 5:03:01 PM	35626
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.19	0.033		mg/Kg	1	12/15/2017 4:14:57 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.4		mg/Kg	1	12/20/2017 10:59:53 PM	35507
Barium	99	0.48		mg/Kg	5	12/20/2017 11:01:09 PM	35507
Cadmium	ND	0.095		mg/Kg	1	12/20/2017 10:59:53 PM	35507
Chromium	5.0	0.29		mg/Kg	1	12/20/2017 10:59:53 PM	35507
Copper	3.6	0.29		mg/Kg	1	12/20/2017 10:59:53 PM	35507
Iron	5200	1200		mg/Kg	500	12/21/2017 8:15:10 AM	35507
Lead	0.28	0.24		mg/Kg	1	12/20/2017 10:59:53 PM	35507
Manganese	67	0.48		mg/Kg	5	12/20/2017 11:01:09 PM	35507
Selenium	ND	2.4		mg/Kg	1	12/21/2017 8:26:18 AM	35507
Silver	ND	0.24		mg/Kg	1	12/20/2017 10:59:53 PM	35507
Uranium	ND	4.8		mg/Kg	1	12/20/2017 10:59:53 PM	35507
Zinc	10	2.4		mg/Kg	1	12/20/2017 10:59:53 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	30	9.8		mg/Kg	1	12/7/2017 5:09:20 AM	35299
Motor Oil Range Organics (MRO)	110	49		mg/Kg	1	12/7/2017 5:09:20 AM	35299
Surr: DNOP	104	70-130		%Rec	1	12/7/2017 5:09:20 AM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/5/2017 6:17:48 PM	35286
Surr: BFB	82.7	15-316		%Rec	1	12/5/2017 6:17:48 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	12/5/2017 6:17:48 PM	35286
Toluene	ND	0.046		mg/Kg	1	12/5/2017 6:17:48 PM	35286
Ethylbenzene	ND	0.046		mg/Kg	1	12/5/2017 6:17:48 PM	35286
Xylenes, Total	ND	0.092		mg/Kg	1	12/5/2017 6:17:48 PM	35286
Surr: 4-Bromofluorobenzene	81.5	80-120		%Rec	1	12/5/2017 6:17:48 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-027
Collection Date: 11/29/2017 11:30:00 AM
Client Sample ID: S-082148-112917-MG-T14
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	12/20/2017 5:15:26 PM	35626
Sulfate	ND	30		mg/Kg	20	12/20/2017 5:15:26 PM	35626
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	ND	0.032		mg/Kg	1	12/15/2017 4:16:40 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Barium	99	0.50		mg/Kg	5	12/20/2017 11:03:42 PM	35507
Cadmium	ND	0.10		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Chromium	3.4	0.30		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Copper	1.8	0.30		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Iron	3400	1200		mg/Kg	500	12/21/2017 8:16:51 AM	35507
Lead	0.38	0.25		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Manganese	36	0.10		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Selenium	5.7	2.5		mg/Kg	1	12/21/2017 8:52:18 AM	35507
Silver	0.27	0.25		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Uranium	ND	5.0		mg/Kg	1	12/20/2017 11:02:26 PM	35507
Zinc	7.6	2.5		mg/Kg	1	12/20/2017 11:02:26 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/7/2017 5:33:43 AM	35299
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/7/2017 5:33:43 AM	35299
Surr: DNOP	106	70-130		%Rec	1	12/7/2017 5:33:43 AM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/5/2017 8:14:10 PM	35286
Surr: BFB	88.7	15-316		%Rec	1	12/5/2017 8:14:10 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 8:14:10 PM	35286
Toluene	ND	0.047		mg/Kg	1	12/5/2017 8:14:10 PM	35286
Ethylbenzene	ND	0.047		mg/Kg	1	12/5/2017 8:14:10 PM	35286
Xylenes, Total	ND	0.094		mg/Kg	1	12/5/2017 8:14:10 PM	35286
Surr: 4-Bromofluorobenzene	83.8	80-120		%Rec	1	12/5/2017 8:14:10 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1712028

Lab ID: 1712028-028
Collection Date: 11/29/2017 12:00:00 PM
Client Sample ID: S-082148-112917-MG-T15
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	12/20/2017 5:27:51 PM	35626
Sulfate	4700	150		mg/Kg	100	12/22/2017 10:51:54 PM	35626
EPA METHOD 7471: MERCURY						Analyst: **JLF**	
Mercury	0.046	0.032		mg/Kg	1	12/15/2017 4:18:23 PM	35509
EPA METHOD 6010B: SOIL METALS						Analyst: **TES**	
Arsenic	ND	2.5		mg/Kg	1	12/20/2017 11:04:59 PM	35507
Barium	500	2.0		mg/Kg	20	12/21/2017 9:03:49 AM	35507
Cadmium	ND	0.098		mg/Kg	1	12/20/2017 11:04:59 PM	35507
Chromium	9.6	0.30		mg/Kg	1	12/20/2017 11:04:59 PM	35507
Copper	150	1.5		mg/Kg	5	12/21/2017 8:55:24 AM	35507
Iron	8000	1200		mg/Kg	500	12/21/2017 8:18:32 AM	35507
Lead	2.7	0.25		mg/Kg	1	12/20/2017 11:04:59 PM	35507
Manganese	100	0.49		mg/Kg	5	12/21/2017 8:55:24 AM	35507
Selenium	9.1	2.5		mg/Kg	1	12/21/2017 8:53:48 AM	35507
Silver	ND	0.25		mg/Kg	1	12/20/2017 11:04:59 PM	35507
Uranium	ND	4.9		mg/Kg	1	12/20/2017 11:04:59 PM	35507
Zinc	23	2.5		mg/Kg	1	12/20/2017 11:04:59 PM	35507
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	85	9.9		mg/Kg	1	12/11/2017 11:25:55 PM	35299
Motor Oil Range Organics (MRO)	320	50		mg/Kg	1	12/11/2017 11:25:55 PM	35299
Surr: DNOP	82.8	70-130		%Rec	1	12/11/2017 11:25:55 PM	35299
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/5/2017 8:37:19 PM	35286
Surr: BFB	86.3	15-316		%Rec	1	12/5/2017 8:37:19 PM	35286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/5/2017 8:37:19 PM	35286
Toluene	ND	0.048		mg/Kg	1	12/5/2017 8:37:19 PM	35286
Ethylbenzene	ND	0.048		mg/Kg	1	12/5/2017 8:37:19 PM	35286
Xylenes, Total	ND	0.097		mg/Kg	1	12/5/2017 8:37:19 PM	35286
Surr: 4-Bromofluorobenzene	81.0	80-120		%Rec	1	12/5/2017 8:37:19 PM	35286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35456**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**35456**		RunNo:	**47708**				
Prep Date:	**12/12/2017**	Analysis Date:	**12/12/2017**		SeqNo:	**1526136**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-35456**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**35456**		RunNo:	**47708**				
Prep Date:	**12/12/2017**	Analysis Date:	**12/12/2017**		SeqNo:	**1526137**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.1	90	110			
Sulfate	28	1.5	30.00	0	93.8	90	110			

Sample ID	**MB-35482**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**35482**		RunNo:	**47741**				
Prep Date:	**12/13/2017**	Analysis Date:	**12/13/2017**		SeqNo:	**1528089**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-35482**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**35482**		RunNo:	**47741**				
Prep Date:	**12/13/2017**	Analysis Date:	**12/13/2017**		SeqNo:	**1528090**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			
Sulfate	29	1.5	30.00	0	96.3	90	110			

Sample ID	**MB-35566**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**35566**		RunNo:	**47855**				
Prep Date:	**12/18/2017**	Analysis Date:	**12/18/2017**		SeqNo:	**1532772**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-35566**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**35566**		RunNo:	**47855**				
Prep Date:	**12/18/2017**	Analysis Date:	**12/18/2017**		SeqNo:	**1532773**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-35566**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**35566**		RunNo:	**47855**				
Prep Date:	**12/18/2017**	Analysis Date:	**12/18/2017**		SeqNo:	**1532773**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	90	110			
Sulfate	30	1.5	30.00	0	99.2	90	110			

Sample ID	**MB-35626**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**35626**		RunNo:	**47918**				
Prep Date:	**12/20/2017**	Analysis Date:	**12/20/2017**		SeqNo:	**1535014**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-35626**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**35626**		RunNo:	**47918**				
Prep Date:	**12/20/2017**	Analysis Date:	**12/20/2017**		SeqNo:	**1535015**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.2	90	110			
Sulfate	28	1.5	30.00	0	93.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID **LCS-35299**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **35299**	RunNo: **47518**
Prep Date: **12/4/2017**	Analysis Date: **12/5/2017**	SeqNo: **1517358** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.4	73.2	114			
Surr: DNOP	4.6		5.000		92.8	70	130			

Sample ID **MB-35299**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **35299**	RunNo: **47518**
Prep Date: **12/4/2017**	Analysis Date: **12/5/2017**	SeqNo: **1517360** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	70	130			

Sample ID **1712028-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-112717-M**	Batch ID: **35298**	RunNo: **47518**
Prep Date: **12/4/2017**	Analysis Date: **12/6/2017**	SeqNo: **1518337** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.8	49.02	0	95.1	55.8	125			
Surr: DNOP	4.7		4.902		95.4	70	130			

Sample ID **1712028-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-112717-M**	Batch ID: **35298**	RunNo: **47518**
Prep Date: **12/4/2017**	Analysis Date: **12/6/2017**	SeqNo: **1518338** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.6	47.94	0	96.6	55.8	125	0.719	20	
Surr: DNOP	4.7		4.794		98.2	70	130	0	0	

Sample ID **LCS-35298**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **35298**	RunNo: **47518**
Prep Date: **12/4/2017**	Analysis Date: **12/6/2017**	SeqNo: **1518367** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.7	73.2	114			
Surr: DNOP	4.7		5.000		94.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35298**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**35298**	RunNo:	**47518**				
Prep Date:	**12/4/2017**	Analysis Date:	**12/6/2017**	SeqNo:	**1518369**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	70	130			

Sample ID	**LCS-35332**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**35332**	RunNo:	**47518**				
Prep Date:	**12/5/2017**	Analysis Date:	**12/6/2017**	SeqNo:	**1518925**	Units:	**%Rec**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.2	70	130			

Sample ID	**MB-35332**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**35332**	RunNo:	**47518**				
Prep Date:	**12/5/2017**	Analysis Date:	**12/6/2017**	SeqNo:	**1518926**	Units:	**%Rec**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35285**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**35285**		RunNo:	**47528**				
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**		SeqNo:	**1518220**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		111	15	316			

Sample ID	**LCS-35285**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**35285**		RunNo:	**47528**				
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**		SeqNo:	**1518221**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.6	75.9	131			
Surr: BFB	1200		1000		120	15	316			

Sample ID	**1712028-002AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-112717-M**	Batch ID:	**35285**		RunNo:	**47528**				
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**		SeqNo:	**1518224**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.6	23.06	0	107	77.8	128			
Surr: BFB	1100		922.5		120	15	316			

Sample ID	**1712028-002AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-112717-M**	Batch ID:	**35285**		RunNo:	**47528**				
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**		SeqNo:	**1518225**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.7	23.65	0	112	77.8	128	7.17	20	
Surr: BFB	1200		946.1		122	15	316	0	0	

Sample ID	**MB-35286**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**35286**		RunNo:	**47527**				
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**		SeqNo:	**1518264**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.0	15	316			

Sample ID	**LCS-35286**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**35286**		RunNo:	**47527**				
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**		SeqNo:	**1518265**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-35286**	SampType: **LCS**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **35286**		RunNo: **47527**					
Prep Date:	**12/4/2017**	Analysis Date: **12/5/2017**		SeqNo: **1518265**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	98.0	75.9	131			
Surr: BFB	1100		1000		106	15	316			

Sample ID	**1712028-022AMS**	SampType: **MS**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-112917-M**	Batch ID: **35286**		RunNo: **47527**					
Prep Date:	**12/4/2017**	Analysis Date: **12/5/2017**		SeqNo: **1518272**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.49	0	104	77.8	128			
Surr: BFB	1000		979.4		105	15	316			

Sample ID	**1712028-022AMSD**	SampType: **MSD**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-112917-M**	Batch ID: **35286**		RunNo: **47527**					
Prep Date:	**12/4/2017**	Analysis Date: **12/5/2017**		SeqNo: **1518273**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.51	0	106	77.8	128	2.20	20	
Surr: BFB	1000		980.4		103	15	316	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35285**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **35285**		RunNo: **47528**					
Prep Date:	**12/4/2017**	Analysis Date: **12/5/2017**		SeqNo: **1518239**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	**LCS-35285**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **35285**		RunNo: **47528**					
Prep Date:	**12/4/2017**	Analysis Date: **12/5/2017**		SeqNo: **1518240**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	106	77.3	128			
Toluene	1.1	0.050	1.000	0	107	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	102	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	99.7	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	**1712028-001AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-112717-M**	Batch ID: **35285**		RunNo: **47528**					
Prep Date:	**12/4/2017**	Analysis Date: **12/5/2017**		SeqNo: **1518242**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9542	0	101	80.9	132			
Toluene	0.98	0.048	0.9542	0	102	79.8	136			
Ethylbenzene	0.96	0.048	0.9542	0	101	79.4	140			
Xylenes, Total	2.8	0.095	2.863	0	98.2	78.5	142			
Surr: 4-Bromofluorobenzene	1.0		0.9542		107	80	120			

Sample ID	**1712028-001AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-112717-M**	Batch ID: **35285**		RunNo: **47528**					
Prep Date:	**12/4/2017**	Analysis Date: **12/5/2017**		SeqNo: **1518243**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9434	0	109	80.9	132	5.94	20	
Toluene	1.0	0.047	0.9434	0	110	79.8	136	6.29	20	
Ethylbenzene	1.0	0.047	0.9434	0	107	79.4	140	4.26	20	
Xylenes, Total	3.0	0.094	2.830	0	105	78.5	142	5.34	20	
Surr: 4-Bromofluorobenzene	1.0		0.9434		107	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35286**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**35286**	RunNo:	**47527**					
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**	SeqNo:	**1518311**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	80	120			

Sample ID	**LCS-35286**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**35286**	RunNo:	**47527**					
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**	SeqNo:	**1518312**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.6	77.3	128			
Toluene	0.92	0.050	1.000	0	91.9	79.2	125			
Ethylbenzene	0.92	0.050	1.000	0	91.5	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	91.6	81.6	129			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	80	120			

Sample ID	**1712028-021AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-112917-M**	Batch ID:	**35286**	RunNo:	**47527**					
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**	SeqNo:	**1518319**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9488	0	95.7	80.9	132			
Toluene	0.91	0.047	0.9488	0	95.9	79.8	136			
Ethylbenzene	0.92	0.047	0.9488	0	96.5	79.4	140			
Xylenes, Total	2.8	0.095	2.846	0	97.3	78.5	142			
Surr: 4-Bromofluorobenzene	0.81		0.9488		85.5	80	120			

Sample ID	**1712028-021AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-112917-M**	Batch ID:	**35286**	RunNo:	**47527**					
Prep Date:	**12/4/2017**	Analysis Date:	**12/5/2017**	SeqNo:	**1518321**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	0.9940	0	97.9	80.9	132	6.97	20	
Toluene	0.98	0.050	0.9940	0	98.5	79.8	136	7.37	20	
Ethylbenzene	0.98	0.050	0.9940	0	98.3	79.4	140	6.45	20	
Xylenes, Total	2.9	0.099	2.982	0	98.8	78.5	142	6.24	20	
Surr: 4-Bromofluorobenzene	0.84		0.9940		84.8	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35508**	SampType: **MBLK**			TestCode: **EPA Method 7471: Mercury**				
Client ID:	**PBS**	Batch ID: **35508**			RunNo: **47830**				
Prep Date:	**12/14/2017**	Analysis Date: **12/15/2017**			SeqNo: **1529918**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-35508**	SampType: **LCS**			TestCode: **EPA Method 7471: Mercury**				
Client ID:	**LCSS**	Batch ID: **35508**			RunNo: **47830**				
Prep Date:	**12/14/2017**	Analysis Date: **12/15/2017**			SeqNo: **1529919**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	103	80	120			

Sample ID	**1712028-001AMS**	SampType: **MS**			TestCode: **EPA Method 7471: Mercury**				
Client ID:	**S-082148-112717-M**	Batch ID: **35508**			RunNo: **47830**				
Prep Date:	**12/14/2017**	Analysis Date: **12/15/2017**			SeqNo: **1529924**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.14	0.031	0.1546	0.009374	87.5	80	120			

Sample ID	**1712028-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 7471: Mercury**				
Client ID:	**S-082148-112717-M**	Batch ID: **35508**			RunNo: **47830**				
Prep Date:	**12/14/2017**	Analysis Date: **12/15/2017**			SeqNo: **1529925**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.15	0.032	0.1612	0.009374	88.5	80	120	5.08	20	

Sample ID	**MB-35509**	SampType: **MBLK**			TestCode: **EPA Method 7471: Mercury**				
Client ID:	**PBS**	Batch ID: **35509**			RunNo: **47830**				
Prep Date:	**12/14/2017**	Analysis Date: **12/15/2017**			SeqNo: **1529946**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-35509**	SampType: **LCS**			TestCode: **EPA Method 7471: Mercury**				
Client ID:	**LCSS**	Batch ID: **35509**			RunNo: **47830**				
Prep Date:	**12/14/2017**	Analysis Date: **12/15/2017**			SeqNo: **1529947**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1667	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**1712028-018AMS**	SampType:	**MS**		TestCode:	**EPA Method 7471: Mercury**				
Client ID:	**S-082148-112917-M**	Batch ID:	**35509**		RunNo:	**47830**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/15/2017**		SeqNo:	**1529978**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.35	0.15	0.1560	0.1218	143	80	120			S

Sample ID	**1712028-018AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 7471: Mercury**				
Client ID:	**S-082148-112917-M**	Batch ID:	**35509**		RunNo:	**47830**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/15/2017**		SeqNo:	**1529979**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.42	0.16	0.1614	0.1218	183	80	120	18.9	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35506**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**35506**	RunNo:	**47848**
Prep Date:	**12/14/2017**	Analysis Date:	**12/18/2017**	SeqNo:	**1533976** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**LCS-35506**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**35506**	RunNo:	**47848**
Prep Date:	**12/14/2017**	Analysis Date:	**12/18/2017**	SeqNo:	**1533977** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	96.6	80	120			
Barium	26	0.10	25.00	0	105	80	120			
Cadmium	25	0.10	25.00	0	100	80	120			
Chromium	25	0.30	25.00	0	100	80	120			
Copper	26	0.30	25.00	0	104	80	120			
Iron	26	2.5	25.00	0	102	80	120			
Lead	24	0.25	25.00	0	97.6	80	120			
Manganese	26	0.10	25.00	0	104	80	120			
Silver	5.4	0.25	5.000	0	107	80	120			
Uranium	24	5.0	25.00	0	97.7	80	120			
Zinc	24	2.5	25.00	0	97.4	80	120			

Sample ID	**1712028-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**S-082148-112717-M**	Batch ID:	**35506**	RunNo:	**47848**
Prep Date:	**12/14/2017**	Analysis Date:	**12/18/2017**	SeqNo:	**1534037** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	32	2.5	24.54	8.347	96.9	75	125			
Cadmium	23	0.098	24.54	0	94.9	75	125			
Chromium	33	0.29	24.54	8.572	97.8	75	125			
Copper	27	0.29	24.54	2.117	101	75	125			
Silver	4.5	0.25	4.907	0	90.8	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**1712028-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112717-M**	Batch ID:	**35506**		RunNo:	**47848**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/18/2017**		SeqNo:	**1534039**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	30	2.4	23.88	8.347	89.0	75	125	8.17	20	
Cadmium	22	0.096	23.88	0	91.8	75	125	5.95	20	
Chromium	31	0.29	23.88	8.572	94.4	75	125	4.56	20	
Copper	26	0.29	23.88	2.117	99.2	75	125	4.46	20	
Silver	4.2	0.24	4.776	0	87.1	75	125	6.88	20	

Sample ID	**MB-35507**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**PBS**	Batch ID:	**35507**		RunNo:	**47909**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/20/2017**		SeqNo:	**1535090**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**LCS-35507**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**LCSS**	Batch ID:	**35507**		RunNo:	**47909**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/20/2017**		SeqNo:	**1535091**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0	100	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Cadmium	26	0.10	25.00	0	102	80	120			
Chromium	24	0.30	25.00	0	98.0	80	120			
Copper	25	0.30	25.00	0	100	80	120			
Iron	25	2.5	25.00	0	101	80	120			
Lead	25	0.25	25.00	0	98.7	80	120			
Manganese	25	0.10	25.00	0	102	80	120			
Selenium	25	2.5	25.00	0	101	80	120			
Silver	5.2	0.25	5.000	0	105	80	120			
Uranium	23	5.0	25.00	0	92.9	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-35507**	SampType: **LCS**		TestCode: **EPA Method 6010B: Soil Metals**					
Client ID:	**LCSS**	Batch ID: **35507**		RunNo: **47909**					
Prep Date:	**12/14/2017**	Analysis Date: **12/20/2017**		SeqNo: **1535091**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	25	2.5	25.00	0	99.2	80	120			

Sample ID	**1712028-001AMS**	SampType: **MS**		TestCode: **EPA Method 6010B: Soil Metals**					
Client ID:	**S-082148-112717-M**	Batch ID: **35506**		RunNo: **47909**					
Prep Date:	**12/14/2017**	Analysis Date: **12/20/2017**		SeqNo: **1535106**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	22	0.25	24.54	0	90.0	75	125			
Selenium	28	2.5	24.54	1.554	106	75	125			
Zinc	40	2.5	24.54	16.55	95.9	75	125			

Sample ID	**1712028-001AMSD**	SampType: **MSD**		TestCode: **EPA Method 6010B: Soil Metals**					
Client ID:	**S-082148-112717-M**	Batch ID: **35506**		RunNo: **47909**					
Prep Date:	**12/14/2017**	Analysis Date: **12/20/2017**		SeqNo: **1535107**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	21	0.24	23.88	0	89.4	75	125	3.37	20	
Selenium	25	2.4	23.88	1.554	98.3	75	125	9.83	20	
Zinc	39	2.4	23.88	16.55	94.8	75	125	2.23	20	

Sample ID	**MB-35507**	SampType: **MBLK**		TestCode: **EPA Method 6010B: Soil Metals**					
Client ID:	**PBS**	Batch ID: **35507**		RunNo: **47954**					
Prep Date:	**12/14/2017**	Analysis Date: **12/21/2017**		SeqNo: **1536337**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-35507**	SampType: **LCS**		TestCode: **EPA Method 6010B: Soil Metals**						
Client ID:	**LCSS**	Batch ID: **35507**		RunNo: **47954**						
Prep Date:	**12/14/2017**	Analysis Date: **12/21/2017**		SeqNo: **1536338**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0	101	80	120			
Barium	26	0.10	25.00	0	104	80	120			
Cadmium	26	0.10	25.00	0	103	80	120			
Chromium	24	0.30	25.00	0	96.0	80	120			
Copper	25	0.30	25.00	0	102	80	120			
Iron	25	2.5	25.00	0	99.4	80	120			
Lead	25	0.25	25.00	0	98.9	80	120			
Manganese	25	0.10	25.00	0	98.3	80	120			
Selenium	26	2.5	25.00	0	102	80	120			
Silver	5.4	0.25	5.000	0	108	80	120			
Uranium	23	5.0	25.00	0	93.0	80	120			
Zinc	23	2.5	25.00	0	93.7	80	120			

Sample ID	**1712028-017AMS**	SampType: **MS**		TestCode: **EPA Method 6010B: Soil Metals**						
Client ID:	**S-082148-112917-M**	Batch ID: **35507**		RunNo: **47954**						
Prep Date:	**12/14/2017**	Analysis Date: **12/21/2017**		SeqNo: **1536356**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	22	0.10	24.92	0	88.7	75	125			
Chromium	27	0.30	24.92	5.649	84.1	75	125			
Copper	28	0.30	24.92	3.056	99.2	75	125			
Lead	21	0.25	24.92	0.9669	81.0	75	125			
Selenium	20	2.5	24.92	0	81.2	75	125			
Uranium	12	5.0	24.92	0	49.9	75	125			S
Zinc	33	2.5	24.92	12.23	82.9	75	125			

Sample ID	**1712028-017AMSD**	SampType: **MSD**		TestCode: **EPA Method 6010B: Soil Metals**						
Client ID:	**S-082148-112917-M**	Batch ID: **35507**		RunNo: **47954**						
Prep Date:	**12/14/2017**	Analysis Date: **12/21/2017**		SeqNo: **1536357**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	22	0.098	24.51	0	88.4	75	125	2.05	20	
Chromium	26	0.29	24.51	5.649	83.4	75	125	1.94	20	
Copper	27	0.29	24.51	3.056	98.2	75	125	2.38	20	
Lead	21	0.25	24.51	0.9669	80.3	75	125	2.40	20	
Selenium	22	2.5	24.51	0	89.4	75	125	8.02	20	
Uranium	13	4.9	24.51	0	54.1	75	125	6.44	20	S
Zinc	32	2.5	24.51	12.23	82.0	75	125	1.74	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**1712028-017AMS**	SampType:	**MS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112917-M**	Batch ID:	**35507**		RunNo:	**47954**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/21/2017**		SeqNo:	**1536373**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	24.92	1.065	102	75	125			
Silver	5.4	0.25	4.985	0	109	75	125			

Sample ID	**1712028-017AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-112917-M**	Batch ID:	**35507**		RunNo:	**47954**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/21/2017**		SeqNo:	**1536374**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	24.51	1.065	99.1	75	125	4.17	20	
Silver	5.3	0.25	4.901	0	108	75	125	2.80	20	

Sample ID	**MB-35506**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**PBS**	Batch ID:	**35506**		RunNo:	**47922**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/20/2017**		SeqNo:	**1536419**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**LCS-35506**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**LCSS**	Batch ID:	**35506**		RunNo:	**47922**				
Prep Date:	**12/14/2017**	Analysis Date:	**12/20/2017**		SeqNo:	**1536420**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	97.5	80	120			
Barium	25	0.10	25.00	0	99.2	80	120			
Cadmium	26	0.10	25.00	0	103	80	120			
Chromium	25	0.30	25.00	0	99.4	80	120			
Copper	26	0.30	25.00	0	103	80	120			
Lead	25	0.25	25.00	0	98.9	80	120			
Manganese	26	0.10	25.00	0	103	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712028**

03-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-35506**	SampType: **LCS**		TestCode: **EPA Method 6010B: Soil Metals**						
Client ID:	**LCSS**	Batch ID: **35506**		RunNo: **47922**						
Prep Date:	**12/14/2017**	Analysis Date: **12/20/2017**		SeqNo: **1536420**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	24	2.5	25.00	0	95.2	80	120			
Silver	5.2	0.25	5.000	0	104	80	120			
Uranium	23	5.0	25.00	0	93.5	80	120			
Zinc	25	2.5	25.00	0	99.0	80	120			

Sample ID	**1712028-017APS**	SampType: **PS**		TestCode: **EPA Method 6010B: Soil Metals**						
Client ID:	**S-082148-112917-M**	Batch ID: **35507**		RunNo: **47922**						
Prep Date:		Analysis Date: **12/20/2017**		SeqNo: **1536435**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	210	0.49	122.2	92.40	94.2	80	120			
Manganese	170	0.49	122.2	58.02	95.6	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1712028 | RcptNo: 1

Received By: **Erin Melendrez** 12/1/2017 9:30:00 AM

Completed By: **Sophia Campuzano** 12/1/2017 10:24:51 AM

Reviewed By: ENM 12/1/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			

Chain-of-Custody Record

Client: CHD Services Inc.

Mailing Address: 6121 Indian School Rd. Ste 200 NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler: Michael Grant

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.1 − 0.7(C°) = 3.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1712028	BTEX + ~~MTBE + TMB~~'s (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride/Sulfate/300	Metals (6010B/6020)*	Mercury (7471)	
11/27/17	1115	S	S-082148-112717-MG-V1	4oz Soil Jar	ICE	-001	X		X									X	X	X	
	1135		S-082148-112717-MG-V2			-002	X		X									X	X	X	
	1200		S-082148-112717-MG-V4			-003	X		X									X	X	X	
	1210		S-082148-112717-MG-V5			-004	X		X									X	X	X	
	1220		S-082148-112717-MG-V6			-005	X		X									X	X	X	
	1320		S-082148-112717-MG-V7			-006	X		X									X	X	X	
	1340		S-082148-112717-MG-V8			-007	X		X									X	X	X	
	1330		S-082148-112717-MG-V9			-008	X		X									X	X	X	
	1350		S-082148-112717-MG-V10			-009	X		X									X	X	X	
	1440		S-082148-112717-MG-V11			-010	X		X									X	X	X	
	1430		S-082148-112717-MG-V12			-011	X		X									X	X	X	
	1400		S-082148-112717-MG-V13			-012	X		X									X	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/30/17	0740			11/31/17	0740
11/30/17	1900			12/1/17	0930

Remarks:
*Metals in list 20.6.2.3103 A+B per Bernie See attached list.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services Inc.

Mailing Address: 6121 Indian School Rd Ste 200 NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler: Michael Gant

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.0 -0.7(C°)=3.4

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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1712028	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride/Sulfate (300)	Metals (6010B/6020)	Mercury (7471)		Air Bubbles (Y or N)
11/27/17	1415	S	S-082148-112717-MG-V14	4oz Soil Jar	ICE	-013	X		X									X	X	X		
11/27/17	1450		S-082148-112717-MG-V15			-014	X		X									X	X	X		
11/29/17	0950		S-082148-112917-MG-T1			-015	X		X									X	X	X		
	0955		S-082148-112917-MG-T2			-016	X		X									X	X	X		
	1020		S-082148-112917-MG-T4			-017	X		X									X	X	X		
	1030		S-082148-112917-MG-T5			-018	X		X									X	X	X		
	1035		S-082148-112917-MG-T6			-019	X		X									X	X	X		
	1050		S-082148-112917-MG-T7			-020	X		X									X	X	X		
	~~1055~~ 1110		S-082148-112917-MG-T8			-021	X		X									X	X	X		
	1055		S-082148-112917-MG-T9			-022	X		X									X	X	X		
	1115		S-082148-112917-MG-T10			-023	X		X									X	X	X		
	1150		S-082148-112917-MG-T11			-024	X		X									X	X	X		

Date	Time	Relinquished by:	Received by:	Date	Time
11/30/17	0740			11/30/17	0740
12/1/17	1900			12/1/17	0930

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services Inc.

Mailing Address: 6121 Indian School Rd Ste 200 NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.1 + -0.7(A) = 3.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1712028	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides/Sulfate (300)	Metals (6010B/6020)	Mercury (7471)	Air Bubbles (Y or N)
11/29/17	1145	S	S-082148-112917-MG-T12	4oz Soil Jar	ICE	-025	X		X									X	X	X	
"	1135	"	S-082148-112917-MG-T13	"	"	-026	X		X									X	X	X	
"	1130	"	S-082148-112917-MG-T14	"	"	-027	X		X									X	X	X	
"	1200	"	S-082148-112917-MG-T15	"	"	-028	X		X									X	X	X	

Date	Time	Relinquished by:	Received by:	Date Time
11/30/17	0740			11/30/17 0740
11/30/17	1900			12/1/17 0930

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

C. The standards are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations.
[2-18-77; 20.6.2.3101 NMAC - Rn, 20 NMAC 6.2.III.3101, 1-15-01]

20.6.2.3102: [RESERVED]
[12-1-95; 20.6.2.3102 NMAC - Rn, 20 NMAC 6.2.III.3102, 1-15-01]

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection D of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants.

A. **Human Health Standards**-Ground water shall meet the standards of Subsection A and B of this section unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 20.6.2.1101 NMAC for the combination of contaminants, or the Human Health Standard of Subsection A of Section 20.6.2.3103 NMAC for each contaminant shall apply, whichever is more stringent. Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l
(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l
(23) total xylenes.....0.62 mg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l
(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l

(32) PAHs: total naphthalene plus monomethylnaphthalenes.....0.03 mg/l
(33) benzo-a-pyrene.....0.0007 mg/l

B. Other Standards for Domestic Water Supply

(1) Chloride (Cl) .....250.0 mg/l
(2) Copper (Cu) .....1.0 mg/l
(3) Iron (Fe) .....1.0 mg/l
(4) Manganese (Mn) .....0.2 mg/l
(6) Phenols.....0.005 mg/l
(7) Sulfate (SO_4) .....600.0 mg/l
(8) Total Dissolved Solids (TDS) .....1000.0 mg/l
(9) Zinc (Zn) .....10.0 mg/l
(10) pH.....between 6 and 9

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of this section unless otherwise provided.

(1) Aluminum (Al)..... .....5.0 mg/l
(2) Boron (B) .....0.75 mg/l
(3) Cobalt (Co) .....0.05 mg/l
(4) Molybdenum (Mo) .....1.0 mg/l
(5) Nickel (Ni) .....0.2 mg/l

[2-18-77, 1-29-82, 11-17-83, 3-3-86, 12-1-95; 20.6.2.3103 NMAC - Rn, 20 NMAC 6.2.III.3103, 1-15-01; A, 9-26-04]

[Note: For purposes of application of the amended numeric uranium standard to past and current water discharges (as of 9-26-04), the new standard will not become effective until June 1, 2007. For any new water discharges, the uranium standard is effective 9-26-04.]

20.6.2.3104 DISCHARGE PERMIT REQUIRED: Unless otherwise provided by this Part, no person shall cause or allow effluent or leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge permit issued by the secretary. When a permit has been issued, discharges must be consistent with the terms and conditions of the permit. In the event of a transfer of the ownership, control, or possession of a facility for which a discharge permit is in effect, the transferee shall have authority to discharge under such permit, provided that the transferee has complied with Section 20.6.2.3111 NMAC, regarding transfers. [2-18-77, 12-24-87, 12-1-95; Rn & A, 20.6.2.3104 NMAC - 20 NMAC 6.2.III.3104, 1-15-01; A, 12-1-01]

20.6.2.3105 EXEMPTIONS FROM DISCHARGE PERMIT REQUIREMENT: Sections 20.6.2.3104 and 20.6.2.3106 NMAC do not apply to the following:

A. Effluent or leachate which conforms to all the listed numerical standards of Section 20.6.2.3103 NMAC and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply;

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day;

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system;

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result;

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry arroyos and ephemeral streams are not exempt from the discharge permit requirement, except as otherwise provided in this section;

F. Those constituents which are subject to effective and enforceable effluent limitations in a National Pollutant Discharge Elimination System (NPDES) permit, where discharge onto or below the surface of the ground so that water contaminants may move directly or indirectly into ground water occurs downstream from the outfall

Analytical Data 2018

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 26, 2018

Bernie Bockish

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1801309

Dear Bernie Bockish:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/6/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1801309

Lab ID: 1801309-001
Collection Date: 1/4/2018 1:55:00 PM
Client Sample ID: S-082148-010418-MG-V4
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/16/2018 1:15:08 PM	36048
EPA METHOD 7471: MERCURY						Analyst: **ELS**	
Mercury	ND	0.031		mg/Kg	1	1/16/2018 2:09:42 PM	36038
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	1/19/2018 11:50:29 AM	36037
Barium	78	0.099		mg/Kg	1	1/18/2018 11:48:16 AM	36037
Cadmium	ND	0.099		mg/Kg	1	1/18/2018 11:48:16 AM	36037
Chromium	5.1	0.30		mg/Kg	1	1/18/2018 11:48:16 AM	36037
Copper	2.3	0.30		mg/Kg	1	1/18/2018 11:48:16 AM	36037
Iron	5300	120		mg/Kg	50	1/19/2018 10:29:05 AM	36037
Lead	ND	0.25		mg/Kg	1	1/19/2018 10:27:39 AM	36037
Manganese	43	0.099		mg/Kg	1	1/19/2018 10:27:39 AM	36037
Selenium	ND	2.5		mg/Kg	1	1/18/2018 11:48:16 AM	36037
Silver	ND	0.25		mg/Kg	1	1/18/2018 11:48:16 AM	36037
Uranium	ND	5.0		mg/Kg	1	1/18/2018 11:48:16 AM	36037
Zinc	10	2.5		mg/Kg	1	1/18/2018 11:48:16 AM	36037
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	550	100		mg/Kg	10	1/11/2018 5:26:06 PM	35932
Motor Oil Range Organics (MRO)	1300	510		mg/Kg	10	1/11/2018 5:26:06 PM	35932
Surr: DNOP	0	70-130	S	%Rec	10	1/11/2018 5:26:06 PM	35932
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/11/2018 11:39:48 AM	35928
Surr: BFB	80.5	15-316		%Rec	1	1/11/2018 11:39:48 AM	35928
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	1/11/2018 11:39:48 AM	35928
Toluene	ND	0.046		mg/Kg	1	1/11/2018 11:39:48 AM	35928
Ethylbenzene	ND	0.046		mg/Kg	1	1/11/2018 11:39:48 AM	35928
Xylenes, Total	ND	0.092		mg/Kg	1	1/11/2018 11:39:48 AM	35928
Surr: 4-Bromofluorobenzene	88.0	80-120		%Rec	1	1/11/2018 11:39:48 AM	35928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1801309

Lab ID: 1801309-002
Collection Date: 1/4/2018 2:00:00 PM
Client Sample ID: S-082148-010418-MG-T3
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/16/2018 1:27:33 PM	36048
EPA METHOD 7471: MERCURY						Analyst: **ELS**	
Mercury	0.27	0.032		mg/Kg	1	1/16/2018 2:11:24 PM	36038
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.4		mg/Kg	1	1/19/2018 11:51:59 AM	36037
Barium	57	0.096		mg/Kg	1	1/18/2018 11:49:42 AM	36037
Cadmium	ND	0.096		mg/Kg	1	1/18/2018 11:49:42 AM	36037
Chromium	5.8	0.29		mg/Kg	1	1/18/2018 11:49:42 AM	36037
Copper	2.2	0.29		mg/Kg	1	1/18/2018 11:49:42 AM	36037
Iron	6000	240		mg/Kg	100	1/19/2018 10:32:04 AM	36037
Lead	0.86	0.24		mg/Kg	1	1/19/2018 10:30:32 AM	36037
Manganese	43	0.096		mg/Kg	1	1/19/2018 10:30:32 AM	36037
Selenium	ND	2.4		mg/Kg	1	1/18/2018 11:49:42 AM	36037
Silver	ND	0.24		mg/Kg	1	1/18/2018 11:49:42 AM	36037
Uranium	ND	4.8		mg/Kg	1	1/18/2018 11:49:42 AM	36037
Zinc	12	2.4		mg/Kg	1	1/18/2018 11:49:42 AM	36037
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	780	96		mg/Kg	10	1/11/2018 6:14:17 PM	35932
Motor Oil Range Organics (MRO)	1700	480		mg/Kg	10	1/11/2018 6:14:17 PM	35932
Surr: DNOP	0	70-130	S	%Rec	10	1/11/2018 6:14:17 PM	35932
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/11/2018 12:50:05 PM	35928
Surr: BFB	81.4	15-316		%Rec	1	1/11/2018 12:50:05 PM	35928
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	1/11/2018 12:50:05 PM	35928
Toluene	0.068	0.047		mg/Kg	1	1/11/2018 12:50:05 PM	35928
Ethylbenzene	ND	0.047		mg/Kg	1	1/11/2018 12:50:05 PM	35928
Xylenes, Total	0.10	0.094		mg/Kg	1	1/11/2018 12:50:05 PM	35928
Surr: 4-Bromofluorobenzene	87.1	80-120		%Rec	1	1/11/2018 12:50:05 PM	35928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1801309

Lab ID: 1801309-003
Collection Date: 1/4/2018 2:05:00 PM
Client Sample ID: S-082148-010418-MG-V3
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	1/16/2018 1:39:57 PM	36048
EPA METHOD 7471: MERCURY						Analyst: **ELS**	
Mercury	ND	0.033		mg/Kg	1	1/16/2018 2:13:06 PM	36038
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.4		mg/Kg	1	1/19/2018 11:53:26 AM	36037
Barium	69	0.097		mg/Kg	1	1/18/2018 11:57:15 AM	36037
Cadmium	ND	0.097		mg/Kg	1	1/18/2018 11:57:15 AM	36037
Chromium	6.6	0.29		mg/Kg	1	1/18/2018 11:57:15 AM	36037
Copper	2.1	0.29		mg/Kg	1	1/18/2018 11:57:15 AM	36037
Iron	6600	240		mg/Kg	100	1/19/2018 10:35:03 AM	36037
Lead	0.26	0.24		mg/Kg	1	1/19/2018 10:33:31 AM	36037
Manganese	39	0.097		mg/Kg	1	1/19/2018 10:33:31 AM	36037
Selenium	ND	2.4		mg/Kg	1	1/19/2018 10:33:31 AM	36037
Silver	ND	0.24		mg/Kg	1	1/18/2018 11:57:15 AM	36037
Uranium	ND	4.9		mg/Kg	1	1/18/2018 11:57:15 AM	36037
Zinc	13	2.4		mg/Kg	1	1/18/2018 11:57:15 AM	36037
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/10/2018 6:25:43 PM	35932
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/10/2018 6:25:43 PM	35932
Surr: DNOP	99.1	70-130		%Rec	1	1/10/2018 6:25:43 PM	35932
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/10/2018 10:16:36 PM	35928
Surr: BFB	90.9	15-316		%Rec	1	1/10/2018 10:16:36 PM	35928
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	1/10/2018 10:16:36 PM	35928
Toluene	ND	0.050		mg/Kg	1	1/10/2018 10:16:36 PM	35928
Ethylbenzene	ND	0.050		mg/Kg	1	1/10/2018 10:16:36 PM	35928
Xylenes, Total	ND	0.10		mg/Kg	1	1/10/2018 10:16:36 PM	35928
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	1/10/2018 10:16:36 PM	35928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1801309**

26-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-36048**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**36048**	RunNo:	**48479**					
Prep Date:	**1/16/2018**	Analysis Date:	**1/16/2018**	SeqNo:	**1559254**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-36048**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**36048**	RunNo:	**48479**					
Prep Date:	**1/16/2018**	Analysis Date:	**1/16/2018**	SeqNo:	**1559255**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1801309**

26-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-35932**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**35932**		RunNo:	**48338**				
Prep Date:	**1/9/2018**	Analysis Date:	**1/10/2018**		SeqNo:	**1552552**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.2	70	130			
Surr: DNOP	4.5		5.000		89.7	70	130			

Sample ID	**MB-35932**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**35932**		RunNo:	**48338**				
Prep Date:	**1/9/2018**	Analysis Date:	**1/10/2018**		SeqNo:	**1552553**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1801309**

26-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID **MB-35928**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **35928**	RunNo: **48354**
Prep Date: **1/9/2018**	Analysis Date: **1/10/2018**	SeqNo: **1553154** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.5	15	316			

Sample ID **LCS-35928**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **35928**	RunNo: **48354**
Prep Date: **1/9/2018**	Analysis Date: **1/10/2018**	SeqNo: **1553155** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	75.9	131			
Surr: BFB	890		1000		89.4	15	316			

Sample ID **1801309-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-010418-M**	Batch ID: **35928**	RunNo: **48383**
Prep Date: **1/9/2018**	Analysis Date: **1/11/2018**	SeqNo: **1554673** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.72	0	94.3	77.8	128			
Surr: BFB	860		948.8		90.9	15	316			

Sample ID **1801309-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-010418-M**	Batch ID: **35928**	RunNo: **48383**
Prep Date: **1/9/2018**	Analysis Date: **1/11/2018**	SeqNo: **1554674** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.78	0	102	77.8	128	12.6	20	
Surr: BFB	900		991.1		90.9	15	316	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1801309**

26-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-35928**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**35928**	RunNo:	**48354**					
Prep Date:	**1/9/2018**	Analysis Date:	**1/10/2018**	SeqNo:	**1553179**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.5	80	120			

Sample ID	**LCS-35928**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**35928**	RunNo:	**48354**					
Prep Date:	**1/9/2018**	Analysis Date:	**1/10/2018**	SeqNo:	**1553180**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	86.8	77.3	128			
Toluene	0.89	0.050	1.000	0	89.2	79.2	125			
Ethylbenzene	0.88	0.050	1.000	0	87.6	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	89.6	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.0	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1801309**

26-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-36038**	SampType:	**MBLK**	TestCode:	**EPA Method 7471: Mercury**				
Client ID:	**PBS**	Batch ID:	**36038**	RunNo:	**48481**				
Prep Date:	**1/16/2018**	Analysis Date:	**1/16/2018**	SeqNo:	**1558319**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-36038**	SampType:	**LCS**	TestCode:	**EPA Method 7471: Mercury**				
Client ID:	**LCSS**	Batch ID:	**36038**	RunNo:	**48481**				
Prep Date:	**1/16/2018**	Analysis Date:	**1/16/2018**	SeqNo:	**1558320**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	100	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1801309**

26-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-36037**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**36037**	RunNo:	**48534**
Prep Date:	**1/16/2018**	Analysis Date:	**1/18/2018**	SeqNo:	**1560671** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**LCS-36037**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**36037**	RunNo:	**48534**
Prep Date:	**1/16/2018**	Analysis Date:	**1/18/2018**	SeqNo:	**1560672** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	25	0.10	25.00	0	100	80	120			
Cadmium	25	0.10	25.00	0	100	80	120			
Chromium	25	0.30	25.00	0	98.7	80	120			
Copper	25	0.30	25.00	0	102	80	120			
Iron	26	2.5	25.00	0	103	80	120			
Selenium	24	2.5	25.00	0	94.0	80	120			
Silver	5.2	0.25	5.000	0	103	80	120			
Uranium	24	5.0	25.00	0	96.4	80	120			
Zinc	24	2.5	25.00	0	97.6	80	120			

Sample ID	**MB-36037**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**36037**	RunNo:	**48555**
Prep Date:	**1/16/2018**	Analysis Date:	**1/19/2018**	SeqNo:	**1561782** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.25								
Manganese	ND	0.10								

Sample ID	**LCS-36037**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**36037**	RunNo:	**48555**
Prep Date:	**1/16/2018**	Analysis Date:	**1/19/2018**	SeqNo:	**1561783** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	25	0.25	25.00	0	101	80	120			
Manganese	25	0.10	25.00	0	98.9	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1801309**

26-Jan-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-36037**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**					
Client ID:	**PBS**	Batch ID:	**36037**	RunNo:	**48555**					
Prep Date:	**1/16/2018**	Analysis Date:	**1/19/2018**	SeqNo:	**1561905**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								

Sample ID	**LCS-36037**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**					
Client ID:	**LCSS**	Batch ID:	**36037**	RunNo:	**48555**					
Prep Date:	**1/16/2018**	Analysis Date:	**1/19/2018**	SeqNo:	**1561906**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0	98.9	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1801309 | RcptNo: 1

Received By: Anne Thorne 1/6/2018 1:30:00 AM

Completed By: Dennis Suazo 1/8/2018 9:19:44 AM

Reviewed By: IMO 1/8/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified:		Date:	
By Whom:		Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person	
Regarding:			
Client Instructions:			

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Not Present			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd, Suite 200
NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler: Michael Gant

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1801309	BTEX + MTBE + TPH (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride_300	7471 Mercury	6010 B		Air Bubbles (Y or N)
01/04/18	1355	S	S-082148-010418-MG-V4	4oz Soil Jars	ICE	001	X		X	✓								X	X	X		
	1400		S-082148-010418-MG-T3	1	1	002	X		X									X	X	X		
	1405		S-082148-010418-MG-V3			003	X		X									X	X	X		

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
1/5/18	1330			1/5/18	1330	
1/5/18	1900			01/06/18	1030	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 07, 2018

Bernie Bockisch
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1803057

Dear Bernie Bockisch:

Hall Environmental Analysis Laboratory received 16 sample(s) on 3/1/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1803057

Lab ID: 1803057-001 **Collection Date:** 2/26/2018 10:35:00 AM
Client Sample ID: S-082148-022618-MG-V1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/6/2018 1:08:52 PM	36808
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/6/2018 1:08:52 PM	36808
Surr: DNOP	77.1	70-130		%Rec	1	3/6/2018 1:08:52 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2018 9:44:21 AM	36806
Surr: BFB	92.6	15-316		%Rec	1	3/5/2018 9:44:21 AM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/5/2018 9:44:21 AM	36806
Toluene	ND	0.047		mg/Kg	1	3/5/2018 9:44:21 AM	36806
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2018 9:44:21 AM	36806
Xylenes, Total	ND	0.095		mg/Kg	1	3/5/2018 9:44:21 AM	36806
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	3/5/2018 9:44:21 AM	36806

Lab ID: 1803057-002 **Collection Date:** 2/26/2018 10:30:00 AM
Client Sample ID: S-082148-022618-MG-V2 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/6/2018 1:30:50 PM	36808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/6/2018 1:30:50 PM	36808
Surr: DNOP	80.2	70-130		%Rec	1	3/6/2018 1:30:50 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2018 10:07:53 AM	36806
Surr: BFB	97.9	15-316		%Rec	1	3/5/2018 10:07:53 AM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/5/2018 10:07:53 AM	36806
Toluene	ND	0.047		mg/Kg	1	3/5/2018 10:07:53 AM	36806
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2018 10:07:53 AM	36806
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2018 10:07:53 AM	36806
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	3/5/2018 10:07:53 AM	36806

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1803057

Lab ID: 1803057-003 **Collection Date:** 2/26/2018 10:50:00 AM
Client Sample ID: S-082148-022618-MG-V3 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/6/2018 1:52:49 PM	36808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/6/2018 1:52:49 PM	36808
Surr: DNOP	83.6	70-130		%Rec	1	3/6/2018 1:52:49 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2018 10:31:26 AM	36806
Surr: BFB	94.8	15-316		%Rec	1	3/5/2018 10:31:26 AM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/5/2018 10:31:26 AM	36806
Toluene	ND	0.048		mg/Kg	1	3/5/2018 10:31:26 AM	36806
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2018 10:31:26 AM	36806
Xylenes, Total	ND	0.095		mg/Kg	1	3/5/2018 10:31:26 AM	36806
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	3/5/2018 10:31:26 AM	36806

Lab ID: 1803057-004 **Collection Date:** 2/26/2018 10:40:00 AM
Client Sample ID: S-082148-022618-MG-V4 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/6/2018 2:14:46 PM	36808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/6/2018 2:14:46 PM	36808
Surr: DNOP	86.7	70-130		%Rec	1	3/6/2018 2:14:46 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2018 10:55:08 AM	36806
Surr: BFB	95.1	15-316		%Rec	1	3/5/2018 10:55:08 AM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/5/2018 10:55:08 AM	36806
Toluene	ND	0.049		mg/Kg	1	3/5/2018 10:55:08 AM	36806
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2018 10:55:08 AM	36806
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2018 10:55:08 AM	36806
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	3/5/2018 10:55:08 AM	36806

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1803057

Lab ID: 1803057-005 **Collection Date:** 2/26/2018 11:20:00 AM
Client Sample ID: S-082148-022618-MG-V5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/6/2018 2:36:51 PM	36808
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/6/2018 2:36:51 PM	36808
Surr: DNOP	89.0	70-130		%Rec	1	3/6/2018 2:36:51 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/5/2018 11:18:51 AM	36806
Surr: BFB	92.6	15-316		%Rec	1	3/5/2018 11:18:51 AM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/5/2018 11:18:51 AM	36806
Toluene	ND	0.050		mg/Kg	1	3/5/2018 11:18:51 AM	36806
Ethylbenzene	ND	0.050		mg/Kg	1	3/5/2018 11:18:51 AM	36806
Xylenes, Total	ND	0.099		mg/Kg	1	3/5/2018 11:18:51 AM	36806
Surr: 4-Bromofluorobenzene	97.9	80-120		%Rec	1	3/5/2018 11:18:51 AM	36806

Lab ID: 1803057-006 **Collection Date:** 2/26/2018 11:24:00 AM
Client Sample ID: S-082148-022618-MG-V6 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/6/2018 2:58:50 PM	36808
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/6/2018 2:58:50 PM	36808
Surr: DNOP	80.4	70-130		%Rec	1	3/6/2018 2:58:50 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2018 11:42:34 AM	36806
Surr: BFB	93.2	15-316		%Rec	1	3/5/2018 11:42:34 AM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/5/2018 11:42:34 AM	36806
Toluene	ND	0.049		mg/Kg	1	3/5/2018 11:42:34 AM	36806
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2018 11:42:34 AM	36806
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2018 11:42:34 AM	36806
Surr: 4-Bromofluorobenzene	97.2	80-120		%Rec	1	3/5/2018 11:42:34 AM	36806

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1803057

Lab ID: 1803057-007 **Collection Date:** 2/26/2018 12:12:00 PM
Client Sample ID: S-082148-022618-MG-V7 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/6/2018 3:20:54 PM	36808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/6/2018 3:20:54 PM	36808
Surr: DNOP	81.9	70-130		%Rec	1	3/6/2018 3:20:54 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2018 12:06:16 PM	36806
Surr: BFB	96.6	15-316		%Rec	1	3/5/2018 12:06:16 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/5/2018 12:06:16 PM	36806
Toluene	ND	0.048		mg/Kg	1	3/5/2018 12:06:16 PM	36806
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2018 12:06:16 PM	36806
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2018 12:06:16 PM	36806
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	3/5/2018 12:06:16 PM	36806

Lab ID: 1803057-008 **Collection Date:** 2/26/2018 12:30:00 PM
Client Sample ID: S-082148-022618-MG-V8 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/6/2018 4:05:06 PM	36808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/6/2018 4:05:06 PM	36808
Surr: DNOP	82.0	70-130		%Rec	1	3/6/2018 4:05:06 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/5/2018 12:30:00 PM	36806
Surr: BFB	94.5	15-316		%Rec	1	3/5/2018 12:30:00 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/5/2018 12:30:00 PM	36806
Toluene	ND	0.046		mg/Kg	1	3/5/2018 12:30:00 PM	36806
Ethylbenzene	ND	0.046		mg/Kg	1	3/5/2018 12:30:00 PM	36806
Xylenes, Total	ND	0.092		mg/Kg	1	3/5/2018 12:30:00 PM	36806
Surr: 4-Bromofluorobenzene	98.5	80-120		%Rec	1	3/5/2018 12:30:00 PM	36806

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1803057

Lab ID: 1803057-009 **Collection Date:** 2/26/2018 12:02:00 PM
Client Sample ID: S-082148-022618-MG-V9 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/6/2018 4:27:06 PM	36808
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/6/2018 4:27:06 PM	36808
Surr: DNOP	88.5	70-130		%Rec	1	3/6/2018 4:27:06 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/5/2018 12:53:42 PM	36806
Surr: BFB	96.9	15-316		%Rec	1	3/5/2018 12:53:42 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/5/2018 12:53:42 PM	36806
Toluene	ND	0.046		mg/Kg	1	3/5/2018 12:53:42 PM	36806
Ethylbenzene	ND	0.046		mg/Kg	1	3/5/2018 12:53:42 PM	36806
Xylenes, Total	ND	0.092		mg/Kg	1	3/5/2018 12:53:42 PM	36806
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	3/5/2018 12:53:42 PM	36806

Lab ID: 1803057-010 **Collection Date:** 2/26/2018 12:28:00 PM
Client Sample ID: S-082148-022618-MG-V10 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/6/2018 4:49:13 PM	36808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/6/2018 4:49:13 PM	36808
Surr: DNOP	88.2	70-130		%Rec	1	3/6/2018 4:49:13 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2018 1:17:12 PM	36806
Surr: BFB	94.8	15-316		%Rec	1	3/5/2018 1:17:12 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/5/2018 1:17:12 PM	36806
Toluene	ND	0.047		mg/Kg	1	3/5/2018 1:17:12 PM	36806
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2018 1:17:12 PM	36806
Xylenes, Total	ND	0.095		mg/Kg	1	3/5/2018 1:17:12 PM	36806
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	3/5/2018 1:17:12 PM	36806

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1803057

Lab ID: 1803057-011 **Collection Date:** 2/27/2018 9:50:00 AM
Client Sample ID: S-082148-022718-MG-V15 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/6/2018 5:11:14 PM	36808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/6/2018 5:11:14 PM	36808
Surr: DNOP	78.5	70-130		%Rec	1	3/6/2018 5:11:14 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2018 5:13:50 PM	36806
Surr: BFB	101	15-316		%Rec	1	3/5/2018 5:13:50 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/5/2018 5:13:50 PM	36806
Toluene	ND	0.049		mg/Kg	1	3/5/2018 5:13:50 PM	36806
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2018 5:13:50 PM	36806
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2018 5:13:50 PM	36806
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	3/5/2018 5:13:50 PM	36806

Lab ID: 1803057-012 **Collection Date:** 2/27/2018 10:10:00 AM
Client Sample ID: S-082148-022718-MG-V11 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/6/2018 5:33:23 PM	36808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/6/2018 5:33:23 PM	36808
Surr: DNOP	80.3	70-130		%Rec	1	3/6/2018 5:33:23 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/5/2018 5:37:37 PM	36806
Surr: BFB	92.3	15-316		%Rec	1	3/5/2018 5:37:37 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/5/2018 5:37:37 PM	36806
Toluene	ND	0.050		mg/Kg	1	3/5/2018 5:37:37 PM	36806
Ethylbenzene	ND	0.050		mg/Kg	1	3/5/2018 5:37:37 PM	36806
Xylenes, Total	ND	0.099		mg/Kg	1	3/5/2018 5:37:37 PM	36806
Surr: 4-Bromofluorobenzene	96.3	80-120		%Rec	1	3/5/2018 5:37:37 PM	36806

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1803057

Lab ID: 1803057-013 **Collection Date:** 2/27/2018 10:25:00 AM
Client Sample ID: S-082148-022718-MG-V12 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/6/2018 5:55:21 PM	36808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/6/2018 5:55:21 PM	36808
Surr: DNOP	77.4	70-130		%Rec	1	3/6/2018 5:55:21 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2018 6:01:17 PM	36806
Surr: BFB	98.4	15-316		%Rec	1	3/5/2018 6:01:17 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/5/2018 6:01:17 PM	36806
Toluene	ND	0.048		mg/Kg	1	3/5/2018 6:01:17 PM	36806
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2018 6:01:17 PM	36806
Xylenes, Total	ND	0.097		mg/Kg	1	3/5/2018 6:01:17 PM	36806
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	3/5/2018 6:01:17 PM	36806

Lab ID: 1803057-014 **Collection Date:** 2/27/2018 10:40:00 AM
Client Sample ID: S-082148-022718-MG-V13 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/6/2018 6:17:29 PM	36808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/6/2018 6:17:29 PM	36808
Surr: DNOP	74.7	70-130		%Rec	1	3/6/2018 6:17:29 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2018 6:24:56 PM	36806
Surr: BFB	94.6	15-316		%Rec	1	3/5/2018 6:24:56 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/5/2018 6:24:56 PM	36806
Toluene	ND	0.048		mg/Kg	1	3/5/2018 6:24:56 PM	36806
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2018 6:24:56 PM	36806
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2018 6:24:56 PM	36806
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	3/5/2018 6:24:56 PM	36806

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1803057

Lab ID: 1803057-015 **Collection Date:** 2/27/2018 10:50:00 AM
Client Sample ID: S-082148-022718-MG-V14 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/6/2018 6:39:29 PM	36808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/6/2018 6:39:29 PM	36808
Surr: DNOP	77.3	70-130		%Rec	1	3/6/2018 6:39:29 PM	36808
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2018 6:48:36 PM	36806
Surr: BFB	96.2	15-316		%Rec	1	3/5/2018 6:48:36 PM	36806
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/5/2018 6:48:36 PM	36806
Toluene	ND	0.049		mg/Kg	1	3/5/2018 6:48:36 PM	36806
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2018 6:48:36 PM	36806
Xylenes, Total	ND	0.097		mg/Kg	1	3/5/2018 6:48:36 PM	36806
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	1	3/5/2018 6:48:36 PM	36806

Lab ID: 1803057-016 **Collection Date:** 2/27/2018 11:30:00 AM
Client Sample ID: S-082148-022718-MG-V4-6' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/6/2018 7:01:29 PM	36841
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/6/2018 7:01:29 PM	36841
Surr: DNOP	75.0	70-130		%Rec	1	3/6/2018 7:01:29 PM	36841
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2018 10:43:46 PM	36815
Surr: BFB	97.8	15-316		%Rec	1	3/5/2018 10:43:46 PM	36815
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/5/2018 10:43:46 PM	36815
Toluene	ND	0.047		mg/Kg	1	3/5/2018 10:43:46 PM	36815
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2018 10:43:46 PM	36815
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2018 10:43:46 PM	36815
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	3/5/2018 10:43:46 PM	36815

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803057**

07-Mar-18

Client: GHD

Project: Jal Landfarm

Sample ID **LCS-36808**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **36808**	RunNo: **49529**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1600965** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	70	130			
Surr: DNOP	4.9		5.000		98.3	70	130			

Sample ID **MB-36808**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **36808**	RunNo: **49529**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1600966** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	70	130			

Sample ID **LCS-36841**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **36841**	RunNo: **49576**
Prep Date: **3/5/2018**	Analysis Date: **3/6/2018**	SeqNo: **1602674** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.7	70	130			
Surr: DNOP	4.4		5.000		87.6	70	130			

Sample ID **MB-36841**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **36841**	RunNo: **49576**
Prep Date: **3/5/2018**	Analysis Date: **3/6/2018**	SeqNo: **1602675** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.8	70	130			

Sample ID **LCS-36846**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **36846**	RunNo: **49574**
Prep Date: **3/5/2018**	Analysis Date: **3/6/2018**	SeqNo: **1603076** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.1		5.000		62.3	70	130			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1803057**
07-Mar-18

Client: GHD
Project: Jal Landfarm

Sample ID	**MB-36846**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**
Client ID:	**PBS**	Batch ID:	**36846**	RunNo:	**49574**
Prep Date:	**3/5/2018**	Analysis Date:	**3/6/2018**	SeqNo:	**1603077** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.2		10.00		72.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803057**

07-Mar-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-36800**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **36800**			RunNo: **49541**					
Prep Date:	**3/2/2018**	Analysis Date: **3/5/2018**			SeqNo: **1601997**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		910		1000		91.3	15	316			

Sample ID	**LCS-36800**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **36800**			RunNo: **49541**					
Prep Date:	**3/2/2018**	Analysis Date: **3/5/2018**			SeqNo: **1601998**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1100		1000		115	15	316			

Sample ID	**MB-36815**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **36815**			RunNo: **49541**					
Prep Date:	**3/2/2018**	Analysis Date: **3/5/2018**			SeqNo: **1602016**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		ND	5.0								
Surr: BFB		870		1000		86.9	15	316			

Sample ID	**LCS-36815**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **36815**			RunNo: **49541**					
Prep Date:	**3/2/2018**	Analysis Date: **3/5/2018**			SeqNo: **1602017**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		28	5.0	25.00	0	110	75.9	131			
Surr: BFB		1100		1000		108	15	316			

Sample ID	**MB-36806**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **36806**			RunNo: **49542**					
Prep Date:	**3/2/2018**	Analysis Date: **3/5/2018**			SeqNo: **1602091**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		ND	5.0								
Surr: BFB		940		1000		94.4	15	316			

Sample ID	**LCS-36806**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **36806**			RunNo: **49542**					
Prep Date:	**3/2/2018**	Analysis Date: **3/5/2018**			SeqNo: **1602093**		Units: **mg/Kg**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		24	5.0	25.00	0	95.0	75.9	131			
Surr: BFB		1100		1000		111	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803057**

07-Mar-18

Client: GHD

Project: Jal Landfarm

Sample ID **MB-36800**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **36800**	RunNo: **49541**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602035** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.1	80	120			

Sample ID **LCS-36800**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **36800**	RunNo: **49541**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602036** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		94.6	80	120			

Sample ID **MB-36815**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **36815**	RunNo: **49541**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602054** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.85		1.000		85.0	80	120			

Sample ID **LCS-36815**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **36815**	RunNo: **49541**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602055** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.1	77.3	128			
Toluene	0.98	0.050	1.000	0	97.6	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	98.9	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	80	120			

Sample ID **MB-36806**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **36806**	RunNo: **49542**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602128** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1803057**

07-Mar-18

Client: GHD

Project: Jal Landfarm

Sample ID **MB-36806**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **36806**	RunNo: **49542**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602128** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID **LCS-36806**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **36806**	RunNo: **49542**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602129** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.4	77.3	128			
Toluene	0.99	0.050	1.000	0	99.3	79.2	125			
Ethylbenzene	0.99	0.050	1.000	0	99.3	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	99.7	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID **1803057-016AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-022718-M**	Batch ID: **36815**	RunNo: **49542**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602152** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.74	0.023	0.9268	0.006060	78.9	80.9	132			S
Toluene	0.92	0.046	0.9268	0	98.8	79.8	136			
Ethylbenzene	0.89	0.046	0.9268	0	95.7	79.4	140			
Xylenes, Total	2.6	0.093	2.780	0	94.8	78.5	142			
Surr: 4-Bromofluorobenzene	0.98		0.9268		106	80	120			

Sample ID **1803057-016AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-022718-M**	Batch ID: **36815**	RunNo: **49542**
Prep Date: **3/2/2018**	Analysis Date: **3/5/2018**	SeqNo: **1602153** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.024	0.9634	0.006060	101	80.9	132	27.9	20	R
Toluene	1.0	0.048	0.9634	0	107	79.8	136	12.2	20	
Ethylbenzene	0.94	0.048	0.9634	0	98.1	79.4	140	6.31	20	
Xylenes, Total	2.8	0.096	2.890	0	97.6	78.5	142	6.71	20	
Surr: 4-Bromofluorobenzene	1.0		0.9634		108	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1803057 | RcptNo: 1

Received By: **Mandy Woods** 3/1/2018 10:00:00 AM

Completed By: **Ashley Gallegos** 3/1/2018 2:08:18 PM

Reviewed By: BRC 03/01/18

labeled by: MW 3/1/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: ____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? ____
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: ____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: ____ Date: ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good	Yes			

Chain-of-Custody Record

Client: GHD Services Inc.

Mailing Address: 6121 Indian School Rd Ste 200
NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Bernard.Bockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler: MG

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.7°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1803057	BTEX + MTBE + TMBs (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
1/26/18	1035	S	S-082148-022618-MG-V1	4oz Soil Jar	ICE	-001	X		X									
	1030		S-082148-022618-MG-V2			-002	X		X									
	1050		S-082148-022618-MG-V3			-003	X		X									
	1040		S-082148-022618-MG-V4			-004	X		X									
	1120		S-082148-022618-MG-V5			-005	X		X									
	1124		S-082148-022618-MG-V6			-006	X		X									
	1212		S-082148-022618-MG-V7			-007	X		X									
	1230		S-082148-022618-MG-V8			-008	X		X									
	1202		S-082148-022618-MG-V9			-009	X		X									
	1228		S-082148-022618-MG-V10			-010	X		X									
1/27/18	0950		S-082148-022718-MG-V15			-011	X		X									
1/27/18	1010		S-082148-022718-MG-V11			-012	X		X									

Date: 1/28/18 Time: 0830 Relinquished by: [signature]
Received by: [signature] Date: 1/28/18 Time: 0830

Date: 1/28/18 Time: 1900 Relinquished by: [signature]
Received by: courier 2/1/18 Date: 3/1/18 Time: 1000

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services Inc

Mailing Address: 6121 Indian School Rd Ste 200 NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: BernardBockisch@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Sal Landfarm

Project #: 082148

Project Manager: Bernard Bockisch

Sampler: MG

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.7°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1803057	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
2/27/18	1025	S	S-082148-022718-MG-V12	4oz Soil Jar	ICE	-013	X		X									
	1040		S-082148-022718-MG-V13			-014	X		X									
	1050		S-082148-022718-MG-V14			-015	X		X									
	1130		S-082148-022718-MG-V-4-6'			-016	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/28/18	0830			2/28/18	0830
Date:	Time:	Relinquished by:	Received by: (courier 3/1/18 MS)	Date	Time
2/28/18	1900			3/1/18	1000

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 19, 2018

Alan Brandon

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1806122

Dear Alan Brandon:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/1/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1806122

Lab ID: 1806122-001 **Collection Date:** 5/30/2018 2:20:00 PM
Client Sample ID: S-082148-053018-JP-V-14 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/6/2018 3:34:02 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/6/2018 3:34:02 PM
Surr: DNOP	101	70-130		%Rec	1	6/6/2018 3:34:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	6/5/2018 4:16:04 PM
Surr: BFB	99.7	15-316		%Rec	1	6/5/2018 4:16:04 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.018		mg/Kg	1	6/5/2018 4:16:04 PM
Toluene	ND	0.035		mg/Kg	1	6/5/2018 4:16:04 PM
Ethylbenzene	ND	0.035		mg/Kg	1	6/5/2018 4:16:04 PM
Xylenes, Total	ND	0.070		mg/Kg	1	6/5/2018 4:16:04 PM
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	6/5/2018 4:16:04 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	ND	30		mg/Kg	20	6/13/2018 4:51:45 PM

Lab ID: 1806122-002 **Collection Date:** 5/30/2018 12:03:00 PM
Client Sample ID: S-082148-053018-JP-V-15 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/6/2018 4:46:56 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/6/2018 4:46:56 PM
Surr: DNOP	98.8	70-130		%Rec	1	6/6/2018 4:46:56 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	6/5/2018 5:26:42 PM
Surr: BFB	91.1	15-316		%Rec	1	6/5/2018 5:26:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.016		mg/Kg	1	6/5/2018 5:26:42 PM
Toluene	ND	0.032		mg/Kg	1	6/5/2018 5:26:42 PM
Ethylbenzene	ND	0.032		mg/Kg	1	6/5/2018 5:26:42 PM
Xylenes, Total	ND	0.065		mg/Kg	1	6/5/2018 5:26:42 PM
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	6/5/2018 5:26:42 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	ND	30		mg/Kg	20	6/13/2018 5:04:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806122**

20-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-38660**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**38660**	RunNo:	**51967**					
Prep Date:	**6/13/2018**	Analysis Date:	**6/13/2018**	SeqNo:	**1698916**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-38660**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**38660**	RunNo:	**51967**					
Prep Date:	**6/13/2018**	Analysis Date:	**6/13/2018**	SeqNo:	**1698917**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806122**

20-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-38490**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**38490**		RunNo:	**51754**				
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**		SeqNo:	**1690092**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.1	70	130			

Sample ID	**LCS-38490**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**38490**		RunNo:	**51754**				
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**		SeqNo:	**1690093**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.3	70	130			
Surr: DNOP	4.4		5.000		87.1	70	130			

Sample ID	**1806122-001AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**S-082148-053018-JP**	Batch ID:	**38490**		RunNo:	**51776**				
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**		SeqNo:	**1690343**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	49.85	2.529	99.9	62	120			
Surr: DNOP	5.0		4.985		99.8	70	130			

Sample ID	**1806122-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**S-082148-053018-JP**	Batch ID:	**38490**		RunNo:	**51776**				
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**		SeqNo:	**1690600**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.10	2.529	99.6	62	120	0.177	20	
Surr: DNOP	4.8		5.010		94.9	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806122**

20-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **B51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689310** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.1	15	316			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **B51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689311** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	75.9	131			
Surr: BFB	1000		1000		102	15	316			

Sample ID **1806122-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-053018-JP**	Batch ID: **B51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689323** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	3.5	17.52	0	114	77.8	128			
Surr: BFB	770		700.8		109	15	316			

Sample ID **1806122-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-053018-JP**	Batch ID: **B51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689324** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	3.5	17.52	0	110	77.8	128	3.22	20	
Surr: BFB	780		700.8		111	15	316	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806122**

20-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **D51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689334** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.9	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **D51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689335** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.2	77.3	128			
Toluene	0.95	0.050	1.000	0	94.5	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	95.5	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	96.4	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **1806122-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-053018-JP**	Batch ID: **D51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689342** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.58	0.016	0.6489	0	89.2	68.5	133			
Toluene	0.60	0.032	0.6489	0.005710	91.6	75	130			
Ethylbenzene	0.59	0.032	0.6489	0	90.4	79.4	128			
Xylenes, Total	1.8	0.065	1.947	0.007852	92.9	77.3	131			
Surr: 4-Bromofluorobenzene	0.69		0.6489		106	80	120			

Sample ID **1806122-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-053018-JP**	Batch ID: **D51752**	RunNo: **51752**
Prep Date:	Analysis Date: **6/5/2018**	SeqNo: **1689343** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.58	0.016	0.6489	0	88.8	68.5	133	0.483	20	
Toluene	0.59	0.032	0.6489	0.005710	90.0	75	130	1.72	20	
Ethylbenzene	0.59	0.032	0.6489	0	90.4	79.4	128	0.0553	20	
Xylenes, Total	1.8	0.065	1.947	0.007852	92.1	77.3	131	0.882	20	
Surr: 4-Bromofluorobenzene	0.69		0.6489		107	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1806122 | RcptNo: 1

Received By: Jazzmine Burkhead 6/1/2018 2:10:00 PM

Completed By: Isaiah Ortiz 6/4/2018 4:11:40 PM IO

Reviewed By: ENM 6/5/18
L: JB 06/05/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

06/05/18 JB

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	8.4	Good	Not Present			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: 505 884

email or Fax#: Alan.Brandon@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Alan Brandon

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

Sample Temperature: 8.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1806122	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	chloride by EPA 300				Air Bubbles (Y or N)
5-30-18	1420	S	S-082148-053018-JP-V-14	various	ICE	-001	X		X									X				
5-30-18	1203	S	S-082148-053018-JP-V-15	various	ICE	-002	X		X									X				

Date: 6/1/18 Time: 1410 Relinquished by: _____

Received by: _____ Date Time: 06/01/18 14:10

Date: Time: Relinquished by: _____

Received by: _____ Date Time:

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 25, 2018

Alan Brandon

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1806132

Dear Alan Brandon:

Hall Environmental Analysis Laboratory received 29 sample(s) on 6/1/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-001 **Collection Date:** 5/29/2018 11:40:00 AM
Client Sample ID: S-082148-052918-JP-V-1 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/13/2018 5:16:35 PM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/6/2018 1:16:52 PM	R51790
Surr: BFB	118	70-130		%Rec	1	6/6/2018 1:16:52 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2018 3:25:56 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 3:25:56 PM	38523
Surr: DNOP	104	70-130		%Rec	1	6/7/2018 3:25:56 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	6/6/2018 1:16:52 PM	B51790
Toluene	ND	0.036		mg/Kg	1	6/6/2018 1:16:52 PM	B51790
Ethylbenzene	ND	0.036		mg/Kg	1	6/6/2018 1:16:52 PM	B51790
Xylenes, Total	ND	0.071		mg/Kg	1	6/6/2018 1:16:52 PM	B51790
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	6/6/2018 1:16:52 PM	B51790
Surr: Toluene-d8	101	70-130		%Rec	1	6/6/2018 1:16:52 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-002 **Collection Date:** 5/29/2018 12:48:00 PM
Client Sample ID: S-082148-052918-JP-V-2 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/13/2018 5:28:59 PM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	6/6/2018 1:39:58 PM	R51790
Surr: BFB	118	70-130		%Rec	1	6/6/2018 1:39:58 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 3:50:12 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 3:50:12 PM	38523
Surr: DNOP	107	70-130		%Rec	1	6/7/2018 3:50:12 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.016		mg/Kg	1	6/6/2018 1:39:58 PM	B51790
Toluene	ND	0.032		mg/Kg	1	6/6/2018 1:39:58 PM	B51790
Ethylbenzene	ND	0.032		mg/Kg	1	6/6/2018 1:39:58 PM	B51790
Xylenes, Total	ND	0.064		mg/Kg	1	6/6/2018 1:39:58 PM	B51790
Surr: 4-Bromofluorobenzene	124	70-130		%Rec	1	6/6/2018 1:39:58 PM	B51790
Surr: Toluene-d8	96.6	70-130		%Rec	1	6/6/2018 1:39:58 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-003 **Collection Date:** 5/29/2018 2:26:00 PM
Client Sample ID: S-082148-052918-JP-V-4 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 10:57:12 AM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	6/6/2018 3:37:57 PM	R51790
Surr: BFB	124	70-130		%Rec	1	6/6/2018 3:37:57 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	220	10		mg/Kg	1	6/8/2018 9:07:23 AM	38523
Motor Oil Range Organics (MRO)	910	50		mg/Kg	1	6/8/2018 9:07:23 AM	38523
Surr: DNOP	115	70-130		%Rec	1	6/8/2018 9:07:23 AM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.017		mg/Kg	1	6/6/2018 3:37:57 PM	B51790
Toluene	ND	0.034		mg/Kg	1	6/6/2018 3:37:57 PM	B51790
Ethylbenzene	ND	0.034		mg/Kg	1	6/6/2018 3:37:57 PM	B51790
Xylenes, Total	ND	0.069		mg/Kg	1	6/6/2018 3:37:57 PM	B51790
Surr: 4-Bromofluorobenzene	129	70-130		%Rec	1	6/6/2018 3:37:57 PM	B51790
Surr: Toluene-d8	103	70-130		%Rec	1	6/6/2018 3:37:57 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-004 **Collection Date:** 5/29/2018 2:45:00 PM
Client Sample ID: S-082148-052918-JP-V-5 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 11:09:37 AM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	6/6/2018 4:01:05 PM	R51790
Surr: BFB	124	70-130		%Rec	1	6/6/2018 4:01:05 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 4:38:55 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 4:38:55 PM	38523
Surr: DNOP	109	70-130		%Rec	1	6/7/2018 4:38:55 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	6/6/2018 4:01:05 PM	B51790
Toluene	ND	0.037		mg/Kg	1	6/6/2018 4:01:05 PM	B51790
Ethylbenzene	ND	0.037		mg/Kg	1	6/6/2018 4:01:05 PM	B51790
Xylenes, Total	ND	0.073		mg/Kg	1	6/6/2018 4:01:05 PM	B51790
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	6/6/2018 4:01:05 PM	B51790
Surr: Toluene-d8	101	70-130		%Rec	1	6/6/2018 4:01:05 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-005 **Collection Date:** 5/29/2018 3:36:00 PM
Client Sample ID: S-082148-052918-JP-V-6 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 11:22:02 AM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/6/2018 4:24:19 PM	R51790
Surr: BFB	123	70-130		%Rec	1	6/6/2018 4:24:19 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2018 5:03:16 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 5:03:16 PM	38523
Surr: DNOP	109	70-130		%Rec	1	6/7/2018 5:03:16 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.016		mg/Kg	1	6/6/2018 4:24:19 PM	B51790
Toluene	ND	0.033		mg/Kg	1	6/6/2018 4:24:19 PM	B51790
Ethylbenzene	ND	0.033		mg/Kg	1	6/6/2018 4:24:19 PM	B51790
Xylenes, Total	ND	0.065		mg/Kg	1	6/6/2018 4:24:19 PM	B51790
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	6/6/2018 4:24:19 PM	B51790
Surr: Toluene-d8	101	70-130		%Rec	1	6/6/2018 4:24:19 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-006 **Collection Date:** 5/29/2018 4:00:00 PM
Client Sample ID: S-082148-052918-JP-V-7 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 11:34:27 AM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	6/6/2018 4:47:34 PM	R51790
Surr: BFB	120	70-130		%Rec	1	6/6/2018 4:47:34 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 5:27:28 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 5:27:28 PM	38523
Surr: DNOP	106	70-130		%Rec	1	6/7/2018 5:27:28 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.015		mg/Kg	1	6/6/2018 4:47:34 PM	B51790
Toluene	ND	0.030		mg/Kg	1	6/6/2018 4:47:34 PM	B51790
Ethylbenzene	ND	0.030		mg/Kg	1	6/6/2018 4:47:34 PM	B51790
Xylenes, Total	ND	0.060		mg/Kg	1	6/6/2018 4:47:34 PM	B51790
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	6/6/2018 4:47:34 PM	B51790
Surr: Toluene-d8	99.3	70-130		%Rec	1	6/6/2018 4:47:34 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-007 **Collection Date:** 5/30/2018 10:00:00 AM
Client Sample ID: S-082148-053018-JP-V-8 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 11:46:52 AM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/6/2018 5:10:42 PM	R51790
Surr: BFB	121	70-130		%Rec	1	6/6/2018 5:10:42 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 5:51:46 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 5:51:46 PM	38523
Surr: DNOP	110	70-130		%Rec	1	6/7/2018 5:51:46 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	6/6/2018 5:10:42 PM	B51790
Toluene	ND	0.036		mg/Kg	1	6/6/2018 5:10:42 PM	B51790
Ethylbenzene	ND	0.036		mg/Kg	1	6/6/2018 5:10:42 PM	B51790
Xylenes, Total	ND	0.071		mg/Kg	1	6/6/2018 5:10:42 PM	B51790
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	6/6/2018 5:10:42 PM	B51790
Surr: Toluene-d8	99.7	70-130		%Rec	1	6/6/2018 5:10:42 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-008 **Collection Date:** 5/30/2018 11:16:00 AM
Client Sample ID: S-082148-053018-JP-V-9 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 11:59:17 AM	38660
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/6/2018 5:33:55 PM	R51790
Surr: BFB	120	70-130		%Rec	1	6/6/2018 5:33:55 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2018 6:16:02 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 6:16:02 PM	38523
Surr: DNOP	109	70-130		%Rec	1	6/7/2018 6:16:02 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	6/6/2018 5:33:55 PM	B51790
Toluene	ND	0.036		mg/Kg	1	6/6/2018 5:33:55 PM	B51790
Ethylbenzene	ND	0.036		mg/Kg	1	6/6/2018 5:33:55 PM	B51790
Xylenes, Total	ND	0.073		mg/Kg	1	6/6/2018 5:33:55 PM	B51790
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	6/6/2018 5:33:55 PM	B51790
Surr: Toluene-d8	102	70-130		%Rec	1	6/6/2018 5:33:55 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-009 **Collection Date:** 5/30/2018 10:36:00 AM
Client Sample ID: S-082148-053018-JP-V-10 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 1:42:26 PM	38674
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	6/6/2018 5:57:09 PM	R51790
Surr: BFB	126	70-130		%Rec	1	6/6/2018 5:57:09 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 6:40:17 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 6:40:17 PM	38523
Surr: DNOP	88.9	70-130		%Rec	1	6/7/2018 6:40:17 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.017		mg/Kg	1	6/6/2018 5:57:09 PM	B51790
Toluene	ND	0.035		mg/Kg	1	6/6/2018 5:57:09 PM	B51790
Ethylbenzene	ND	0.035		mg/Kg	1	6/6/2018 5:57:09 PM	B51790
Xylenes, Total	ND	0.069		mg/Kg	1	6/6/2018 5:57:09 PM	B51790
Surr: 4-Bromofluorobenzene	131	70-130	S	%Rec	1	6/6/2018 5:57:09 PM	B51790
Surr: Toluene-d8	100	70-130		%Rec	1	6/6/2018 5:57:09 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-010 **Collection Date:** 5/30/2018 12:42:00 PM
Client Sample ID: S-082148-053018-JP-V-11 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 1:54:51 PM	38674
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/6/2018 6:20:20 PM	R51790
Surr: BFB	122	70-130		%Rec	1	6/6/2018 6:20:20 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 7:04:26 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 7:04:26 PM	38523
Surr: DNOP	92.2	70-130		%Rec	1	6/7/2018 7:04:26 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.017		mg/Kg	1	6/6/2018 6:20:20 PM	B51790
Toluene	ND	0.033		mg/Kg	1	6/6/2018 6:20:20 PM	B51790
Ethylbenzene	ND	0.033		mg/Kg	1	6/6/2018 6:20:20 PM	B51790
Xylenes, Total	ND	0.066		mg/Kg	1	6/6/2018 6:20:20 PM	B51790
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	6/6/2018 6:20:20 PM	B51790
Surr: Toluene-d8	101	70-130		%Rec	1	6/6/2018 6:20:20 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-011 **Collection Date:** 5/30/2018 1:10:00 PM
Client Sample ID: S-082148-053018-JP-V-12 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 2:07:16 PM	38674
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	6/6/2018 6:43:33 PM	R51790
Surr: BFB	120	70-130		%Rec	1	6/6/2018 6:43:33 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 7:28:58 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 7:28:58 PM	38523
Surr: DNOP	93.3	70-130		%Rec	1	6/7/2018 7:28:58 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.017		mg/Kg	1	6/6/2018 6:43:33 PM	B51790
Toluene	ND	0.035		mg/Kg	1	6/6/2018 6:43:33 PM	B51790
Ethylbenzene	ND	0.035		mg/Kg	1	6/6/2018 6:43:33 PM	B51790
Xylenes, Total	ND	0.069		mg/Kg	1	6/6/2018 6:43:33 PM	B51790
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	6/6/2018 6:43:33 PM	B51790
Surr: Toluene-d8	101	70-130		%Rec	1	6/6/2018 6:43:33 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-012 **Collection Date:** 5/30/2018 1:37:00 PM
Client Sample ID: S-082148-053018-JP-V-13 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	48	30		mg/Kg	20	6/14/2018 2:19:40 PM	38674
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	6/6/2018 7:06:37 PM	R51790
Surr: BFB	121	70-130		%Rec	1	6/6/2018 7:06:37 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 7:53:25 PM	38523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 7:53:25 PM	38523
Surr: DNOP	88.4	70-130		%Rec	1	6/7/2018 7:53:25 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.016		mg/Kg	1	6/6/2018 7:06:37 PM	B51790
Toluene	ND	0.032		mg/Kg	1	6/6/2018 7:06:37 PM	B51790
Ethylbenzene	ND	0.032		mg/Kg	1	6/6/2018 7:06:37 PM	B51790
Xylenes, Total	ND	0.064		mg/Kg	1	6/6/2018 7:06:37 PM	B51790
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	6/6/2018 7:06:37 PM	B51790
Surr: Toluene-d8	98.1	70-130		%Rec	1	6/6/2018 7:06:37 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-013 **Collection Date:** 5/29/2018 11:30:00 AM
Client Sample ID: S-082148-052918-JP-T-1 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 2:32:05 PM	38674
Sulfate	ND	30		mg/Kg	20	6/14/2018 2:32:05 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	0.11	0.033		mg/Kg	1	6/13/2018 10:28:08 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	3.2	2.4		mg/Kg	1	6/17/2018 3:43:15 PM	38622
Barium	110	0.097		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Cadmium	ND	0.097		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Chromium	4.0	0.29		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Copper	3.3	0.29		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Iron	7900	120		mg/Kg	50	6/17/2018 3:52:09 PM	38622
Lead	ND	0.24		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Manganese	42	0.097		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Selenium	2.7	2.4		mg/Kg	1	6/17/2018 3:43:15 PM	38622
Silver	ND	0.24		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Uranium	ND	4.9		mg/Kg	1	6/14/2018 12:29:59 PM	38622
Zinc	11	2.4		mg/Kg	1	6/17/2018 3:43:15 PM	38622
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	6/6/2018 7:29:47 PM	R51790
Surr: BFB	120	70-130		%Rec	1	6/6/2018 7:29:47 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	70	9.9		mg/Kg	1	6/8/2018 10:19:41 AM	38523
Motor Oil Range Organics (MRO)	230	49		mg/Kg	1	6/8/2018 10:19:41 AM	38523
Surr: DNOP	76.8	70-130		%Rec	1	6/8/2018 10:19:41 AM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.021		mg/Kg	1	6/6/2018 7:29:47 PM	B51790
Toluene	ND	0.043		mg/Kg	1	6/6/2018 7:29:47 PM	B51790
Ethylbenzene	ND	0.043		mg/Kg	1	6/6/2018 7:29:47 PM	B51790
Xylenes, Total	ND	0.085		mg/Kg	1	6/6/2018 7:29:47 PM	B51790
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	6/6/2018 7:29:47 PM	B51790
Surr: Toluene-d8	98.1	70-130		%Rec	1	6/6/2018 7:29:47 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-014 **Collection Date:** 5/29/2018 12:38:00 PM
Client Sample ID: S-082148-052918-JP-T-2 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 2:44:29 PM	38674
Sulfate	190	30		mg/Kg	20	6/14/2018 2:44:29 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	6/13/2018 10:33:15 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	2.7	2.4		mg/Kg	1	6/17/2018 3:54:13 PM	38622
Barium	70	0.097		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Cadmium	ND	0.097		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Chromium	14	0.29		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Copper	4.8	0.29		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Iron	16000	240		mg/Kg	100	6/17/2018 3:56:22 PM	38622
Lead	4.4	0.24		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Manganese	91	0.097		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Selenium	ND	2.4		mg/Kg	1	6/17/2018 3:54:13 PM	38622
Silver	ND	0.24		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Uranium	ND	4.8		mg/Kg	1	6/14/2018 12:37:34 PM	38622
Zinc	22	2.4		mg/Kg	1	6/17/2018 3:54:13 PM	38622
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/6/2018 7:53:00 PM	R51790
Surr: BFB	118	70-130		%Rec	1	6/6/2018 7:53:00 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2018 8:42:03 PM	38523
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/7/2018 8:42:03 PM	38523
Surr: DNOP	97.9	70-130		%Rec	1	6/7/2018 8:42:03 PM	38523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.017		mg/Kg	1	6/6/2018 7:53:00 PM	B51790
Toluene	ND	0.033		mg/Kg	1	6/6/2018 7:53:00 PM	B51790
Ethylbenzene	ND	0.033		mg/Kg	1	6/6/2018 7:53:00 PM	B51790
Xylenes, Total	ND	0.067		mg/Kg	1	6/6/2018 7:53:00 PM	B51790
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	6/6/2018 7:53:00 PM	B51790
Surr: Toluene-d8	98.2	70-130		%Rec	1	6/6/2018 7:53:00 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-015 **Collection Date:** 5/29/2018 1:34:00 PM
Client Sample ID: S-082148-052918-JP-T-3 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	1300	97		mg/Kg	10	6/8/2018 11:44:38 AM	38523
Motor Oil Range Organics (MRO)	2500	490		mg/Kg	10	6/8/2018 11:44:38 AM	38523
Surr: DNOP	0	70-130	S	%Rec	10	6/8/2018 11:44:38 AM	38523
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/7/2018 11:39:36 AM	38529
Surr: BFB	84.1	15-316		%Rec	1	6/7/2018 11:39:36 AM	38529

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-016 **Collection Date:** 5/29/2018 2:14:00 PM
Client Sample ID: S-082148-052918-JP-T-4 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 3:21:43 PM	38674
Sulfate	41	30		mg/Kg	20	6/14/2018 3:21:43 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.032		mg/Kg	1	6/13/2018 10:34:59 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	2.7	2.5		mg/Kg	1	6/17/2018 4:04:36 PM	38622
Barium	90	0.10		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Cadmium	ND	0.10		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Chromium	5.8	0.30		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Copper	2.4	0.30		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Iron	7200	120		mg/Kg	50	6/17/2018 4:06:54 PM	38622
Lead	0.70	0.25		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Manganese	58	0.10		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:04:36 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Uranium	ND	5.0		mg/Kg	1	6/14/2018 12:39:39 PM	38622
Zinc	13	2.5		mg/Kg	1	6/17/2018 4:04:36 PM	38622
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/6/2018 9:48:07 PM	R51790
Surr: BFB	122	70-130		%Rec	1	6/6/2018 9:48:07 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	850	100		mg/Kg	10	6/8/2018 9:09:18 AM	38524
Motor Oil Range Organics (MRO)	1200	500		mg/Kg	10	6/8/2018 9:09:18 AM	38524
Surr: DNOP	0	70-130	S	%Rec	10	6/8/2018 9:09:18 AM	38524
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	6/6/2018 9:48:07 PM	B51790
Toluene	ND	0.036		mg/Kg	1	6/6/2018 9:48:07 PM	B51790
Ethylbenzene	ND	0.036		mg/Kg	1	6/6/2018 9:48:07 PM	B51790
Xylenes, Total	ND	0.072		mg/Kg	1	6/6/2018 9:48:07 PM	B51790
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	6/6/2018 9:48:07 PM	B51790
Surr: Toluene-d8	99.2	70-130		%Rec	1	6/6/2018 9:48:07 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-017 **Collection Date:** 5/29/2018 2:39:00 PM
Client Sample ID: S-082148-052918-JP-T-5 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 10:39:16 PM	38695
Sulfate	ND	30		mg/Kg	20	6/14/2018 10:39:16 PM	38695
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	0.17	0.032		mg/Kg	1	6/13/2018 10:36:44 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	6/17/2018 4:08:58 PM	38622
Barium	49	0.10		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Cadmium	ND	0.10		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Chromium	8.2	0.30		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Copper	6.5	0.30		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Iron	5900	130		mg/Kg	50	6/17/2018 4:10:58 PM	38622
Lead	7.4	0.25		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Manganese	60	0.10		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:08:58 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Uranium	ND	5.0		mg/Kg	1	6/14/2018 12:41:45 PM	38622
Zinc	27	2.5		mg/Kg	1	6/17/2018 4:08:58 PM	38622
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	6/6/2018 10:11:09 PM	R51790
Surr: BFB	123	70-130		%Rec	1	6/6/2018 10:11:09 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/8/2018 12:30:27 PM	38524
Motor Oil Range Organics (MRO)	80	50		mg/Kg	1	6/8/2018 12:30:27 PM	38524
Surr: DNOP	72.2	70-130		%Rec	1	6/8/2018 12:30:27 PM	38524
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.016		mg/Kg	1	6/6/2018 10:11:09 PM	B51790
Toluene	ND	0.032		mg/Kg	1	6/6/2018 10:11:09 PM	B51790
Ethylbenzene	ND	0.032		mg/Kg	1	6/6/2018 10:11:09 PM	B51790
Xylenes, Total	ND	0.063		mg/Kg	1	6/6/2018 10:11:09 PM	B51790
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	6/6/2018 10:11:09 PM	B51790
Surr: Toluene-d8	97.1	70-130		%Rec	1	6/6/2018 10:11:09 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-018 **Collection Date:** 5/29/2018 3:02:00 PM
Client Sample ID: S-082148-052918-JP-T-6 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 3:34:08 PM	38674
Sulfate	140	30		mg/Kg	20	6/14/2018 3:34:08 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	0.073	0.032		mg/Kg	1	6/13/2018 10:38:29 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	6/17/2018 4:13:02 PM	38622
Barium	76	0.099		mg/Kg	1	6/14/2018 12:49:49 PM	38622
Cadmium	ND	0.099		mg/Kg	1	6/14/2018 12:49:49 PM	38622
Chromium	4.4	0.30		mg/Kg	1	6/14/2018 12:49:49 PM	38622
Copper	2.9	0.30		mg/Kg	1	6/14/2018 12:49:49 PM	38622
Iron	5600	120		mg/Kg	50	6/17/2018 4:15:10 PM	38622
Lead	0.52	0.25		mg/Kg	1	6/14/2018 12:49:49 PM	38622
Manganese	52	0.099		mg/Kg	1	6/14/2018 12:49:49 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:13:02 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 12:49:49 PM	38622
Uranium	ND	4.9		mg/Kg	1	6/17/2018 4:13:02 PM	38622
Zinc	11	2.5		mg/Kg	1	6/17/2018 4:13:02 PM	38622
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	6/6/2018 10:34:13 PM	R51790
Surr: BFB	121	70-130		%Rec	1	6/6/2018 10:34:13 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	13	9.9		mg/Kg	1	6/8/2018 11:00:02 AM	38524
Motor Oil Range Organics (MRO)	85	49		mg/Kg	1	6/8/2018 11:00:02 AM	38524
Surr: DNOP	91.2	70-130		%Rec	1	6/8/2018 11:00:02 AM	38524
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.018		mg/Kg	1	6/6/2018 10:34:13 PM	B51790
Toluene	ND	0.037		mg/Kg	1	6/6/2018 10:34:13 PM	B51790
Ethylbenzene	ND	0.037		mg/Kg	1	6/6/2018 10:34:13 PM	B51790
Xylenes, Total	ND	0.073		mg/Kg	1	6/6/2018 10:34:13 PM	B51790
Surr: 4-Bromofluorobenzene	126	70-130		%Rec	1	6/6/2018 10:34:13 PM	B51790
Surr: Toluene-d8	96.9	70-130		%Rec	1	6/6/2018 10:34:13 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-019 **Collection Date:** 5/29/2018 4:12:00 PM
Client Sample ID: S-082148-052918-JP-T-7 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 3:46:33 PM	38674
Sulfate	32	30		mg/Kg	20	6/14/2018 3:46:33 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	0.041	0.033		mg/Kg	1	6/14/2018 10:59:33 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	6/17/2018 4:17:15 PM	38622
Barium	83	0.10		mg/Kg	1	6/14/2018 12:51:50 PM	38622
Cadmium	ND	0.10		mg/Kg	1	6/14/2018 12:51:50 PM	38622
Chromium	2.8	0.30		mg/Kg	1	6/14/2018 12:51:50 PM	38622
Copper	2.6	0.30		mg/Kg	1	6/14/2018 12:51:50 PM	38622
Iron	4700	50		mg/Kg	20	6/17/2018 4:19:24 PM	38622
Lead	ND	0.25		mg/Kg	1	6/14/2018 12:51:50 PM	38622
Manganese	32	0.10		mg/Kg	1	6/14/2018 12:51:50 PM	38622
Selenium	2.6	2.5		mg/Kg	1	6/17/2018 4:17:15 PM	38622
Silver	0.55	0.25		mg/Kg	1	6/14/2018 12:51:50 PM	38622
Uranium	ND	5.0		mg/Kg	1	6/17/2018 4:17:15 PM	38622
Zinc	8.3	2.5		mg/Kg	1	6/17/2018 4:17:15 PM	38622
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/6/2018 10:57:18 PM	R51790
Surr: BFB	118	70-130		%Rec	1	6/6/2018 10:57:18 PM	R51790
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	15	9.9		mg/Kg	1	6/7/2018 5:26:09 PM	38524
Motor Oil Range Organics (MRO)	110	50		mg/Kg	1	6/7/2018 5:26:09 PM	38524
Surr: DNOP	85.7	70-130		%Rec	1	6/7/2018 5:26:09 PM	38524
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.017		mg/Kg	1	6/6/2018 10:57:18 PM	B51790
Toluene	ND	0.033		mg/Kg	1	6/6/2018 10:57:18 PM	B51790
Ethylbenzene	ND	0.033		mg/Kg	1	6/6/2018 10:57:18 PM	B51790
Xylenes, Total	ND	0.066		mg/Kg	1	6/6/2018 10:57:18 PM	B51790
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	6/6/2018 10:57:18 PM	B51790
Surr: Toluene-d8	97.1	70-130		%Rec	1	6/6/2018 10:57:18 PM	B51790

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-020 **Collection Date:** 5/30/2018 10:10:00 AM
Client Sample ID: S-082148-053018-JP-T-8 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 4:23:48 PM	38674
Sulfate	ND	30		mg/Kg	20	6/14/2018 4:23:48 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	0.037	0.033		mg/Kg	1	6/14/2018 11:01:14 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	3.6	2.5		mg/Kg	1	6/17/2018 4:29:41 PM	38622
Barium	86	0.098		mg/Kg	1	6/14/2018 12:53:48 PM	38622
Cadmium	ND	0.098		mg/Kg	1	6/14/2018 12:53:48 PM	38622
Chromium	4.7	0.30		mg/Kg	1	6/14/2018 12:53:48 PM	38622
Copper	2.6	0.30		mg/Kg	1	6/14/2018 12:53:48 PM	38622
Iron	5100	120		mg/Kg	50	6/17/2018 4:31:51 PM	38622
Lead	0.69	0.25		mg/Kg	1	6/14/2018 12:53:48 PM	38622
Manganese	41	0.098		mg/Kg	1	6/14/2018 12:53:48 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:29:41 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 12:53:48 PM	38622
Uranium	ND	4.9		mg/Kg	1	6/17/2018 4:29:41 PM	38622
Zinc	12	2.5		mg/Kg	1	6/17/2018 4:29:41 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	29	10		mg/Kg	1	6/7/2018 5:48:33 PM	38524
Motor Oil Range Organics (MRO)	140	50		mg/Kg	1	6/7/2018 5:48:33 PM	38524
Surr: DNOP	108	70-130		%Rec	1	6/7/2018 5:48:33 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/6/2018 10:26:43 PM	38499
Surr: BFB	92.2	15-316		%Rec	1	6/6/2018 10:26:43 PM	38499
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	6/6/2018 10:26:43 PM	38499
Toluene	ND	0.033		mg/Kg	1	6/6/2018 10:26:43 PM	38499
Ethylbenzene	ND	0.033		mg/Kg	1	6/6/2018 10:26:43 PM	38499
Xylenes, Total	ND	0.065		mg/Kg	1	6/6/2018 10:26:43 PM	38499
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/6/2018 10:26:43 PM	38499

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-021 **Collection Date:** 5/30/2018 11:30:00 AM
Client Sample ID: S-082148-053018-JP-T-9 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 4:36:13 PM	38674
Sulfate	810	30		mg/Kg	20	6/14/2018 4:36:13 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	0.097	0.064		mg/Kg	2	6/13/2018 12:41:29 PM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.5		mg/Kg	1	6/17/2018 4:33:55 PM	38622
Barium	62	0.10		mg/Kg	1	6/14/2018 12:55:39 PM	38622
Cadmium	ND	0.10		mg/Kg	1	6/14/2018 12:55:39 PM	38622
Chromium	4.7	0.30		mg/Kg	1	6/14/2018 12:55:39 PM	38622
Copper	3.2	0.30		mg/Kg	1	6/14/2018 12:55:39 PM	38622
Iron	6200	120		mg/Kg	50	6/17/2018 4:35:56 PM	38622
Lead	1.7	0.25		mg/Kg	1	6/14/2018 12:55:39 PM	38622
Manganese	51	0.10		mg/Kg	1	6/14/2018 12:55:39 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:33:55 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 12:55:39 PM	38622
Uranium	ND	5.0		mg/Kg	1	6/17/2018 4:33:55 PM	38622
Zinc	14	2.5		mg/Kg	1	6/17/2018 4:33:55 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/7/2018 6:10:56 PM	38524
Motor Oil Range Organics (MRO)	76	49		mg/Kg	1	6/7/2018 6:10:56 PM	38524
Surr: DNOP	107	70-130		%Rec	1	6/7/2018 6:10:56 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	6/6/2018 10:50:04 PM	38499
Surr: BFB	92.0	15-316		%Rec	1	6/6/2018 10:50:04 PM	38499
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	6/6/2018 10:50:04 PM	38499
Toluene	ND	0.032		mg/Kg	1	6/6/2018 10:50:04 PM	38499
Ethylbenzene	ND	0.032		mg/Kg	1	6/6/2018 10:50:04 PM	38499
Xylenes, Total	ND	0.065		mg/Kg	1	6/6/2018 10:50:04 PM	38499
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/6/2018 10:50:04 PM	38499

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-022 **Collection Date:** 5/30/2018 10:43:00 AM
Client Sample ID: S-082148-053018-JP-T-10 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/14/2018 4:48:38 PM	38674
Sulfate	ND	30		mg/Kg	20	6/14/2018 4:48:38 PM	38674
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	0.038	0.033		mg/Kg	1	6/14/2018 11:02:55 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst: **MED**	
Arsenic	ND	2.4		mg/Kg	1	6/17/2018 4:37:59 PM	38622
Barium	48	0.098		mg/Kg	1	6/14/2018 12:57:42 PM	38622
Cadmium	ND	0.098		mg/Kg	1	6/14/2018 12:57:42 PM	38622
Chromium	4.5	0.29		mg/Kg	1	6/14/2018 12:57:42 PM	38622
Copper	2.0	0.29		mg/Kg	1	6/14/2018 12:57:42 PM	38622
Iron	5600	120		mg/Kg	50	6/17/2018 4:40:06 PM	38622
Lead	1.4	0.24		mg/Kg	1	6/14/2018 12:57:42 PM	38622
Manganese	41	0.098		mg/Kg	1	6/14/2018 12:57:42 PM	38622
Selenium	ND	2.4		mg/Kg	1	6/17/2018 4:37:59 PM	38622
Silver	ND	0.24		mg/Kg	1	6/14/2018 12:57:42 PM	38622
Uranium	ND	4.9		mg/Kg	1	6/17/2018 4:37:59 PM	38622
Zinc	12	2.4		mg/Kg	1	6/17/2018 4:37:59 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	21	9.9		mg/Kg	1	6/7/2018 6:33:16 PM	38524
Motor Oil Range Organics (MRO)	100	50		mg/Kg	1	6/7/2018 6:33:16 PM	38524
Surr: DNOP	91.7	70-130		%Rec	1	6/7/2018 6:33:16 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/7/2018 12:23:26 AM	G51763
Surr: BFB	90.7	15-316		%Rec	1	6/7/2018 12:23:26 AM	G51763
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	6/7/2018 12:23:26 AM	B51763
Toluene	ND	0.033		mg/Kg	1	6/7/2018 12:23:26 AM	B51763
Ethylbenzene	ND	0.033		mg/Kg	1	6/7/2018 12:23:26 AM	B51763
Xylenes, Total	ND	0.066		mg/Kg	1	6/7/2018 12:23:26 AM	B51763
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	6/7/2018 12:23:26 AM	B51763

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-023 **Collection Date:** 5/30/2018 12:51:00 PM
Client Sample ID: S-082148-053018-JP-T-11 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Chloride	ND	30		mg/Kg	20	6/14/2018 5:01:02 PM	38674
Sulfate	94	30		mg/Kg	20	6/14/2018 5:01:02 PM	38674
EPA METHOD 7471: MERCURY						Analyst:	**rde**
Mercury	0.034	0.032		mg/Kg	1	6/14/2018 11:04:37 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst:	**MED**
Arsenic	ND	2.5		mg/Kg	1	6/17/2018 4:42:01 PM	38622
Barium	50	0.10		mg/Kg	1	6/14/2018 12:59:39 PM	38622
Cadmium	ND	0.10		mg/Kg	1	6/14/2018 12:59:39 PM	38622
Chromium	4.1	0.30		mg/Kg	1	6/14/2018 12:59:39 PM	38622
Copper	2.0	0.30		mg/Kg	1	6/14/2018 12:59:39 PM	38622
Iron	4600	130		mg/Kg	50	6/17/2018 4:44:03 PM	38622
Lead	0.78	0.25		mg/Kg	1	6/14/2018 12:59:39 PM	38622
Manganese	39	0.10		mg/Kg	1	6/14/2018 12:59:39 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:42:01 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 12:59:39 PM	38622
Uranium	ND	5.0		mg/Kg	1	6/17/2018 4:42:01 PM	38622
Zinc	9.0	2.5		mg/Kg	1	6/17/2018 4:42:01 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/7/2018 6:55:37 PM	38524
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 6:55:37 PM	38524
Surr: DNOP	88.4	70-130		%Rec	1	6/7/2018 6:55:37 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/7/2018 12:46:46 AM	G51763
Surr: BFB	94.2	15-316		%Rec	1	6/7/2018 12:46:46 AM	G51763
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.017		mg/Kg	1	6/7/2018 12:46:46 AM	B51763
Toluene	ND	0.033		mg/Kg	1	6/7/2018 12:46:46 AM	B51763
Ethylbenzene	ND	0.033		mg/Kg	1	6/7/2018 12:46:46 AM	B51763
Xylenes, Total	ND	0.066		mg/Kg	1	6/7/2018 12:46:46 AM	B51763
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/7/2018 12:46:46 AM	B51763

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-024 **Collection Date:** 5/30/2018 1:17:00 PM
Client Sample ID: S-082148-053018-JP-T-12 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Chloride	ND	30		mg/Kg	20	6/14/2018 5:13:27 PM	38674
Sulfate	4100	75		mg/Kg	50	6/15/2018 12:14:32 PM	38674
EPA METHOD 7471: MERCURY						Analyst:	**rde**
Mercury	0.070	0.066		mg/Kg	2	6/13/2018 12:46:48 PM	38629
EPA METHOD 6010B: SOIL METALS						Analyst:	**MED**
Arsenic	ND	2.5		mg/Kg	1	6/17/2018 4:46:03 PM	38622
Barium	56	0.099		mg/Kg	1	6/14/2018 1:01:36 PM	38622
Cadmium	ND	0.099		mg/Kg	1	6/14/2018 1:01:36 PM	38622
Chromium	6.6	0.30		mg/Kg	1	6/14/2018 1:01:36 PM	38622
Copper	240	0.30		mg/Kg	1	6/14/2018 1:01:36 PM	38622
Iron	7900	120		mg/Kg	50	6/17/2018 4:48:14 PM	38622
Lead	0.51	0.25		mg/Kg	1	6/14/2018 1:01:36 PM	38622
Manganese	130	0.099		mg/Kg	1	6/14/2018 1:01:36 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:46:03 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 1:01:36 PM	38622
Uranium	ND	4.9		mg/Kg	1	6/17/2018 4:46:03 PM	38622
Zinc	16	2.5		mg/Kg	1	6/17/2018 4:46:03 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 7:18:04 PM	38524
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 7:18:04 PM	38524
Surr: DNOP	88.6	70-130		%Rec	1	6/7/2018 7:18:04 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	6/7/2018 1:10:17 AM	G51763
Surr: BFB	91.2	15-316		%Rec	1	6/7/2018 1:10:17 AM	G51763
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.017		mg/Kg	1	6/7/2018 1:10:17 AM	B51763
Toluene	ND	0.034		mg/Kg	1	6/7/2018 1:10:17 AM	B51763
Ethylbenzene	ND	0.034		mg/Kg	1	6/7/2018 1:10:17 AM	B51763
Xylenes, Total	ND	0.067		mg/Kg	1	6/7/2018 1:10:17 AM	B51763
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	1	6/7/2018 1:10:17 AM	B51763

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-025 **Collection Date:** 5/30/2018 1:47:00 PM
Client Sample ID: S-082148-053018-JP-T-13 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	32	30		mg/Kg	20	6/20/2018 6:49:36 PM	38674
Sulfate	660	30		mg/Kg	20	6/20/2018 6:49:36 PM	38674
EPA METHOD 7471: MERCURY						Analyst:	**rde**
Mercury	0.12	0.065		mg/Kg	2	6/13/2018 12:48:28 PM	38629
EPA METHOD 6010B: SOIL METALS						Analyst:	**MED**
Arsenic	ND	2.5		mg/Kg	1	6/19/2018 10:18:09 AM	38622
Barium	77	0.099		mg/Kg	1	6/14/2018 1:03:42 PM	38622
Cadmium	ND	0.099		mg/Kg	1	6/14/2018 1:03:42 PM	38622
Chromium	4.8	0.30		mg/Kg	1	6/14/2018 1:03:42 PM	38622
Copper	3.6	0.30		mg/Kg	1	6/14/2018 1:03:42 PM	38622
Iron	5600	120		mg/Kg	50	6/17/2018 5:01:12 PM	38622
Lead	0.50	0.25		mg/Kg	1	6/14/2018 1:03:42 PM	38622
Manganese	54	0.099		mg/Kg	1	6/14/2018 1:03:42 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 4:59:06 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 1:03:42 PM	38622
Uranium	ND	5.0		mg/Kg	1	6/17/2018 4:59:06 PM	38622
Zinc	11	2.5		mg/Kg	1	6/17/2018 4:59:06 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	34	9.9		mg/Kg	1	6/7/2018 7:40:18 PM	38524
Motor Oil Range Organics (MRO)	97	50		mg/Kg	1	6/7/2018 7:40:18 PM	38524
Surr: DNOP	105	70-130		%Rec	1	6/7/2018 7:40:18 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	6/7/2018 1:33:28 AM	G51763
Surr: BFB	91.0	15-316		%Rec	1	6/7/2018 1:33:28 AM	G51763
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.017		mg/Kg	1	6/7/2018 1:33:28 AM	B51763
Toluene	ND	0.034		mg/Kg	1	6/7/2018 1:33:28 AM	B51763
Ethylbenzene	ND	0.034		mg/Kg	1	6/7/2018 1:33:28 AM	B51763
Xylenes, Total	ND	0.067		mg/Kg	1	6/7/2018 1:33:28 AM	B51763
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	6/7/2018 1:33:28 AM	B51763

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-026 **Collection Date:** 5/30/2018 2:27:00 PM
Client Sample ID: S-082148-053018-JP-T-14 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	30		mg/Kg	20	6/20/2018 7:02:00 PM	38674
Sulfate	ND	30		mg/Kg	20	6/20/2018 7:02:00 PM	38674
EPA METHOD 7471: MERCURY						Analyst:	**rde**
Mercury	ND	0.033		mg/Kg	1	6/14/2018 11:06:19 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst:	**MED**
Arsenic	ND	2.5		mg/Kg	1	6/19/2018 10:19:55 AM	38622
Barium	59	0.099		mg/Kg	1	6/14/2018 1:05:39 PM	38622
Cadmium	ND	0.099		mg/Kg	1	6/14/2018 1:05:39 PM	38622
Chromium	3.6	0.30		mg/Kg	1	6/14/2018 1:05:39 PM	38622
Copper	2.2	0.30		mg/Kg	1	6/14/2018 1:05:39 PM	38622
Iron	1600	49		mg/Kg	20	6/17/2018 5:05:16 PM	38622
Lead	0.46	0.25		mg/Kg	1	6/14/2018 1:05:39 PM	38622
Manganese	38	0.099		mg/Kg	1	6/14/2018 1:05:39 PM	38622
Selenium	ND	2.5		mg/Kg	1	6/17/2018 5:03:16 PM	38622
Silver	ND	0.25		mg/Kg	1	6/14/2018 1:05:39 PM	38622
Uranium	ND	4.9		mg/Kg	1	6/17/2018 5:03:16 PM	38622
Zinc	8.8	2.5		mg/Kg	1	6/17/2018 5:03:16 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 8:02:47 PM	38524
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 8:02:47 PM	38524
Surr: DNOP	86.9	70-130		%Rec	1	6/7/2018 8:02:47 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	6/7/2018 1:56:40 AM	G51763
Surr: BFB	90.4	15-316		%Rec	1	6/7/2018 1:56:40 AM	G51763
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.017		mg/Kg	1	6/7/2018 1:56:40 AM	B51763
Toluene	ND	0.034		mg/Kg	1	6/7/2018 1:56:40 AM	B51763
Ethylbenzene	ND	0.034		mg/Kg	1	6/7/2018 1:56:40 AM	B51763
Xylenes, Total	ND	0.068		mg/Kg	1	6/7/2018 1:56:40 AM	B51763
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	6/7/2018 1:56:40 AM	B51763

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-027 **Collection Date:** 5/30/2018 12:08:00 PM
Client Sample ID: S-082148-053018-JP-T-15 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	30		mg/Kg	20	6/20/2018 7:14:25 PM	38674
Sulfate	5100	75		mg/Kg	50	6/21/2018 8:09:09 PM	38674
EPA METHOD 7471: MERCURY						Analyst:	**rde**
Mercury	0.070	0.032		mg/Kg	1	6/14/2018 11:08:01 AM	38629
EPA METHOD 6010B: SOIL METALS						Analyst:	**MED**
Arsenic	ND	2.4		mg/Kg	1	6/19/2018 10:21:41 AM	38622
Barium	220	0.097		mg/Kg	1	6/14/2018 1:07:36 PM	38622
Cadmium	ND	0.097		mg/Kg	1	6/14/2018 1:07:36 PM	38622
Chromium	11	0.29		mg/Kg	1	6/14/2018 1:07:36 PM	38622
Copper	110	0.29		mg/Kg	1	6/14/2018 1:07:36 PM	38622
Iron	8900	120		mg/Kg	50	6/17/2018 5:09:26 PM	38622
Lead	3.7	0.24		mg/Kg	1	6/14/2018 1:07:36 PM	38622
Manganese	75	0.097		mg/Kg	1	6/14/2018 1:07:36 PM	38622
Selenium	ND	2.4		mg/Kg	1	6/17/2018 5:07:17 PM	38622
Silver	ND	0.24		mg/Kg	1	6/14/2018 1:07:36 PM	38622
Uranium	ND	4.9		mg/Kg	1	6/17/2018 5:07:17 PM	38622
Zinc	21	2.4		mg/Kg	1	6/17/2018 5:07:17 PM	38622
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	310	9.6		mg/Kg	1	6/11/2018 5:11:29 PM	38579
Motor Oil Range Organics (MRO)	400	48		mg/Kg	1	6/11/2018 5:11:29 PM	38579
Surr: DNOP	110	70-130		%Rec	1	6/11/2018 5:11:29 PM	38579
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	13	3.4		mg/Kg	1	6/7/2018 2:19:56 AM	G51763
Surr: BFB	115	15-316		%Rec	1	6/7/2018 2:19:56 AM	G51763
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	0.024	0.017		mg/Kg	1	6/7/2018 2:19:56 AM	B51763
Toluene	0.035	0.034		mg/Kg	1	6/7/2018 2:19:56 AM	B51763
Ethylbenzene	ND	0.034		mg/Kg	1	6/7/2018 2:19:56 AM	B51763
Xylenes, Total	0.10	0.067		mg/Kg	1	6/7/2018 2:19:56 AM	B51763
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/7/2018 2:19:56 AM	B51763

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806132
Project: Jal Landfarm

Lab ID: 1806132-028 **Collection Date:** 5/29/2018 1:47:00 PM
Client Sample ID: S-082148-052918-JP-V-3 **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/7/2018 8:47:23 PM	38524
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/7/2018 8:47:23 PM	38524
Surr: DNOP	93.5	70-130		%Rec	1	6/7/2018 8:47:23 PM	38524
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/7/2018 2:43:14 AM	G51763
Surr: BFB	93.0	15-316		%Rec	1	6/7/2018 2:43:14 AM	G51763

Lab ID: 1806132-029 **Collection Date:**
Client Sample ID: MeOH Blank **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2018 3:06:41 AM	G51763
Surr: BFB	95.6	15-316		%Rec	1	6/7/2018 3:06:41 AM	G51763
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	6/7/2018 3:06:41 AM	B51763
Toluene	ND	0.050		mg/Kg	1	6/7/2018 3:06:41 AM	B51763
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2018 3:06:41 AM	B51763
Xylenes, Total	ND	0.10		mg/Kg	1	6/7/2018 3:06:41 AM	B51763
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/7/2018 3:06:41 AM	B51763

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-38660**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**38660**		RunNo:	**51967**				
Prep Date:	**6/13/2018**	Analysis Date:	**6/13/2018**		SeqNo:	**1698916**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-38660**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**38660**		RunNo:	**51967**				
Prep Date:	**6/13/2018**	Analysis Date:	**6/13/2018**		SeqNo:	**1698917**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	90	110			

Sample ID	**MB-38674**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**38674**		RunNo:	**51988**				
Prep Date:	**6/14/2018**	Analysis Date:	**6/14/2018**		SeqNo:	**1700144**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-38674**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**38674**		RunNo:	**51988**				
Prep Date:	**6/14/2018**	Analysis Date:	**6/14/2018**		SeqNo:	**1700145**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.5	90	110			
Sulfate	28	1.5	30.00	0	94.6	90	110			

Sample ID	**MB-38695**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**38695**		RunNo:	**51990**				
Prep Date:	**6/14/2018**	Analysis Date:	**6/14/2018**		SeqNo:	**1700215**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-38695**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**38695**		RunNo:	**51990**				
Prep Date:	**6/14/2018**	Analysis Date:	**6/14/2018**		SeqNo:	**1700216**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			
Sulfate	28	1.5	30.00	0	92.1	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-38524**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**38524**		RunNo:	**51791**				
Prep Date:	**6/6/2018**	Analysis Date:	**6/7/2018**		SeqNo:	**1691786**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	70	130			

Sample ID	**LCS-38524**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**38524**		RunNo:	**51791**				
Prep Date:	**6/6/2018**	Analysis Date:	**6/7/2018**		SeqNo:	**1691787**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.1	70	130			
Surr: DNOP	4.7		5.000		94.5	70	130			

Sample ID	**MB-38523**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**38523**		RunNo:	**51792**				
Prep Date:	**6/6/2018**	Analysis Date:	**6/7/2018**		SeqNo:	**1691851**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	70	130			

Sample ID	**LCS-38523**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**38523**		RunNo:	**51792**				
Prep Date:	**6/6/2018**	Analysis Date:	**6/7/2018**		SeqNo:	**1691852**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	70	130			
Surr: DNOP	4.9		5.000		97.6	70	130			

Sample ID	**MB-38579**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**38579**		RunNo:	**51859**				
Prep Date:	**6/8/2018**	Analysis Date:	**6/11/2018**		SeqNo:	**1694134**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		88.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-38579**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**38579**		RunNo:	**51859**				
Prep Date:	**6/8/2018**	Analysis Date:	**6/11/2018**		SeqNo:	**1694173**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.3	70	130			
Surr: DNOP	3.8		5.000		75.9	70	130			

Sample ID	**MB-38599**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**38599**		RunNo:	**51897**				
Prep Date:	**6/11/2018**	Analysis Date:	**6/12/2018**		SeqNo:	**1696783**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.7		10.00		97.5	70	130			

Sample ID	**LCS-38599**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**38599**		RunNo:	**51897**				
Prep Date:	**6/11/2018**	Analysis Date:	**6/12/2018**		SeqNo:	**1696784**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-38499**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**38499**		RunNo:	**51763**				
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**		SeqNo:	**1690527**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.2	15	316			

Sample ID	**LCS-38499**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**38499**		RunNo:	**51763**				
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**		SeqNo:	**1690528**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	118	75.9	131			
Surr: BFB	1100		1000		112	15	316			

Sample ID	**RB**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**G51763**		RunNo:	**51763**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1690549**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.4	15	316			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**G51763**		RunNo:	**51763**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1690550**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	117	75.9	131			
Surr: BFB	1100		1000		107	15	316			

Sample ID	**1806132-022AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-053018-JP**	Batch ID:	**G51763**		RunNo:	**51763**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1690552**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.3	16.47	0	100	77.8	128			
Surr: BFB	650		658.8		98.3	15	316			

Sample ID	**1806132-022AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-053018-JP**	Batch ID:	**G51763**		RunNo:	**51763**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1690553**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID **1806132-022AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-053018-JP**	Batch ID: **G51763**	RunNo: **51763**
Prep Date:	Analysis Date: **6/6/2018**	SeqNo: **1690553** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.3	16.47	0	106	77.8	128	5.54	20	
Surr: BFB	730		658.8		110	15	316	0	0	

Sample ID **MB-38529**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **38529**	RunNo: **51797**
Prep Date: **6/6/2018**	Analysis Date: **6/7/2018**	SeqNo: **1691764** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.6	15	316			

Sample ID **LCS-38529**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **38529**	RunNo: **51797**
Prep Date: **6/6/2018**	Analysis Date: **6/7/2018**	SeqNo: **1691765** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	75.9	131			
Surr: BFB	1100		1000		108	15	316			

Sample ID **1806132-015AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-052918-JP**	Batch ID: **38529**	RunNo: **51797**
Prep Date: **6/6/2018**	Analysis Date: **6/7/2018**	SeqNo: **1691767** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.8	24.15	0	120	77.8	128			
Surr: BFB	970		966.2		100	15	316			

Sample ID **1806132-015AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-052918-JP**	Batch ID: **38529**	RunNo: **51797**
Prep Date: **6/6/2018**	Analysis Date: **6/7/2018**	SeqNo: **1691768** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.7	23.67	0	123	77.8	128	0.452	20	
Surr: BFB	910		947.0		96.1	15	316	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-38499**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**38499**	RunNo:	**51763**					
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**	SeqNo:	**1690565**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	**LCS-38499**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**38499**	RunNo:	**51763**					
Prep Date:	**6/5/2018**	Analysis Date:	**6/6/2018**	SeqNo:	**1690566**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.0	77.3	128			
Toluene	0.93	0.050	1.000	0	92.6	79.2	125			
Ethylbenzene	0.93	0.050	1.000	0	92.5	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	94.8	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID	**RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**B51763**	RunNo:	**51763**					
Prep Date:		Analysis Date:	**6/6/2018**	SeqNo:	**1690587**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**B51763**	RunNo:	**51763**					
Prep Date:		Analysis Date:	**6/6/2018**	SeqNo:	**1690588**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	77.3	128			
Toluene	0.97	0.050	1.000	0	97.4	79.2	125			
Ethylbenzene	0.97	0.050	1.000	0	97.5	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	99.5	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**1806132-023AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-053018-JP**	Batch ID: **B51763**		RunNo: **51763**					
Prep Date:		Analysis Date: **6/6/2018**		SeqNo: **1690591**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.60	0.017	0.6605	0	91.0	68.5	133			
Toluene	0.62	0.033	0.6605	0	93.6	75	130			
Ethylbenzene	0.61	0.033	0.6605	0	92.7	79.4	128			
Xylenes, Total	1.9	0.066	1.982	0	95.4	77.3	131			
Surr: 4-Bromofluorobenzene	0.72		0.6605		109	80	120			

Sample ID	**1806132-023AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-053018-JP**	Batch ID: **B51763**		RunNo: **51763**					
Prep Date:		Analysis Date: **6/6/2018**		SeqNo: **1690592**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.58	0.017	0.6605	0	87.6	68.5	133	3.83	20	
Toluene	0.59	0.033	0.6605	0	89.7	75	130	4.16	20	
Ethylbenzene	0.59	0.033	0.6605	0	89.6	79.4	128	3.41	20	
Xylenes, Total	1.8	0.066	1.982	0	91.6	77.3	131	4.06	20	
Surr: 4-Bromofluorobenzene	0.71		0.6605		108	80	120	0	0	

Sample ID	**MB-38529**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **38529**		RunNo: **51797**					
Prep Date:	**6/6/2018**	Analysis Date: **6/7/2018**		SeqNo: **1691782**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	**LCS-38529**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **38529**		RunNo: **51797**					
Prep Date:	**6/6/2018**	Analysis Date: **6/7/2018**		SeqNo: **1691783**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**100ng btex lcs**	SampType:	**LCS4**		TestCode:	**EPA Method 8260B: Volatiles Short List**				
Client ID:	**BatchQC**	Batch ID:	**B51790**		RunNo:	**51790**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691195**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.9	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.4	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID	**1806132-002ams**	SampType:	**MS4**		TestCode:	**EPA Method 8260B: Volatiles Short List**				
Client ID:	**S-082148-052918-JP**	Batch ID:	**B51790**		RunNo:	**51790**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691198**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.016	0.6418	0	96.1	80	120			
Toluene	0.62	0.032	0.6418	0.003081	96.4	80	120			
Ethylbenzene	0.64	0.032	0.6418	0	99.4	82	121			
Xylenes, Total	1.9	0.064	1.925	0.01470	96.3	80.2	120			
Surr: 4-Bromofluorobenzene	0.36		0.3209		111	70	130			
Surr: Toluene-d8	0.32		0.3209		100	70	130			

Sample ID	**1806132-002amsd**	SampType:	**MSD4**		TestCode:	**EPA Method 8260B: Volatiles Short List**				
Client ID:	**S-082148-052918-JP**	Batch ID:	**B51790**		RunNo:	**51790**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691199**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.58	0.016	0.6418	0	89.9	80	120	6.64	20	
Toluene	0.57	0.032	0.6418	0.003081	88.4	80	120	8.65	20	
Ethylbenzene	0.60	0.032	0.6418	0	94.1	82	121	5.51	20	
Xylenes, Total	1.8	0.064	1.925	0.01470	92.9	80.2	120	3.59	20	
Surr: 4-Bromofluorobenzene	0.34		0.3209		107	70	130	0	0	
Surr: Toluene-d8	0.31		0.3209		98.1	70	130	0	0	

Sample ID	**rb**	SampType:	**MBLK**		TestCode:	**EPA Method 8260B: Volatiles Short List**				
Client ID:	**PBS**	Batch ID:	**B51790**		RunNo:	**51790**				
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691216**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**
25-Jun-18

Client: GHD
Project: Jal Landfarm

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **B51790**	RunNo: **51790**
Prep Date:	Analysis Date: **6/6/2018**	SeqNo: **1691216** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.58		0.5000		115	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-38629**	SampType: **MBLK**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID: **38629**			RunNo: **51954**					
Prep Date:	**6/12/2018**	Analysis Date: **6/13/2018**			SeqNo: **1697951**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-38629**	SampType: **LCS**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID: **38629**			RunNo: **51954**					
Prep Date:	**6/12/2018**	Analysis Date: **6/13/2018**			SeqNo: **1697952**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	103	80	120			

Sample ID	**LLLCS-38629**	SampType: **LCSLL**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**BatchQC**	Batch ID: **38629**			RunNo: **51954**					
Prep Date:	**6/12/2018**	Analysis Date: **6/13/2018**			SeqNo: **1697953**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	112	70	130			

Sample ID	**1806132-013AMS**	SampType: **MS**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**S-082148-052918-JP**	Batch ID: **38629**			RunNo: **51954**					
Prep Date:	**6/12/2018**	Analysis Date: **6/13/2018**			SeqNo: **1697955**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.24	0.032	0.1621	0.1052	85.1	80	120			

Sample ID	**1806132-013AMSD**	SampType: **MSD**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**S-082148-052918-JP**	Batch ID: **38629**			RunNo: **51954**					
Prep Date:	**6/12/2018**	Analysis Date: **6/13/2018**			SeqNo: **1697956**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.27	0.032	0.1634	0.1052	102	80	120	11.4	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID **MB-38622**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **38622**	RunNo: **51972**
Prep Date: **6/12/2018**	Analysis Date: **6/14/2018**	SeqNo: **1699570** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID **LCS-38622**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **38622**	RunNo: **51972**
Prep Date: **6/12/2018**	Analysis Date: **6/14/2018**	SeqNo: **1699571** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	24	0.10	25.00	0	95.0	80	120			
Cadmium	24	0.10	25.00	0	97.5	80	120			
Chromium	24	0.30	25.00	0	94.7	80	120			
Copper	24	0.30	25.00	0	96.9	80	120			
Iron	25	2.5	25.00	0	98.1	80	120			
Lead	24	0.25	25.00	0	97.6	80	120			
Manganese	23	0.10	25.00	0	93.7	80	120			
Selenium	24	2.5	25.00	0	95.0	80	120			
Silver	5.0	0.25	5.000	0	100	80	120			
Uranium	21	5.0	25.00	0	85.6	80	120			
Zinc	24	2.5	25.00	0	95.1	80	120			

Sample ID **1806132-013AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-052918-JP**	Batch ID: **38622**	RunNo: **51972**
Prep Date: **6/12/2018**	Analysis Date: **6/14/2018**	SeqNo: **1699574** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	120	0.098	24.51	110.6	33.4	75	125			S
Cadmium	18	0.098	24.51	0	74.8	75	125			S
Chromium	20	0.29	24.51	3.997	66.8	75	125			S
Copper	21	0.29	24.51	3.350	73.9	75	125			S
Lead	16	0.25	24.51	0	64.4	75	125			S
Manganese	58	0.098	24.51	41.97	66.3	75	125			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**1806132-013AMS**	SampType:	**MS**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**S-082148-052918-JP**	Batch ID:	**38622**			RunNo:	**51972**			
Prep Date:	**6/12/2018**	Analysis Date:	**6/14/2018**			SeqNo:	**1699574**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.7	0.25	4.903	0.2077	91.1	75	125			
Uranium	ND	4.9	24.51	0	0	75	125			S

Sample ID	**1806132-013AMSD**	SampType:	**MSD**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**S-082148-052918-JP**	Batch ID:	**38622**			RunNo:	**51972**			
Prep Date:	**6/12/2018**	Analysis Date:	**6/14/2018**			SeqNo:	**1699575**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	130	0.098	24.38	110.6	95.2	75	125	11.9	20	
Cadmium	21	0.098	24.38	0	86.0	75	125	13.4	20	
Chromium	24	0.29	24.38	3.997	82.2	75	125	16.5	20	
Copper	24	0.29	24.38	3.350	86.2	75	125	12.6	20	
Lead	19	0.24	24.38	0	76.5	75	125	16.5	20	
Manganese	72	0.098	24.38	41.97	124	75	125	21.5	20	R
Silver	4.9	0.24	4.876	0.2077	96.5	75	125	5.00	20	
Uranium	ND	4.9	24.38	0	0	75	125	0	20	S

Sample ID	**MB-38622**	SampType:	**MBLK**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**PBS**	Batch ID:	**38622**			RunNo:	**52025**			
Prep Date:	**6/12/2018**	Analysis Date:	**6/15/2018**			SeqNo:	**1701479**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								

Sample ID	**LCS-38622**	SampType:	**LCS**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**LCSS**	Batch ID:	**38622**			RunNo:	**52025**			
Prep Date:	**6/12/2018**	Analysis Date:	**6/15/2018**			SeqNo:	**1701481**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	95.9	80	120			

Sample ID	**1806132-013AMS**	SampType:	**MS**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**S-082148-052918-JP**	Batch ID:	**38622**			RunNo:	**52026**			
Prep Date:	**6/12/2018**	Analysis Date:	**6/17/2018**			SeqNo:	**1701552**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.51	3.175	81.4	75	125			
Selenium	29	2.5	24.51	2.735	107	75	125			
Zinc	27	2.5	24.51	11.48	62.0	75	125			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**1806132-013AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**S-082148-052918-JP**	Batch ID:	**38622**	RunNo:	**52026**
Prep Date:	**6/12/2018**	Analysis Date:	**6/17/2018**	SeqNo:	**1701553** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.4	24.38	3.175	80.0	75	125	1.88	20	
Selenium	22	2.4	24.38	2.735	79.2	75	125	26.9	20	R
Zinc	29	2.4	24.38	11.48	71.8	75	125	8.27	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806132**

25-Jun-18

Client: GHD

Project: Jal Landfarm

Sample ID	**1806132-001ams**	SampType:	**MS**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**S-082148-052918-JP**	Batch ID:	**R51790**		RunNo:	**51790**					
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691165**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	19	3.6	17.82	0	107	64.7	142				
Surr: BFB	380		356.4		108	70	130				

Sample ID	**1806132-001amsd**	SampType:	**MSD**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**S-082148-052918-JP**	Batch ID:	**R51790**		RunNo:	**51790**					
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691166**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	18	3.6	17.82	0	98.4	64.7	142	8.07	20		
Surr: BFB	380		356.4		106	70	130	0	0		

Sample ID	**2.5ug gro lcs**	SampType:	**LCS**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**R51790**		RunNo:	**51790**					
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691184**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	70	130				
Surr: BFB	490		500.0		98.6	70	130				

Sample ID	**rb**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**R51790**		RunNo:	**51790**					
Prep Date:		Analysis Date:	**6/6/2018**		SeqNo:	**1691185**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	550		500.0		110	70	130				

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1806132 | RcptNo: 1

Received By: **Jazzmine Burkhead** 6/1/2018 2:10:00 PM

Completed By: **Isaiah Ortiz** 6/5/2018 8:40:53 AM IO

Reviewed By: IO 6/6/18 LB: MW 6/6/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☐	No ☑	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: ____ (<2 or >12 unless noted)
Adjusted? MW 6/6/18
Checked by: ____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: ____ Date: ____
By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: ____
Client Instructions: ____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	8.4	Good	Not Present			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: 505

email or Fax#: Alan.Brandon@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Tal Landfarm

Project #: 082-148

Project Manager: Alan Brandon

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

Sample Temperature: 8.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1806132	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals 6010/7470	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride by SW9056 300	Mercury 7471			Air Bubbles (Y or N)
5-29-18	1140	S	S-082148-052918-JP-V-1	various	ICE	-001	X		X				X					X	X			
5-29-18	1248		S-082148-052918-JP-V-2			-002	X		X				X					X	X			
5-29-18	1426		S-082148-052918-JP-V-4			-003	X		X				X					X	X			
5-29-18	1445		S-082148-052918-JP-V-5			-004	X		X				X					X	X			
5-29-18	1535		S-082148-052918-JP-V-6			-005	X		X				X					X	X			
5-29-18	1600		S-082148-052918-JP-V-7			-006	X		X				X					X	X			
5-30-18	1000		S-082148-053018-JP-V-8			-007	X		X				X					X	X			
5-30-18	1116		S-082148-053018-JP-V-9			-008	X		X				X					X	X			
5-30-18	1036		S-082148-053018-JP-V-10			-009	X		X				X					X	X			
5-30-18	1242		S-082148-053018-JP-V-11			-010	X		X				X					X	X			
5-30-18	1340		S-082148-053018-JP-V-12			-011	X		X				X					X	X			
5-30-18	1337		S-082148-053018-JP-V-13			-012	X		X				X					X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/1/18	1410			06/01/18	14:10
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: No Metals / Mercury
For "V" samples only

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: ~~GHD~~ GHD Services

Mailing Address: 6121 Indian School Rd NE Ste 200
Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Alan.Brandon@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Alan Brandon

Sampler: JP

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1806132	BTEX + ~~MTBE~~ + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals 6010/6020	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride/Sulfate 300	Mercury 7471	10.6.2. 3103 A & B	NMAC Metals 6010/6020	Air Bubbles (Y or N)
5/29/18	1130	S	S-082148-052918-JP-T-1	Various	ICE	-013	X		X				X					X	X	X		
	1238		S-082148-052918-JP-T-2			-014	X		X				X					X	X	X		
	1334		S-082148-052918-JP-T-3			-015			X													
	1419		S-082148-052918-JP-T-4			-016	X		X				X					X	X	X		
	1459		S-082148-052918-JP-T-5			-017	X		X				X					X	X	X		
	1502		S-082148-052918-JP-T-6			-018	X		X				X					X	X	X		
	1612		S-082148-052918-JP-T-7			-019	X		X				X					X	X	X		
5/30/18	1010		S-082148-053018-JP-T-8			-020	X		X				X					X	X	X		
	1130		S-082148-053018-JP-T-9			-021	X		X				X					X	X	X		
	1043		S-082148-053018-JP-T-10			-022	X		X				X					X	X	X		
	1251		S-082148-053018-JP-T-11			-023	X		X				X					X	X	X		
	1317		S-082148-053018-JP-T-12			-024	X		X				X					X	X	X		

Date: 6/1/18 Time: 1448 Relinquished by:

Date: Time: Relinquished by:

Received by: Date: 06/01/18 Time: 1410

Received by: Date: Time:

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD Services

Mailing Address: 6121 Indian School Rd Ste 200 NE Albuquerque, NM 87113

Phone #: 505 884 0672

email or Fax#: Alan.Brandon@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Alan Brandon

Sampler: JP

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.7

HEAL No. 1805133

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	
5/30/18	1347	S	S-082148-053018-JP-T-13	Various	ICE	-025
	1427		S-082148-053018-JP-T-14			-026
	1208		S-082148-053018-JP-T-15			-027
5/29	1347	S	S-082148-052918-VP-V-3 MW 5/29/18 @ 1030	4oz/mesh		-028

Date:	Time:	Relinquished by:
6/1/18	1418	
Date:	Time:	Relinquished by:

Received by: Date 06/01/18 Time 14:18

Received by: Date Time

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride/Sulfate 300	Mercury 7471	2.6.2. 3103 A & B	NMAC Metals 6010/6020	Air Bubbles (Y or N)
X		X				X					X	X	X		
X		X				X					X	X	X		
X		X				X					X	X	X		
X		X				X					X	X			

Remarks:
V-3 TPH GRO/DRO/ORO only
metals: Arsenic, barium, cadmium, chromium, copper, Iron, Lead, manganese, mercury, selenium, Silver, Uranium, Zinc

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 12, 2018

Alan Brandon

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1806I31

Dear Alan Brandon:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/29/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1806I31
Project: Jal Landfarm

Lab ID: 1806I31-001 **Collection Date:** 6/28/2018 9:45:00 AM
Client Sample ID: S-082148-062818-MG-V4 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	7/9/2018 12:16:16 PM	39097
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.032		mg/Kg	1	7/6/2018 5:36:30 PM	39078
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Arsenic	ND	2.4		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Barium	68	0.097		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Cadmium	ND	0.097		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Chromium	5.3	0.29		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Copper	2.8	0.29		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Iron	4900	120		mg/Kg	50	7/10/2018 9:02:11 AM	39100
Lead	ND	0.24		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Manganese	55	0.097		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Selenium	ND	2.4		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Silver	ND	0.24		mg/Kg	1	7/10/2018 8:08:54 AM	39100
Uranium	ND	4.9		mg/Kg	1	7/10/2018 10:44:35 AM	39100
Zinc	10	2.4		mg/Kg	1	7/10/2018 10:44:35 AM	39100
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	7/3/2018 10:13:40 PM	39002
Toluene	ND	0.047		mg/Kg	1	7/3/2018 10:13:40 PM	39002
Ethylbenzene	ND	0.047		mg/Kg	1	7/3/2018 10:13:40 PM	39002
Xylenes, Total	ND	0.094		mg/Kg	1	7/3/2018 10:13:40 PM	39002
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	7/3/2018 10:13:40 PM	39002

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806I31**

12-Jul-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39097**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**39097**	RunNo:	**52563**					
Prep Date:	**7/9/2018**	Analysis Date:	**7/9/2018**	SeqNo:	**1724219**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-39097**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**39097**	RunNo:	**52563**					
Prep Date:	**7/9/2018**	Analysis Date:	**7/9/2018**	SeqNo:	**1724220**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806I31**

12-Jul-18

Client: GHD

Project: Jal Landfarm

Sample ID **MB-39002**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **39002**	RunNo: **52464**
Prep Date: **7/2/2018**	Analysis Date: **7/3/2018**	SeqNo: **1720290** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID **LCS-39002**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **39002**	RunNo: **52464**
Prep Date: **7/2/2018**	Analysis Date: **7/3/2018**	SeqNo: **1720291** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.5	77.3	128			
Toluene	0.97	0.050	1.000	0	97.0	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	95.7	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	98.6	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **MB-39008**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **39008**	RunNo: **52464**
Prep Date: **7/2/2018**	Analysis Date: **7/3/2018**	SeqNo: **1720312** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **LCS-39008**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **39008**	RunNo: **52464**
Prep Date: **7/2/2018**	Analysis Date: **7/3/2018**	SeqNo: **1720313** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806I31**

12-Jul-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39078**	SampType:	**MBLK**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID:	**39078**	RunNo:	**52511**					
Prep Date:	**7/6/2018**	Analysis Date:	**7/6/2018**	SeqNo:	**1722083**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-39078**	SampType:	**LCS**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID:	**39078**	RunNo:	**52511**					
Prep Date:	**7/6/2018**	Analysis Date:	**7/6/2018**	SeqNo:	**1722084**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	96.5	80	120			

Sample ID	**LLLCS-39078**	SampType:	**LCSLL**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**39078**	RunNo:	**52511**					
Prep Date:	**7/6/2018**	Analysis Date:	**7/6/2018**	SeqNo:	**1722085**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	84.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806I31**

12-Jul-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39100**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**39100**	RunNo:	**52556**
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1723910** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID	**LCS-39100**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**39100**	RunNo:	**52556**
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1723911** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	95.4	80	120			
Barium	26	0.10	25.00	0	104	80	120			
Cadmium	26	0.10	25.00	0	102	80	120			
Chromium	26	0.30	25.00	0	104	80	120			
Copper	26	0.30	25.00	0	104	80	120			
Iron	25	2.5	25.00	0	101	80	120			
Lead	24	0.25	25.00	0	96.0	80	120			
Manganese	24	0.10	25.00	0	97.5	80	120			
Selenium	23	2.5	25.00	0	92.9	80	120			
Silver	5.2	0.25	5.000	0	104	80	120			

Sample ID	**MB-39100**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**39100**	RunNo:	**52556**
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1725118** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.30								

Sample ID	**MB-39100**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**39100**	RunNo:	**52556**
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1725171** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	5.0								
Zinc	ND	2.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1806I31**

12-Jul-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-39100**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**39100**	RunNo:	**52556**
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1725172** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	22	5.0	25.00	0	86.3	80	120			
Zinc	23	2.5	25.00	0	91.3	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1806I31 | RcptNo: 1

Received By: **Erin Melendrez** 6/29/2018 8:45:00 AM

Completed By: **Erin Melendrez** 6/29/2018 3:28:40 PM

Reviewed By: LB 6/29/18

LB: JAB 06/29/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? 06/29/18

Checked by: JAB

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Not Present			

Chain-of-Custody Record

Client: GHD Services

Mailing Address: 6121 Indian School Rd Ste 200 NE Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Alan.Brandon@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: 082148

Project #: Jal Landfarm

Project Manager: Alan Brandon

Sampler: MG

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.4 + 1.0(CF) = 1.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 300	7471 Mercury	6010B		Air Bubbles (Y or N)
6/28/18	0945	S	5-082148-062818-MG-V1	4oz Soil Jar	ICE	1806131-001	X											X	X	X		

Date: 6/28/18 Time: 1200 Relinquished by: _____ Received by: _____ Date: 6/29/18 Time: 1200

Date: 6/28/18 Time: 1500 Relinquished by: _____ Received by: courier 6/29/18 ENH Date: 6/29/18 Time: 0845

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 02, 2018

Alan Brandon

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1807D24

Dear Alan Brandon:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/25/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1807D24

Lab ID: 1807D24-001
Collection Date: 7/23/2018 12:25:00 PM
Client Sample ID: S-082148-072318-JP-V4
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Chloride	ND	30		mg/Kg	20	7/28/2018 4:22:15 PM	39465
EPA METHOD 7471: MERCURY						Analyst:	**rde**
Mercury	ND	0.033		mg/Kg	1	7/31/2018 3:20:57 PM	39504
EPA METHOD 6010B: SOIL METALS						Analyst:	**pmf**
Arsenic	ND	2.5		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Barium	90	0.099		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Cadmium	ND	0.099		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Chromium	5.7	0.30		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Copper	2.8	0.30		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Iron	6000	120		mg/Kg	50	8/1/2018 11:45:02 AM	39500
Lead	0.38	0.25		mg/Kg	1	8/1/2018 1:26:21 PM	39500
Manganese	50	0.099		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Selenium	ND	2.5		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Silver	ND	0.25		mg/Kg	1	8/1/2018 11:19:16 AM	39500
Uranium	ND	5.0		mg/Kg	1	8/1/2018 1:26:21 PM	39500
Zinc	11	2.5		mg/Kg	1	8/1/2018 11:19:16 AM	39500
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/31/2018 5:02:37 AM	39439
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/31/2018 5:02:37 AM	39439
Surr: DNOP	87.5	50.6-138		%Rec	1	7/31/2018 5:02:37 AM	39439
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/27/2018 11:14:54 PM	39424
Surr: BFB	88.9	15-316		%Rec	1	7/27/2018 11:14:54 PM	39424
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	7/27/2018 11:14:54 PM	39424
Toluene	ND	0.049		mg/Kg	1	7/27/2018 11:14:54 PM	39424
Ethylbenzene	ND	0.049		mg/Kg	1	7/27/2018 11:14:54 PM	39424
Xylenes, Total	ND	0.098		mg/Kg	1	7/27/2018 11:14:54 PM	39424
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	7/27/2018 11:14:54 PM	39424

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807D24**

02-Aug-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39465**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**39465**	RunNo:	**53060**					
Prep Date:	**7/27/2018**	Analysis Date:	**7/28/2018**	SeqNo:	**1745306**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-39465**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**39465**	RunNo:	**53060**					
Prep Date:	**7/27/2018**	Analysis Date:	**7/28/2018**	SeqNo:	**1745307**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807D24**

02-Aug-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39439**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**
Client ID:	**PBS**	Batch ID:	**39439**	RunNo:	**53063**
Prep Date:	**7/26/2018**	Analysis Date:	**7/30/2018**	SeqNo:	**1746347** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.2	50.6	138			

Sample ID	**LCS-39439**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**
Client ID:	**LCSS**	Batch ID:	**39439**	RunNo:	**53063**
Prep Date:	**7/26/2018**	Analysis Date:	**7/30/2018**	SeqNo:	**1746348** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	70	130			
Surr: DNOP	4.7		5.000		93.5	50.6	138			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807D24**

02-Aug-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39424**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**39424**	RunNo:	**53040**					
Prep Date:	**7/26/2018**	Analysis Date:	**7/27/2018**	SeqNo:	**1743917**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.0	15	316			

Sample ID	**LCS-39424**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**39424**	RunNo:	**53040**					
Prep Date:	**7/26/2018**	Analysis Date:	**7/27/2018**	SeqNo:	**1743918**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	75.9	131			
Surr: BFB	1000		1000		104	15	316			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807D24**

02-Aug-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39424**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**39424**	RunNo:	**53040**					
Prep Date:	**7/26/2018**	Analysis Date:	**7/27/2018**	SeqNo:	**1743949**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	**LCS-39424**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**39424**	RunNo:	**53040**					
Prep Date:	**7/26/2018**	Analysis Date:	**7/27/2018**	SeqNo:	**1743950**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.4	77.3	128			
Toluene	0.98	0.050	1.000	0	97.6	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	95.0	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	98.2	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807D24**

02-Aug-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39504**	SampType:	**MBLK**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID:	**39504**	RunNo:	**53098**					
Prep Date:	**7/31/2018**	Analysis Date:	**7/31/2018**	SeqNo:	**1746860**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-39504**	SampType:	**LCS**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID:	**39504**	RunNo:	**53098**					
Prep Date:	**7/31/2018**	Analysis Date:	**7/31/2018**	SeqNo:	**1746861**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1667	0	115	80	120			

Sample ID	**LLLCS-39504**	SampType:	**LCSLL**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**39504**	RunNo:	**53098**					
Prep Date:	**7/31/2018**	Analysis Date:	**7/31/2018**	SeqNo:	**1746862**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	103	70	130			

Sample ID	**1807D24-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**S-082148-072318-JP**	Batch ID:	**39504**	RunNo:	**53098**					
Prep Date:	**7/31/2018**	Analysis Date:	**7/31/2018**	SeqNo:	**1746864**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1645	0.006980	118	80	120			

Sample ID	**1807D24-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**S-082148-072318-JP**	Batch ID:	**39504**	RunNo:	**53098**					
Prep Date:	**7/31/2018**	Analysis Date:	**7/31/2018**	SeqNo:	**1746865**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1662	0.006980	112	80	120	3.73	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807D24**

02-Aug-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39500**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**39500**	RunNo:	**53113**
Prep Date:	**7/31/2018**	Analysis Date:	**8/1/2018**	SeqNo:	**1747823** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Manganese	ND	0.10								
Selenium	ND	2.5								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**MB-39500**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**39500**	RunNo:	**53113**
Prep Date:	**7/31/2018**	Analysis Date:	**8/1/2018**	SeqNo:	**1747861** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.25								
Uranium	ND	5.0								

Sample ID	**LCS-39500**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**39500**	RunNo:	**53113**
Prep Date:	**7/31/2018**	Analysis Date:	**8/1/2018**	SeqNo:	**1747863** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	24	0.25	25.00	0	94.8	80	120			
Uranium	23	5.0	25.00	0	91.0	80	120			

Sample ID	**LCS-39500**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**39500**	RunNo:	**53113**
Prep Date:	**7/31/2018**	Analysis Date:	**8/1/2018**	SeqNo:	**1747991** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	94.6	80	120			
Barium	25	0.10	25.00	0	99.0	80	120			
Cadmium	24	0.10	25.00	0	96.8	80	120			
Chromium	25	0.30	25.00	0	98.6	80	120			
Copper	25	0.30	25.00	0	101	80	120			
Iron	25	2.5	25.00	0	99.9	80	120			
Manganese	23	0.10	25.00	0	93.4	80	120			
Selenium	22	2.5	25.00	0	89.3	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807D24**

02-Aug-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-39500**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**					
Client ID:	**LCSS**	Batch ID:	**39500**	RunNo:	**53113**					
Prep Date:	**7/31/2018**	Analysis Date:	**8/1/2018**	SeqNo:	**1747991**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	23	2.5	25.00	0	93.8	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1807D24 | RcptNo: 1

Received By: **Isaiah Ortiz** 7/25/2018 9:25:00 AM IO

Completed By: **Ashley Gallegos** 7/25/2018 11:40:02 AM AG

Reviewed By: JAB 07/25/18 labeled by: IO 7/25/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: 10 (<2 or >12 unless noted)

Adjusted?

Checked by: 7/25/18

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.2	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: GHD	Turn-Around Time: 5 day Turn ☑ Standard ☐ Rush
	Project Name: Jal Landfarm
Mailing Address: 6121 Indian School Rd NE, Suite 200 Albuquerque NM 87110	Project #: 082148
Phone #: (505) 884-0672	
email or Fax#: Alan.Brandon@ghd.com	Project Manager: Alan Brandon
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	
Accreditation ☐ NELAP ☐ Other	Sampler: Joshua Pigg
☐ EDD (Type)	On Ice: ☑ Yes ☐ No
	Sample Temperature: 1.2-1.0 (Cr) 6.2

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1807D24	BTEX + ~~MTBE + TMB's (8021)~~ (BTEX)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 300	7471 Mercury	6010 B		Air Bubbles (Y or N)
7-23-18	1225	S	S-082148-072318-JP-V4	4oz glass Jar	ICE	-001	X		X									X	X	X		

Date: 7/24/18	Time: 1200	Relinquished by:	Received by:	Date: 7/24/18	Time: 1200
Date: 7/24/18	Time: 1900	Relinquished by:	Received by: FOD Courier	Date: 7/25/18	Time: 0925

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 24, 2018

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1808E79

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 19 sample(s) on 8/23/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-001 **Collection Date:** 8/21/2018 9:39:00 AM
Client Sample ID: S-082148-082118-JP-V1-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.3	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	8/29/2018 6:26:28 PM	40023
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dr	1	8/29/2018 6:26:28 PM	40023
Surr: DNOP	96.9	50.6-138		%Rec	1	8/29/2018 6:26:28 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	8/28/2018 9:35:41 AM	40011
Surr: BFB	87.1	15-316		%Rec	1	8/28/2018 9:35:41 AM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg-dr	1	8/28/2018 9:35:41 AM	40011
Toluene	ND	0.051		mg/Kg-dr	1	8/28/2018 9:35:41 AM	40011
Ethylbenzene	ND	0.051		mg/Kg-dr	1	8/28/2018 9:35:41 AM	40011
Xylenes, Total	ND	0.10		mg/Kg-dr	1	8/28/2018 9:35:41 AM	40011
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	8/28/2018 9:35:41 AM	40011

Lab ID: 1808E79-002 **Collection Date:** 8/21/2018 9:53:00 AM
Client Sample ID: S-082148-082118-JP-V2-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	10	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	8/29/2018 7:40:26 PM	40023
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dr	1	8/29/2018 7:40:26 PM	40023
Surr: DNOP	87.3	50.6-138		%Rec	1	8/29/2018 7:40:26 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg-dr	1	8/28/2018 10:46:04 AM	40011
Surr: BFB	89.8	15-316		%Rec	1	8/28/2018 10:46:04 AM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	8/28/2018 10:46:04 AM	40011
Toluene	ND	0.054		mg/Kg-dr	1	8/28/2018 10:46:04 AM	40011
Ethylbenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 10:46:04 AM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 10:46:04 AM	40011
Surr: 4-Bromofluorobenzene	92.4	80-120		%Rec	1	8/28/2018 10:46:04 AM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

Lab ID: 1808E79-003
Collection Date: 8/21/2018 10:11:00 AM
Client Sample ID: S-082148-082118-JP-V3-5'
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	11	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	80	11		mg/Kg-dr	1	8/29/2018 8:04:55 PM	40023
Motor Oil Range Organics (MRO)	140	53		mg/Kg-dr	1	8/29/2018 8:04:55 PM	40023
Surr: DNOP	103	50.6-138		%Rec	1	8/29/2018 8:04:55 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg-dr	1	8/28/2018 11:56:38 AM	40011
Surr: BFB	86.7	15-316		%Rec	1	8/28/2018 11:56:38 AM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	8/28/2018 11:56:38 AM	40011
Toluene	ND	0.054		mg/Kg-dr	1	8/28/2018 11:56:38 AM	40011
Ethylbenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 11:56:38 AM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 11:56:38 AM	40011
Surr: 4-Bromofluorobenzene	88.0	80-120		%Rec	1	8/28/2018 11:56:38 AM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-004 **Collection Date:** 8/21/2018 10:32:00 AM
Client Sample ID: S-082148-082118-JP-V4-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.5	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	67	10		mg/Kg-dr	1	8/30/2018 12:51:08 PM	40023
Motor Oil Range Organics (MRO)	270	52		mg/Kg-dr	1	8/30/2018 12:51:08 PM	40023
Surr: DNOP	105	50.6-138		%Rec	1	8/30/2018 12:51:08 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	8/28/2018 12:19:59 PM	40011
Surr: BFB	87.1	15-316		%Rec	1	8/28/2018 12:19:59 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	8/28/2018 12:19:59 PM	40011
Toluene	ND	0.051		mg/Kg-dr	1	8/28/2018 12:19:59 PM	40011
Ethylbenzene	ND	0.051		mg/Kg-dr	1	8/28/2018 12:19:59 PM	40011
Xylenes, Total	ND	0.10		mg/Kg-dr	1	8/28/2018 12:19:59 PM	40011
Surr: 4-Bromofluorobenzene	88.9	80-120		%Rec	1	8/28/2018 12:19:59 PM	40011

Lab ID: 1808E79-005 **Collection Date:** 8/21/2018 10:50:00 AM
Client Sample ID: S-082148-082118-JP-V5-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	8/29/2018 10:31:45 PM	40023
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dr	1	8/29/2018 10:31:45 PM	40023
Surr: DNOP	97.5	50.6-138		%Rec	1	8/29/2018 10:31:45 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg-dr	1	8/28/2018 12:43:20 PM	40011
Surr: BFB	91.1	15-316		%Rec	1	8/28/2018 12:43:20 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	8/28/2018 12:43:20 PM	40011
Toluene	ND	0.054		mg/Kg-dr	1	8/28/2018 12:43:20 PM	40011
Ethylbenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 12:43:20 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 12:43:20 PM	40011
Surr: 4-Bromofluorobenzene	93.3	80-120		%Rec	1	8/28/2018 12:43:20 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-006 **Collection Date:** 8/21/2018 11:13:00 AM
Client Sample ID: S-082148-082118-JP-V6-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.3	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	8/29/2018 10:56:11 PM	40023
Motor Oil Range Organics (MRO)	ND	56		mg/Kg-dr	1	8/29/2018 10:56:11 PM	40023
Surr: DNOP	97.3	50.6-138		%Rec	1	8/29/2018 10:56:11 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	8/28/2018 1:06:40 PM	40011
Surr: BFB	89.2	15-316		%Rec	1	8/28/2018 1:06:40 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	8/28/2018 1:06:40 PM	40011
Toluene	ND	0.053		mg/Kg-dr	1	8/28/2018 1:06:40 PM	40011
Ethylbenzene	ND	0.053		mg/Kg-dr	1	8/28/2018 1:06:40 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 1:06:40 PM	40011
Surr: 4-Bromofluorobenzene	91.0	80-120		%Rec	1	8/28/2018 1:06:40 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-007 **Collection Date:** 8/21/2018 11:58:00 AM
Client Sample ID: S-082148-082118-JP-V7-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	17	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	12		mg/Kg-dr	1	8/29/2018 11:20:33 PM	40023
Motor Oil Range Organics (MRO)	ND	59		mg/Kg-dr	1	8/29/2018 11:20:33 PM	40023
Surr: DNOP	92.2	50.6-138		%Rec	1	8/29/2018 11:20:33 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.8		mg/Kg-dr	1	8/28/2018 1:30:02 PM	40011
Surr: BFB	90.9	15-316		%Rec	1	8/28/2018 1:30:02 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.029		mg/Kg-dr	1	8/28/2018 1:30:02 PM	40011
Toluene	ND	0.058		mg/Kg-dr	1	8/28/2018 1:30:02 PM	40011
Ethylbenzene	ND	0.058		mg/Kg-dr	1	8/28/2018 1:30:02 PM	40011
Xylenes, Total	ND	0.12		mg/Kg-dr	1	8/28/2018 1:30:02 PM	40011
Surr: 4-Bromofluorobenzene	94.2	80-120		%Rec	1	8/28/2018 1:30:02 PM	40011

Lab ID: 1808E79-008 **Collection Date:** 8/21/2018 12:15:00 PM
Client Sample ID: S-082148-082118-JP-V8-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	12	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	8/29/2018 11:44:57 PM	40023
Motor Oil Range Organics (MRO)	ND	52		mg/Kg-dr	1	8/29/2018 11:44:57 PM	40023
Surr: DNOP	96.2	50.6-138		%Rec	1	8/29/2018 11:44:57 PM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	8/28/2018 1:53:25 PM	40011
Surr: BFB	91.4	15-316		%Rec	1	8/28/2018 1:53:25 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	8/28/2018 1:53:25 PM	40011
Toluene	ND	0.053		mg/Kg-dr	1	8/28/2018 1:53:25 PM	40011
Ethylbenzene	ND	0.053		mg/Kg-dr	1	8/28/2018 1:53:25 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 1:53:25 PM	40011
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	8/28/2018 1:53:25 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-009 **Collection Date:** 8/21/2018 12:31:00 PM
Client Sample ID: S-082148-082118-JP-V9-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	11	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	8/30/2018 12:09:25 AM	40023
Motor Oil Range Organics (MRO)	ND	51		mg/Kg-dr	1	8/30/2018 12:09:25 AM	40023
Surr: DNOP	83.6	50.6-138		%Rec	1	8/30/2018 12:09:25 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	8/28/2018 2:16:49 PM	40011
Surr: BFB	92.2	15-316		%Rec	1	8/28/2018 2:16:49 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	8/28/2018 2:16:49 PM	40011
Toluene	ND	0.053		mg/Kg-dr	1	8/28/2018 2:16:49 PM	40011
Ethylbenzene	ND	0.053		mg/Kg-dr	1	8/28/2018 2:16:49 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 2:16:49 PM	40011
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	8/28/2018 2:16:49 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-010 **Collection Date:** 8/21/2018 12:45:00 PM
Client Sample ID: S-082148-082118-JP-V10-4' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.7	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	8/30/2018 1:46:48 AM	40023
Motor Oil Range Organics (MRO)	ND	52		mg/Kg-dr	1	8/30/2018 1:46:48 AM	40023
Surr: DNOP	93.9	50.6-138		%Rec	1	8/30/2018 1:46:48 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	8/28/2018 2:40:17 PM	40011
Surr: BFB	91.8	15-316		%Rec	1	8/28/2018 2:40:17 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	8/28/2018 2:40:17 PM	40011
Toluene	ND	0.053		mg/Kg-dr	1	8/28/2018 2:40:17 PM	40011
Ethylbenzene	ND	0.053		mg/Kg-dr	1	8/28/2018 2:40:17 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 2:40:17 PM	40011
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	8/28/2018 2:40:17 PM	40011

Lab ID: 1808E79-011 **Collection Date:** 8/21/2018 1:30:00 PM
Client Sample ID: S-082148-082218-JP-V11-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	6.2	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	8/30/2018 2:11:15 AM	40023
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dr	1	8/30/2018 2:11:15 AM	40023
Surr: DNOP	97.5	50.6-138		%Rec	1	8/30/2018 2:11:15 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	8/28/2018 4:37:33 PM	40011
Surr: BFB	91.9	15-316		%Rec	1	8/28/2018 4:37:33 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	8/28/2018 4:37:33 PM	40011
Toluene	ND	0.053		mg/Kg-dr	1	8/28/2018 4:37:33 PM	40011
Ethylbenzene	ND	0.053		mg/Kg-dr	1	8/28/2018 4:37:33 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 4:37:33 PM	40011
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	8/28/2018 4:37:33 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

Lab ID: 1808E79-012
Collection Date: 8/22/2018 9:15:00 AM
Client Sample ID: S-082148-082218-JP-V12-5'
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.8	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	8/30/2018 2:35:41 AM	40023
Motor Oil Range Organics (MRO)	ND	51		mg/Kg-dr	1	8/30/2018 2:35:41 AM	40023
Surr: DNOP	95.0	50.6-138		%Rec	1	8/30/2018 2:35:41 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	8/28/2018 5:01:03 PM	40011
Surr: BFB	91.8	15-316		%Rec	1	8/28/2018 5:01:03 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	8/28/2018 5:01:03 PM	40011
Toluene	ND	0.051		mg/Kg-dr	1	8/28/2018 5:01:03 PM	40011
Ethylbenzene	ND	0.051		mg/Kg-dr	1	8/28/2018 5:01:03 PM	40011
Xylenes, Total	ND	0.10		mg/Kg-dr	1	8/28/2018 5:01:03 PM	40011
Surr: 4-Bromofluorobenzene	93.7	80-120		%Rec	1	8/28/2018 5:01:03 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-013 **Collection Date:** 8/22/2018 9:28:00 AM
Client Sample ID: S-082148-082218-JP-V13-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	5.7	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg-dr	1	8/30/2018 3:00:07 AM	40023
Motor Oil Range Organics (MRO)	ND	49		mg/Kg-dr	1	8/30/2018 3:00:07 AM	40023
Surr: DNOP	91.0	50.6-138		%Rec	1	8/30/2018 3:00:07 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	8/28/2018 5:24:30 PM	40011
Surr: BFB	92.4	15-316		%Rec	1	8/28/2018 5:24:30 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	8/28/2018 5:24:30 PM	40011
Toluene	ND	0.051		mg/Kg-dr	1	8/28/2018 5:24:30 PM	40011
Ethylbenzene	ND	0.051		mg/Kg-dr	1	8/28/2018 5:24:30 PM	40011
Xylenes, Total	ND	0.10		mg/Kg-dr	1	8/28/2018 5:24:30 PM	40011
Surr: 4-Bromofluorobenzene	93.7	80-120		%Rec	1	8/28/2018 5:24:30 PM	40011

Lab ID: 1808E79-014 **Collection Date:** 8/22/2018 9:42:00 AM
Client Sample ID: S-082148-082218-JP-V14-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	8/30/2018 3:24:30 AM	40023
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dr	1	8/30/2018 3:24:30 AM	40023
Surr: DNOP	80.8	50.6-138		%Rec	1	8/30/2018 3:24:30 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.7		mg/Kg-dr	1	8/28/2018 5:47:58 PM	40011
Surr: BFB	90.4	15-316		%Rec	1	8/28/2018 5:47:58 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.029		mg/Kg-dr	1	8/28/2018 5:47:58 PM	40011
Toluene	ND	0.057		mg/Kg-dr	1	8/28/2018 5:47:58 PM	40011
Ethylbenzene	ND	0.057		mg/Kg-dr	1	8/28/2018 5:47:58 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 5:47:58 PM	40011
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	8/28/2018 5:47:58 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-015 **Collection Date:** 8/21/2018 1:10:00 PM
Client Sample ID: S-082148-082118-JP-V15-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	12	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	8/30/2018 3:49:02 AM	40023
Motor Oil Range Organics (MRO)	ND	56		mg/Kg-dr	1	8/30/2018 3:49:02 AM	40023
Surr: DNOP	72.6	50.6-138		%Rec	1	8/30/2018 3:49:02 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg-dr	1	8/28/2018 6:11:26 PM	40011
Surr: BFB	92.1	15-316		%Rec	1	8/28/2018 6:11:26 PM	40011
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	8/28/2018 6:11:26 PM	40011
Toluene	ND	0.055		mg/Kg-dr	1	8/28/2018 6:11:26 PM	40011
Ethylbenzene	ND	0.055		mg/Kg-dr	1	8/28/2018 6:11:26 PM	40011
Xylenes, Total	ND	0.11		mg/Kg-dr	1	8/28/2018 6:11:26 PM	40011
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	8/28/2018 6:11:26 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-016 **Collection Date:** 8/22/2018 10:10:00 AM
Client Sample ID: S-082148-082218-JP-V4A-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.8	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Fluoride	13	1.6		mg/Kg-dr	5	9/6/2018 4:55:39 PM	40105
Chloride	ND	1.6		mg/Kg-dr	1	9/1/2018 1:12:17 AM	40105
Nitrogen, Nitrate (As N)	2.7	0.33		mg/Kg-dr	1	9/1/2018 1:12:17 AM	40105
Sulfate	87	1.6		mg/Kg-dr	1	9/1/2018 1:12:17 AM	40105
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.18		mg/Kg-dr	5	8/27/2018 4:38:06 PM	40008
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Aluminum	8000	330		mg/Kg-dr	100	9/6/2018 1:37:29 PM	40126
Arsenic	3.9	2.8		mg/Kg-dr	1	9/6/2018 1:35:51 PM	40126
Barium	79	0.11		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Boron	5.8	2.2		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Cadmium	ND	0.11		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Chromium	5.7	0.33		mg/Kg-dr	1	9/6/2018 1:35:51 PM	40126
Cobalt	1.5	0.33		mg/Kg-dr	1	9/6/2018 11:59:31 AM	40126
Copper	1.9	0.33		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Iron	5300	280		mg/Kg-dr	100	9/6/2018 12:21:29 PM	40126
Lead	0.45	0.28		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Manganese	55	0.11		mg/Kg-dr	1	9/6/2018 11:59:31 AM	40126
Molybdenum	ND	0.44		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Nickel	3.5	0.55		mg/Kg-dr	1	9/6/2018 11:59:31 AM	40126
Selenium	ND	2.8		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Silver	ND	0.28		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
Uranium	ND	5.5		mg/Kg-dr	1	9/6/2018 1:35:51 PM	40126
Zinc	12	2.8		mg/Kg-dr	1	9/6/2018 11:36:57 AM	40126
EPA METHOD 8011/504.1 MODIFIED: EDB						Analyst: **CLP**	
1,2-Dibromoethane	ND	0.10		µg/Kg	1	8/28/2018 5:53:23 PM	39985
EPA METHOD 8082A: PCB'S						Analyst: **TOM**	
Aroclor 1016	ND	0.022		mg/Kg-dr	1	9/4/2018 8:23:11 PM	39993
Aroclor 1221	ND	0.022		mg/Kg-dr	1	9/4/2018 8:23:11 PM	39993
Aroclor 1232	ND	0.022		mg/Kg-dr	1	9/4/2018 8:23:11 PM	39993
Aroclor 1242	ND	0.022		mg/Kg-dr	1	9/4/2018 8:23:11 PM	39993
Aroclor 1248	ND	0.022		mg/Kg-dr	1	9/4/2018 8:23:11 PM	39993
Aroclor 1254	ND	0.022		mg/Kg-dr	1	9/4/2018 8:23:11 PM	39993
Aroclor 1260	ND	0.022		mg/Kg-dr	1	9/4/2018 8:23:11 PM	39993

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Lab Order: 1808E79
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EPA METHOD 8082A: PCB'S					Analyst: **TOM**	
Surr: Decachlorobiphenyl	72.0	31.9-130	%Rec	1	9/4/2018 8:23:11 PM	39993
Surr: Tetrachloro-m-xylene	75.2	21.2-142	%Rec	1	9/4/2018 8:23:11 PM	39993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11	mg/Kg-dr	1	8/30/2018 4:13:23 AM	40023
Motor Oil Range Organics (MRO)	ND	55	mg/Kg-dr	1	8/30/2018 4:13:23 AM	40023
Surr: DNOP	74.9	50.6-138	%Rec	1	8/30/2018 4:13:23 AM	40023
EPA METHOD 8015D: GASOLINE RANGE					Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.1	mg/Kg-dr	1	8/28/2018 6:34:48 PM	40011
Surr: BFB	90.7	15-316	%Rec	1	8/28/2018 6:34:48 PM	40011
EPA METHOD 8310: PAHS					Analyst: **TOM**	
Naphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 4:35:32 PM	40025
1-Methylnaphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 4:35:32 PM	40025
2-Methylnaphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 4:35:32 PM	40025
Benzo(a)pyrene	ND	0.011	mg/Kg-dr	1	9/6/2018 4:35:32 PM	40025
Surr: Benzo(e)pyrene	55.4	32.4-109	%Rec	1	9/6/2018 4:35:32 PM	40025
EPA METHOD 8260B: VOLATILES					Analyst: **RAA**	
Benzene	ND	0.025	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Toluene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Ethylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Methyl tert-butyl ether (MTBE)	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2,4-Trimethylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,3,5-Trimethylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2-Dichloroethane (EDC)	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2-Dibromoethane (EDB)	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Naphthalene	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1-Methylnaphthalene	ND	0.20	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
2-Methylnaphthalene	ND	0.20	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Acetone	ND	0.76	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Bromobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Bromodichloromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Bromoform	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Bromomethane	ND	0.15	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
2-Butanone	ND	0.51	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Carbon disulfide	ND	0.51	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Carbon tetrachloride	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Chlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Chloroethane	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Chloroform	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Chloromethane	ND	0.15	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
2-Chlorotoluene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
4-Chlorotoluene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011

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Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES Analyst: **RAA**

cis-1,2-DCE	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
cis-1,3-Dichloropropene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2-Dibromo-3-chloropropane	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Dibromochloromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Dibromomethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2-Dichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,3-Dichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,4-Dichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Dichlorodifluoromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,1-Dichloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,1-Dichloroethene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2-Dichloropropane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,3-Dichloropropane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
2,2-Dichloropropane	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,1-Dichloropropene	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Hexachlorobutadiene	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
2-Hexanone	ND	0.51	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Isopropylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
4-Isopropyltoluene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
4-Methyl-2-pentanone	ND	0.51	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Methylene chloride	ND	0.15	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
n-Butylbenzene	ND	0.15	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
n-Propylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
sec-Butylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Styrene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
tert-Butylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,1,1,2-Tetrachloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,1,2,2-Tetrachloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Tetrachloroethene (PCE)	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
trans-1,2-DCE	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
trans-1,3-Dichloropropene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2,3-Trichlorobenzene	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2,4-Trichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,1,1-Trichloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,1,2-Trichloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Trichloroethene (TCE)	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Trichlorofluoromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
1,2,3-Trichloropropane	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Vinyl chloride	ND	0.051	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Xylenes, Total	ND	0.10	mg/Kg-dr	1	8/28/2018 9:06:31 PM	40011
Surr: Dibromofluoromethane	95.0	70-130	%Rec	1	8/28/2018 9:06:31 PM	40011
Surr: 1,2-Dichloroethane-d4	90.4	70-130	%Rec	1	8/28/2018 9:06:31 PM	40011
Surr: Toluene-d8	96.3	70-130	%Rec	1	8/28/2018 9:06:31 PM	40011

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Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	8/28/2018 9:06:31 PM	40011
EPA METHOD 9040C						Analyst: **JRR**
pH	8.23		pH Units	1	8/30/2018 1:26:00 PM	R53823

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-017 **Collection Date:** 8/22/2018 10:26:00 AM
Client Sample ID: S-082148-082218-JP-V4B-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.7	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Fluoride	7.1	0.33		mg/Kg-dr	1	9/6/2018 5:08:03 PM	40105
Chloride	ND	1.6		mg/Kg-dr	1	9/1/2018 2:01:55 AM	40105
Nitrogen, Nitrate (As N)	ND	0.33		mg/Kg-dr	1	9/1/2018 2:01:55 AM	40105
Sulfate	12	1.6		mg/Kg-dr	1	9/1/2018 2:01:55 AM	40105
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.035		mg/Kg-dr	1	8/27/2018 3:59:22 PM	40008
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Aluminum	7200	320		mg/Kg-dr	100	9/6/2018 1:40:40 PM	40126
Arsenic	ND	2.7		mg/Kg-dr	1	9/6/2018 1:39:01 PM	40126
Barium	55	0.11		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Boron	4.9	2.2		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Cadmium	ND	0.11		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Chromium	5.1	0.32		mg/Kg-dr	1	9/6/2018 1:39:01 PM	40126
Cobalt	1.4	0.32		mg/Kg-dr	1	9/6/2018 12:01:19 PM	40126
Copper	1.7	0.32		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Iron	5000	270		mg/Kg-dr	100	9/6/2018 12:23:27 PM	40126
Lead	1.1	0.27		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Manganese	54	0.11		mg/Kg-dr	1	9/6/2018 12:01:19 PM	40126
Molybdenum	ND	0.43		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Nickel	3.6	0.54		mg/Kg-dr	1	9/6/2018 12:01:19 PM	40126
Selenium	ND	2.7		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Silver	ND	0.27		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
Uranium	ND	5.4		mg/Kg-dr	1	9/6/2018 1:39:01 PM	40126
Zinc	11	2.7		mg/Kg-dr	1	9/6/2018 11:38:50 AM	40126
EPA METHOD 8011/504.1 MODIFIED: EDB						Analyst: **CLP**	
1,2-Dibromoethane	ND	0.10		µg/Kg	1	8/28/2018 6:08:22 PM	39985
EPA METHOD 8082A: PCB'S						Analyst: **TOM**	
Aroclor 1016	ND	0.020		mg/Kg-dr	1	9/4/2018 10:02:07 PM	39993
Aroclor 1221	ND	0.020		mg/Kg-dr	1	9/4/2018 10:02:07 PM	39993
Aroclor 1232	ND	0.020		mg/Kg-dr	1	9/4/2018 10:02:07 PM	39993
Aroclor 1242	ND	0.020		mg/Kg-dr	1	9/4/2018 10:02:07 PM	39993
Aroclor 1248	ND	0.020		mg/Kg-dr	1	9/4/2018 10:02:07 PM	39993
Aroclor 1254	ND	0.020		mg/Kg-dr	1	9/4/2018 10:02:07 PM	39993
Aroclor 1260	ND	0.020		mg/Kg-dr	1	9/4/2018 10:02:07 PM	39993

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

EPA METHOD 8082A: PCB'S						Analyst: **TOM**	
Surr: Decachlorobiphenyl	92.4	31.9-130		%Rec	1	9/4/2018 10:02:07 PM	39993
Surr: Tetrachloro-m-xylene	112	21.2-142		%Rec	1	9/4/2018 10:02:07 PM	39993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	82	11		mg/Kg-dr	1	8/30/2018 4:37:57 AM	40023
Motor Oil Range Organics (MRO)	110	54		mg/Kg-dr	1	8/30/2018 4:37:57 AM	40023
Surr: DNOP	101	50.6-138		%Rec	1	8/30/2018 4:37:57 AM	40023
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg-dr	1	8/28/2018 6:58:12 PM	40011
Surr: BFB	92.1	15-316		%Rec	1	8/28/2018 6:58:12 PM	40011
EPA METHOD 8310: PAHS						Analyst: **TOM**	
Naphthalene	ND	2.7	D	mg/Kg-dr	10	9/6/2018 5:26:32 PM	40025
1-Methylnaphthalene	ND	2.7	D	mg/Kg-dr	10	9/6/2018 5:26:32 PM	40025
2-Methylnaphthalene	ND	2.7	D	mg/Kg-dr	10	9/6/2018 5:26:32 PM	40025
Benzo(a)pyrene	ND	0.11	D	mg/Kg-dr	10	9/6/2018 5:26:32 PM	40025
Surr: Benzo(e)pyrene	0	32.4-109	SD	%Rec	10	9/6/2018 5:26:32 PM	40025
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.027		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Toluene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Ethylbenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Methyl tert-butyl ether (MTBE)	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2,4-Trimethylbenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,3,5-Trimethylbenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2-Dichloroethane (EDC)	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2-Dibromoethane (EDB)	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Naphthalene	ND	0.11		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1-Methylnaphthalene	ND	0.21		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
2-Methylnaphthalene	ND	0.21		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Acetone	ND	0.81		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Bromobenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Bromodichloromethane	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Bromoform	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Bromomethane	ND	0.16		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
2-Butanone	ND	0.54		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Carbon disulfide	ND	0.54		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Carbon tetrachloride	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Chlorobenzene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Chloroethane	ND	0.11		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Chloroform	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Chloromethane	ND	0.16		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
2-Chlorotoluene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
4-Chlorotoluene	ND	0.054		mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES

Analyst: **RAA**

cis-1,2-DCE	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
cis-1,3-Dichloropropene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2-Dibromo-3-chloropropane	ND	0.11	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Dibromochloromethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Dibromomethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2-Dichlorobenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,3-Dichlorobenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,4-Dichlorobenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Dichlorodifluoromethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,1-Dichloroethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,1-Dichloroethene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2-Dichloropropane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,3-Dichloropropane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
2,2-Dichloropropane	ND	0.11	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,1-Dichloropropene	ND	0.11	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Hexachlorobutadiene	ND	0.11	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
2-Hexanone	ND	0.54	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Isopropylbenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
4-Isopropyltoluene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
4-Methyl-2-pentanone	ND	0.54	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Methylene chloride	ND	0.16	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
n-Butylbenzene	ND	0.16	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
n-Propylbenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
sec-Butylbenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Styrene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
tert-Butylbenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,1,1,2-Tetrachloroethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,1,2,2-Tetrachloroethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Tetrachloroethene (PCE)	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
trans-1,2-DCE	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
trans-1,3-Dichloropropene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2,3-Trichlorobenzene	ND	0.11	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2,4-Trichlorobenzene	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,1,1-Trichloroethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,1,2-Trichloroethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Trichloroethene (TCE)	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Trichlorofluoromethane	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
1,2,3-Trichloropropane	ND	0.11	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Vinyl chloride	ND	0.054	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Xylenes, Total	ND	0.11	mg/Kg-dr	1	8/28/2018 9:35:31 PM	40011
Surr: Dibromofluoromethane	98.6	70-130	%Rec	1	8/28/2018 9:35:31 PM	40011
Surr: 1,2-Dichloroethane-d4	95.8	70-130	%Rec	1	8/28/2018 9:35:31 PM	40011
Surr: Toluene-d8	93.4	70-130	%Rec	1	8/28/2018 9:35:31 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	108	70-130	%Rec	1	8/28/2018 9:35:31 PM	40011
EPA METHOD 9040C						Analyst: **JRR**
pH	8.61		pH Units	1	8/30/2018 1:26:00 PM	R53823

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-018 **Collection Date:** 8/22/2018 10:43:00 AM
Client Sample ID: S-082148-082218-JP-V4C-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.8	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Fluoride	12	1.7		mg/Kg-dr	5	9/6/2018 5:20:27 PM	40105
Chloride	ND	1.7		mg/Kg-dr	1	9/1/2018 2:26:44 AM	40105
Nitrogen, Nitrate (As N)	2.5	0.33		mg/Kg-dr	1	9/1/2018 2:26:44 AM	40105
Sulfate	24	1.7		mg/Kg-dr	1	9/1/2018 2:26:44 AM	40105
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.035		mg/Kg-dr	1	8/27/2018 4:01:05 PM	40008
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Aluminum	10000	340		mg/Kg-dr	100	9/6/2018 1:43:51 PM	40126
Arsenic	3.0	2.8		mg/Kg-dr	1	9/6/2018 1:42:12 PM	40126
Barium	73	0.11		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Boron	5.9	2.2		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Cadmium	ND	0.11		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Chromium	6.5	0.34		mg/Kg-dr	1	9/6/2018 1:42:12 PM	40126
Cobalt	1.6	0.34		mg/Kg-dr	1	9/6/2018 12:05:11 PM	40126
Copper	1.7	0.34		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Iron	6300	280		mg/Kg-dr	100	9/6/2018 12:25:25 PM	40126
Lead	0.47	0.28		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Manganese	47	0.11		mg/Kg-dr	1	9/6/2018 12:05:11 PM	40126
Molybdenum	ND	0.45		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Nickel	3.9	0.56		mg/Kg-dr	1	9/6/2018 12:05:11 PM	40126
Selenium	ND	2.8		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Silver	ND	0.28		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
Uranium	ND	5.6		mg/Kg-dr	1	9/6/2018 1:42:12 PM	40126
Zinc	14	2.8		mg/Kg-dr	1	9/6/2018 11:40:43 AM	40126
EPA METHOD 8011/504.1 MODIFIED: EDB						Analyst: **CLP**	
1,2-Dibromoethane	ND	0.10		µg/Kg	1	8/28/2018 6:23:30 PM	39985
EPA METHOD 8082A: PCB'S						Analyst: **TOM**	
Aroclor 1016	ND	0.022		mg/Kg-dr	1	9/4/2018 11:08:03 PM	39993
Aroclor 1221	ND	0.022		mg/Kg-dr	1	9/4/2018 11:08:03 PM	39993
Aroclor 1232	ND	0.022		mg/Kg-dr	1	9/4/2018 11:08:03 PM	39993
Aroclor 1242	ND	0.022		mg/Kg-dr	1	9/4/2018 11:08:03 PM	39993
Aroclor 1248	ND	0.022		mg/Kg-dr	1	9/4/2018 11:08:03 PM	39993
Aroclor 1254	ND	0.022		mg/Kg-dr	1	9/4/2018 11:08:03 PM	39993
Aroclor 1260	ND	0.022		mg/Kg-dr	1	9/4/2018 11:08:03 PM	39993

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

EPA METHOD 8082A: PCB'S					Analyst: **TOM**	
Surr: Decachlorobiphenyl	90.4	31.9-130	%Rec	1	9/4/2018 11:08:03 PM	39993
Surr: Tetrachloro-m-xylene	94.0	21.2-142	%Rec	1	9/4/2018 11:08:03 PM	39993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10	mg/Kg-dr	1	8/30/2018 5:02:12 AM	40023
Motor Oil Range Organics (MRO)	ND	51	mg/Kg-dr	1	8/30/2018 5:02:12 AM	40023
Surr: DNOP	81.5	50.6-138	%Rec	1	8/30/2018 5:02:12 AM	40023
EPA METHOD 8015D: GASOLINE RANGE					Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.1	mg/Kg-dr	1	8/28/2018 7:21:35 PM	40011
Surr: BFB	90.3	15-316	%Rec	1	8/28/2018 7:21:35 PM	40011
EPA METHOD 8310: PAHS					Analyst: **TOM**	
Naphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 6:17:33 PM	40025
1-Methylnaphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 6:17:33 PM	40025
2-Methylnaphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 6:17:33 PM	40025
Benzo(a)pyrene	ND	0.011	mg/Kg-dr	1	9/6/2018 6:17:33 PM	40025
Surr: Benzo(e)pyrene	62.7	32.4-109	%Rec	1	9/6/2018 6:17:33 PM	40025
EPA METHOD 8260B: VOLATILES					Analyst: **RAA**	
Benzene	ND	0.025	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Toluene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Ethylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Methyl tert-butyl ether (MTBE)	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2,4-Trimethylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,3,5-Trimethylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2-Dichloroethane (EDC)	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2-Dibromoethane (EDB)	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Naphthalene	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1-Methylnaphthalene	ND	0.20	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
2-Methylnaphthalene	ND	0.20	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Acetone	ND	0.76	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Bromobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Bromodichloromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Bromoform	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Bromomethane	ND	0.15	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
2-Butanone	ND	0.51	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Carbon disulfide	ND	0.51	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Carbon tetrachloride	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Chlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Chloroethane	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Chloroform	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Chloromethane	ND	0.15	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
2-Chlorotoluene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
4-Chlorotoluene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES

Analyst: **RAA**

cis-1,2-DCE	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
cis-1,3-Dichloropropene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2-Dibromo-3-chloropropane	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Dibromochloromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Dibromomethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2-Dichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,3-Dichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,4-Dichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Dichlorodifluoromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,1-Dichloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,1-Dichloroethene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2-Dichloropropane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,3-Dichloropropane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
2,2-Dichloropropane	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,1-Dichloropropene	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Hexachlorobutadiene	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
2-Hexanone	ND	0.51	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Isopropylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
4-Isopropyltoluene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
4-Methyl-2-pentanone	ND	0.51	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Methylene chloride	ND	0.15	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
n-Butylbenzene	ND	0.15	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
n-Propylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
sec-Butylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Styrene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
tert-Butylbenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,1,1,2-Tetrachloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,1,2,2-Tetrachloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Tetrachloroethene (PCE)	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
trans-1,2-DCE	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
trans-1,3-Dichloropropene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2,3-Trichlorobenzene	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2,4-Trichlorobenzene	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,1,1-Trichloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,1,2-Trichloroethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Trichloroethene (TCE)	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Trichlorofluoromethane	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
1,2,3-Trichloropropane	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Vinyl chloride	ND	0.051	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Xylenes, Total	ND	0.10	mg/Kg-dr	1	8/28/2018 10:04:33 PM	40011
Surr: Dibromofluoromethane	95.1	70-130	%Rec	1	8/28/2018 10:04:33 PM	40011
Surr: 1,2-Dichloroethane-d4	95.4	70-130	%Rec	1	8/28/2018 10:04:33 PM	40011
Surr: Toluene-d8	99.4	70-130	%Rec	1	8/28/2018 10:04:33 PM	40011

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm

Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	8/28/2018 10:04:33 PM	40011
EPA METHOD 9040C						Analyst: **JRR**
pH	8.50		pH Units	1	8/30/2018 1:26:00 PM	R53823

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

Lab ID: 1808E79-019 **Collection Date:** 8/22/2018 11:07:00 AM
Client Sample ID: S-082148-082218-JP-V4D-5' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.6	1.0		wt%	1	8/30/2018	R53873
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Fluoride	16	1.7		mg/Kg-dr	5	9/6/2018 5:32:52 PM	40105
Chloride	ND	1.7		mg/Kg-dr	1	9/1/2018 3:16:22 AM	40105
Nitrogen, Nitrate (As N)	2.1	0.33		mg/Kg-dr	1	9/1/2018 3:16:22 AM	40105
Sulfate	23	1.7		mg/Kg-dr	1	9/1/2018 3:16:22 AM	40105
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.036		mg/Kg-dr	1	8/27/2018 4:02:49 PM	40008
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**	
Aluminum	17000	330		mg/Kg-dr	100	9/6/2018 1:47:03 PM	40126
Arsenic	6.5	2.8		mg/Kg-dr	1	9/6/2018 1:45:23 PM	40126
Barium	130	0.11		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Boron	9.8	2.2		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Cadmium	ND	0.11		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Chromium	10	0.33		mg/Kg-dr	1	9/6/2018 1:45:23 PM	40126
Cobalt	1.5	0.33		mg/Kg-dr	1	9/6/2018 12:07:04 PM	40126
Copper	1.7	0.33		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Iron	9200	280		mg/Kg-dr	100	9/6/2018 12:27:21 PM	40126
Lead	ND	0.28		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Manganese	39	0.11		mg/Kg-dr	1	9/6/2018 12:07:04 PM	40126
Molybdenum	ND	0.44		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Nickel	6.0	0.55		mg/Kg-dr	1	9/6/2018 12:07:04 PM	40126
Selenium	ND	2.8		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Silver	ND	0.28		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
Uranium	ND	5.5		mg/Kg-dr	1	9/6/2018 1:45:23 PM	40126
Zinc	18	2.8		mg/Kg-dr	1	9/6/2018 11:42:37 AM	40126
EPA METHOD 8011/504.1 MODIFIED: EDB						Analyst: **CLP**	
1,2-Dibromoethane	ND	0.10		µg/Kg	1	8/28/2018 6:38:41 PM	39985
EPA METHOD 8082A: PCB'S						Analyst: **TOM**	
Aroclor 1016	ND	0.022		mg/Kg-dr	1	9/4/2018 11:41:03 PM	39993
Aroclor 1221	ND	0.022		mg/Kg-dr	1	9/4/2018 11:41:03 PM	39993
Aroclor 1232	ND	0.022		mg/Kg-dr	1	9/4/2018 11:41:03 PM	39993
Aroclor 1242	ND	0.022		mg/Kg-dr	1	9/4/2018 11:41:03 PM	39993
Aroclor 1248	ND	0.022		mg/Kg-dr	1	9/4/2018 11:41:03 PM	39993
Aroclor 1254	ND	0.022		mg/Kg-dr	1	9/4/2018 11:41:03 PM	39993
Aroclor 1260	ND	0.022		mg/Kg-dr	1	9/4/2018 11:41:03 PM	39993

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1808E79
Project: Jal Landfarm

EPA METHOD 8082A: PCB'S					Analyst: **TOM**	
Surr: Decachlorobiphenyl	92.0	31.9-130	%Rec	1	9/4/2018 11:41:03 PM	39993
Surr: Tetrachloro-m-xylene	78.8	21.2-142	%Rec	1	9/4/2018 11:41:03 PM	39993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	11	mg/Kg-dr	1	8/30/2018 5:26:38 AM	40023
Motor Oil Range Organics (MRO)	ND	53	mg/Kg-dr	1	8/30/2018 5:26:38 AM	40023
Surr: DNOP	83.5	50.6-138	%Rec	1	8/30/2018 5:26:38 AM	40023
EPA METHOD 8015D: GASOLINE RANGE					Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3	mg/Kg-dr	1	8/28/2018 7:44:54 PM	40011
Surr: BFB	87.9	15-316	%Rec	1	8/28/2018 7:44:54 PM	40011
EPA METHOD 8310: PAHS					Analyst: **TOM**	
Naphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 6:43:05 PM	40025
1-Methylnaphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 6:43:05 PM	40025
2-Methylnaphthalene	ND	0.27	mg/Kg-dr	1	9/6/2018 6:43:05 PM	40025
Benzo(a)pyrene	ND	0.011	mg/Kg-dr	1	9/6/2018 6:43:05 PM	40025
Surr: Benzo(e)pyrene	69.0	32.4-109	%Rec	1	9/6/2018 6:43:05 PM	40025
EPA METHOD 8260B: VOLATILES					Analyst: **RAA**	
Benzene	ND	0.026	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Toluene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Ethylbenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Methyl tert-butyl ether (MTBE)	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2,4-Trimethylbenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,3,5-Trimethylbenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2-Dichloroethane (EDC)	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2-Dibromoethane (EDB)	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Naphthalene	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1-Methylnaphthalene	ND	0.21	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
2-Methylnaphthalene	ND	0.21	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Acetone	ND	0.79	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Bromobenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Bromodichloromethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Bromoform	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Bromomethane	ND	0.16	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
2-Butanone	ND	0.53	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Carbon disulfide	ND	0.53	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Carbon tetrachloride	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Chlorobenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Chloroethane	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Chloroform	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Chloromethane	ND	0.16	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
2-Chlorotoluene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
4-Chlorotoluene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES

Analyst: **RAA**

cis-1,2-DCE	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
cis-1,3-Dichloropropene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2-Dibromo-3-chloropropane	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Dibromochloromethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Dibromomethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2-Dichlorobenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,3-Dichlorobenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,4-Dichlorobenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Dichlorodifluoromethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,1-Dichloroethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,1-Dichloroethene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2-Dichloropropane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,3-Dichloropropane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
2,2-Dichloropropane	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,1-Dichloropropene	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Hexachlorobutadiene	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
2-Hexanone	ND	0.53	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Isopropylbenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
4-Isopropyltoluene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
4-Methyl-2-pentanone	ND	0.53	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Methylene chloride	ND	0.16	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
n-Butylbenzene	ND	0.16	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
n-Propylbenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
sec-Butylbenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Styrene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
tert-Butylbenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,1,1,2-Tetrachloroethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,1,2,2-Tetrachloroethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Tetrachloroethene (PCE)	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
trans-1,2-DCE	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
trans-1,3-Dichloropropene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2,3-Trichlorobenzene	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2,4-Trichlorobenzene	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,1,1-Trichloroethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,1,2-Trichloroethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Trichloroethene (TCE)	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Trichlorofluoromethane	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
1,2,3-Trichloropropane	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Vinyl chloride	ND	0.053	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Xylenes, Total	ND	0.11	mg/Kg-dr	1	8/28/2018 10:33:29 PM	40011
Surr: Dibromofluoromethane	97.4	70-130	%Rec	1	8/28/2018 10:33:29 PM	40011
Surr: 1,2-Dichloroethane-d4	98.7	70-130	%Rec	1	8/28/2018 10:33:29 PM	40011
Surr: Toluene-d8	98.9	70-130	%Rec	1	8/28/2018 10:33:29 PM	40011

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 1808E79

EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/28/2018 10:33:29 PM	40011
EPA METHOD 9040C						Analyst: **JRR**
pH	8.83		pH Units	1	8/30/2018 1:26:00 PM	R53823

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Wet Chemistry by Method 9012B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Cyanide	ND		0.250	1	08/30/2018 11:54	WG1153865

Wet Chemistry by Method 9066

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND		0.670	1	08/29/2018 12:16	WG1152902

Wet Chemistry by Method 9012B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Cyanide	ND		0.250	1	08/30/2018 08:59	WG1[illegible]

Wet Chemistry by Method 9066

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND	J6	0.670	1	08/29/2018 12:06	WG1[illegible]

Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

Wet Chemistry by Method 9012B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Cyanide	ND		0.750	1	08/30/2018 09:01	WG1162748

Wet Chemistry by Method 9066

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND		0.670	1	08/29/2018 12:11	WG1157914

Wet Chemistry by Method 9012B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Cyanide	ND		0.760	1	08/30/2018 09:06	WG1158748

Wet Chemistry by Method 9066

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND	J6	0.670	1	08/29/2018 12:17	WG1157304

Method Blank (MB)

(MB) R3337883-1 08/30/18 08:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Cyanide	U		0.0390	0.250

L1021153-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1021153-02 08/30/18 08:59 • (DUP) R3337883-4 08/30/18 09:00

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3337883-2 08/30/18 08:55 • (LCSD) R3337883-3 08/30/18 08:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyanide	2.50	2.56	2.48	103	99.0	90.0-150			3.52	20

L1021153-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1021153-03 08/30/18 09:01 • (MS) R3337883-5 08/30/18 09:02 • (MSD) R3337883-6 08/30/18 09:03

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	1.67	ND	1.45	1.41	86.8	84.8	1	75.0-125			2.31	20

Method Blank (MB)

(MB) R3337974-1 08/30/18 11:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Cyanide	U		0.0390	0.250

L1021153-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1021153-01 08/30/18 11:54 • (DUP) R3337974-4 08/30/18 11:55

Analyte	Orginal Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Cyanide	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3337974-2 08/30/18 11:49 • (LCSD) R3337974-3 08/30/18 11:50

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Cyanide	2.50	2.71	2.55	108	102	90.0-150			6.05	20

L1021680-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1021680-01 08/30/18 12:02 • (MS) R3337974-5 08/30/18 12:03 • (MSD) R3337974-6 08/30/18 12:04

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Cyanide	1.67	0.286	1.18	1.29	53.6	60.0	1	75.0-125	J3	J3	8.70	20

Method Blank (MB)

(MB) R3337624-1 08/29/18 12:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Total Phenol by 4AAP	U		0.220	0.570

L1021153-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1021153-03 08/29/18 12:11 • (DUP) R3337624-6 08/29/18 12:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Total Phenol by 4AAP	ND	0.498	1	0.000		20

L1021223-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1021223-01 08/29/18 12:20 • (DUP) R3337624-8 08/29/18 12:21

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Total Phenol by 4AAP	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3337624-2 08/29/18 12:02 • (LCSD) R3337624-3 08/29/18 12:03

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Total Phenol by 4AAP	8.33	8.55	8.60	103	103	90.0-110			0.583	20

L1021153-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1021153-02 08/29/18 12:06 • (MS) R3337624-4 08/29/18 12:07 • (MSD) R3337624-5 08/29/18 12:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Total Phenol by 4AAP	16.7	ND	11.8	11.9	70.6	71.5	1	90.0-110	J3	J3	1.26	20

L1021153-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1021153-04 08/29/18 12:17 • (MS) R3337624-7 08/29/18 12:18

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/kg	mg/kg	mg/kg	%		%	
Total Phenol by 4AAP	16.7	ND	12.5	71.0	1	90.0-110	J3

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Pace Analytical
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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1808E79
Pace Project No.: 30263553

Sample: 1808E79-016 S-082148-082218-JP Lab ID: **30263553001** Collected: 08/22/18 10:10 Received: 08/28/18 10:00 Matrix: Solid
PWS: Site ID: Sample Type:
Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1	**1.857 ± 0.341 (0.153) C:NA T:NA**	pCi/g	09/21/18 11:02	13982-63-3	Ra
Radium-228	EPA 901.1	**0.502 ± 0.214 (0.249) C:NA T:NA**	pCi/g	09/21/18 11:02	15262-20-1	

Sample: 1808E79-017 S-082148-082218-JP Lab ID: **30263553002** Collected: 08/22/18 10:26 Received: 08/28/18 10:00 Matrix: Solid
PWS: Site ID: Sample Type:
Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1	**0.412 ± 0.117 (0.090) C:NA T:NA**	pCi/g	09/21/18 11:03	13982-63-3	Ra
Radium-228	EPA 901.1	**0.529 ± 0.174 (0.247) C:NA T:NA**	pCi/g	09/21/18 11:03	15262-20-1	

Sample: 1808E79-018 S-082148-082218-JP Lab ID: **30263553003** Collected: 08/22/18 10:43 Received: 08/28/18 10:00 Matrix: Solid
PWS: Site ID: Sample Type:
Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1	**1.094 ± 0.246 (0.159) C:NA T:NA**	pCi/g	09/21/18 11:36	13982-63-3	Ra
Radium-228	EPA 901.1	**0.545 ± 0.210 (0.231) C:NA T:NA**	pCi/g	09/21/18 11:36	15262-20-1	

Sample: 1808E79-019 S-082148-082218-JP Lab ID: **30263553004** Collected: 08/22/18 11:07 Received: 08/28/18 10:00 Matrix: Solid
PWS: Site ID: Sample Type:
Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1	**0.372 ± 0.119 (0.154) C:NA T:NA**	pCi/g	09/21/18 11:37	13982-63-3	Ra
Radium-228	EPA 901.1	**0.349 ± 0.237 (0.437) C:NA T:NA**	pCi/g	09/21/18 11:37	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1808E79
Pace Project No.: 30263553

QC Batch: 312365 Analysis Method: EPA 901.1
QC Batch Method: EPA 901.1 Analysis Description: 901.1 Gamma Spec Ingrowth
Associated Lab Samples: 30263553001, 30263553002, 30263553003, 30263553004

METHOD BLANK: 1525412 Matrix: Solid
Associated Lab Samples: 30263553001, 30263553002, 30263553003, 30263553004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.065 ± 0.064 (0.193) C:NA T:NA	pCi/g	09/19/18 16:29	Ra
Radium-228	0.082 ± 0.069 (0.207) C:NA T:NA	pCi/g	09/19/18 16:29	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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www.pacelabs.com

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1808E79
Pace Project No.: 30263553

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.
Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Ra The reported Ra-226 results were determined by hermetically sealing the dried, processed sample in an appropriate-sized can. Each sample was stored for a minimum of 21 days to ensure that equilibrium between Ra-226 and daughters Bi-214 and Pb-214 was achieved. Reported Ra-226 results were inferred from gamma peaks attributable to Bi-214 and Pb-214.

REPORT OF LABORATORY ANALYSIS

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-40105**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**40105**	RunNo:	**53859**					
Prep Date:	**8/31/2018**	Analysis Date:	**8/31/2018**	SeqNo:	**1778056**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Sample ID	**LCS-40105**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**40105**	RunNo:	**53859**					
Prep Date:	**8/31/2018**	Analysis Date:	**8/31/2018**	SeqNo:	**1778057**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			
Nitrogen, Nitrate (As N)	7.6	0.30	7.500	0	102	90	110			
Sulfate	29	1.5	30.00	0	95.2	90	110			

Sample ID	**1808E79-016AMS**	SampType:	**ms**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**S-082148-082218-JP**	Batch ID:	**40105**	RunNo:	**53859**					
Prep Date:	**8/31/2018**	Analysis Date:	**9/1/2018**	SeqNo:	**1778067**	Units:	**mg/Kg-dry**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	17	1.6	16.45	1.523	92.1	60.8	141			
Nitrogen, Nitrate (As N)	11	0.33	8.226	2.686	104	61.8	142			
Sulfate	120	1.6	32.90	86.63	105	71.9	115			

Sample ID	**1808E79-016AMSD**	SampType:	**msd**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**S-082148-082218-JP**	Batch ID:	**40105**	RunNo:	**53859**					
Prep Date:	**8/31/2018**	Analysis Date:	**9/1/2018**	SeqNo:	**1778068**	Units:	**mg/Kg-dry**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.6	16.45	1.523	90.0	60.8	141	2.15	20	
Nitrogen, Nitrate (As N)	11	0.33	8.226	2.686	98.6	61.8	142	4.07	20	
Sulfate	110	1.6	32.90	86.63	62.1	71.9	115	12.4	20	S

Sample ID	**MB-40105**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**40105**	RunNo:	**53953**					
Prep Date:	**8/31/2018**	Analysis Date:	**9/6/2018**	SeqNo:	**1783005**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**
24-Sep-18

Client: GHD
Project: Jal Landfarm

Sample ID	**LCS-40105**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**40105**	RunNo:	**53953**					
Prep Date:	**8/31/2018**	Analysis Date:	**9/6/2018**	SeqNo:	**1783006**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.6	0.30	1.500	0	104	90	110			
Chloride	14	1.5	15.00	0	95.3	90	110			
Nitrogen, Nitrate (As N)	7.6	0.30	7.500	0	101	90	110			
Sulfate	28	1.5	30.00	0	93.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39985**	SampType:	**MBLK**	TestCode:	**EPA Method 8011/504.1 Modified: EDB**					
Client ID:	**PBS**	Batch ID:	**39985**	RunNo:	**53786**					
Prep Date:	**8/27/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1775069**	Units:	**µg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.10								

Sample ID	**LCS-39985**	SampType:	**LCS**	TestCode:	**EPA Method 8011/504.1 Modified: EDB**					
Client ID:	**LCSS**	Batch ID:	**39985**	RunNo:	**53786**					
Prep Date:	**8/27/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1775070**	Units:	**µg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.2	0.10	1.000	0	116	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID **1808E79-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-082118-JP**	Batch ID: **40023**	RunNo: **53783**
Prep Date: **8/28/2018**	Analysis Date: **8/29/2018**	SeqNo: **1775619** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	11	53.37	0	88.9	53.5	126			
Surr: DNOP	4.5		5.337		84.5	50.6	138			

Sample ID **1808E79-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-082118-JP**	Batch ID: **40023**	RunNo: **53783**
Prep Date: **8/28/2018**	Analysis Date: **8/29/2018**	SeqNo: **1775620** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	51.75	0	90.9	53.5	126	0.872	21.7	
Surr: DNOP	4.5		5.175		87.8	50.6	138	0	0	

Sample ID **LCS-40023**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40023**	RunNo: **53783**
Prep Date: **8/28/2018**	Analysis Date: **8/29/2018**	SeqNo: **1775639** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.2	70	130			
Surr: DNOP	4.7		5.000		94.4	50.6	138			

Sample ID **MB-40023**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40023**	RunNo: **53783**
Prep Date: **8/28/2018**	Analysis Date: **8/29/2018**	SeqNo: **1775640** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.5	50.6	138			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-40011**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **40011**			RunNo: **53767**					
Prep Date:	**8/27/2018**	Analysis Date: **8/28/2018**			SeqNo: **1773796**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		87.3	15	316			

Sample ID	**LCS-40011**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **40011**			RunNo: **53767**					
Prep Date:	**8/27/2018**	Analysis Date: **8/28/2018**			SeqNo: **1773797**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	75.9	131			
Surr: BFB	990		1000		98.8	15	316			

Sample ID	**1808E79-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-082118-JP**	Batch ID: **40011**			RunNo: **53767**					
Prep Date:	**8/27/2018**	Analysis Date: **8/28/2018**			SeqNo: **1773799**		Units: **mg/Kg-dry**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	5.2	25.90	0	120	77.8	128			
Surr: BFB	1000		1036		100	15	316			

Sample ID	**1808E79-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-082118-JP**	Batch ID: **40011**			RunNo: **53767**					
Prep Date:	**8/27/2018**	Analysis Date: **8/28/2018**			SeqNo: **1773800**		Units: **mg/Kg-dry**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	5.3	26.74	0	121	77.8	128	4.24	20	
Surr: BFB	1100		1070		103	15	316	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-40011**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**40011**	RunNo:	**53767**					
Prep Date:	**8/27/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1773822**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		88.6	80	120			

Sample ID	**LCS-40011**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**40011**	RunNo:	**53767**					
Prep Date:	**8/27/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1773823**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.8	77.3	128			
Toluene	0.96	0.050	1.000	0	96.1	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	95.5	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	96.7	81.6	129			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.5	80	120			

Sample ID	**1808E79-002AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-082118-JP**	Batch ID:	**40011**	RunNo:	**53767**					
Prep Date:	**8/27/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1773826**	Units:	**mg/Kg-dry**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.027	1.100	0	107	68.5	133			
Toluene	1.2	0.055	1.100	0.009642	110	75	130			
Ethylbenzene	1.2	0.055	1.100	0	112	79.4	128			
Xylenes, Total	3.7	0.11	3.300	0.01500	113	77.3	131			
Surr: 4-Bromofluorobenzene	1.0		1.100		92.6	80	120			

Sample ID	**1808E79-002AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-082118-JP**	Batch ID:	**40011**	RunNo:	**53767**					
Prep Date:	**8/27/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1773827**	Units:	**mg/Kg-dry**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.027	1.071	0	106	68.5	133	4.24	20	
Toluene	1.2	0.054	1.071	0.009642	108	75	130	4.32	20	
Ethylbenzene	1.2	0.054	1.071	0	109	79.4	128	5.60	20	
Xylenes, Total	3.6	0.11	3.214	0.01500	111	77.3	131	4.25	20	
Surr: 4-Bromofluorobenzene	1.0		1.071		93.5	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-39993**	SampType:	**MBLK**	TestCode:	**EPA Method 8082A: PCB's**					
Client ID:	**PBS**	Batch ID:	**39993**	RunNo:	**53899**					
Prep Date:	**8/27/2018**	Analysis Date:	**9/4/2018**	SeqNo:	**1778895**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.020								
Aroclor 1221	ND	0.020								
Aroclor 1232	ND	0.020								
Aroclor 1242	ND	0.020								
Aroclor 1248	ND	0.020								
Aroclor 1254	ND	0.020								
Aroclor 1260	ND	0.020								
Surr: Decachlorobiphenyl	0.044		0.06250		70.4	31.9	130			
Surr: Tetrachloro-m-xylene	0.042		0.06250		66.4	21.2	142			

Sample ID	**LCS-39993**	SampType:	**LCS**	TestCode:	**EPA Method 8082A: PCB's**					
Client ID:	**LCSS**	Batch ID:	**39993**	RunNo:	**53899**					
Prep Date:	**8/27/2018**	Analysis Date:	**9/4/2018**	SeqNo:	**1778896**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.12	0.020	0.1250	0	98.8	35.9	162			
Aroclor 1260	0.089	0.020	0.1250	0	71.3	37.9	147			
Surr: Decachlorobiphenyl	0.052		0.06250		83.6	31.9	130			
Surr: Tetrachloro-m-xylene	0.053		0.06250		85.2	21.2	142			

Sample ID	**1808E79-016AMS**	SampType:	**MS**	TestCode:	**EPA Method 8082A: PCB's**					
Client ID:	**S-082148-082218-JP**	Batch ID:	**39993**	RunNo:	**53899**					
Prep Date:	**8/27/2018**	Analysis Date:	**9/4/2018**	SeqNo:	**1778899**	Units:	**mg/Kg-dry**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.12	0.022	0.1386	0	86.9	15	153			
Aroclor 1260	0.13	0.022	0.1386	0	90.6	15	180			
Surr: Decachlorobiphenyl	0.059		0.06928		84.8	31.9	130			
Surr: Tetrachloro-m-xylene	0.068		0.06928		97.6	21.2	142			

Sample ID	**1808E79-016AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8082A: PCB's**					
Client ID:	**S-082148-082218-JP**	Batch ID:	**39993**	RunNo:	**53899**					
Prep Date:	**8/27/2018**	Analysis Date:	**9/4/2018**	SeqNo:	**1778900**	Units:	**mg/Kg-dry**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.11	0.021	0.1318	0	86.0	15	153	6.09	32.9	
Aroclor 1260	0.12	0.021	0.1318	0	92.4	15	180	3.01	31.1	
Surr: Decachlorobiphenyl	0.059		0.06591		88.8	31.9	130	0	0	
Surr: Tetrachloro-m-xylene	0.054		0.06591		82.0	21.2	142	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**
24-Sep-18

Client: GHD
Project: Jal Landfarm

Sample ID **mb-40011**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **40011**	RunNo: **53770**
Prep Date: **8/27/2018**	Analysis Date: **8/28/2018**	SeqNo: **1774064** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.050								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.050								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID **mb-40011**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **40011**	RunNo: **53770**
Prep Date: **8/27/2018**	Analysis Date: **8/28/2018**	SeqNo: **1774064** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.5	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		109	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCSD-40025**	SampType:	**LCSD**		TestCode:	**EPA Method 8310: PAHs**				
Client ID:	**LCSS02**	Batch ID:	**40025**		RunNo:	**53961**				
Prep Date:	**8/29/2018**	Analysis Date:	**9/6/2018**		SeqNo:	**1782228**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.1	0.25	2.000	0	53.0	25.8	120	14.7	20	
1-Methylnaphthalene	1.1	0.25	2.000	0	53.3	29.7	118	14.2	20	
2-Methylnaphthalene	1.1	0.25	2.000	0	53.9	29.7	117	14.7	20	
Benzo(a)pyrene	ND	0.010	0.01250	0	52.0	25.8	132	0	20	
Surr: Benzo(e)pyrene	0.30		0.5000		59.6	32.4	109	0		

Sample ID	**MB-40025**	SampType:	**MBLK**		TestCode:	**EPA Method 8310: PAHs**				
Client ID:	**PBS**	Batch ID:	**40025**		RunNo:	**53961**				
Prep Date:	**8/29/2018**	Analysis Date:	**9/6/2018**		SeqNo:	**1782247**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Benzo(a)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.31		0.5000		61.8	32.4	109			

Sample ID	**LCS-40025**	SampType:	**LCS**		TestCode:	**EPA Method 8310: PAHs**				
Client ID:	**LCSS**	Batch ID:	**40025**		RunNo:	**53961**				
Prep Date:	**8/29/2018**	Analysis Date:	**9/6/2018**		SeqNo:	**1782248**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	0.92	0.25	2.000	0	45.8	25.8	120			
1-Methylnaphthalene	0.93	0.25	2.000	0	46.3	29.7	118			
2-Methylnaphthalene	0.93	0.25	2.000	0	46.5	29.7	117			
Benzo(a)pyrene	ND	0.010	0.01250	0	52.0	25.8	132			
Surr: Benzo(e)pyrene	0.28		0.5000		56.2	32.4	109			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-40008**	SampType: **MBLK**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID: **40008**			RunNo: **53728**					
Prep Date:	**8/27/2018**	Analysis Date: **8/27/2018**			SeqNo: **1772448**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LCS-40008**	SampType: **LCS**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID: **40008**			RunNo: **53728**					
Prep Date:	**8/27/2018**	Analysis Date: **8/27/2018**			SeqNo: **1772449**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	104	80	120			

Sample ID	**LLLLCS-40008**	SampType: **LCSLL**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**BatchQC**	Batch ID: **40008**			RunNo: **53728**					
Prep Date:	**8/27/2018**	Analysis Date: **8/27/2018**			SeqNo: **1772450**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	114	70	130			

Sample ID	**1808E79-016AMS**	SampType: **MS**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**S-082148-082218-JP**	Batch ID: **40008**			RunNo: **53728**					
Prep Date:	**8/27/2018**	Analysis Date: **8/27/2018**			SeqNo: **1772505**		Units: **mg/Kg-dry**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.18	0.1816	0	110	80	120			

Sample ID	**1808E79-016AMSD**	SampType: **MSD**			TestCode: **EPA Method 7471: Mercury**					
Client ID:	**S-082148-082218-JP**	Batch ID: **40008**			RunNo: **53728**					
Prep Date:	**8/27/2018**	Analysis Date: **8/27/2018**			SeqNo: **1772506**		Units: **mg/Kg-dry**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.18	0.1801	0	105	80	120	5.21	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-40126**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**40126**	RunNo:	**53956**
Prep Date:	**9/4/2018**	Analysis Date:	**9/6/2018**	SeqNo:	**1781273** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.10								
Boron	ND	2.0								
Cadmium	ND	0.10								
Copper	ND	0.30								
Lead	ND	0.25								
Molybdenum	ND	0.40								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID	**LCS-40126**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**LCSS**	Batch ID:	**40126**	RunNo:	**53956**
Prep Date:	**9/4/2018**	Analysis Date:	**9/6/2018**	SeqNo:	**1781275** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	21	0.10	25.00	0	84.2	80	120			
Boron	22	2.0	25.00	0	89.0	80	120			
Cadmium	22	0.10	25.00	0	87.3	80	120			
Copper	22	0.30	25.00	0	87.0	80	120			
Lead	21	0.25	25.00	0	85.4	80	120			
Molybdenum	22	0.40	25.00	0	89.6	80	120			
Selenium	21	2.5	25.00	0	85.2	80	120			
Silver	4.6	0.25	5.000	0	92.9	80	120			
Uranium	20	5.0	25.00	0	80.5	80	120			
Zinc	22	2.5	25.00	0	87.8	80	120			

Sample ID	**MB-40126**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Soil Metals**
Client ID:	**PBS**	Batch ID:	**40126**	RunNo:	**53956**
Prep Date:	**9/4/2018**	Analysis Date:	**9/6/2018**	SeqNo:	**1781294** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.30								
Iron	ND	2.5								
Manganese	0.24	0.10								
Nickel	ND	0.50								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808E79**

24-Sep-18

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-40126**	SampType: **LCS**		TestCode: **EPA Method 6010B: Soil Metals**					
Client ID:	**LCSS**	Batch ID: **40126**		RunNo: **53956**					
Prep Date:	**9/4/2018**	Analysis Date: **9/6/2018**		SeqNo: **1781296**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	22	0.30	25.00	0	88.9	80	120			
Iron	24	2.5	25.00	0	95.0	80	120			
Manganese	22	0.10	25.00	0	86.6	80	120			
Nickel	22	0.50	25.00	0	87.4	80	120			

Sample ID	**MB-40126**	SampType: **MBLK**		TestCode: **EPA Method 6010B: Soil Metals**					
Client ID:	**PBS**	Batch ID: **40126**		RunNo: **53956**					
Prep Date:	**9/4/2018**	Analysis Date: **9/6/2018**		SeqNo: **1781556**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	3.0								
Arsenic	ND	2.5								
Chromium	ND	0.30								
Uranium	ND	5.0								

Sample ID	**LCS-40126**	SampType: **LCS**		TestCode: **EPA Method 6010B: Soil Metals**					
Client ID:	**LCSS**	Batch ID: **40126**		RunNo: **53956**					
Prep Date:	**9/4/2018**	Analysis Date: **9/6/2018**		SeqNo: **1781560**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	25	3.0	25.00	0	99.1	80	120			
Arsenic	24	2.5	25.00	0	97.3	80	120			
Chromium	25	0.30	25.00	0	98.2	80	120			
Uranium	22	5.0	25.00	0	88.2	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1808E79 | RcptNo: 1

Received By: **Ashley Gallegos** 8/23/2018 10:40:00 AM

Completed By: **Ashley Gallegos** 8/23/2018 12:48:01 PM

Reviewed By: VV2 08/27/18 labeled by: ENM 8/27/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

ENM 8/27/18

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified:		Date	
By Whom:		Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person	
Regarding:			
Client Instructions:			

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good	Yes			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.9-1.0(C°)=3.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1808E79	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	% Moisture				Air Bubbles (Y or N)
8-21-18	939	S	S-082148-082118-JP-V1-5'	4oz gl-ss Jar	ICE	-001	X		X									X				
8-21-18	953	S	S-082148-082118-JP-V2-5'			-002	X		X									X				
8-21-18	1011	S	S-082148-082118-JP-V3-5'			-003	X		X									X				
8-21-18	1032	S	S-082148-082118-JP-V4-5'			-004	X		X									X				
8-21-18	1050	S	S-082148-082118-JP-V5-5'			-005	X		X									X				
8-21-18	1113	S	S-082148-082118-JP-V6-5'			-006	X		X									X				
8-21-18	1158	S	S-082148-082118-JP-V7-5'			-0087	X		X									X				
8-21-18	1215	S	S-082148-082118-JP-V8-5'			-008	X		X									X				
8-21-18	1231	S	S-082148-082118-JP-V9-5'			-009	X		X									X				
8-21-18	1245	S	S-082148-082118-JP-V10-4'			-010	X		X									X				
8-21-18	1330	S	S-082148-082118-JP-V11-5'			-011	X		X									X				
8-22-18	915	S	S-082148-082118-JP-V12-5'			-012	X		X									X				

Date	Time	Relinquished by:	Received by:	Date	Time
8-22-18	1445			8/22/18	1445
8/22/18	1900		Courier EJH 8/23/18	8/23/18	1040

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.9-1.0(cf)=3.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1808E79	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	% Moisture		3Q18 SO Lists A+B)	See Attached	Air Bubbles (Y or N)
8-22-18	928	S	S-082148-082218-JP-V13-5'	4oz glass Jar	ICE	-013	X		X									X				
8-22-18	942	S	S-082148-082218-JP-V14-5'	↓	↓	-014	X		X									X				
8-21-18	1310	S	S-082148-082218-JP-V15-5	↓	↓	-015	X		X									X				
8-22-18	1010	S	S-082148-082218-JP-V4A-5'	4oz glass Jar x6	↓	-016	X		X									X		X		
8-22-18	1026	S	S-082148-082218-JP-V4B-5'	↓	↓	-017	X		X									X		X		
8-22-18	1043	S	S-082148-082218-JP-V4C-5'	↓	↓	-018	X		X									X		X		
8-22-18	1107	S	S-082148-082218-JP-V4D-5'	↓	↓	-019	X		X									X		X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-22-18	1445			8/22/18	1445
8/22/18	1900		Courier GNH 8/23/18	8/23/18	1040

Remarks: 3Q18 SO(List A+B)
- Metals 6010
- Mercury 7471
- chloride 300
- Cyanide 300
- Fluoride 300
- Nitrate 300
- pH 9045
- Phenols 9065
- Sulfate 300
- Radioactivity
- VOC's 8260
- PCB's 8082
- PAH's 8270 SIM

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l
(23) total xylenes.....0.62 mg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l
(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l
(32) PAHs: total naphthalene plus monomethylnaphthalenes.....0.03 mg/l
(33) benzo-a-pyrene.....0.0007 mg/l

B. Other Standards for Domestic Water Supply

(1) Chloride (Cl).....250.0 mg/l
(2) Copper (Cu).....1.0 mg/l
(3) Iron (Fe).....1.0 mg/l
(4) Manganese (Mn).....0.2 mg/l
(6) Phenols.....0.005 mg/l
(7) Sulfate (SO_4).....600.0 mg/l
~~(8) Total Dissolved Solids (TDS).....1000.0 mg/l~~
(9) Zinc (Zn).....10.0 mg/l
(10) pH.....between 6 and 9

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of this section unless otherwise provided.

(1) Aluminum (Al).....5.0 mg/l
(2) Boron (B).....0.75 mg/l
(3) Cobalt (Co).....0.05 mg/l
(4) Molybdenum (Mo).....1.0 mg/l
(5) Nickel (Ni).....0.2 mg/l

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 08, 2019

Christine Mathews

GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL:
FAX

RE: Jal Landfarm OrderNo.: 1811958

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 30 sample(s) on 11/17/2018 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 20, 2018.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-001 **Collection Date:** 11/14/2018 11:05:00 AM
Client Sample ID: S-082148-111418-JP-T1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.6	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 1:03:26 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	40	9.3		mg/Kg	1	11/21/2018 9:40:32 AM	41649
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	11/21/2018 9:40:32 AM	41649
Surr: DNOP	115	50.6-138		%Rec	1	11/21/2018 9:40:32 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2018 5:23:24 PM	41627
Surr: BFB	97.8	73.8-119		%Rec	1	11/21/2018 5:23:24 PM	41627

Lab ID: 1811958-002 **Collection Date:** 11/14/2018 11:39:00 AM
Client Sample ID: S-082148-111418-JP-T2 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	10	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 1:40:39 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	18	9.9		mg/Kg	1	11/21/2018 11:35:37 AM	41649
Motor Oil Range Organics (MRO)	74	50		mg/Kg	1	11/21/2018 11:35:37 AM	41649
Surr: DNOP	100	50.6-138		%Rec	1	11/21/2018 11:35:37 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/21/2018 6:34:06 PM	41627
Surr: BFB	97.6	73.8-119		%Rec	1	11/21/2018 6:34:06 PM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-003 **Collection Date:** 11/14/2018 11:33:00 AM
Client Sample ID: S-082148-111418-JP-T3 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.7	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 1:53:04 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	570	11		mg/Kg	1	11/21/2018 12:24:16 PM	41649
Motor Oil Range Organics (MRO)	900	54		mg/Kg	1	11/21/2018 12:24:16 PM	41649
Surr: DNOP	111	50.6-138		%Rec	1	11/21/2018 12:24:16 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	11/22/2018 3:11:10 AM	41627
Surr: BFB	97.4	73.8-119		%Rec	1	11/22/2018 3:11:10 AM	41627

Lab ID: 1811958-004 **Collection Date:** 11/14/2018 11:27:00 AM
Client Sample ID: S-082148-111418-JP-T4 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	11	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 2:30:18 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	180	9.7		mg/Kg	1	11/21/2018 1:46:23 PM	41649
Motor Oil Range Organics (MRO)	230	48		mg/Kg	1	11/21/2018 1:46:23 PM	41649
Surr: DNOP	107	50.6-138		%Rec	1	11/21/2018 1:46:23 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg	1	11/22/2018 3:34:30 AM	41627
Surr: BFB	98.8	73.8-119		%Rec	1	11/22/2018 3:34:30 AM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-005 **Collection Date:** 11/14/2018 12:10:00 PM
Client Sample ID: S-082148-111418-JP-T5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	5.9	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 2:42:43 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/21/2018 3:29:49 PM	41649
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/21/2018 3:29:49 PM	41649
Surr: DNOP	103	50.6-138		%Rec	1	11/21/2018 3:29:49 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	11/22/2018 3:57:51 AM	41627
Surr: BFB	97.2	73.8-119		%Rec	1	11/22/2018 3:57:51 AM	41627

Lab ID: 1811958-006 **Collection Date:** 11/14/2018 12:20:00 PM
Client Sample ID: S-082148-111418-JP-T6 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.1	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 2:55:07 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/21/2018 4:43:04 PM	41649
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/21/2018 4:43:04 PM	41649
Surr: DNOP	132	50.6-138		%Rec	1	11/21/2018 4:43:04 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	11/22/2018 4:21:11 AM	41627
Surr: BFB	93.2	73.8-119		%Rec	1	11/22/2018 4:21:11 AM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-007 **Collection Date:** 11/14/2018 12:24:00 PM
Client Sample ID: S-082148-111418-JP-T7 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.9	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 3:07:31 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	15	9.6		mg/Kg	1	11/21/2018 5:55:54 PM	41649
Motor Oil Range Organics (MRO)	57	48		mg/Kg	1	11/21/2018 5:55:54 PM	41649
Surr: DNOP	127	50.6-138		%Rec	1	11/21/2018 5:55:54 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	11/22/2018 4:44:31 AM	41627
Surr: BFB	96.9	73.8-119		%Rec	1	11/22/2018 4:44:31 AM	41627

Lab ID: 1811958-008 **Collection Date:** 11/14/2018 12:27:00 PM
Client Sample ID: S-082148-111418-JP-T8 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	7.4	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 3:19:55 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/21/2018 7:08:21 PM	41649
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 7:08:21 PM	41649
Surr: DNOP	84.8	50.6-138		%Rec	1	11/21/2018 7:08:21 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	11/22/2018 5:07:54 AM	41627
Surr: BFB	97.2	73.8-119		%Rec	1	11/22/2018 5:07:54 AM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-009 **Collection Date:** 11/14/2018 12:45:00 PM
Client Sample ID: S-082148-111418-JP-T9 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	7.9	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 3:32:19 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	11	9.4		mg/Kg	1	11/21/2018 8:20:29 PM	41649
Motor Oil Range Organics (MRO)	62	47		mg/Kg	1	11/21/2018 8:20:29 PM	41649
Surr: DNOP	66.6	50.6-138		%Rec	1	11/21/2018 8:20:29 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	11/22/2018 5:31:15 AM	41627
Surr: BFB	96.4	73.8-119		%Rec	1	11/22/2018 5:31:15 AM	41627

Lab ID: 1811958-010 **Collection Date:** 11/14/2018 12:33:00 PM
Client Sample ID: S-082148-111418-JP-T10 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	7.2	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 3:44:44 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/21/2018 9:32:33 PM	41649
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 9:32:33 PM	41649
Surr: DNOP	73.8	50.6-138		%Rec	1	11/21/2018 9:32:33 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	11/22/2018 5:54:35 AM	41627
Surr: BFB	97.2	73.8-119		%Rec	1	11/22/2018 5:54:35 AM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-011 **Collection Date:** 11/14/2018 11:58:00 AM
Client Sample ID: S-082148-111418-JP-T11 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	5.8	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 3:57:08 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/21/2018 10:44:17 PM	41649
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/21/2018 10:44:17 PM	41649
Surr: DNOP	73.3	50.6-138		%Rec	1	11/21/2018 10:44:17 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/22/2018 6:17:58 AM	41627
Surr: BFB	96.4	73.8-119		%Rec	1	11/22/2018 6:17:58 AM	41627

Lab ID: 1811958-012 **Collection Date:** 11/14/2018 11:51:00 AM
Client Sample ID: S-082148-111418-JP-T12 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.5	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 4:09:33 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/21/2018 11:56:26 PM	41649
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 11:56:26 PM	41649
Surr: DNOP	82.9	50.6-138		%Rec	1	11/21/2018 11:56:26 PM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/21/2018 5:54:42 PM	41627
Surr: BFB	93.6	73.8-119		%Rec	1	11/21/2018 5:54:42 PM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-013 **Collection Date:** 11/14/2018 11:47:00 AM
Client Sample ID: S-082148-111418-JP-T13 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	12	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 4:21:57 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	9.5	9.4		mg/Kg	1	11/22/2018 1:32:32 AM	41649
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/22/2018 1:32:32 AM	41649
Surr: DNOP	89.4	50.6-138		%Rec	1	11/22/2018 1:32:32 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/21/2018 6:17:31 PM	41627
Surr: BFB	90.0	73.8-119		%Rec	1	11/21/2018 6:17:31 PM	41627

Lab ID: 1811958-014 **Collection Date:** 11/14/2018 11:43:00 AM
Client Sample ID: S-082148-111418-JP-T14 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	6.0	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 4:59:10 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/22/2018 2:44:32 AM	41649
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/22/2018 2:44:32 AM	41649
Surr: DNOP	118	50.6-138		%Rec	1	11/22/2018 2:44:32 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/21/2018 6:40:18 PM	41627
Surr: BFB	89.1	73.8-119		%Rec	1	11/21/2018 6:40:18 PM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-015 **Collection Date:** 11/14/2018 12:05:00 PM
Client Sample ID: S-082148-111418-JP-T15 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	12	1.0		wt%	1	11/19/2018	R55754
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 5:11:35 PM	41677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	110	9.7		mg/Kg	1	11/22/2018 3:56:49 AM	41649
Motor Oil Range Organics (MRO)	210	48		mg/Kg	1	11/22/2018 3:56:49 AM	41649
Surr: DNOP	115	50.6-138		%Rec	1	11/22/2018 3:56:49 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/22/2018 4:30:16 AM	41627
Surr: BFB	90.0	73.8-119		%Rec	1	11/22/2018 4:30:16 AM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-016 **Collection Date:** 11/14/2018 10:45:00 AM
Client Sample ID: S-082148-111418-JP-V1-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 5:23:59 PM	41677
Sulfate	200	30		mg/Kg	20	11/21/2018 5:23:59 PM	41677
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 5:32:33 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	2.9	2.4		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Barium	36	0.096		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Cadmium	ND	0.096		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Chromium	6.9	0.29		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Copper	0.31	0.29		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Iron	9100	240		mg/Kg	100	12/6/2018 2:23:30 PM	41770
Lead	ND	0.24		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Manganese	36	0.096		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Selenium	ND	2.4		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Silver	ND	0.24		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Uranium	ND	4.8		mg/Kg	1	12/4/2018 4:28:59 PM	41770
Zinc	16	2.4		mg/Kg	1	12/12/2018 10:56:16 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/22/2018 5:09:09 AM	41649
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/22/2018 5:09:09 AM	41649
Surr: DNOP	101	50.6-138		%Rec	1	11/22/2018 5:09:09 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/22/2018 4:52:51 AM	41627
Surr: BFB	88.9	73.8-119		%Rec	1	11/22/2018 4:52:51 AM	41627
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 11:58:11 AM	41627
Toluene	ND	0.049		mg/Kg	1	11/24/2018 11:58:11 AM	41627
Ethylbenzene	ND	0.049		mg/Kg	1	11/24/2018 11:58:11 AM	41627
Xylenes, Total	ND	0.099		mg/Kg	1	11/24/2018 11:58:11 AM	41627
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	11/24/2018 11:58:11 AM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-017 **Collection Date:** 11/14/2018 1:20:00 PM
Client Sample ID: S-082148-111418-JP-V2-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 5:36:24 PM	41677
Sulfate	ND	30		mg/Kg	20	11/21/2018 5:36:24 PM	41677
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 5:37:50 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	7.2	2.4		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Barium	46	0.096		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Cadmium	ND	0.096		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Chromium	7.5	0.29		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Copper	0.89	0.29		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Iron	8500	240		mg/Kg	100	12/6/2018 2:25:21 PM	41770
Lead	ND	0.24		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Manganese	46	0.096		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Selenium	ND	2.4		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Silver	ND	0.24		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Uranium	ND	4.8		mg/Kg	1	12/4/2018 4:31:07 PM	41770
Zinc	16	2.4		mg/Kg	1	12/12/2018 11:04:01 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/22/2018 6:22:06 AM	41649
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/22/2018 6:22:06 AM	41649
Surr: DNOP	101	50.6-138		%Rec	1	11/22/2018 6:22:06 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/22/2018 5:15:26 AM	41627
Surr: BFB	90.4	73.8-119		%Rec	1	11/22/2018 5:15:26 AM	41627
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/24/2018 1:06:24 PM	41627
Toluene	ND	0.048		mg/Kg	1	11/24/2018 1:06:24 PM	41627
Ethylbenzene	ND	0.048		mg/Kg	1	11/24/2018 1:06:24 PM	41627
Xylenes, Total	ND	0.097		mg/Kg	1	11/24/2018 1:06:24 PM	41627
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	11/24/2018 1:06:24 PM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-018 **Collection Date:** 11/15/2018 3:30:00 PM
Client Sample ID: S-082148-111518-JP-V3-5.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/21/2018 6:13:38 PM	41677
Sulfate	130	30		mg/Kg	20	11/21/2018 6:13:38 PM	41677
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.032		mg/Kg	1	11/27/2018 5:43:11 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Barium	53	0.098		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Cadmium	ND	0.098		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Chromium	5.1	0.29		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Copper	ND	0.29		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Iron	5200	250		mg/Kg	100	12/6/2018 2:33:09 PM	41770
Lead	0.79	0.25		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Manganese	22	0.098		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Uranium	ND	4.9		mg/Kg	1	12/4/2018 4:33:14 PM	41770
Zinc	9.5	2.5		mg/Kg	1	12/12/2018 11:05:53 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/22/2018 7:35:01 AM	41649
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/22/2018 7:35:01 AM	41649
Surr: DNOP	102	50.6-138		%Rec	1	11/22/2018 7:35:01 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/22/2018 5:38:03 AM	41627
Surr: BFB	89.5	73.8-119		%Rec	1	11/22/2018 5:38:03 AM	41627
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/24/2018 1:29:13 PM	41627
Toluene	ND	0.049		mg/Kg	1	11/24/2018 1:29:13 PM	41627
Ethylbenzene	ND	0.049		mg/Kg	1	11/24/2018 1:29:13 PM	41627
Xylenes, Total	ND	0.097		mg/Kg	1	11/24/2018 1:29:13 PM	41627
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	11/24/2018 1:29:13 PM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-019 **Collection Date:** 11/15/2018 3:48:00 PM
Client Sample ID: S-082148-111518-JP-V4-5.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 4:11:48 PM	41707
Sulfate	ND	30		mg/Kg	20	11/26/2018 4:11:48 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.032		mg/Kg	1	11/27/2018 5:44:58 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.4		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Barium	70	0.098		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Cadmium	ND	0.098		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Chromium	4.2	0.29		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Copper	1.3	0.29		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Iron	4400	240		mg/Kg	100	12/6/2018 2:37:02 PM	41770
Lead	0.58	0.24		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Manganese	33	0.098		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Selenium	ND	2.4		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Silver	ND	0.24		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Uranium	ND	4.9		mg/Kg	1	12/4/2018 4:35:17 PM	41770
Zinc	7.8	2.4		mg/Kg	1	12/12/2018 11:07:42 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	11/22/2018 8:48:09 AM	41649
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/22/2018 8:48:09 AM	41649
Surr: DNOP	82.2	50.6-138		%Rec	1	11/22/2018 8:48:09 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/22/2018 6:00:40 AM	41627
Surr: BFB	91.6	73.8-119		%Rec	1	11/22/2018 6:00:40 AM	41627
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 1:51:59 PM	41627
Toluene	ND	0.049		mg/Kg	1	11/24/2018 1:51:59 PM	41627
Ethylbenzene	ND	0.049		mg/Kg	1	11/24/2018 1:51:59 PM	41627
Xylenes, Total	ND	0.099		mg/Kg	1	11/24/2018 1:51:59 PM	41627
Surr: 4-Bromofluorobenzene	93.3	80-120		%Rec	1	11/24/2018 1:51:59 PM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-020 **Collection Date:** 11/15/2018 2:40:00 PM
Client Sample ID: S-082148-111518-JP-V5-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 4:49:01 PM	41707
Sulfate	ND	30		mg/Kg	20	11/26/2018 4:49:01 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 5:46:38 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Barium	38	0.098		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Cadmium	ND	0.098		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Chromium	6.4	0.29		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Copper	1.8	0.29		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Iron	8000	250		mg/Kg	100	12/6/2018 2:38:49 PM	41770
Lead	0.63	0.25		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Manganese	49	0.098		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Uranium	ND	4.9		mg/Kg	1	12/4/2018 4:37:18 PM	41770
Zinc	17	2.5		mg/Kg	1	12/12/2018 11:09:39 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/22/2018 10:01:16 AM	41649
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/22/2018 10:01:16 AM	41649
Surr: DNOP	73.4	50.6-138		%Rec	1	11/22/2018 10:01:16 AM	41649
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/22/2018 6:23:16 AM	41627
Surr: BFB	91.8	73.8-119		%Rec	1	11/22/2018 6:23:16 AM	41627
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/24/2018 2:14:39 PM	41627
Toluene	ND	0.048		mg/Kg	1	11/24/2018 2:14:39 PM	41627
Ethylbenzene	ND	0.048		mg/Kg	1	11/24/2018 2:14:39 PM	41627
Xylenes, Total	ND	0.097		mg/Kg	1	11/24/2018 2:14:39 PM	41627
Surr: 4-Bromofluorobenzene	94.9	80-120		%Rec	1	11/24/2018 2:14:39 PM	41627

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-021 **Collection Date:** 11/15/2018 2:26:00 PM
Client Sample ID: S-082148-111518-JP-V6-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 5:01:25 PM	41707
Sulfate	160	30		mg/Kg	20	11/26/2018 5:01:25 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.032		mg/Kg	1	11/27/2018 5:48:18 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Barium	52	0.10		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Cadmium	ND	0.10		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Chromium	6.4	0.30		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Copper	1.2	0.30		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Iron	8000	250		mg/Kg	100	12/6/2018 2:40:35 PM	41770
Lead	ND	0.25		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Manganese	37	0.10		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Uranium	ND	5.0		mg/Kg	1	12/4/2018 4:39:26 PM	41770
Zinc	16	2.5		mg/Kg	1	12/12/2018 11:11:28 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/21/2018 1:32:35 PM	41655
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/21/2018 1:32:35 PM	41655
Surr: DNOP	93.2	50.6-138		%Rec	1	11/21/2018 1:32:35 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2018 3:34:11 PM	41631
Surr: BFB	90.7	73.8-119		%Rec	1	11/20/2018 3:34:11 PM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 2:37:16 PM	41631
Toluene	ND	0.049		mg/Kg	1	11/24/2018 2:37:16 PM	41631
Ethylbenzene	ND	0.049		mg/Kg	1	11/24/2018 2:37:16 PM	41631
Xylenes, Total	ND	0.098		mg/Kg	1	11/24/2018 2:37:16 PM	41631
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	11/24/2018 2:37:16 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-022 **Collection Date:** 11/15/2018 1:50:00 PM
Client Sample ID: S-082148-111518-JP-V7-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 5:13:49 PM	41707
Sulfate	ND	30		mg/Kg	20	11/26/2018 5:13:49 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 5:49:58 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Barium	25	0.099		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Cadmium	ND	0.099		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Chromium	3.6	0.30		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Copper	ND	0.30		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Iron	4400	250		mg/Kg	100	12/6/2018 2:42:21 PM	41770
Lead	0.94	0.25		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Manganese	15	0.099		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Uranium	ND	5.0		mg/Kg	1	12/4/2018 4:41:35 PM	41770
Zinc	6.5	2.5		mg/Kg	1	12/12/2018 11:13:18 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/21/2018 2:38:56 PM	41655
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/21/2018 2:38:56 PM	41655
Surr: DNOP	89.4	50.6-138		%Rec	1	11/21/2018 2:38:56 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/20/2018 4:42:17 PM	41631
Surr: BFB	91.0	73.8-119		%Rec	1	11/20/2018 4:42:17 PM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 2:59:59 PM	41631
Toluene	ND	0.050		mg/Kg	1	11/24/2018 2:59:59 PM	41631
Ethylbenzene	ND	0.050		mg/Kg	1	11/24/2018 2:59:59 PM	41631
Xylenes, Total	ND	0.099		mg/Kg	1	11/24/2018 2:59:59 PM	41631
Surr: 4-Bromofluorobenzene	94.2	80-120		%Rec	1	11/24/2018 2:59:59 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-023 **Collection Date:** 11/15/2018 12:50:00 PM
Client Sample ID: S-082148-111518-JP-V8-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 5:51:02 PM	41707
Sulfate	50	30		mg/Kg	20	11/26/2018 5:51:02 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.032		mg/Kg	1	11/27/2018 5:51:39 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	3.4	2.4		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Barium	160	0.097		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Cadmium	ND	0.097		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Chromium	7.8	0.29		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Copper	0.86	0.29		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Iron	9400	240		mg/Kg	100	12/6/2018 2:44:10 PM	41770
Lead	ND	0.24		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Manganese	43	0.097		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Selenium	ND	2.4		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Silver	ND	0.24		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Uranium	ND	4.8		mg/Kg	1	12/4/2018 4:43:34 PM	41770
Zinc	17	2.4		mg/Kg	1	12/12/2018 11:15:07 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/21/2018 3:00:57 PM	41655
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/21/2018 3:00:57 PM	41655
Surr: DNOP	88.0	50.6-138		%Rec	1	11/21/2018 3:00:57 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2018 5:05:00 PM	41631
Surr: BFB	90.3	73.8-119		%Rec	1	11/20/2018 5:05:00 PM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 4:08:16 PM	41631
Toluene	ND	0.049		mg/Kg	1	11/24/2018 4:08:16 PM	41631
Ethylbenzene	ND	0.049		mg/Kg	1	11/24/2018 4:08:16 PM	41631
Xylenes, Total	ND	0.099		mg/Kg	1	11/24/2018 4:08:16 PM	41631
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	11/24/2018 4:08:16 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-024 **Collection Date:** 11/15/2018 2:15:00 PM
Client Sample ID: S-082148-111518-JP-V9-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 6:03:26 PM	41707
Sulfate	100	30		mg/Kg	20	11/26/2018 6:03:26 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 5:53:21 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Barium	36	0.10		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Cadmium	ND	0.10		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Chromium	5.0	0.30		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Copper	0.51	0.30		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Iron	5300	250		mg/Kg	100	12/6/2018 2:45:54 PM	41770
Lead	0.51	0.25		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Manganese	25	0.10		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Uranium	ND	5.0		mg/Kg	1	12/4/2018 4:45:44 PM	41770
Zinc	12	2.5		mg/Kg	1	12/12/2018 11:16:56 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/21/2018 3:23:04 PM	41655
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/21/2018 3:23:04 PM	41655
Surr: DNOP	88.1	50.6-138		%Rec	1	11/21/2018 3:23:04 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/20/2018 5:27:47 PM	41631
Surr: BFB	90.4	73.8-119		%Rec	1	11/20/2018 5:27:47 PM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/24/2018 6:02:19 PM	41631
Toluene	ND	0.048		mg/Kg	1	11/24/2018 6:02:19 PM	41631
Ethylbenzene	ND	0.048		mg/Kg	1	11/24/2018 6:02:19 PM	41631
Xylenes, Total	ND	0.096		mg/Kg	1	11/24/2018 6:02:19 PM	41631
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	11/24/2018 6:02:19 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-025 **Collection Date:** 11/15/2018 2:00:00 PM
Client Sample ID: S-082148-111518-JP-V10-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 6:15:50 PM	41707
Sulfate	ND	30		mg/Kg	20	11/26/2018 6:15:50 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 5:55:03 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Barium	91	0.098		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Cadmium	ND	0.098		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Chromium	7.5	0.29		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Copper	0.63	0.29		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Iron	9000	250		mg/Kg	100	12/6/2018 2:47:42 PM	41770
Lead	ND	0.25		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Manganese	38	0.098		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Uranium	ND	4.9		mg/Kg	1	12/4/2018 4:54:02 PM	41770
Zinc	17	2.5		mg/Kg	1	12/12/2018 11:18:46 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/21/2018 3:45:11 PM	41655
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 3:45:11 PM	41655
Surr: DNOP	89.4	50.6-138		%Rec	1	11/21/2018 3:45:11 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/20/2018 5:50:25 PM	41631
Surr: BFB	90.1	73.8-119		%Rec	1	11/20/2018 5:50:25 PM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 6:25:08 PM	41631
Toluene	ND	0.050		mg/Kg	1	11/24/2018 6:25:08 PM	41631
Ethylbenzene	ND	0.050		mg/Kg	1	11/24/2018 6:25:08 PM	41631
Xylenes, Total	ND	0.10		mg/Kg	1	11/24/2018 6:25:08 PM	41631
Surr: 4-Bromofluorobenzene	93.6	80-120		%Rec	1	11/24/2018 6:25:08 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-026 **Collection Date:** 11/15/2018 11:50:00 AM
Client Sample ID: S-082148-111518-JP-V11-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 6:28:15 PM	41707
Sulfate	140	30		mg/Kg	20	11/26/2018 6:28:15 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 5:56:49 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	6.4	2.5		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Barium	69	0.099		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Cadmium	ND	0.099		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Chromium	5.7	0.30		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Copper	1.1	0.30		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Iron	7000	250		mg/Kg	100	12/6/2018 2:49:30 PM	41770
Lead	ND	0.25		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Manganese	39	0.099		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Uranium	ND	5.0		mg/Kg	1	12/4/2018 4:56:18 PM	41770
Zinc	13	2.5		mg/Kg	1	12/12/2018 11:20:43 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/21/2018 4:07:22 PM	41655
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 4:07:22 PM	41655
Surr: DNOP	92.2	50.6-138		%Rec	1	11/21/2018 4:07:22 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/20/2018 6:13:07 PM	41631
Surr: BFB	91.4	73.8-119		%Rec	1	11/20/2018 6:13:07 PM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/24/2018 6:47:54 PM	41631
Toluene	ND	0.048		mg/Kg	1	11/24/2018 6:47:54 PM	41631
Ethylbenzene	ND	0.048		mg/Kg	1	11/24/2018 6:47:54 PM	41631
Xylenes, Total	ND	0.095		mg/Kg	1	11/24/2018 6:47:54 PM	41631
Surr: 4-Bromofluorobenzene	87.4	80-120		%Rec	1	11/24/2018 6:47:54 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-027 **Collection Date:** 11/15/2018 12:10:00 PM
Client Sample ID: S-082148-111518-JP-V12-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 6:40:39 PM	41707
Sulfate	370	30		mg/Kg	20	11/26/2018 6:40:39 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.032		mg/Kg	1	11/27/2018 5:58:32 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Barium	35	0.099		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Cadmium	ND	0.099		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Chromium	8.1	0.30		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Copper	3.8	0.30		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Iron	10000	250		mg/Kg	100	12/6/2018 2:51:16 PM	41770
Lead	ND	0.25		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Manganese	46	0.099		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Uranium	ND	4.9		mg/Kg	1	12/4/2018 4:58:27 PM	41770
Zinc	20	2.5		mg/Kg	1	12/12/2018 12:19:37 PM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/21/2018 4:29:28 PM	41655
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/21/2018 4:29:28 PM	41655
Surr: DNOP	90.2	50.6-138		%Rec	1	11/21/2018 4:29:28 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2018 6:35:49 PM	41631
Surr: BFB	89.8	73.8-119		%Rec	1	11/20/2018 6:35:49 PM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/24/2018 7:10:34 PM	41631
Toluene	ND	0.049		mg/Kg	1	11/24/2018 7:10:34 PM	41631
Ethylbenzene	ND	0.049		mg/Kg	1	11/24/2018 7:10:34 PM	41631
Xylenes, Total	ND	0.098		mg/Kg	1	11/24/2018 7:10:34 PM	41631
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	11/24/2018 7:10:34 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-028 **Collection Date:** 11/15/2018 12:18:00 PM
Client Sample ID: S-082148-111518-JP-V13-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 6:53:03 PM	41707
Sulfate	150	30		mg/Kg	20	11/26/2018 6:53:03 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 6:03:49 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Barium	48	0.098		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Cadmium	ND	0.098		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Chromium	4.0	0.29		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Copper	1.7	0.29		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Iron	4600	250		mg/Kg	100	12/6/2018 2:59:03 PM	41770
Lead	0.88	0.25		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Manganese	52	0.098		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Selenium	ND	2.5		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Silver	ND	0.25		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Uranium	ND	4.9		mg/Kg	1	12/4/2018 5:00:36 PM	41770
Zinc	11	2.5		mg/Kg	1	12/12/2018 12:21:24 PM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/21/2018 4:51:39 PM	41655
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 4:51:39 PM	41655
Surr: DNOP	95.9	50.6-138		%Rec	1	11/21/2018 4:51:39 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2018 2:31:46 AM	41631
Surr: BFB	88.3	73.8-119		%Rec	1	11/21/2018 2:31:46 AM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 7:33:18 PM	41631
Toluene	ND	0.049		mg/Kg	1	11/24/2018 7:33:18 PM	41631
Ethylbenzene	ND	0.049		mg/Kg	1	11/24/2018 7:33:18 PM	41631
Xylenes, Total	ND	0.099		mg/Kg	1	11/24/2018 7:33:18 PM	41631
Surr: 4-Bromofluorobenzene	94.1	80-120		%Rec	1	11/24/2018 7:33:18 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-029 **Collection Date:** 11/15/2018 12:35:00 PM
Client Sample ID: S-082148-111518-JP-V14-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 7:05:28 PM	41707
Sulfate	260	30		mg/Kg	20	11/26/2018 7:05:28 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 6:05:33 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.5		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Barium	130	0.10		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Cadmium	ND	0.10		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Chromium	7.5	0.30		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Copper	2.8	0.30		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Iron	9900	250		mg/Kg	100	12/6/2018 3:02:52 PM	41770
Lead	ND	0.25		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Manganese	110	0.10		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Selenium	3.7	2.5		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Silver	0.36	0.25		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Uranium	ND	5.0		mg/Kg	1	12/4/2018 5:02:37 PM	41770
Zinc	20	2.5		mg/Kg	1	12/12/2018 12:23:13 PM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/21/2018 5:13:40 PM	41655
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 5:13:40 PM	41655
Surr: DNOP	94.0	50.6-138		%Rec	1	11/21/2018 5:13:40 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/21/2018 2:54:21 AM	41631
Surr: BFB	88.0	73.8-119		%Rec	1	11/21/2018 2:54:21 AM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/24/2018 7:55:51 PM	41631
Toluene	ND	0.048		mg/Kg	1	11/24/2018 7:55:51 PM	41631
Ethylbenzene	ND	0.048		mg/Kg	1	11/24/2018 7:55:51 PM	41631
Xylenes, Total	ND	0.097		mg/Kg	1	11/24/2018 7:55:51 PM	41631
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	11/24/2018 7:55:51 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1811958
Project: Jal Landfarm

Lab ID: 1811958-030 **Collection Date:** 11/15/2018 11:30:00 AM
Client Sample ID: S-082148-111518-JP-V15-4.5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	11/26/2018 7:17:52 PM	41707
Sulfate	1400	30		mg/Kg	20	11/26/2018 7:17:52 PM	41707
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.033		mg/Kg	1	11/27/2018 6:07:17 PM	41737
EPA METHOD 6010B: SOIL METALS						Analyst: **rde**	
Arsenic	ND	2.4		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Barium	76	0.098		mg/Kg	1	12/12/2018 10:47:05 AM	41770
Cadmium	ND	0.098		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Chromium	6.5	0.29		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Copper	3.6	0.29		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Iron	8500	240		mg/Kg	100	12/6/2018 3:04:46 PM	41770
Lead	0.85	0.24		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Manganese	130	0.098		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Selenium	ND	2.4		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Silver	ND	0.24		mg/Kg	1	12/12/2018 10:47:05 AM	41770
Uranium	ND	4.9		mg/Kg	1	12/4/2018 5:04:54 PM	41770
Zinc	21	2.4		mg/Kg	1	12/12/2018 10:47:05 AM	41770
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/21/2018 6:19:39 PM	41655
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/21/2018 6:19:39 PM	41655
Surr: DNOP	98.3	50.6-138		%Rec	1	11/21/2018 6:19:39 PM	41655
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/21/2018 3:16:56 AM	41631
Surr: BFB	89.1	73.8-119		%Rec	1	11/21/2018 3:16:56 AM	41631
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/24/2018 8:18:42 PM	41631
Toluene	ND	0.050		mg/Kg	1	11/24/2018 8:18:42 PM	41631
Ethylbenzene	ND	0.050		mg/Kg	1	11/24/2018 8:18:42 PM	41631
Xylenes, Total	ND	0.10		mg/Kg	1	11/24/2018 8:18:42 PM	41631
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	11/24/2018 8:18:42 PM	41631

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-41677**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**41677**	RunNo:	**55810**					
Prep Date:	**11/21/2018**	Analysis Date:	**11/21/2018**	SeqNo:	**1861920**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-41677**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**41677**	RunNo:	**55810**					
Prep Date:	**11/21/2018**	Analysis Date:	**11/21/2018**	SeqNo:	**1861921**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.4	90	110			
Sulfate	29	1.5	30.00	0	97.5	90	110			

Sample ID	**MB-41707**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**41707**	RunNo:	**55869**					
Prep Date:	**11/26/2018**	Analysis Date:	**11/26/2018**	SeqNo:	**1863738**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID	**LCS-41707**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**41707**	RunNo:	**55869**					
Prep Date:	**11/26/2018**	Analysis Date:	**11/26/2018**	SeqNo:	**1863739**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			
Sulfate	29	1.5	30.00	0	98.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID **MB-41649**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **41649**	RunNo: **55813**
Prep Date: **11/20/2018**	Analysis Date: **11/21/2018**	SeqNo: **1861155** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		93.5	50.6	138			

Sample ID **1811958-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-111418-JP**	Batch ID: **41649**	RunNo: **55813**
Prep Date: **11/20/2018**	Analysis Date: **11/21/2018**	SeqNo: **1861160** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	66	10	49.75	40.40	52.0	53.5	126			S
Surr: DNOP	5.0		4.975		100	50.6	138			

Sample ID **1811958-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-111418-JP**	Batch ID: **41649**	RunNo: **55813**
Prep Date: **11/20/2018**	Analysis Date: **11/21/2018**	SeqNo: **1861161** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	9.9	49.31	40.40	32.1	53.5	126	16.4	21.7	S
Surr: DNOP	4.9		4.931		99.0	50.6	138	0	0	

Sample ID **LCS-41655**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **41655**	RunNo: **55806**
Prep Date: **11/20/2018**	Analysis Date: **11/21/2018**	SeqNo: **1861167** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	105	70	130			
Surr: DNOP	4.2		5.000		83.7	50.6	138			

Sample ID **MB-41655**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **41655**	RunNo: **55806**
Prep Date: **11/20/2018**	Analysis Date: **11/21/2018**	SeqNo: **1861168** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		86.9	50.6	138			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-41649**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**
Client ID:	**LCSS**	Batch ID:	**41649**	RunNo:	**55813**
Prep Date:	**11/20/2018**	Analysis Date:	**11/21/2018**	SeqNo:	**1862015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.8	70	130			
Surr: DNOP	4.8		5.000		95.2	50.6	138			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-41631**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**41631**		RunNo:	**55770**				
Prep Date:	**11/19/2018**	Analysis Date:	**11/20/2018**		SeqNo:	**1859870**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	850		1000		85.4	73.8	119			

Sample ID	**LCS-41631**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**41631**		RunNo:	**55770**				
Prep Date:	**11/19/2018**	Analysis Date:	**11/20/2018**		SeqNo:	**1859871**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	80.1	123			
Surr: BFB	1000		1000		100	73.8	119			

Sample ID	**1811958-021AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-111518-JP**	Batch ID:	**41631**		RunNo:	**55770**				
Prep Date:	**11/19/2018**	Analysis Date:	**11/20/2018**		SeqNo:	**1859874**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.9	24.49	0	123	77.8	128			
Surr: BFB	1000		979.4		106	73.8	119			

Sample ID	**1811958-021AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**S-082148-111518-JP**	Batch ID:	**41631**		RunNo:	**55770**				
Prep Date:	**11/19/2018**	Analysis Date:	**11/20/2018**		SeqNo:	**1859875**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.9	24.58	0	120	77.8	128	2.47	20	
Surr: BFB	1000		983.3		106	73.8	119	0	0	

Sample ID	**MB-41627**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**41627**		RunNo:	**55808**				
Prep Date:	**11/19/2018**	Analysis Date:	**11/21/2018**		SeqNo:	**1861349**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.7	73.8	119			

Sample ID	**LCS-41627**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**41627**		RunNo:	**55808**				
Prep Date:	**11/19/2018**	Analysis Date:	**11/21/2018**		SeqNo:	**1861350**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**LCS-41627**	SampType: **LCS**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **41627**		RunNo: **55808**					
Prep Date:	**11/19/2018**	Analysis Date: **11/21/2018**		SeqNo: **1861350**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	80.1	123			
Surr: BFB	1200		1000		118	73.8	119			

Sample ID	**1811958-001AMS**	SampType: **MS**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-111418-JP**	Batch ID: **41627**		RunNo: **55808**					
Prep Date:	**11/19/2018**	Analysis Date: **11/21/2018**		SeqNo: **1861352**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.51	0	91.2	77.8	128			
Surr: BFB	1100		980.4		109	73.8	119			

Sample ID	**1811958-001AMSD**	SampType: **MSD**		TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**S-082148-111418-JP**	Batch ID: **41627**		RunNo: **55808**					
Prep Date:	**11/19/2018**	Analysis Date: **11/21/2018**		SeqNo: **1861353**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.61	0	92.5	77.8	128	1.87	20	
Surr: BFB	1100		984.3		112	73.8	119	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**100NG BTEX LCS**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **41627**		RunNo: **55823**					
Prep Date:		Analysis Date: **11/24/2018**		SeqNo: **1861689**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.4	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	**1811958-016AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-111418-JP**	Batch ID: **41627**		RunNo: **55823**					
Prep Date:		Analysis Date: **11/24/2018**		SeqNo: **1861691**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0.003818	101	63.9	127			
Toluene	1.0	0.050	1.000	0	104	69.9	131			
Ethylbenzene	1.0	0.050	1.000	0	104	71	132			
Xylenes, Total	3.1	0.10	3.000	0	103	71.8	131			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	**1811958-016AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-111418-JP**	Batch ID: **41627**		RunNo: **55823**					
Prep Date:		Analysis Date: **11/24/2018**		SeqNo: **1861692**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0.003818	97.2	63.9	127	3.36	20	
Toluene	0.99	0.050	1.000	0	99.4	69.9	131	4.41	20	
Ethylbenzene	0.99	0.050	1.000	0	99.2	71	132	4.75	20	
Xylenes, Total	3.0	0.10	3.000	0	98.8	71.8	131	3.73	20	
Surr: 4-Bromofluorobenzene	0.94		1.000		94.0	80	120	0	0	

Sample ID	**100NG BTEX LCS**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **41631**		RunNo: **55823**					
Prep Date:		Analysis Date: **11/24/2018**		SeqNo: **1861699**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.4	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**1811958-022AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-111518-JP**	Batch ID: **41631**		RunNo: **55823**					
Prep Date:		Analysis Date: **11/24/2018**		SeqNo: **1861705**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0.004014	95.8	63.9	127			
Toluene	0.98	0.050	1.000	0	98.4	69.9	131			
Ethylbenzene	0.98	0.050	1.000	0	97.7	71	132			
Xylenes, Total	2.9	0.10	3.000	0	95.7	71.8	131			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.9	80	120			

Sample ID	**1811958-022AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**S-082148-111518-JP**	Batch ID: **41631**		RunNo: **55823**					
Prep Date:		Analysis Date: **11/24/2018**		SeqNo: **1861706**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0.004014	94.5	63.9	127	1.34	20	
Toluene	0.98	0.050	1.000	0	97.6	69.9	131	0.847	20	
Ethylbenzene	0.96	0.050	1.000	0	96.4	71	132	1.28	20	
Xylenes, Total	2.8	0.10	3.000	0	94.9	71.8	131	0.909	20	
Surr: 4-Bromofluorobenzene	0.94		1.000		93.6	80	120	0	0	

Sample ID	**MB-41627**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **41627**		RunNo: **55808**					
Prep Date:	**11/19/2018**	Analysis Date: **11/21/2018**		SeqNo: **1861784**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	**MB-41631**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **41631**		RunNo: **55770**					
Prep Date:	**11/19/2018**	Analysis Date: **11/20/2018**		SeqNo: **1861785**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.7	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**MB-41737**	SampType: **MBLK**		TestCode: **EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID: **41737**		RunNo: **55897**					
Prep Date:	**11/27/2018**	Analysis Date: **11/27/2018**		SeqNo: **1864666**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	**LLLCS-41737**	SampType: **LCSLL**		TestCode: **EPA Method 7471: Mercury**					
Client ID:	**BatchQC**	Batch ID: **41737**		RunNo: **55897**					
Prep Date:	**11/27/2018**	Analysis Date: **11/27/2018**		SeqNo: **1864667**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	83.6	70	130			

Sample ID	**LCS-41737**	SampType: **LCS**		TestCode: **EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID: **41737**		RunNo: **55897**					
Prep Date:	**11/27/2018**	Analysis Date: **11/27/2018**		SeqNo: **1864668**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	94.7	80	120			

Sample ID	**1811958-016BMS**	SampType: **MS**		TestCode: **EPA Method 7471: Mercury**					
Client ID:	**S-082148-111418-JP**	Batch ID: **41737**		RunNo: **55897**					
Prep Date:	**11/27/2018**	Analysis Date: **11/27/2018**		SeqNo: **1864670**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1648	0	101	80	120			

Sample ID	**1811958-016BMSD**	SampType: **MSD**		TestCode: **EPA Method 7471: Mercury**					
Client ID:	**S-082148-111418-JP**	Batch ID: **41737**		RunNo: **55897**					
Prep Date:	**11/27/2018**	Analysis Date: **11/27/2018**		SeqNo: **1864671**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.032	0.1625	0	100	80	120	2.20	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID **MB-41770**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **41770**	RunNo: **56083**
Prep Date: **11/28/2018**	Analysis Date: **12/4/2018**	SeqNo: **1873078** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Uranium	ND	5.0								

Sample ID **LCS-41770**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **41770**	RunNo: **56083**
Prep Date: **11/28/2018**	Analysis Date: **12/4/2018**	SeqNo: **1873082** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	25.00	0	103	80	120			
Barium	25	0.10	25.00	0	98.3	80	120			
Cadmium	25	0.10	25.00	0	99.8	80	120			
Chromium	24	0.30	25.00	0	97.9	80	120			
Copper	25	0.30	25.00	0	100	80	120			
Iron	26	2.5	25.00	0	105	80	120			
Lead	25	0.25	25.00	0	99.3	80	120			
Manganese	25	0.10	25.00	0	99.2	80	120			
Selenium	25	2.5	25.00	0	100	80	120			
Silver	5.1	0.25	5.000	0	102	80	120			
Uranium	23	5.0	25.00	0	92.2	80	120			

Sample ID **1811958-030BMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-111518-JP**	Batch ID: **41770**	RunNo: **56083**
Prep Date: **11/28/2018**	Analysis Date: **12/4/2018**	SeqNo: **1873154** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	2.5	24.58	0	85.9	75	125			
Barium	92	0.098	24.58	72.88	78.5	75	125			
Cadmium	21	0.098	24.58	0	85.0	75	125			
Chromium	26	0.29	24.58	6.496	80.2	75	125			
Copper	26	0.29	24.58	3.575	92.5	75	125			
Iron	6800	2.5	24.58	6495	1050	75	125			ES

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**1811958-030BMS**	SampType:	**MS**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**S-082148-111518-JP**	Batch ID:	**41770**			RunNo:	**56083**			
Prep Date:	**11/28/2018**	Analysis Date:	**12/4/2018**			SeqNo:	**1873154**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	21	0.25	24.58	0.8467	80.5	75	125			
Manganese	150	0.098	24.58	127.3	102	75	125			
Selenium	21	2.5	24.58	0	86.6	75	125			
Silver	3.7	0.25	4.915	0	74.9	75	125			S
Uranium	9.0	4.9	24.58	0	36.8	75	125			S
Zinc	38	2.5	24.58	19.27	75.2	75	125			

Sample ID	**1811958-030BMSD**	SampType:	**MSD**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**S-082148-111518-JP**	Batch ID:	**41770**			RunNo:	**56083**			
Prep Date:	**11/28/2018**	Analysis Date:	**12/4/2018**			SeqNo:	**1873155**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	2.5	24.60	0	85.2	75	125	0.702	20	
Barium	91	0.098	24.60	72.88	74.2	75	125	1.13	20	S
Cadmium	21	0.098	24.60	0	84.1	75	125	0.993	20	
Chromium	26	0.30	24.60	6.496	79.7	75	125	0.405	20	
Copper	26	0.30	24.60	3.575	92.5	75	125	0.0372	20	
Iron	6800	2.5	24.60	6495	1300	75	125	0.878	20	ES
Lead	20	0.25	24.60	0.8467	77.9	75	125	3.09	20	
Manganese	160	0.098	24.60	127.3	121	75	125	3.08	20	
Selenium	21	2.5	24.60	0	85.4	75	125	1.27	20	
Silver	3.6	0.25	4.920	0	74.0	75	125	1.12	20	S
Uranium	9.8	4.9	24.60	0	39.7	75	125	7.90	20	S
Zinc	39	2.5	24.60	19.27	81.3	75	125	3.94	20	

Sample ID	**MB-41770**	SampType:	**MBLK**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**PBS**	Batch ID:	**41770**			RunNo:	**56150**			
Prep Date:	**11/28/2018**	Analysis Date:	**12/6/2018**			SeqNo:	**1875546**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	2.5								

Sample ID	**LCS-41770**	SampType:	**LCS**			TestCode:	**EPA Method 6010B: Soil Metals**			
Client ID:	**LCSS**	Batch ID:	**41770**			RunNo:	**56150**			
Prep Date:	**11/28/2018**	Analysis Date:	**12/6/2018**			SeqNo:	**1875547**	Units:	**mg/Kg**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	25	2.5	25.00	0	102	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1811958**

09-Jan-19

Client: GHD

Project: Jal Landfarm

Sample ID	**1811958-030BMS**	SampType:	**MS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-111518-JP**	Batch ID:	**41770**		RunNo:	**56300**				
Prep Date:	**11/28/2018**	Analysis Date:	**12/12/2018**		SeqNo:	**1881445**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	97	0.098	24.58	76.21	83.2	75	125			
Silver	3.7	0.25	4.915	0	75.9	75	125			
Zinc	41	2.5	24.58	20.51	81.7	75	125			

Sample ID	**1811958-030BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**S-082148-111518-JP**	Batch ID:	**41770**		RunNo:	**56300**				
Prep Date:	**11/28/2018**	Analysis Date:	**12/12/2018**		SeqNo:	**1881446**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	95	0.098	24.60	76.21	76.7	75	125	1.65	20	
Silver	3.7	0.25	4.920	0	75.0	75	125	1.12	20	
Zinc	42	2.5	24.60	20.51	88.6	75	125	4.10	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1811958 | RcptNo: 1

Received By: **Jazzmine Burkhead** 11/17/2018 10:40:00 AM

Completed By: **Anne Thorne** 11/19/2018 10:00:13 AM

Reviewed By: ENM 11/19/18

Labeled by: DAD 11/19/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 11/19/18

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Yes			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: 505 884 0672

email or Fax#: Christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

# of Coolers: 1 CF = +0

Cooler Temp (including CF): 5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1811958	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides EPA 300		% Moisture		
11-14-18	1105	S	S-082148-111418-JP-T1	1x 4oz Glass Jar	ICE	001		X									X		X		
	1139		S-082148-111418-JP-T2			002		X									X		X		
	1133		S-082148-111418-JP-T3			003		X									X		X		
	1127		S-082148-111418-JP-T4			004		X									X		X		
	1210		S-082148-111418-JP-T5			005		X									X		X		
	1220		S-082148-111418-JP-T6			006		X									X		X		
	1224		S-082148-111418-JP-T7			007		X									X		X		
	1227		S-082148-111418-JP-T8			008		X									X		X		
	1245		S-082148-111418-JP-T9			009		X									X		X		
	1233		S-082148-111418-JP-T10			010		X									X		X		
	1158		S-082148-111418-JP-T11			011		X									X		X		
	1151		S-082148-111418-JP-T12			012		X									X		X		

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
11-16-18	0845				11/16/18	0845
11/16/18	1900			Courier	11/17/18	10:40

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE
Suite 200 Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ **Rush**

Project Name: Jal Land farm

Project #: 082148

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

# of Coolers: 1 (CF = +1.0)

Cooler Temp (including CF): 5.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1811958	BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Cl^- + Sulfates EPA 300	% moisture	Mercury (7471)	Metals (6010) see Remarks		
11-14-18	1147	S	S-082148-111418-JP-T13	1x glass 4oz Jar	ICE	-013		X									X	X				
	1143		S-082148-111418-JP-T14			-014		X									X	X				
	1205		S-082148-111418-JP-T15			-015		X									X	X				
	1045		S-082148-111418-JP-V1-4.5	2x glass 4oz Jar		-016	X	X									X		X	X		
	1320		S-082148-111418-JP-V2-4.5			-017	X	X									X		X	X		

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
11-16-18	0845				11/16/18	0845
11/16/18	1940				11/17/18	10:40

Remarks: For T13, T14, T15 Just analyze for Chlorides and for V1 and V2 analyze for Cl^- + Sulfates. For Metals analyze for As, Ba, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Zn
Courier

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE
Suite 200 Albuquerque, NM 87110

Phone #: 505 884 0672

email or Fax#: Christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Jal Land Farm

Project #: 082148

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

# of Coolers: 1 CF = +1.0

Cooler Temp (including CF): 5.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1811958	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Mercury 7471		Metals 6010 see Remarks		
11-15-18	1530	S	S-082148-111518-JP-V3-5.5	2x4oz gl-ss Jar	ICE	018	X	X					X				X		X		
	1548		S-082148-111518-JP-V4-5.5			019	X	X					X				X		X		
	1440		S-082148-111518-JP-V5-4.5			020	X	X					X				X		X		
	1426		S-082148-111518-JP-V6-4.5			021	X	X					X				X		X		
	1350		S-082148-111518-JP-V7-4.5			022	X	X					X				X		X		
	1250		S-082148-111518-JP-V8-4.5			023	X	X					X				X		X		
	1415		S-082148-111518-JP-V9-4.5			024	X	X					X				X		X		
	1400		S-082148-111518-JP-V10-4.5			025	X	X					X				X		X		
	1150		S-082148-111518-JP-V11-4.5			026	X	X					X				X		X		
	1210		S-082148-111518-JP-V12-4.5			027	X	X					X				X		X		
	1218		S-082148-111518-JP-V13-4.5			028	X	X					X				X		X		
	1235		S-082148-111518-JP-V14-4.5			029	X	X					X				X		X		

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
11-16-18	0845				11/16/18	0845
11/16/18	1940				11/17/18	1040

Remarks: For Metals please analyze for As, Ba, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Zn, Hg. For Chloride and sulfate analyze with EPA 300.1 method.

Courier

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE
Suite 200 Albuquerque NM 87110

Phone #: 505 884 0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

# of Coolers: 1 (CF = +1.0)

Cooler Temp(including CF): 5.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1811958	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl), F, Br, NO_3, NO_2, PO_4, (SO_4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Mercury 7471		Metals 6010 see Remarks		
11-15-18	1130	S	S-082148-111518-JP-V15-45	2x 4oz gl-ss Jar	ICE	030	X	X					X				X		X		

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-16-18	0845				11/16/18	0845
11/16/18	1900				11/17/18	10:40

Remarks: For Metals Please analyze for As, Ba, Cd, Cr Cu, Fe, Mn, Pb, Se, Ag, Zn, Hg. For chloride and sulfate analyze with method EPA 300.1

Courier

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Analytical Data 2019

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 28, 2019

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1903792

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 15 sample(s) on 3/16/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-001 **Collection Date:** 3/15/2019 10:15:00 AM
Client Sample ID: S-082148-031519-JP-V1-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	7.2	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/21/2019 11:59:55 AM	43763
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2019 11:59:55 AM	43763
Surr: DNOP	84.9	70-130		%Rec	1	3/21/2019 11:59:55 AM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/20/2019 12:27:13 AM	43727
Surr: BFB	87.0	73.8-119		%Rec	1	3/20/2019 12:27:13 AM	43727
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/20/2019 12:27:13 AM	43727
Toluene	ND	0.050		mg/Kg	1	3/20/2019 12:27:13 AM	43727
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2019 12:27:13 AM	43727
Xylenes, Total	ND	0.099		mg/Kg	1	3/20/2019 12:27:13 AM	43727
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	3/20/2019 12:27:13 AM	43727

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-002 **Collection Date:** 3/15/2019 10:35:00 AM
Client Sample ID: S-082148-031519-JP-V2-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	10	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/21/2019 1:12:47 PM	43763
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/21/2019 1:12:47 PM	43763
Surr: DNOP	92.3	70-130		%Rec	1	3/21/2019 1:12:47 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/20/2019 12:49:58 AM	43727
Surr: BFB	84.9	73.8-119		%Rec	1	3/20/2019 12:49:58 AM	43727
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/20/2019 12:49:58 AM	43727
Toluene	ND	0.050		mg/Kg	1	3/20/2019 12:49:58 AM	43727
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2019 12:49:58 AM	43727
Xylenes, Total	ND	0.099		mg/Kg	1	3/20/2019 12:49:58 AM	43727
Surr: 4-Bromofluorobenzene	92.4	80-120		%Rec	1	3/20/2019 12:49:58 AM	43727

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-003 **Collection Date:** 3/15/2019 10:50:00 AM
Client Sample ID: S-082148-031519-JP-V3-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	20	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	21	9.9		mg/Kg	1	3/21/2019 1:37:02 PM	43763
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/21/2019 1:37:02 PM	43763
Surr: DNOP	78.3	70-130		%Rec	1	3/21/2019 1:37:02 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/20/2019 1:12:45 AM	43727
Surr: BFB	86.0	73.8-119		%Rec	1	3/20/2019 1:12:45 AM	43727
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/20/2019 1:12:45 AM	43727
Toluene	ND	0.046		mg/Kg	1	3/20/2019 1:12:45 AM	43727
Ethylbenzene	ND	0.046		mg/Kg	1	3/20/2019 1:12:45 AM	43727
Xylenes, Total	ND	0.093		mg/Kg	1	3/20/2019 1:12:45 AM	43727
Surr: 4-Bromofluorobenzene	95.1	80-120		%Rec	1	3/20/2019 1:12:45 AM	43727

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-004 **Collection Date:** 3/15/2019 11:15:00 AM
Client Sample ID: S-082148-031519-JP-V4-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	280	20		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.6	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	130	9.5		mg/Kg	1	3/21/2019 2:01:26 PM	43763
Motor Oil Range Organics (MRO)	160	47		mg/Kg	1	3/21/2019 2:01:26 PM	43763
Surr: DNOP	89.5	70-130		%Rec	1	3/21/2019 2:01:26 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/20/2019 1:35:31 AM	43727
Surr: BFB	83.4	73.8-119		%Rec	1	3/20/2019 1:35:31 AM	43727
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/20/2019 1:35:31 AM	43727
Toluene	ND	0.049		mg/Kg	1	3/20/2019 1:35:31 AM	43727
Ethylbenzene	ND	0.049		mg/Kg	1	3/20/2019 1:35:31 AM	43727
Xylenes, Total	ND	0.097		mg/Kg	1	3/20/2019 1:35:31 AM	43727
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	3/20/2019 1:35:31 AM	43727

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-005 **Collection Date:** 3/15/2019 11:38:00 AM
Client Sample ID: S-082148-031519-JP-V5-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/21/2019 2:25:46 PM	43763
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2019 2:25:46 PM	43763
Surr: DNOP	84.4	70-130		%Rec	1	3/21/2019 2:25:46 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/20/2019 1:58:17 AM	43727
Surr: BFB	88.5	73.8-119		%Rec	1	3/20/2019 1:58:17 AM	43727
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/20/2019 1:58:17 AM	43727
Toluene	ND	0.050		mg/Kg	1	3/20/2019 1:58:17 AM	43727
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2019 1:58:17 AM	43727
Xylenes, Total	ND	0.099		mg/Kg	1	3/20/2019 1:58:17 AM	43727
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	3/20/2019 1:58:17 AM	43727

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-006 **Collection Date:** 3/15/2019 12:05:00 PM
Client Sample ID: S-082148-031519-JP-V6-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.3	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/26/2019 8:59:10 AM	43763
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/26/2019 8:59:10 AM	43763
Surr: DNOP	91.7	70-130		%Rec	1	3/26/2019 8:59:10 AM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/20/2019 2:21:01 AM	43727
Surr: BFB	86.4	73.8-119		%Rec	1	3/20/2019 2:21:01 AM	43727
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/20/2019 2:21:01 AM	43727
Toluene	ND	0.050		mg/Kg	1	3/20/2019 2:21:01 AM	43727
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2019 2:21:01 AM	43727
Xylenes, Total	ND	0.099		mg/Kg	1	3/20/2019 2:21:01 AM	43727
Surr: 4-Bromofluorobenzene	91.0	80-120		%Rec	1	3/20/2019 2:21:01 AM	43727

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-007 **Collection Date:** 3/15/2019 12:20:00 PM
Client Sample ID: S-082148-031519-JP-V7-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	19	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/21/2019 3:14:29 PM	43763
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/21/2019 3:14:29 PM	43763
Surr: DNOP	74.4	70-130		%Rec	1	3/21/2019 3:14:29 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/20/2019 2:43:48 AM	43727
Surr: BFB	86.0	73.8-119		%Rec	1	3/20/2019 2:43:48 AM	43727
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/20/2019 2:43:48 AM	43727
Toluene	ND	0.047		mg/Kg	1	3/20/2019 2:43:48 AM	43727
Ethylbenzene	ND	0.047		mg/Kg	1	3/20/2019 2:43:48 AM	43727
Xylenes, Total	ND	0.094		mg/Kg	1	3/20/2019 2:43:48 AM	43727
Surr: 4-Bromofluorobenzene	88.0	80-120		%Rec	1	3/20/2019 2:43:48 AM	43727

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-008 **Collection Date:** 3/15/2019 12:40:00 PM
Client Sample ID: S-082148-031519-JP-V8-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	10	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/21/2019 3:38:58 PM	43763
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/21/2019 3:38:58 PM	43763
Surr: DNOP	76.3	70-130		%Rec	1	3/21/2019 3:38:58 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/19/2019 9:34:52 AM	43729
Surr: BFB	98.7	73.8-119		%Rec	1	3/19/2019 9:34:52 AM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/19/2019 9:34:52 AM	43729
Toluene	ND	0.047		mg/Kg	1	3/19/2019 9:34:52 AM	43729
Ethylbenzene	ND	0.047		mg/Kg	1	3/19/2019 9:34:52 AM	43729
Xylenes, Total	ND	0.094		mg/Kg	1	3/19/2019 9:34:52 AM	43729
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	3/19/2019 9:34:52 AM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-009 **Collection Date:** 3/15/2019 12:55:00 PM
Client Sample ID: S-082148-031519-JP-V9-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	7.3	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/26/2019 9:23:18 AM	43763
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/26/2019 9:23:18 AM	43763
Surr: DNOP	97.4	70-130		%Rec	1	3/26/2019 9:23:18 AM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/19/2019 11:33:01 AM	43729
Surr: BFB	97.9	73.8-119		%Rec	1	3/19/2019 11:33:01 AM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/19/2019 11:33:01 AM	43729
Toluene	ND	0.049		mg/Kg	1	3/19/2019 11:33:01 AM	43729
Ethylbenzene	ND	0.049		mg/Kg	1	3/19/2019 11:33:01 AM	43729
Xylenes, Total	ND	0.099		mg/Kg	1	3/19/2019 11:33:01 AM	43729
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	3/19/2019 11:33:01 AM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-010 **Collection Date:** 3/15/2019 1:20:00 PM
Client Sample ID: S-082148-031519-JP-V10-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/21/2019 5:56:47 PM	43763
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2019 5:56:47 PM	43763
Surr: DNOP	70.3	70-130		%Rec	1	3/21/2019 5:56:47 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/19/2019 11:56:26 AM	43729
Surr: BFB	99.8	73.8-119		%Rec	1	3/19/2019 11:56:26 AM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/19/2019 11:56:26 AM	43729
Toluene	ND	0.049		mg/Kg	1	3/19/2019 11:56:26 AM	43729
Ethylbenzene	ND	0.049		mg/Kg	1	3/19/2019 11:56:26 AM	43729
Xylenes, Total	ND	0.098		mg/Kg	1	3/19/2019 11:56:26 AM	43729
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	3/19/2019 11:56:26 AM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-011 **Collection Date:** 3/15/2019 2:33:00 PM
Client Sample ID: S-082148-031519-JP-V11-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	9.4	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/21/2019 6:21:10 PM	43763
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2019 6:21:10 PM	43763
Surr: DNOP	72.4	70-130		%Rec	1	3/21/2019 6:21:10 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/19/2019 12:19:44 PM	43729
Surr: BFB	98.0	73.8-119		%Rec	1	3/19/2019 12:19:44 PM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/19/2019 12:19:44 PM	43729
Toluene	ND	0.049		mg/Kg	1	3/19/2019 12:19:44 PM	43729
Ethylbenzene	ND	0.049		mg/Kg	1	3/19/2019 12:19:44 PM	43729
Xylenes, Total	ND	0.098		mg/Kg	1	3/19/2019 12:19:44 PM	43729
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	3/19/2019 12:19:44 PM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-012 **Collection Date:** 3/15/2019 2:15:00 PM
Client Sample ID: S-082148-031519-JP-V12-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	12	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/26/2019 9:47:33 AM	43763
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/26/2019 9:47:33 AM	43763
Surr: DNOP	91.1	70-130		%Rec	1	3/26/2019 9:47:33 AM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/19/2019 12:43:04 PM	43729
Surr: BFB	98.6	73.8-119		%Rec	1	3/19/2019 12:43:04 PM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/19/2019 12:43:04 PM	43729
Toluene	ND	0.050		mg/Kg	1	3/19/2019 12:43:04 PM	43729
Ethylbenzene	ND	0.050		mg/Kg	1	3/19/2019 12:43:04 PM	43729
Xylenes, Total	ND	0.099		mg/Kg	1	3/19/2019 12:43:04 PM	43729
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	3/19/2019 12:43:04 PM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-013 **Collection Date:** 3/15/2019 1:35:00 PM
Client Sample ID: S-082148-031519-JP-V13-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/26/2019 10:11:44 AM	43763
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/26/2019 10:11:44 AM	43763
Surr: DNOP	99.1	70-130		%Rec	1	3/26/2019 10:11:44 AM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/19/2019 6:11:57 PM	43729
Surr: BFB	96.6	73.8-119		%Rec	1	3/19/2019 6:11:57 PM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/19/2019 6:11:57 PM	43729
Toluene	ND	0.047		mg/Kg	1	3/19/2019 6:11:57 PM	43729
Ethylbenzene	ND	0.047		mg/Kg	1	3/19/2019 6:11:57 PM	43729
Xylenes, Total	ND	0.094		mg/Kg	1	3/19/2019 6:11:57 PM	43729
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	3/19/2019 6:11:57 PM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-014 **Collection Date:** 3/15/2019 1:55:00 PM
Client Sample ID: S-082148-031519-JP-V14-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	8.4	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/27/2019 3:12:27 PM	43763
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/27/2019 3:12:27 PM	43763
Surr: DNOP	114	70-130		%Rec	1	3/27/2019 3:12:27 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/19/2019 6:35:27 PM	43729
Surr: BFB	97.9	73.8-119		%Rec	1	3/19/2019 6:35:27 PM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/19/2019 6:35:27 PM	43729
Toluene	ND	0.048		mg/Kg	1	3/19/2019 6:35:27 PM	43729
Ethylbenzene	ND	0.048		mg/Kg	1	3/19/2019 6:35:27 PM	43729
Xylenes, Total	ND	0.097		mg/Kg	1	3/19/2019 6:35:27 PM	43729
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	3/19/2019 6:35:27 PM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1903792
Project: Jal Landfarm

Lab ID: 1903792-015 **Collection Date:** 3/15/2019 3:05:00 PM
Client Sample ID: S-082148-031519-JP-V15-5' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 418.1: TPH						Analyst: **CLP**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	3/21/2019	43766
PERCENT MOISTURE						Analyst: **AG**	
Percent Moisture	13	1.0		wt%	1	3/18/2019	R58458
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/27/2019 3:29:24 PM	43763
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/27/2019 3:29:24 PM	43763
Surr: DNOP	98.4	70-130		%Rec	1	3/27/2019 3:29:24 PM	43763
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	3/19/2019 6:59:06 PM	43729
Surr: BFB	96.1	73.8-119		%Rec	1	3/19/2019 6:59:06 PM	43729
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg	1	3/19/2019 6:59:06 PM	43729
Toluene	ND	0.054		mg/Kg	1	3/19/2019 6:59:06 PM	43729
Ethylbenzene	ND	0.054		mg/Kg	1	3/19/2019 6:59:06 PM	43729
Xylenes, Total	ND	0.11		mg/Kg	1	3/19/2019 6:59:06 PM	43729
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	3/19/2019 6:59:06 PM	43729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903792**

28-Mar-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-43766**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **43766**	RunNo: **58538**
Prep Date: **3/19/2019**	Analysis Date: **3/21/2019**	SeqNo: **1965530** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID: **LCS-43766**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **43766**	RunNo: **58538**
Prep Date: **3/19/2019**	Analysis Date: **3/21/2019**	SeqNo: **1965531** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	98	20	100.0	0	98.3	54.3	153			

Sample ID: **LCSD-43766**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **43766**	RunNo: **58538**
Prep Date: **3/19/2019**	Analysis Date: **3/21/2019**	SeqNo: **1965532** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	105	54.3	153	6.69	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903792**

28-Mar-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-43763**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **43763**	RunNo: **58526**
Prep Date: **3/19/2019**	Analysis Date: **3/21/2019**	SeqNo: **1964505** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		86.2	70	130			

Sample ID: **LCS-43763**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **43763**	RunNo: **58526**
Prep Date: **3/19/2019**	Analysis Date: **3/21/2019**	SeqNo: **1964514** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.4	63.9	124			
Surr: DNOP	4.5		5.000		89.2	70	130			

Sample ID: **1903792-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-031519-JP**	Batch ID: **43763**	RunNo: **58526**
Prep Date: **3/19/2019**	Analysis Date: **3/21/2019**	SeqNo: **1964853** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.9	49.60	0	83.0	53.5	126			
Surr: DNOP	4.1		4.960		83.4	70	130			

Sample ID: **1903792-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-031519-JP**	Batch ID: **43763**	RunNo: **58526**
Prep Date: **3/19/2019**	Analysis Date: **3/21/2019**	SeqNo: **1964854** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.9	49.41	0	87.0	53.5	126	4.26	21.7	
Surr: DNOP	4.2		4.941		85.6	70	130	0	0	

Sample ID: **MB-43833**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **43833**	RunNo: **58623**
Prep Date: **3/22/2019**	Analysis Date: **3/26/2019**	SeqNo: **1969454** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		10.00		50.1	70	130			S

Sample ID: **LCS-43863**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **43863**	RunNo: **58623**
Prep Date: **3/25/2019**	Analysis Date: **3/27/2019**	SeqNo: **1969475** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903792**

28-Mar-19

Client: GHD

Project: Jal Landfarm

Sample ID: **LCS-43863**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **43863**	RunNo: **58623**
Prep Date: **3/25/2019**	Analysis Date: **3/27/2019**	SeqNo: **1969475** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.5		5.000		69.8	70	130			S

Sample ID: **MB-43863**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **43863**	RunNo: **58623**
Prep Date: **3/25/2019**	Analysis Date: **3/27/2019**	SeqNo: **1969476** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.0		10.00		80.4	70	130			

Sample ID: **MB-43833**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **43833**	RunNo: **58692**
Prep Date: **3/22/2019**	Analysis Date: **3/27/2019**	SeqNo: **1971266** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		94.7	70	130			

Sample ID: **LCS-43833**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **43833**	RunNo: **58692**
Prep Date: **3/22/2019**	Analysis Date: **3/27/2019**	SeqNo: **1971268** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.4	70	130			

Qualifiers:

H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903792**

28-Mar-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-43729**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **43729**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962648** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		98.8	73.8	119			

Sample ID: **LCS-43729**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **43729**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962649** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	80.1	123			
Surr: BFB	1100		1000		110	73.8	119			

Sample ID: **MB-43727**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **43727**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962672** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.6	73.8	119			

Sample ID: **LCS-43727**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **43727**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962673** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	80.1	123			
Surr: BFB	1100		1000		111	73.8	119			

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903792**

28-Mar-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-43729**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **43729**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962693** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID: **LCS-43729**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **43729**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962694** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.6	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **1903792-008AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-031519-JP**	Batch ID: **43729**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962696** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9416	0	118	63.9	127			
Toluene	1.2	0.047	0.9416	0	124	69.9	131			
Ethylbenzene	1.2	0.047	0.9416	0	127	71	132			
Xylenes, Total	3.6	0.094	2.825	0	128	71.8	131			
Surr: 4-Bromofluorobenzene	0.98		0.9416		104	80	120			

Sample ID: **1903792-008AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-031519-JP**	Batch ID: **43729**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962697** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	113	63.9	127	1.74	20	
Toluene	1.2	0.050	1.000	0	118	69.9	131	0.532	20	
Ethylbenzene	1.2	0.050	1.000	0	120	71	132	0.563	20	
Xylenes, Total	3.6	0.10	3.000	0	121	71.8	131	0.275	20	
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120	0	0	

Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903792**

28-Mar-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-43727**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **43727**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962711** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **LCS-43727**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **43727**	RunNo: **58461**
Prep Date: **3/18/2019**	Analysis Date: **3/19/2019**	SeqNo: **1962712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.5	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **GHD** Work Order Number: **1903792** RcptNo: **1**

Received By: **Erin Melendrez** **3/16/2019 10:50:00 AM**

Completed By: **Erin Melendrez** **3/18/2019 8:49:26 AM**

Reviewed By: ENM 3/18/19

LB: DAD 3/18/19

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 3/18/19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good	Yes			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE
Suite 200 Albuquerque NM 87110

Phone #: 505 884 0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: 5 day
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.7°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1903792	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)			% Moisture		Air Bubbles (Y or N)
3-15-19	1015	S	S-082148-031519-JP-V_1-5'	2 x 402 glass Jar	ICE	-001	x			x										x		
	1035		S-082148-031519-JP-V_2-5'			-002	x			x										x		
	1050		S-082148-031519-JP-V_3-5'			-003	x			x										x		
	1115		S-082148-031519-JP-V_4-5'			-004	x			x										x		
	1138		S-082148-031519-JP-V_5-5'			-005	x			x										x		
	1205		S-082148-031519-JP-V_6-5'			-006	x			x										x		
	1220		S-082148-031519-JP-V_7-5'			-007	x			x										x		
	1240		S-082148-031519-JP-V_8-5'			-008	x			x										x		
	1255		S-082148-031519-JP-V_9-5'			-009	x			x										x		
	1320		S-082148-031519-JP-V_{10}-5'			-010	x			x										x		
	1433		S-082148-031519-JP-V_{11}-5'			-011	x			x										x		
	1415		S-082148-031519-JP-V_{12}-5'			-012	x			x										x		

Date:	Time:	Relinquished by:	Received by:	Date	Time
3-15-19	1600			3/15/19	1600
3/15/19	1900		Courier ENH 3/16/19	3/16/19	1050

Remarks: for all samples run analytical for TPH GRO/DRO/ORO using 418.1, and BTEX using 8021B, as well as % moisture as seen on SSOW

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE
Suite 200 Albuquerque NM 87110

Phone #: (505) 884 0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush 5 day

Project Name: Jal Landfarm

Project #: 082148

Project Manager: christine Mathews

Sampler: Joshua Rigg

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.7°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1903792	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)		BTEX (8021B)	TPH GRO/DRO/ORO (418.1)	% moisture		
3-15-19	1335	S	S-082148-031519-JP-V13-5'	2x 4oz glass Jar	ICE	-013												X	X	X		
↓	1355	↓	S-082148-031519-JP-V14-5'	↓	↓	-014												X	X	X		
↓	1505	↓	S-082148-031519-JP-V15-5'	↓	↓	-015												X	X	X		

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3-15-19	1600				3/15/19	1600
3/15/19	1900			courier	3/16/19	1050

Remarks: for all samples run analytical for TPH GRO/DRO/ORO using 418.1, BTEX using 8021B, and % moisture as written in SSOW

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 18, 2019

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX:

RE: Jal Landfarm OrderNo.: 1906009

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 30 sample(s) on 6/1/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued June 20, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V1-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 10:25:00 AM
Lab ID: 1906009-001 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	5.8	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	4.9	1.6		mg/Kg-dr	1	6/5/2019 9:53:15 PM	45398
Sulfate	92	1.6		mg/Kg-dr	1	6/5/2019 9:53:15 PM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.2		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Arsenic	ND	5.2		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Barium	110	0.21		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Beryllium	0.33	0.31		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Cadmium	ND	0.21		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Chromium	5.2	0.63		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Copper	2.2	0.63		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Iron	5300	260		mg/Kg-dr	100	6/4/2019 8:15:45 AM	45344
Lead	0.82	0.52		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Manganese	50	0.21		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Selenium	ND	5.2		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Silver	ND	0.52		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Thallium	ND	5.2		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
Uranium	ND	10		mg/Kg-dr	2	7/17/2019 10:04:38 AM	45344
Zinc	11	5.2		mg/Kg-dr	2	6/4/2019 10:13:58 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/5/2019 8:59:16 PM	45356
Motor Oil Range Organics (MRO)	ND	53		mg/Kg-dr	1	6/5/2019 8:59:16 PM	45356
Surr: DNOP	95.4	70-130		%Rec	1	6/5/2019 8:59:16 PM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg-dr	1	6/4/2019 6:33:02 PM	45341
Surr: BFB	91.7	73.8-119		%Rec	1	6/4/2019 6:33:02 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 6:33:02 PM	45341
Toluene	ND	0.049		mg/Kg-dr	1	6/4/2019 6:33:02 PM	45341
Ethylbenzene	ND	0.049		mg/Kg-dr	1	6/4/2019 6:33:02 PM	45341
Xylenes, Total	ND	0.099		mg/Kg-dr	1	6/4/2019 6:33:02 PM	45341
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	6/4/2019 6:33:02 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V2-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 11:05:00 AM
Lab ID: 1906009-002 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	11	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/5/2019 11:07:40 PM	45398
Sulfate	6.3	1.7		mg/Kg-dr	1	6/5/2019 11:07:40 PM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.6		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Arsenic	ND	5.6		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Barium	82	0.22		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Beryllium	0.62	0.33		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Chromium	9.5	0.67		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Copper	1.8	0.67		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Iron	9900	280		mg/Kg-dr	100	6/4/2019 8:17:25 AM	45344
Lead	1.2	0.56		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Manganese	50	0.22		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Selenium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Silver	ND	0.56		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Thallium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:10:15 AM	45344
Zinc	22	5.6		mg/Kg-dr	2	6/4/2019 10:19:01 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/5/2019 9:23:47 PM	45356
Motor Oil Range Organics (MRO)	ND	57		mg/Kg-dr	1	6/5/2019 9:23:47 PM	45356
Surr: DNOP	89.1	70-130		%Rec	1	6/5/2019 9:23:47 PM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.6		mg/Kg-dr	1	6/4/2019 7:43:12 PM	45341
Surr: BFB	91.8	73.8-119		%Rec	1	6/4/2019 7:43:12 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.028		mg/Kg-dr	1	6/4/2019 7:43:12 PM	45341
Toluene	ND	0.056		mg/Kg-dr	1	6/4/2019 7:43:12 PM	45341
Ethylbenzene	ND	0.056		mg/Kg-dr	1	6/4/2019 7:43:12 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/4/2019 7:43:12 PM	45341
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	6/4/2019 7:43:12 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V3-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 3:05:00 PM
Lab ID: 1906009-003 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	12	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/5/2019 11:32:29 PM	45398
Sulfate	40	1.7		mg/Kg-dr	1	6/5/2019 11:32:29 PM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.6		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Arsenic	11	5.6		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Barium	61	0.22		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Beryllium	0.81	0.34		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Chromium	13	0.67		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Copper	1.8	0.67		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Iron	13000	280		mg/Kg-dr	100	6/4/2019 8:19:04 AM	45344
Lead	ND	0.56		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Manganese	160	0.22		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Selenium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Silver	ND	0.56		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Thallium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:15:55 AM	45344
Zinc	29	5.6		mg/Kg-dr	2	6/4/2019 10:20:42 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/14/2019 11:06:05 AM	45572
Motor Oil Range Organics (MRO)	ND	55		mg/Kg-dr	1	6/14/2019 11:06:05 AM	45572
Surr: DNOP	111	70-130		%Rec	1	6/14/2019 11:06:05 AM	45572
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg-dr	1	6/4/2019 8:06:43 PM	45341
Surr: BFB	89.9	73.8-119		%Rec	1	6/4/2019 8:06:43 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.028		mg/Kg-dr	1	6/4/2019 8:06:43 PM	45341
Toluene	ND	0.055		mg/Kg-dr	1	6/4/2019 8:06:43 PM	45341
Ethylbenzene	ND	0.055		mg/Kg-dr	1	6/4/2019 8:06:43 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/4/2019 8:06:43 PM	45341
Surr: 4-Bromofluorobenzene	85.6	80-120		%Rec	1	6/4/2019 8:06:43 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V4-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 11:30:00 AM
Lab ID: 1906009-004 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	11	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	8.4		mg/Kg-dr	5	6/5/2019 11:57:17 PM	45398
Sulfate	19	8.4		mg/Kg-dr	5	6/5/2019 11:57:17 PM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.5		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Arsenic	ND	5.5		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Barium	98	0.22		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Beryllium	0.50	0.33		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Chromium	8.0	0.66		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Copper	1.5	0.66		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Iron	8200	280		mg/Kg-dr	100	6/4/2019 8:28:15 AM	45344
Lead	0.63	0.55		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Manganese	47	0.22		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Selenium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Silver	ND	0.55		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Thallium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:17:22 AM	45344
Zinc	17	5.5		mg/Kg-dr	2	6/4/2019 10:31:36 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/5/2019 10:12:44 PM	45356
Motor Oil Range Organics (MRO)	ND	56		mg/Kg-dr	1	6/5/2019 10:12:44 PM	45356
Surr: DNOP	88.8	70-130		%Rec	1	6/5/2019 10:12:44 PM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg-dr	1	6/5/2019 3:53:01 PM	45341
Surr: BFB	90.3	73.8-119		%Rec	1	6/5/2019 3:53:01 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	6/5/2019 3:53:01 PM	45341
Toluene	ND	0.055		mg/Kg-dr	1	6/5/2019 3:53:01 PM	45341
Ethylbenzene	ND	0.055		mg/Kg-dr	1	6/5/2019 3:53:01 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 3:53:01 PM	45341
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	6/5/2019 3:53:01 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V5-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 12:00:00 PM
Lab ID: 1906009-005 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	9.6	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/6/2019 12:22:06 AM	45398
Sulfate	31	1.7		mg/Kg-dr	1	6/6/2019 12:22:06 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.5		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Arsenic	ND	5.5		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Barium	120	0.22		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Beryllium	0.60	0.33		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Chromium	9.4	0.66		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Copper	2.1	0.66		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Iron	9500	270		mg/Kg-dr	100	6/4/2019 8:29:57 AM	45344
Lead	ND	0.55		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Manganese	52	0.22		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Selenium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Silver	ND	0.55		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Thallium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:18:46 AM	45344
Zinc	22	5.5		mg/Kg-dr	2	6/4/2019 10:33:17 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/5/2019 10:37:11 PM	45356
Motor Oil Range Organics (MRO)	ND	55		mg/Kg-dr	1	6/5/2019 10:37:11 PM	45356
Surr: DNOP	83.5	70-130		%Rec	1	6/5/2019 10:37:11 PM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	6/5/2019 4:16:22 PM	45341
Surr: BFB	89.3	73.8-119		%Rec	1	6/5/2019 4:16:22 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	6/5/2019 4:16:22 PM	45341
Toluene	ND	0.053		mg/Kg-dr	1	6/5/2019 4:16:22 PM	45341
Ethylbenzene	ND	0.053		mg/Kg-dr	1	6/5/2019 4:16:22 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 4:16:22 PM	45341
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/5/2019 4:16:22 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V6-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 12:20:00 PM
Lab ID: 1906009-006 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	8.6	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	4.8	1.6		mg/Kg-dr	1	6/6/2019 1:11:45 AM	45398
Sulfate	190	33		mg/Kg-dr	20	6/6/2019 1:24:09 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.4		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Arsenic	ND	5.4		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Barium	100	0.22		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Beryllium	0.41	0.33		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Chromium	6.8	0.65		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Copper	2.1	0.65		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Iron	6500	270		mg/Kg-dr	100	6/4/2019 8:31:36 AM	45344
Lead	1.1	0.54		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Manganese	53	0.22		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Selenium	ND	5.4		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Silver	ND	0.54		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Thallium	ND	5.4		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:20:10 AM	45344
Zinc	15	5.4		mg/Kg-dr	2	6/4/2019 10:34:58 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/5/2019 11:01:38 PM	45356
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dr	1	6/5/2019 11:01:38 PM	45356
Surr: DNOP	103	70-130		%Rec	1	6/5/2019 11:01:38 PM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg-dr	1	6/5/2019 4:39:45 PM	45341
Surr: BFB	93.4	73.8-119		%Rec	1	6/5/2019 4:39:45 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg-dr	1	6/5/2019 4:39:45 PM	45341
Toluene	ND	0.054		mg/Kg-dr	1	6/5/2019 4:39:45 PM	45341
Ethylbenzene	ND	0.054		mg/Kg-dr	1	6/5/2019 4:39:45 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 4:39:45 PM	45341
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	6/5/2019 4:39:45 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V7-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 12:55:00 PM
Lab ID: 1906009-007 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	8.7	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/6/2019 1:36:34 AM	45398
Sulfate	80	1.7		mg/Kg-dr	1	6/6/2019 1:36:34 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.4		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Arsenic	ND	5.4		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Barium	85	0.22		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Beryllium	0.52	0.32		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Chromium	8.5	0.65		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Copper	0.83	0.65		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Iron	8600	270		mg/Kg-dr	100	6/4/2019 8:33:15 AM	45344
Lead	1.6	0.54		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Manganese	41	0.22		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Selenium	ND	5.4		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Silver	ND	0.54		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Thallium	ND	5.4		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:21:34 AM	45344
Zinc	18	5.4		mg/Kg-dr	2	6/4/2019 10:36:38 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/5/2019 11:47:35 PM	45356
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dr	1	6/5/2019 11:47:35 PM	45356
Surr: DNOP	86.0	70-130		%Rec	1	6/5/2019 11:47:35 PM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg-dr	1	6/5/2019 6:13:29 PM	45341
Surr: BFB	91.2	73.8-119		%Rec	1	6/5/2019 6:13:29 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	6/5/2019 6:13:29 PM	45341
Toluene	ND	0.052		mg/Kg-dr	1	6/5/2019 6:13:29 PM	45341
Ethylbenzene	ND	0.052		mg/Kg-dr	1	6/5/2019 6:13:29 PM	45341
Xylenes, Total	ND	0.10		mg/Kg-dr	1	6/5/2019 6:13:29 PM	45341
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	6/5/2019 6:13:29 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V8-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 1:20:00 PM
Lab ID: 1906009-008 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	9.8	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/6/2019 2:01:23 AM	45398
Sulfate	16	1.7		mg/Kg-dr	1	6/6/2019 2:01:23 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.5		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Arsenic	ND	5.5		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Barium	130	0.22		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Beryllium	ND	0.33		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Chromium	5.3	0.66		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Copper	2.0	0.66		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Iron	5100	270		mg/Kg-dr	100	6/4/2019 8:34:55 AM	45344
Lead	1.1	0.55		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Manganese	51	0.22		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Selenium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Silver	ND	0.55		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Thallium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:22:59 AM	45344
Zinc	13	5.5		mg/Kg-dr	2	6/4/2019 10:38:18 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	12	11		mg/Kg-dr	1	6/6/2019 12:12:01 AM	45356
Motor Oil Range Organics (MRO)	ND	55		mg/Kg-dr	1	6/6/2019 12:12:01 AM	45356
Surr: DNOP	98.9	70-130		%Rec	1	6/6/2019 12:12:01 AM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	6/5/2019 6:37:04 PM	45341
Surr: BFB	89.8	73.8-119		%Rec	1	6/5/2019 6:37:04 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	6/5/2019 6:37:04 PM	45341
Toluene	ND	0.053		mg/Kg-dr	1	6/5/2019 6:37:04 PM	45341
Ethylbenzene	ND	0.053		mg/Kg-dr	1	6/5/2019 6:37:04 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 6:37:04 PM	45341
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/5/2019 6:37:04 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V9-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 1:40:00 PM
Lab ID: 1906009-009 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	14	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/6/2019 2:26:12 AM	45398
Sulfate	250	35		mg/Kg-dr	20	6/6/2019 2:38:37 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.8		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Arsenic	ND	5.8		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Barium	200	0.23		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Beryllium	0.39	0.35		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Cadmium	ND	0.23		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Chromium	6.0	0.70		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Copper	2.5	0.70		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Iron	6000	290		mg/Kg-dr	100	6/4/2019 8:36:53 AM	45344
Lead	ND	0.58		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Manganese	99	0.23		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Selenium	ND	5.8		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Silver	0.89	0.58		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Thallium	ND	5.8		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
Uranium	ND	12		mg/Kg-dr	2	7/17/2019 10:24:24 AM	45344
Zinc	15	5.8		mg/Kg-dr	2	6/4/2019 10:39:58 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/6/2019 12:36:35 AM	45356
Motor Oil Range Organics (MRO)	ND	57		mg/Kg-dr	1	6/6/2019 12:36:35 AM	45356
Surr: DNOP	89.4	70-130		%Rec	1	6/6/2019 12:36:35 AM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.6		mg/Kg-dr	1	6/5/2019 7:00:33 PM	45341
Surr: BFB	92.0	73.8-119		%Rec	1	6/5/2019 7:00:33 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.028		mg/Kg-dr	1	6/5/2019 7:00:33 PM	45341
Toluene	ND	0.056		mg/Kg-dr	1	6/5/2019 7:00:33 PM	45341
Ethylbenzene	ND	0.056		mg/Kg-dr	1	6/5/2019 7:00:33 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 7:00:33 PM	45341
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	6/5/2019 7:00:33 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V10-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 1:55:00 PM
Lab ID: 1906009-010 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	12	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/6/2019 2:51:02 AM	45398
Sulfate	170	34		mg/Kg-dr	20	6/6/2019 3:03:27 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.7		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Arsenic	ND	5.7		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Barium	99	0.23		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Beryllium	0.34	0.34		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Cadmium	ND	0.23		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Chromium	5.6	0.68		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Copper	2.1	0.68		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Iron	5700	290		mg/Kg-dr	100	6/4/2019 8:38:33 AM	45344
Lead	1.3	0.57		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Manganese	90	0.23		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Selenium	ND	5.7		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Silver	ND	0.57		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Thallium	ND	5.7		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:25:48 AM	45344
Zinc	13	5.7		mg/Kg-dr	2	6/4/2019 10:41:38 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/6/2019 1:00:58 AM	45356
Motor Oil Range Organics (MRO)	ND	57		mg/Kg-dr	1	6/6/2019 1:00:58 AM	45356
Surr: DNOP	82.3	70-130		%Rec	1	6/6/2019 1:00:58 AM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg-dr	1	6/5/2019 7:23:59 PM	45341
Surr: BFB	88.3	73.8-119		%Rec	1	6/5/2019 7:23:59 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.028		mg/Kg-dr	1	6/5/2019 7:23:59 PM	45341
Toluene	ND	0.055		mg/Kg-dr	1	6/5/2019 7:23:59 PM	45341
Ethylbenzene	ND	0.055		mg/Kg-dr	1	6/5/2019 7:23:59 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 7:23:59 PM	45341
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/5/2019 7:23:59 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V11-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 3:35:00 PM
Lab ID: 1906009-011 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	13	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	13	1.7		mg/Kg-dr	1	6/6/2019 3:40:39 AM	45398
Sulfate	270	35		mg/Kg-dr	20	6/6/2019 3:53:04 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.6		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Arsenic	7.8	5.6		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Barium	56	0.22		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Beryllium	0.61	0.33		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Chromium	9.5	0.67		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Copper	2.2	0.67		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Iron	10000	280		mg/Kg-dr	100	6/4/2019 8:40:13 AM	45344
Lead	ND	0.56		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Manganese	68	0.22		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Selenium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Silver	ND	0.56		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Thallium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:27:13 AM	45344
Zinc	21	5.6		mg/Kg-dr	2	6/4/2019 10:43:18 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/6/2019 1:25:19 AM	45356
Motor Oil Range Organics (MRO)	ND	56		mg/Kg-dr	1	6/6/2019 1:25:19 AM	45356
Surr: DNOP	84.2	70-130		%Rec	1	6/6/2019 1:25:19 AM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.6		mg/Kg-dr	1	6/5/2019 7:47:25 PM	45341
Surr: BFB	89.8	73.8-119		%Rec	1	6/5/2019 7:47:25 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.028		mg/Kg-dr	1	6/5/2019 7:47:25 PM	45341
Toluene	ND	0.056		mg/Kg-dr	1	6/5/2019 7:47:25 PM	45341
Ethylbenzene	ND	0.056		mg/Kg-dr	1	6/5/2019 7:47:25 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 7:47:25 PM	45341
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/5/2019 7:47:25 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V12-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 3:55:00 PM
Lab ID: 1906009-012 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	10	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/6/2019 4:05:29 AM	45398
Sulfate	72	1.7		mg/Kg-dr	1	6/6/2019 4:05:29 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.5		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Arsenic	13	5.5		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Barium	60	0.22		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Beryllium	0.59	0.33		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Chromium	8.9	0.65		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Copper	1.4	0.65		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Iron	10000	270		mg/Kg-dr	100	6/4/2019 8:41:53 AM	45344
Lead	1.4	0.55		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Manganese	210	0.22		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Selenium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Silver	ND	0.55		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Thallium	ND	5.5		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:28:36 AM	45344
Zinc	20	5.5		mg/Kg-dr	2	6/4/2019 10:44:59 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/6/2019 1:49:35 AM	45356
Motor Oil Range Organics (MRO)	ND	55		mg/Kg-dr	1	6/6/2019 1:49:35 AM	45356
Surr: DNOP	84.8	70-130		%Rec	1	6/6/2019 1:49:35 AM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	6/5/2019 8:10:48 PM	45341
Surr: BFB	89.7	73.8-119		%Rec	1	6/5/2019 8:10:48 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg-dr	1	6/5/2019 8:10:48 PM	45341
Toluene	ND	0.053		mg/Kg-dr	1	6/5/2019 8:10:48 PM	45341
Ethylbenzene	ND	0.053		mg/Kg-dr	1	6/5/2019 8:10:48 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 8:10:48 PM	45341
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/5/2019 8:10:48 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V13-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 2:15:00 PM
Lab ID: 1906009-013 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	12	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	1.7		mg/Kg-dr	1	6/6/2019 4:30:18 AM	45398
Sulfate	88	1.7		mg/Kg-dr	1	6/6/2019 4:30:18 AM	45398
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.6		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Arsenic	ND	5.6		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Barium	120	0.22		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Beryllium	0.36	0.33		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Cadmium	ND	0.22		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Chromium	5.5	0.67		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Copper	3.0	0.67		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Iron	5800	280		mg/Kg-dr	100	6/4/2019 8:43:32 AM	45344
Lead	ND	0.56		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Manganese	72	0.22		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Selenium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Silver	ND	0.56		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Thallium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:34:18 AM	45344
Zinc	14	5.6		mg/Kg-dr	2	6/4/2019 10:52:43 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/6/2019 2:13:59 AM	45356
Motor Oil Range Organics (MRO)	ND	56		mg/Kg-dr	1	6/6/2019 2:13:59 AM	45356
Surr: DNOP	83.0	70-130		%Rec	1	6/6/2019 2:13:59 AM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg-dr	1	6/5/2019 8:34:11 PM	45341
Surr: BFB	89.9	73.8-119		%Rec	1	6/5/2019 8:34:11 PM	45341
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.028		mg/Kg-dr	1	6/5/2019 8:34:11 PM	45341
Toluene	ND	0.055		mg/Kg-dr	1	6/5/2019 8:34:11 PM	45341
Ethylbenzene	ND	0.055		mg/Kg-dr	1	6/5/2019 8:34:11 PM	45341
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/5/2019 8:34:11 PM	45341
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/5/2019 8:34:11 PM	45341

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V14-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 2:45:00 PM
Lab ID: 1906009-014 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	12	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	1.7		mg/Kg-dr	1	6/10/2019 3:51:02 PM	45461
Sulfate	72	1.7		mg/Kg-dr	1	6/10/2019 3:51:02 PM	45461
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.6		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Arsenic	5.9	5.6		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Barium	110	0.23		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Beryllium	0.68	0.34		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Cadmium	ND	0.23		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Chromium	11	0.68		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Copper	ND	0.68		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Iron	10000	280		mg/Kg-dr	100	6/4/2019 8:53:15 AM	45344
Lead	ND	0.56		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Manganese	49	0.23		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Selenium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Silver	ND	0.56		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Thallium	ND	5.6		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
Uranium	ND	11		mg/Kg-dr	2	7/17/2019 10:35:44 AM	45344
Zinc	23	5.6		mg/Kg-dr	2	6/4/2019 10:54:25 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/6/2019 2:38:14 AM	45356
Motor Oil Range Organics (MRO)	ND	57		mg/Kg-dr	1	6/6/2019 2:38:14 AM	45356
Surr: DNOP	81.1	70-130		%Rec	1	6/6/2019 2:38:14 AM	45356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg-dr	1	6/4/2019 12:33:45 PM	45348
Surr: BFB	104	73.8-119		%Rec	1	6/4/2019 12:33:45 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.027		mg/Kg-dr	1	6/4/2019 12:33:45 PM	45348
Toluene	ND	0.054		mg/Kg-dr	1	6/4/2019 12:33:45 PM	45348
Ethylbenzene	ND	0.054		mg/Kg-dr	1	6/4/2019 12:33:45 PM	45348
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/4/2019 12:33:45 PM	45348
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	6/4/2019 12:33:45 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-052919-JP-V15-5'
Project: Jal Landfarm
Collection Date: 5/29/2019 3:25:00 PM
Lab ID: 1906009-015 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	26	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	42	41		mg/Kg-dr	20	6/10/2019 4:53:06 PM	45461
Sulfate	3900	100		mg/Kg-dr	50	6/11/2019 8:59:39 PM	45461
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	6.7		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Arsenic	ND	6.7		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Barium	120	0.27		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Beryllium	0.54	0.40		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Cadmium	ND	0.27		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Chromium	9.0	0.81		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Copper	16	0.81		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Iron	9500	340		mg/Kg-dr	100	6/4/2019 8:54:57 AM	45344
Lead	2.9	0.67		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Manganese	170	0.27		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Selenium	ND	6.7		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Silver	ND	0.67		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Thallium	ND	6.7		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
Uranium	ND	13		mg/Kg-dr	2	7/17/2019 10:37:08 AM	45344
Zinc	27	6.7		mg/Kg-dr	2	6/4/2019 10:56:05 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	13		mg/Kg-dr	1	6/5/2019 5:39:16 PM	45362
Motor Oil Range Organics (MRO)	ND	67		mg/Kg-dr	1	6/5/2019 5:39:16 PM	45362
Surr: DNOP	116	70-130		%Rec	1	6/5/2019 5:39:16 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	6.5		mg/Kg-dr	1	6/4/2019 1:46:43 PM	45348
Surr: BFB	107	73.8-119		%Rec	1	6/4/2019 1:46:43 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.032		mg/Kg-dr	1	6/4/2019 1:46:43 PM	45348
Toluene	ND	0.065		mg/Kg-dr	1	6/4/2019 1:46:43 PM	45348
Ethylbenzene	ND	0.065		mg/Kg-dr	1	6/4/2019 1:46:43 PM	45348
Xylenes, Total	ND	0.13		mg/Kg-dr	1	6/4/2019 1:46:43 PM	45348
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	1	6/4/2019 1:46:43 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T1
Project: Jal Landfarm
Collection Date: 5/30/2019 10:30:00 AM
Lab ID: 1906009-016 **Matrix:** SOIL
Received Date: 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	3.3	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	7.8		mg/Kg-dr	5	6/10/2019 5:05:30 PM	45461
Sulfate	14	7.8		mg/Kg-dr	5	6/10/2019 5:05:30 PM	45461
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Arsenic	ND	5.0		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Barium	110	0.20		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Beryllium	0.47	0.30		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Cadmium	ND	0.20		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Chromium	7.4	0.60		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Copper	3.8	0.60		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Iron	8000	250		mg/Kg-dr	100	6/4/2019 8:56:37 AM	45344
Lead	0.90	0.50		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Manganese	97	0.20		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Selenium	ND	5.0		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Silver	ND	0.50		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Thallium	ND	5.0		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
Uranium	ND	10		mg/Kg-dr	2	7/17/2019 10:38:31 AM	45344
Zinc	18	5.0		mg/Kg-dr	2	6/4/2019 10:57:46 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	10	10		mg/Kg-dr	1	6/5/2019 6:01:35 PM	45362
Motor Oil Range Organics (MRO)	66	51		mg/Kg-dr	1	6/5/2019 6:01:35 PM	45362
Surr: DNOP	75.2	70-130		%Rec	1	6/5/2019 6:01:35 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg-dr	1	6/4/2019 2:59:06 PM	45348
Surr: BFB	97.8	73.8-119		%Rec	1	6/4/2019 2:59:06 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg-dr	1	6/4/2019 2:59:06 PM	45348
Toluene	ND	0.049		mg/Kg-dr	1	6/4/2019 2:59:06 PM	45348
Ethylbenzene	ND	0.049		mg/Kg-dr	1	6/4/2019 2:59:06 PM	45348
Xylenes, Total	ND	0.098		mg/Kg-dr	1	6/4/2019 2:59:06 PM	45348
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	6/4/2019 2:59:06 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T2
Project: Jal Landfarm
Collection Date: 5/30/2019 10:45:00 AM
Lab ID: 1906009-017
Matrix: SOIL
Received Date: 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	4.9	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	16		mg/Kg-dr	5	6/11/2019 2:59:47 PM	45491
Sulfate	48	16		mg/Kg-dr	5	6/11/2019 2:59:47 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.2		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Arsenic	ND	5.2		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Barium	200	0.21		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Beryllium	0.51	0.31		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Cadmium	ND	0.21		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Chromium	8.5	0.63		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Copper	4.4	0.63		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Iron	8200	260		mg/Kg-dr	100	6/4/2019 8:58:16 AM	45344
Lead	1.0	0.52		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Manganese	72	0.21		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Selenium	ND	5.2		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Silver	ND	0.52		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Thallium	ND	5.2		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
Uranium	ND	10		mg/Kg-dr	2	7/17/2019 10:39:56 AM	45344
Zinc	16	5.2		mg/Kg-dr	2	6/4/2019 10:59:26 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	45	10		mg/Kg-dr	1	6/6/2019 9:50:43 PM	45362
Motor Oil Range Organics (MRO)	160	51		mg/Kg-dr	1	6/6/2019 9:50:43 PM	45362
Surr: DNOP	76.5	70-130		%Rec	1	6/6/2019 9:50:43 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	6/4/2019 3:23:12 PM	45348
Surr: BFB	98.1	73.8-119		%Rec	1	6/4/2019 3:23:12 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.026		mg/Kg-dr	1	6/4/2019 3:23:12 PM	45348
Toluene	ND	0.051		mg/Kg-dr	1	6/4/2019 3:23:12 PM	45348
Ethylbenzene	ND	0.051		mg/Kg-dr	1	6/4/2019 3:23:12 PM	45348
Xylenes, Total	ND	0.10		mg/Kg-dr	1	6/4/2019 3:23:12 PM	45348
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	6/4/2019 3:23:12 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T3
Project: Jal Landfarm
Collection Date: 5/30/2019 11:00:00 AM
Lab ID: 1906009-018 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	1.9	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	15		mg/Kg-dr	5	6/11/2019 3:49:25 PM	45491
Sulfate	39	15		mg/Kg-dr	5	6/11/2019 3:49:25 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Arsenic	ND	5.1		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Barium	98	0.20		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Beryllium	0.47	0.30		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Cadmium	ND	0.20		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Chromium	7.1	0.61		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Copper	1.9	0.61		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Iron	7200	250		mg/Kg-dr	100	6/4/2019 8:59:56 AM	45344
Lead	1.1	0.51		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Manganese	62	0.20		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Selenium	ND	5.1		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Silver	ND	0.51		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Thallium	ND	5.1		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
Uranium	ND	10		mg/Kg-dr	2	7/17/2019 10:41:20 AM	45344
Zinc	19	5.1		mg/Kg-dr	2	6/4/2019 11:01:06 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	470	100		mg/Kg-dr	10	6/5/2019 6:46:17 PM	45362
Motor Oil Range Organics (MRO)	1100	510		mg/Kg-dr	10	6/5/2019 6:46:17 PM	45362
Surr: DNOP	0	70-130	S	%Rec	10	6/5/2019 6:46:17 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg-dr	1	6/4/2019 3:47:28 PM	45348
Surr: BFB	102	73.8-119		%Rec	1	6/4/2019 3:47:28 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 3:47:28 PM	45348
Toluene	ND	0.050		mg/Kg-dr	1	6/4/2019 3:47:28 PM	45348
Ethylbenzene	ND	0.050		mg/Kg-dr	1	6/4/2019 3:47:28 PM	45348
Xylenes, Total	ND	0.099		mg/Kg-dr	1	6/4/2019 3:47:28 PM	45348
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	6/4/2019 3:47:28 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T4
Project: Jal Landfarm
Collection Date: 5/30/2019 11:20:00 AM
Lab ID: 1906009-019 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	2.7	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	3.1		mg/Kg-dr	1	6/11/2019 4:14:14 PM	45491
Sulfate	49	3.1		mg/Kg-dr	1	6/11/2019 4:14:14 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Arsenic	ND	5.1		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Barium	120	0.20		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Beryllium	0.51	0.30		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Cadmium	ND	0.20		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Chromium	6.6	0.61		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Copper	1.8	0.61		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Iron	7000	250		mg/Kg-dr	100	6/4/2019 9:01:35 AM	45344
Lead	1.5	0.51		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Manganese	65	0.20		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Selenium	ND	5.1		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Silver	ND	0.51		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Thallium	ND	5.1		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
Uranium	ND	10		mg/Kg-dr	2	7/17/2019 10:42:44 AM	45344
Zinc	16	5.1		mg/Kg-dr	2	6/4/2019 11:02:46 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	630	99		mg/Kg-dr	10	6/5/2019 7:08:38 PM	45362
Motor Oil Range Organics (MRO)	1100	500		mg/Kg-dr	10	6/5/2019 7:08:38 PM	45362
Surr: DNOP	0	70-130	S	%Rec	10	6/5/2019 7:08:38 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg-dr	1	6/4/2019 4:11:42 PM	45348
Surr: BFB	98.8	73.8-119		%Rec	1	6/4/2019 4:11:42 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 4:11:42 PM	45348
Toluene	ND	0.049		mg/Kg-dr	1	6/4/2019 4:11:42 PM	45348
Ethylbenzene	ND	0.049		mg/Kg-dr	1	6/4/2019 4:11:42 PM	45348
Xylenes, Total	ND	0.098		mg/Kg-dr	1	6/4/2019 4:11:42 PM	45348
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	6/4/2019 4:11:42 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T5
Project: Jal Landfarm
Collection Date: 5/30/2019 11:35:00 AM
Lab ID: 1906009-020 **Matrix:** SOIL
Received Date: 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	2.4	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	3.1		mg/Kg-dr	1	6/11/2019 4:39:02 PM	45491
Sulfate	6.9	3.1		mg/Kg-dr	1	6/11/2019 4:39:02 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Arsenic	ND	5.1		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Barium	39	0.20		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Beryllium	0.35	0.31		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Cadmium	ND	0.20		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Chromium	6.3	0.61		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Copper	3.0	0.61		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Iron	6200	250		mg/Kg-dr	100	6/4/2019 9:03:15 AM	45344
Lead	2.7	0.51		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Manganese	75	0.20		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Selenium	ND	5.1		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Silver	ND	0.51		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Thallium	ND	5.1		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
Uranium	ND	10		mg/Kg-dr	2	7/17/2019 10:44:09 AM	45344
Zinc	19	5.1		mg/Kg-dr	2	6/4/2019 11:04:26 AM	45344
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	6/5/2019 7:30:52 PM	45362
Motor Oil Range Organics (MRO)	ND	51		mg/Kg-dr	1	6/5/2019 7:30:52 PM	45362
Surr: DNOP	125	70-130		%Rec	1	6/5/2019 7:30:52 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg-dr	1	6/4/2019 4:35:52 PM	45348
Surr: BFB	111	73.8-119		%Rec	1	6/4/2019 4:35:52 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg-dr	1	6/4/2019 4:35:52 PM	45348
Toluene	ND	0.048		mg/Kg-dr	1	6/4/2019 4:35:52 PM	45348
Ethylbenzene	ND	0.048		mg/Kg-dr	1	6/4/2019 4:35:52 PM	45348
Xylenes, Total	ND	0.096		mg/Kg-dr	1	6/4/2019 4:35:52 PM	45348
Surr: 4-Bromofluorobenzene	124	80-120	S	%Rec	1	6/4/2019 4:35:52 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T6
Project: Jal Landfarm
Collection Date: 5/30/2019 11:52:00 AM
Lab ID: 1906009-021 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	3.6	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	3.1		mg/Kg-dr	1	6/11/2019 5:03:51 PM	45491
Sulfate	54	3.1		mg/Kg-dr	1	6/11/2019 5:03:51 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.5		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Arsenic	ND	8.5		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Barium	130	0.34		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Beryllium	ND	0.51		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Cadmium	ND	0.34		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Chromium	6.3	1.0		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Copper	3.8	1.0		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Iron	6300	430		mg/Kg-dr	100	6/7/2019 7:56:20 AM	45432
Lead	2.7	0.85		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Manganese	73	0.34		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Selenium	ND	8.5		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Silver	ND	0.85		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Thallium	ND	8.5		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 10:45:34 AM	45432
Zinc	16	8.5		mg/Kg-dr	2	6/7/2019 8:23:16 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	17	10		mg/Kg-dr	1	6/6/2019 10:15:17 PM	45362
Motor Oil Range Organics (MRO)	120	51		mg/Kg-dr	1	6/6/2019 10:15:17 PM	45362
Surr: DNOP	122	70-130		%Rec	1	6/6/2019 10:15:17 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg-dr	1	6/4/2019 5:00:05 PM	45348
Surr: BFB	98.9	73.8-119		%Rec	1	6/4/2019 5:00:05 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 5:00:05 PM	45348
Toluene	ND	0.050		mg/Kg-dr	1	6/4/2019 5:00:05 PM	45348
Ethylbenzene	ND	0.050		mg/Kg-dr	1	6/4/2019 5:00:05 PM	45348
Xylenes, Total	ND	0.099		mg/Kg-dr	1	6/4/2019 5:00:05 PM	45348
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	6/4/2019 5:00:05 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T7
Project: Jal Landfarm
Collection Date: 5/30/2019 12:00:00 PM
Lab ID: 1906009-022 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	4.0	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	3.1		mg/Kg-dr	1	6/11/2019 5:28:40 PM	45491
Sulfate	28	3.1		mg/Kg-dr	1	6/11/2019 5:28:40 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.7		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Arsenic	ND	8.7		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Barium	120	0.35		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Beryllium	ND	0.52		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Cadmium	ND	0.35		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Chromium	5.4	1.0		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Copper	3.3	1.0		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Iron	5500	440		mg/Kg-dr	100	6/7/2019 7:58:13 AM	45432
Lead	2.4	0.87		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Manganese	60	0.35		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Selenium	ND	8.7		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Silver	ND	0.87		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Thallium	ND	8.7		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 10:55:31 AM	45432
Zinc	13	8.7		mg/Kg-dr	2	6/7/2019 8:35:13 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	14	10		mg/Kg-dr	1	6/5/2019 8:15:39 PM	45362
Motor Oil Range Organics (MRO)	90	52		mg/Kg-dr	1	6/5/2019 8:15:39 PM	45362
Surr: DNOP	88.4	70-130		%Rec	1	6/5/2019 8:15:39 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	6/4/2019 5:24:12 PM	45348
Surr: BFB	104	73.8-119		%Rec	1	6/4/2019 5:24:12 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.026		mg/Kg-dr	1	6/4/2019 5:24:12 PM	45348
Toluene	ND	0.051		mg/Kg-dr	1	6/4/2019 5:24:12 PM	45348
Ethylbenzene	ND	0.051		mg/Kg-dr	1	6/4/2019 5:24:12 PM	45348
Xylenes, Total	ND	0.10		mg/Kg-dr	1	6/4/2019 5:24:12 PM	45348
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	1	6/4/2019 5:24:12 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T8
Project: Jal Landfarm
Collection Date: 5/30/2019 12:25:00 PM
Lab ID: 1906009-023 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	3.6	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	3.1		mg/Kg-dr	1	6/11/2019 6:18:20 PM	45491
Sulfate	31	3.1		mg/Kg-dr	1	6/11/2019 6:18:20 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.6		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Arsenic	ND	8.6		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Barium	140	0.34		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Beryllium	ND	0.52		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Cadmium	ND	0.34		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Chromium	6.0	1.0		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Copper	2.9	1.0		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Iron	5000	430		mg/Kg-dr	100	6/7/2019 8:00:05 AM	45432
Lead	2.1	0.86		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Manganese	54	0.34		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Selenium	ND	8.6		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Silver	ND	0.86		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Thallium	ND	8.6		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 10:56:55 AM	45432
Zinc	14	8.6		mg/Kg-dr	2	6/7/2019 8:36:48 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	21	10		mg/Kg-dr	1	6/6/2019 10:39:58 PM	45362
Motor Oil Range Organics (MRO)	120	50		mg/Kg-dr	1	6/6/2019 10:39:58 PM	45362
Surr: DNOP	149	70-130	S	%Rec	1	6/6/2019 10:39:58 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	6/4/2019 5:48:24 PM	45348
Surr: BFB	100	73.8-119		%Rec	1	6/4/2019 5:48:24 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 5:48:24 PM	45348
Toluene	ND	0.051		mg/Kg-dr	1	6/4/2019 5:48:24 PM	45348
Ethylbenzene	ND	0.051		mg/Kg-dr	1	6/4/2019 5:48:24 PM	45348
Xylenes, Total	ND	0.10		mg/Kg-dr	1	6/4/2019 5:48:24 PM	45348
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	6/4/2019 5:48:24 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T9
Project: Jal Landfarm
Collection Date: 5/30/2019 12:40:00 PM
Lab ID: 1906009-024 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	2.4	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	3.0		mg/Kg-dr	1	6/11/2019 6:43:08 PM	45491
Sulfate	82	3.0		mg/Kg-dr	1	6/11/2019 6:43:08 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.6		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Arsenic	ND	8.6		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Barium	80	0.34		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Beryllium	ND	0.51		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Cadmium	ND	0.34		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Chromium	5.8	1.0		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Copper	4.6	1.0		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Iron	6300	430		mg/Kg-dr	100	6/7/2019 8:01:58 AM	45432
Lead	1.4	0.86		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Manganese	66	0.34		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Selenium	ND	8.6		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Silver	ND	0.86		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Thallium	ND	8.6		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 10:58:20 AM	45432
Zinc	15	8.6		mg/Kg-dr	2	6/7/2019 8:38:23 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	6/5/2019 9:00:23 PM	45362
Motor Oil Range Organics (MRO)	63	51		mg/Kg-dr	1	6/5/2019 9:00:23 PM	45362
Surr: DNOP	138	70-130	S	%Rec	1	6/5/2019 9:00:23 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg-dr	1	6/4/2019 7:49:33 PM	45348
Surr: BFB	102	73.8-119		%Rec	1	6/4/2019 7:49:33 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 7:49:33 PM	45348
Toluene	ND	0.050		mg/Kg-dr	1	6/4/2019 7:49:33 PM	45348
Ethylbenzene	ND	0.050		mg/Kg-dr	1	6/4/2019 7:49:33 PM	45348
Xylenes, Total	ND	0.10		mg/Kg-dr	1	6/4/2019 7:49:33 PM	45348
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	6/4/2019 7:49:33 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T10
Project: Jal Landfarm
Collection Date: 5/30/2019 12:49:00 PM
Lab ID: 1906009-025 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	2.7	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	3.1		mg/Kg-dr	1	6/11/2019 7:07:57 PM	45491
Sulfate	5.8	3.1		mg/Kg-dr	1	6/11/2019 7:07:57 PM	45491
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.6		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Arsenic	ND	8.6		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Barium	73	0.34		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Beryllium	ND	0.52		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Cadmium	ND	0.34		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Chromium	5.5	1.0		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Copper	1.9	1.0		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Iron	5100	430		mg/Kg-dr	100	6/7/2019 8:11:00 AM	45432
Lead	2.1	0.86		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Manganese	48	0.34		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Selenium	ND	8.6		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Silver	ND	0.86		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Thallium	ND	8.6		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 10:59:44 AM	45432
Zinc	13	8.6		mg/Kg-dr	2	6/7/2019 8:39:56 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	6/6/2019 11:29:23 PM	45362
Motor Oil Range Organics (MRO)	55	51		mg/Kg-dr	1	6/6/2019 11:29:23 PM	45362
Surr: DNOP	140	70-130	S	%Rec	1	6/6/2019 11:29:23 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg-dr	1	6/4/2019 8:13:55 PM	45348
Surr: BFB	107	73.8-119		%Rec	1	6/4/2019 8:13:55 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg-dr	1	6/4/2019 8:13:55 PM	45348
Toluene	ND	0.048		mg/Kg-dr	1	6/4/2019 8:13:55 PM	45348
Ethylbenzene	ND	0.048		mg/Kg-dr	1	6/4/2019 8:13:55 PM	45348
Xylenes, Total	ND	0.096		mg/Kg-dr	1	6/4/2019 8:13:55 PM	45348
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	1	6/4/2019 8:13:55 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T11
Project: Jal Landfarm
Collection Date: 5/30/2019 2:03:00 PM
Lab ID: 1906009-026 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	1.9	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.7		mg/Kg-dr	5	6/12/2019 3:12:53 PM	45527
Sulfate	38	7.7		mg/Kg-dr	5	6/12/2019 3:12:53 PM	45527
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.5		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Arsenic	ND	8.5		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Barium	69	0.34		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Beryllium	ND	0.51		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Cadmium	ND	0.34		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Chromium	5.2	1.0		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Copper	2.7	1.0		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Iron	5600	430		mg/Kg-dr	100	6/7/2019 8:12:55 AM	45432
Lead	1.8	0.85		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Manganese	61	0.34		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Selenium	ND	8.5		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Silver	ND	0.85		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Thallium	ND	8.5		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 11:01:08 AM	45432
Zinc	13	8.5		mg/Kg-dr	2	6/7/2019 8:41:32 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	6/6/2019 11:53:59 PM	45362
Motor Oil Range Organics (MRO)	ND	51		mg/Kg-dr	1	6/6/2019 11:53:59 PM	45362
Surr: DNOP	165	70-130	S	%Rec	1	6/6/2019 11:53:59 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg-dr	1	6/4/2019 8:38:11 PM	45348
Surr: BFB	106	73.8-119		%Rec	1	6/4/2019 8:38:11 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg-dr	1	6/4/2019 8:38:11 PM	45348
Toluene	ND	0.047		mg/Kg-dr	1	6/4/2019 8:38:11 PM	45348
Ethylbenzene	ND	0.047		mg/Kg-dr	1	6/4/2019 8:38:11 PM	45348
Xylenes, Total	ND	0.095		mg/Kg-dr	1	6/4/2019 8:38:11 PM	45348
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	1	6/4/2019 8:38:11 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T12
Project: Jal Landfarm
Collection Date: 5/30/2019 1:50:00 PM
Lab ID: 1906009-027 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	5.0	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.9		mg/Kg-dr	5	6/12/2019 4:02:31 PM	45527
Sulfate	3300	79		mg/Kg-dr	50	6/13/2019 6:39:10 PM	45527
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.9		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Arsenic	ND	8.9		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Barium	58	0.35		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Beryllium	ND	0.53		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Cadmium	ND	0.35		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Chromium	11	1.1		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Copper	130	1.1		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Iron	8900	440		mg/Kg-dr	100	6/7/2019 8:14:47 AM	45432
Lead	1.1	0.89		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Manganese	90	0.35		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Selenium	ND	8.9		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Silver	ND	0.89		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Thallium	ND	8.9		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
Uranium	ND	18		mg/Kg-dr	2	7/17/2019 11:02:32 AM	45432
Zinc	18	8.9		mg/Kg-dr	2	6/7/2019 8:43:07 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	11		mg/Kg-dr	1	6/5/2019 10:29:18 PM	45362
Motor Oil Range Organics (MRO)	ND	53		mg/Kg-dr	1	6/5/2019 10:29:18 PM	45362
Surr: DNOP	122	70-130		%Rec	1	6/5/2019 10:29:18 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg-dr	1	6/4/2019 9:02:25 PM	45348
Surr: BFB	106	73.8-119		%Rec	1	6/4/2019 9:02:25 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.026		mg/Kg-dr	1	6/4/2019 9:02:25 PM	45348
Toluene	ND	0.053		mg/Kg-dr	1	6/4/2019 9:02:25 PM	45348
Ethylbenzene	ND	0.053		mg/Kg-dr	1	6/4/2019 9:02:25 PM	45348
Xylenes, Total	ND	0.11		mg/Kg-dr	1	6/4/2019 9:02:25 PM	45348
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	1	6/4/2019 9:02:25 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T13
Project: Jal Landfarm
Collection Date: 5/30/2019 1:05:00 PM
Lab ID: 1906009-028 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	3.5	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	14	7.7		mg/Kg-dr	5	6/12/2019 4:27:20 PM	45527
Sulfate	760	7.7		mg/Kg-dr	5	6/12/2019 4:27:20 PM	45527
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.7		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Arsenic	ND	8.7		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Barium	92	0.35		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Beryllium	ND	0.52		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Cadmium	ND	0.35		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Chromium	6.6	1.0		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Copper	4.0	1.0		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Iron	6800	440		mg/Kg-dr	100	6/7/2019 8:16:22 AM	45432
Lead	2.4	0.87		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Manganese	80	0.35		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Selenium	ND	8.7		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Silver	ND	0.87		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Thallium	ND	8.7		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 11:03:56 AM	45432
Zinc	14	8.7		mg/Kg-dr	2	6/7/2019 8:44:43 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	20	10		mg/Kg-dr	1	6/7/2019 12:18:43 AM	45362
Motor Oil Range Organics (MRO)	110	51		mg/Kg-dr	1	6/7/2019 12:18:43 AM	45362
Surr: DNOP	157	70-130	S	%Rec	1	6/7/2019 12:18:43 AM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg-dr	1	6/4/2019 9:26:39 PM	45348
Surr: BFB	112	73.8-119		%Rec	1	6/4/2019 9:26:39 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 9:26:39 PM	45348
Toluene	ND	0.050		mg/Kg-dr	1	6/4/2019 9:26:39 PM	45348
Ethylbenzene	ND	0.050		mg/Kg-dr	1	6/4/2019 9:26:39 PM	45348
Xylenes, Total	ND	0.099		mg/Kg-dr	1	6/4/2019 9:26:39 PM	45348
Surr: 4-Bromofluorobenzene	126	80-120	S	%Rec	1	6/4/2019 9:26:39 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T14
Project: Jal Landfarm
Collection Date: 5/30/2019 1:30:00 PM
Lab ID: 1906009-029 **Matrix:** SOIL **Received Date:** 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	3.6	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.8		mg/Kg-dr	5	6/12/2019 4:52:09 PM	45527
Sulfate	25	7.8		mg/Kg-dr	5	6/12/2019 4:52:09 PM	45527
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	8.7		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Arsenic	ND	8.7		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Barium	270	0.35		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Beryllium	ND	0.52		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Cadmium	ND	0.35		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Chromium	4.9	1.0		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Copper	3.2	1.0		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Iron	4600	430		mg/Kg-dr	100	6/7/2019 8:18:15 AM	45432
Lead	1.6	0.87		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Manganese	63	0.35		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Selenium	ND	8.7		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Silver	ND	0.87		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Thallium	ND	8.7		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
Uranium	ND	17		mg/Kg-dr	2	7/17/2019 11:05:21 AM	45432
Zinc	12	8.7		mg/Kg-dr	2	6/7/2019 8:46:18 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg-dr	1	6/5/2019 11:13:49 PM	45362
Motor Oil Range Organics (MRO)	57	52		mg/Kg-dr	1	6/5/2019 11:13:49 PM	45362
Surr: DNOP	103	70-130		%Rec	1	6/5/2019 11:13:49 PM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	6/4/2019 9:50:48 PM	45348
Surr: BFB	105	73.8-119		%Rec	1	6/4/2019 9:50:48 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg-dr	1	6/4/2019 9:50:48 PM	45348
Toluene	ND	0.051		mg/Kg-dr	1	6/4/2019 9:50:48 PM	45348
Ethylbenzene	ND	0.051		mg/Kg-dr	1	6/4/2019 9:50:48 PM	45348
Xylenes, Total	ND	0.10		mg/Kg-dr	1	6/4/2019 9:50:48 PM	45348
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	1	6/4/2019 9:50:48 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-082148-053019-JP-T15
Project: Jal Landfarm
Collection Date: 5/30/2019 2:35:00 PM
Lab ID: 1906009-030 **Matrix:** SOIL
Received Date: 6/1/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
PERCENT MOISTURE						Analyst: **JMR**	
Percent Moisture	6.9	1.0		wt%	1	6/4/2019	R60423
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	8.1		mg/Kg-dr	5	6/12/2019 5:41:47 PM	45527
Sulfate	6100	81		mg/Kg-dr	50	6/13/2019 6:51:35 PM	45527
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	9.0		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Arsenic	ND	9.0		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Barium	370	0.36		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Beryllium	ND	0.54		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Cadmium	ND	0.36		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Chromium	15	1.1		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Copper	220	1.1		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Iron	11000	450		mg/Kg-dr	100	6/7/2019 8:20:07 AM	45432
Lead	3.3	0.90		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Manganese	100	0.36		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Selenium	ND	9.0		mg/Kg-dr	2	6/8/2019 10:29:03 AM	45432
Silver	ND	0.90		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Thallium	ND	9.0		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
Uranium	ND	18		mg/Kg-dr	2	7/17/2019 11:11:03 AM	45432
Zinc	34	9.0		mg/Kg-dr	2	6/7/2019 8:53:28 AM	45432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	160	11		mg/Kg-dr	1	6/8/2019 3:52:49 AM	45362
Motor Oil Range Organics (MRO)	630	54		mg/Kg-dr	1	6/8/2019 3:52:49 AM	45362
Surr: DNOP	125	70-130		%Rec	1	6/8/2019 3:52:49 AM	45362
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg-dr	1	6/4/2019 10:15:00 PM	45348
Surr: BFB	106	73.8-119		%Rec	1	6/4/2019 10:15:00 PM	45348
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.026		mg/Kg-dr	1	6/4/2019 10:15:00 PM	45348
Toluene	ND	0.051		mg/Kg-dr	1	6/4/2019 10:15:00 PM	45348
Ethylbenzene	ND	0.051		mg/Kg-dr	1	6/4/2019 10:15:00 PM	45348
Xylenes, Total	ND	0.10		mg/Kg-dr	1	6/4/2019 10:15:00 PM	45348
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	1	6/4/2019 10:15:00 PM	45348

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-001 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-001B/S-082148-05291 **Sampling Time** 10:25 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.055	6/10/2019 7:22:00 PM	HSW	EPA 6020A	
%moisture	8.6	Percent		6/10/2019 12:27:00 PM	HSW	%moisture	

Sample Number 190605029-002 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-002B/S-082148-05291 **Sampling Time** 11:05 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.055	6/10/2019 7:45:00 PM	HSW	EPA 6020A	
%moisture	10.6	Percent		6/10/2019 12:28:00 PM	HSW	%moisture	

Sample Number 190605029-003 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-003B/S-082148-05291 **Sampling Time** 3:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0555	6/10/2019 7:48:00 PM	HSW	EPA 6020A	
%moisture	10.6	Percent		6/10/2019 12:29:00 PM	HSW	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-004 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-004B/S-082148-05291 **Sampling Time** 11:30 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.055	6/10/2019 7:50:00 PM	HSW	EPA 6020A	
%moisture	10.7	Percent		6/10/2019 12:29:00 PM	HSW	%moisture	

Sample Number 190605029-005 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-005B/S-082148-05291 **Sampling Time** 12:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.055	6/10/2019 7:53:00 PM	HSW	EPA 6020A	
%moisture	9.2	Percent		6/10/2019 12:30:00 PM	HSW	%moisture	

Sample Number 190605029-006 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-006B/S-082148-05291 **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0555	6/10/2019 8:11:00 PM	HSW	EPA 6020A	
%moisture	10.3	Percent		6/10/2019 12:30:00 PM	HSW	%moisture	

Sample Number 190605029-007 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-007B/S-082148-05291 **Sampling Time** 12:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.054	6/10/2019 8:13:00 PM	HSW	EPA 6020A	
%moisture	8.5	Percent		6/10/2019 12:30:00 PM	HSW	%moisture	

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ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-008 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-008B/S-082148-05291 **Sampling Time** 1:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	6/10/2019 8:16:00 PM	HSW	EPA 6020A	
%moisture	9.0	Percent		6/10/2019 12:34:00 PM	HSW	%moisture	

Sample Number 190605029-009 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-009B/S-082148-05291 **Sampling Time** 1:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.058	6/10/2019 8:18:00 PM	HSW	EPA 6020A	
%moisture	13.5	Percent		6/10/2019 12:34:00 PM	HSW	%moisture	

Sample Number 190605029-010 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-010B/S-082148-05291 **Sampling Time** 1:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.056	6/10/2019 8:21:00 PM	HSW	EPA 6020A	
%moisture	10.9	Percent		6/10/2019 12:34:00 PM	HSW	%moisture	

Sample Number 190605029-011 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-011B/S-082148-05291 **Sampling Time** 3:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	6/10/2019 8:24:00 PM	HSW	EPA 6020A	
%moisture	15.0	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

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Address: 4901 HAWKINS NE SUITE D
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Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-012 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-012B/S-082148-05291 **Sampling Time** 3:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	6/10/2019 8:26:00 PM	HSW	EPA 6020A	
%moisture	9.3	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-013 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-013B/S-082148-05291 **Sampling Time** 2:15 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.057	6/10/2019 8:29:00 PM	HSW	EPA 6020A	
%moisture	13.0	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-014 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-014B/S-082148-05291 **Sampling Time** 2:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.057	6/10/2019 8:31:00 PM	HSW	EPA 6020A	
%moisture	12.5	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-015 **Sampling Date** 5/29/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-015B/S-082148-05291 **Sampling Time** 3:25 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0575	6/10/2019 8:34:00 PM	HSW	EPA 6020A	
%moisture	13.0	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-016 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-016B/S-082148-05301 **Sampling Time** 10:30 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0515	6/10/2019 8:52:00 PM	HSW	EPA 6020A	
%moisture	3.4	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-017 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-017B/S-082148-05301 **Sampling Time** 10:45 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0545	mg/Kg	0.0515	6/13/2019 5:19:00 PM	HSW	EPA 6020A	
%moisture	3.9	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-018 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-018B/S-082148-05301 **Sampling Time** 11:00 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.102	mg/Kg	0.0505	6/13/2019 5:22:00 PM	HSW	EPA 6020A	
%moisture	2.0	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-019 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-019B/S-082148-05301 **Sampling Time** 11:20 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	6/13/2019 5:24:00 PM	HSW	EPA 6020A	
%moisture	6.2	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-020 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-020B/S-082148-05301 **Sampling Time** 11:35 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0549	mg/Kg	0.05	6/13/2019 5:27:00 PM	HSW	EPA 6020A	
%moisture	2.1	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-021 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-021B/S-082148-05301 **Sampling Time** 11:52 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.052	6/13/2019 5:29:00 PM	HSW	EPA 6020A	
%moisture	4.0	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-022 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-022B/S-082148-05301 **Sampling Time** 12:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	6/13/2019 5:32:00 PM	HSW	EPA 6020A	
%moisture	5.6	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-023 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-023B/S-082148-05301 **Sampling Time** 12:25 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0511	mg/Kg	0.051	6/13/2019 5:50:00 PM	HSW	EPA 6020A	
%moisture	2.9	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-024 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-024B/S-082148-05301 **Sampling Time** 12:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0794	mg/Kg	0.051	6/13/2019 5:53:00 PM	HSW	EPA 6020A	
%moisture	2.4	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-025 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-025B/S-082148-05301 **Sampling Time** 12:49 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.051	6/13/2019 5:55:00 PM	HSW	EPA 6020A	
%moisture	2.7	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-026 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-026B/S-082148-05301 **Sampling Time** 2:03 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.156	mg/Kg	0.051	6/13/2019 5:58:00 PM	HSW	EPA 6020A	
%moisture	1.8	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-027 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-027B/S-082148-05301 **Sampling Time** 1:50 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	6/13/2019 6:00:00 PM	HSW	EPA 6020A	
%moisture	5.5	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Sample Number 190605029-028 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-028B/S-082148-05301 **Sampling Time** 1:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.186	mg/Kg	0.0515	6/13/2019 6:03:00 PM	HSW	EPA 6020A	
%moisture	3.4	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-029 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-029B/S-082148-05301 **Sampling Time** 1:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.052	6/13/2019 6:05:00 PM	HSW	EPA 6020A	
%moisture	3.8	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Sample Number 190605029-030 **Sampling Date** 5/30/2019 **Date/Time Received** 6/5/2019 11:06 AM
Client Sample ID 1906009-030B/S-082148-05301 **Sampling Time** 2:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0988	mg/Kg	0.053	6/13/2019 5:04:00 PM	HSW	EPA 6020A	
%moisture	6.4	Percent		6/10/2019 12:45:00 PM	HSW	%moisture	

Authorized Signature

Todd Taruscio, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190605029
Project Name: 1906009

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
MERCURY-ICPMS	0.0255	mg/kg	0.025	102.0	80-120	6/10/2019	6/13/2019

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
190605029-030	MERCURY-ICPMS	0.0988	0.408	mg/kg	0.265	116.7	75-125	6/10/2019	6/13/2019

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
MERCURY-ICPMS	0.388	mg/kg	0.265	109.1	5.0	0-20	6/10/2019	6/13/2019

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Mercury-ICPMS	ND	mg/Kg	0.0001	6/10/2019	6/13/2019

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**
18-Jul-19

Client: GHD
Project: Jal Landfarm

Sample ID: **MB-45398**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **45398**	RunNo: **60439**
Prep Date: **6/5/2019**	Analysis Date: **6/5/2019**	SeqNo: **2044238** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-45398**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **45398**	RunNo: **60439**
Prep Date: **6/5/2019**	Analysis Date: **6/5/2019**	SeqNo: **2044239** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			
Sulfate	30	1.5	30.00	0	100	90	110			

Sample ID: **1906009-001AMS**	SampType: **ms**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-052919-JP**	Batch ID: **45398**	RunNo: **60439**
Prep Date: **6/5/2019**	Analysis Date: **6/5/2019**	SeqNo: **2044249** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	21	1.6	15.93	4.887	98.3	54.5	140			
Sulfate	130	1.6	31.86	91.77	114	16.6	153			

Sample ID: **1906009-001AMSD**	SampType: **msd**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-052919-JP**	Batch ID: **45398**	RunNo: **60439**
Prep Date: **6/5/2019**	Analysis Date: **6/5/2019**	SeqNo: **2044250** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	21	1.6	15.93	4.887	99.0	54.5	140	0.526	20	
Sulfate	130	1.6	31.86	91.77	110	16.6	153	1.05	20	

Sample ID: **MB-45461**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **45461**	RunNo: **60521**
Prep Date: **6/10/2019**	Analysis Date: **6/10/2019**	SeqNo: **2048088** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-45461**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **45461**	RunNo: **60521**
Prep Date: **6/10/2019**	Analysis Date: **6/10/2019**	SeqNo: **2048089** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**
18-Jul-19

Client: GHD
Project: Jal Landfarm

Sample ID: **LCS-45461** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **45461** RunNo: **60521**
Prep Date: **6/10/2019** Analysis Date: **6/10/2019** SeqNo: **2048089** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.6	90	110			
Sulfate	30	1.5	30.00	0	101	90	110			

Sample ID: **1906009-014AMS** SampType: **ms** TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-052919-JP** Batch ID: **45461** RunNo: **60521**
Prep Date: **6/10/2019** Analysis Date: **6/10/2019** SeqNo: **2048115** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	17	1.7	17.00	0.7787	94.7	54.5	140			
Sulfate	110	1.7	34.00	72.17	104	16.6	153			

Sample ID: **1906009-014AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-052919-JP** Batch ID: **45461** RunNo: **60521**
Prep Date: **6/10/2019** Analysis Date: **6/10/2019** SeqNo: **2048116** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	17	1.7	17.00	0.7787	95.0	54.5	140	0.263	20	
Sulfate	100	1.7	34.00	72.17	93.4	16.6	153	3.47	20	

Sample ID: **MB-45491** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **45491** RunNo: **60552**
Prep Date: **6/11/2019** Analysis Date: **6/11/2019** SeqNo: **2049652** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-45491** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **45491** RunNo: **60552**
Prep Date: **6/11/2019** Analysis Date: **6/11/2019** SeqNo: **2049653** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			
Sulfate	30	1.5	30.00	0	99.7	90	110			

Sample ID: **1906009-025AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-053019-JP** Batch ID: **45491** RunNo: **60552**
Prep Date: **6/11/2019** Analysis Date: **6/11/2019** SeqNo: **2049690** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **1906009-025AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**

Client ID: **S-082148-053019-JP** Batch ID: **45491** RunNo: **60552**

Prep Date: **6/11/2019** Analysis Date: **6/11/2019** SeqNo: **2049690** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	30	3.1	15.42	1.067	186	54.5	140			S
Sulfate	67	3.1	30.85	5.818	198	16.6	153			S

Sample ID: **1906009-025AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**

Client ID: **S-082148-053019-JP** Batch ID: **45491** RunNo: **60552**

Prep Date: **6/11/2019** Analysis Date: **6/11/2019** SeqNo: **2049691** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	30	3.1	15.42	1.067	187	54.5	140	0.505	20	S
Sulfate	68	3.1	30.85	5.818	202	16.6	153	1.83	20	S

Sample ID: **MB-45527** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **45527** RunNo: **60594**

Prep Date: **6/12/2019** Analysis Date: **6/12/2019** SeqNo: **2051124** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-45527** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **45527** RunNo: **60594**

Prep Date: **6/12/2019** Analysis Date: **6/12/2019** SeqNo: **2051125** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			
Sulfate	30	1.5	30.00	0	100	90	110			

Sample ID: **1906009-026AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**

Client ID: **S-082148-053019-JP** Batch ID: **45527** RunNo: **60594**

Prep Date: **6/12/2019** Analysis Date: **6/12/2019** SeqNo: **2051148** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	17	7.6	15.30	2.995	89.8	54.5	140			
Sulfate	69	7.6	30.59	38.43	99.2	16.6	153			

Sample ID: **1906009-026AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**

Client ID: **S-082148-053019-JP** Batch ID: **45527** RunNo: **60594**

Prep Date: **6/12/2019** Analysis Date: **6/12/2019** SeqNo: **2051149** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**
18-Jul-19

Client: GHD
Project: Jal Landfarm

Sample ID: **1906009-026AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-053019-JP** Batch ID: **45527** RunNo: **60594**
Prep Date: **6/12/2019** Analysis Date: **6/12/2019** SeqNo: **2051149** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	17	7.6	15.30	2.995	88.8	54.5	140	0.911	20	
Sulfate	67	7.6	30.59	38.43	92.5	16.6	153	3.05	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-45362**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45362**	RunNo: **60403**
Prep Date: **6/4/2019**	Analysis Date: **6/5/2019**	SeqNo: **2042813** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		124	70	130			

Sample ID: **LCS-45362**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45362**	RunNo: **60403**
Prep Date: **6/4/2019**	Analysis Date: **6/5/2019**	SeqNo: **2042814** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.2	63.9	124			
Surr: DNOP	4.9		5.000		97.2	70	130			

Sample ID: **MB-45356**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45356**	RunNo: **60401**
Prep Date: **6/4/2019**	Analysis Date: **6/5/2019**	SeqNo: **2043690** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.7	70	130			

Sample ID: **LCS-45356**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45356**	RunNo: **60401**
Prep Date: **6/4/2019**	Analysis Date: **6/5/2019**	SeqNo: **2043691** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.7	63.9	124			
Surr: DNOP	4.4		5.000		87.5	70	130			

Sample ID: **MB-45572**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45572**	RunNo: **60667**
Prep Date: **6/13/2019**	Analysis Date: **6/14/2019**	SeqNo: **2052663** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		116	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**
18-Jul-19

Client: GHD
Project: Jal Landfarm

Sample ID: **LCS-45572**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45572**	RunNo: **60697**
Prep Date: **6/13/2019**	Analysis Date: **6/17/2019**	SeqNo: **2054878** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	63.9	124			
Surr: DNOP	5.0		5.000		99.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **1906009-015AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-082148-052919-JP** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042071** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	34	6.4	31.82	0	108	69.1	142			
Surr: BFB	1500		1273		116	73.8	119			

Sample ID: **1906009-015AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-082148-052919-JP** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042072** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	37	6.6	32.81	0	112	69.1	142	6.89	20	
Surr: BFB	1700		1312		128	73.8	119	0	0	S

Sample ID: **LCS-45348** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042088** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.5	80.1	123			
Surr: BFB	1200		1000		116	73.8	119			

Sample ID: **MB-45348** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042089** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	73.8	119			

Sample ID: **LCS-45341** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **45341** RunNo: **60389**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042129** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.4	80.1	123			
Surr: BFB	1100		1000		115	73.8	119			

Sample ID: **MB-45341** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **45341** RunNo: **60389**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042130** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**
18-Jul-19

Client: GHD
Project: Jal Landfarm

Sample ID: **MB-45341**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **45341**	RunNo: **60389**
Prep Date: **6/3/2019**	Analysis Date: **6/4/2019**	SeqNo: **2042130** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		92.7	73.8	119			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **1906009-014AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-052919-JP** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042094** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.027	1.087	0	102	63.9	127			
Toluene	1.2	0.054	1.087	0.01231	110	69.9	131			
Ethylbenzene	1.3	0.054	1.087	0	120	71	132			
Xylenes, Total	4.0	0.11	3.260	0	121	71.8	131			
Surr: 4-Bromofluorobenzene	1.3		1.087		119	80	120			

Sample ID: **1906009-014AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-052919-JP** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042095** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.027	1.075	0	99.8	63.9	127	2.92	20	
Toluene	1.2	0.054	1.075	0.01231	109	69.9	131	1.70	20	
Ethylbenzene	1.3	0.054	1.075	0	118	71	132	3.09	20	
Xylenes, Total	3.9	0.11	3.226	0	120	71.8	131	2.25	20	
Surr: 4-Bromofluorobenzene	1.2		1.075		116	80	120	0	0	

Sample ID: **LCS-45348** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042112** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.5	80	120			
Toluene	0.91	0.050	1.000	0	90.5	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.5	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID: **MB-45348** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **45348** RunNo: **60388**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042113** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **1906009-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-052919-JP** Batch ID: **45341** RunNo: **60389**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042140** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9843	0	107	63.9	127			
Toluene	1.1	0.049	0.9843	0.003925	108	69.9	131			
Ethylbenzene	1.0	0.049	0.9843	0.006400	102	71	132			
Xylenes, Total	2.9	0.098	2.953	0.01894	96.0	71.8	131			
Surr: 4-Bromofluorobenzene	1.0		0.9843		101	80	120			

Sample ID: **1906009-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-082148-052919-JP** Batch ID: **45341** RunNo: **60389**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042141** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.026	1.029	0	108	63.9	127	5.18	20	
Toluene	1.1	0.051	1.029	0.003925	109	69.9	131	5.49	20	
Ethylbenzene	1.1	0.051	1.029	0.006400	105	71	132	7.18	20	
Xylenes, Total	3.0	0.10	3.087	0.01894	97.6	71.8	131	6.05	20	
Surr: 4-Bromofluorobenzene	1.1		1.029		104	80	120	0	0	

Sample ID: **LCS-45341** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **45341** RunNo: **60389**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042144** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	80	120			
Toluene	0.99	0.050	1.000	0	98.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.4	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID: **MB-45341** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **45341** RunNo: **60389**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2042145** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.1	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-45344**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **45344**	RunNo: **60369**
Prep Date: **6/3/2019**	Analysis Date: **6/4/2019**	SeqNo: **2041377** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Thallium	ND	2.5								
Zinc	ND	2.5								

Sample ID: **LCS-45344**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **45344**	RunNo: **60369**
Prep Date: **6/3/2019**	Analysis Date: **6/4/2019**	SeqNo: **2041378** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.5	80	120			
Arsenic	24	2.5	25.00	0	96.6	80	120			
Barium	24	0.10	25.00	0	94.0	80	120			
Beryllium	24	0.15	25.00	0	94.3	80	120			
Cadmium	24	0.10	25.00	0	97.7	80	120			
Chromium	24	0.30	25.00	0	96.0	80	120			
Copper	26	0.30	25.00	0	103	80	120			
Iron	26	2.5	25.00	0	103	80	120			
Lead	25	0.25	25.00	0	98.1	80	120			
Manganese	24	0.10	25.00	0	96.1	80	120			
Selenium	23	2.5	25.00	0	92.7	80	120			
Silver	4.9	0.25	5.000	0	98.5	80	120			
Thallium	24	2.5	25.00	0	96.3	80	120			
Zinc	23	2.5	25.00	0	92.9	80	120			

Sample ID: **1906009-001AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-052919-JP**	Batch ID: **45344**	RunNo: **60369**
Prep Date: **6/3/2019**	Analysis Date: **6/4/2019**	SeqNo: **2041439** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **1906009-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-052919-JP** Batch ID: **45344** RunNo: **60369**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2041439** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	8.7	5.2	26.02	0	33.4	75	125			S
Arsenic	26	5.2	26.02	0	98.2	75	125			
Barium	130	0.21	26.02	114.0	77.1	75	125			
Beryllium	24	0.31	26.02	0.3252	91.4	75	125			
Cadmium	25	0.21	26.02	0	94.5	75	125			
Chromium	29	0.62	26.02	5.182	92.6	75	125			
Copper	30	0.62	26.02	2.164	105	75	125			
Lead	26	0.52	26.02	0.8245	95.9	75	125			
Manganese	72	0.21	26.02	49.94	86.5	75	125			
Selenium	20	5.2	26.02	0	78.6	75	125			
Silver	5.6	0.52	5.205	0.1769	103	75	125			
Thallium	15	5.2	26.02	0	56.9	75	125			S
Zinc	33	5.2	26.02	11.45	82.0	75	125			

Sample ID: **1906009-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-052919-JP** Batch ID: **45344** RunNo: **60369**

Prep Date: **6/3/2019** Analysis Date: **6/4/2019** SeqNo: **2041440** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	8.3	5.3	26.47	0	31.4	75	125	4.67	20	S
Arsenic	26	5.3	26.47	0	97.2	75	125	0.712	20	
Barium	140	0.21	26.47	114.0	85.4	75	125	1.89	20	
Beryllium	25	0.32	26.47	0.3252	92.1	75	125	2.45	20	
Cadmium	25	0.21	26.47	0	95.2	75	125	2.50	20	
Chromium	29	0.64	26.47	5.182	91.5	75	125	0.435	20	
Copper	30	0.64	26.47	2.164	106	75	125	2.41	20	
Lead	26	0.53	26.47	0.8245	96.1	75	125	1.91	20	
Manganese	75	0.21	26.47	49.94	92.8	75	125	2.79	20	
Selenium	23	5.3	26.47	0	85.4	75	125	10.0	20	
Silver	5.6	0.53	5.295	0.1769	103	75	125	0.881	20	
Thallium	14	5.3	26.47	0	53.5	75	125	4.43	20	S
Zinc	34	5.3	26.47	11.45	83.5	75	125	2.26	20	

Sample ID: **LCS-45432** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **45432** RunNo: **60467**

Prep Date: **6/6/2019** Analysis Date: **6/7/2019** SeqNo: **2045460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0	101	80	120			
Arsenic	24	2.5	25.00	0	97.5	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**
18-Jul-19

Client: GHD
Project: Jal Landfarm

Sample ID: **LCS-45432**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **45432**	RunNo: **60467**
Prep Date: **6/6/2019**	Analysis Date: **6/7/2019**	SeqNo: **2045460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	24	0.10	25.00	0	97.2	80	120			
Beryllium	25	0.15	25.00	0	101	80	120			
Cadmium	25	0.10	25.00	0	99.5	80	120			
Chromium	25	0.30	25.00	0	99.3	80	120			
Copper	27	0.30	25.00	0	107	80	120			
Iron	26	2.5	25.00	0	102	80	120			
Lead	25	0.25	25.00	0	102	80	120			
Manganese	25	0.10	25.00	0	99.3	80	120			
Selenium	24	2.5	25.00	0	95.3	80	120			
Silver	5.1	0.25	5.000	0	102	80	120			
Thallium	26	2.5	25.00	0	103	80	120			
Zinc	24	2.5	25.00	0	95.4	80	120			

Sample ID: **MB-45432**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **45432**	RunNo: **60467**
Prep Date: **6/6/2019**	Analysis Date: **6/7/2019**	SeqNo: **2045462** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Thallium	ND	2.5								
Zinc	ND	2.5								

Sample ID: **1906009-021AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-053019-JP**	Batch ID: **45432**	RunNo: **60467**
Prep Date: **6/6/2019**	Analysis Date: **6/7/2019**	SeqNo: **2045480** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	20	8.7	43.53	0	45.8	75	125			S
Arsenic	44	8.7	43.53	0	101	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **1906009-021AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-053019-JP** Batch ID: **45432** RunNo: **60467**

Prep Date: **6/6/2019** Analysis Date: **6/7/2019** SeqNo: **2045480** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	180	0.35	43.53	128.7	110	75	125			
Beryllium	45	0.52	43.53	0.3917	102	75	125			
Cadmium	44	0.35	43.53	0	100	75	125			
Chromium	49	1.0	43.53	6.281	97.0	75	125			
Copper	50	1.0	43.53	3.774	106	75	125			
Lead	44	0.87	43.53	2.701	95.4	75	125			
Manganese	110	0.35	43.53	73.04	76.7	75	125			
Selenium	41	8.7	43.53	0	95.2	75	125			
Silver	9.5	0.87	8.705	0	109	75	125			
Thallium	30	8.7	43.53	0	67.9	75	125			S
Zinc	55	8.7	43.53	16.24	89.3	75	125			

Sample ID: **1906009-021AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-053019-JP** Batch ID: **45432** RunNo: **60467**

Prep Date: **6/6/2019** Analysis Date: **6/7/2019** SeqNo: **2045483** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	20	8.8	43.99	0	45.5	75	125	0.389	20	S
Arsenic	44	8.8	43.99	0	101	75	125	1.19	20	
Barium	170	0.35	43.99	128.7	95.6	75	125	3.24	20	
Beryllium	45	0.53	43.99	0.3917	101	75	125	0.560	20	
Cadmium	44	0.35	43.99	0	101	75	125	1.80	20	
Chromium	49	1.1	43.99	6.281	98.2	75	125	2.00	20	
Copper	50	1.1	43.99	3.774	105	75	125	0.0440	20	
Lead	47	0.88	43.99	2.701	99.9	75	125	5.38	20	
Manganese	120	0.35	43.99	73.04	98.9	75	125	9.07	20	
Selenium	41	8.8	43.99	0	92.4	75	125	1.91	20	
Silver	9.2	0.88	8.798	0	104	75	125	3.50	20	
Thallium	29	8.8	43.99	0	65.4	75	125	2.74	20	S
Zinc	56	8.8	43.99	16.24	91.4	75	125	2.40	20	

Sample ID: **MB-45344** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **45344** RunNo: **61442**

Prep Date: **6/3/2019** Analysis Date: **7/17/2019** SeqNo: **2082842** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	5.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**

18-Jul-19

Client: GHD

Project: Jal Landfarm

Sample ID: **LCS-45344** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **45344** RunNo: **61442**

Prep Date: **6/3/2019** Analysis Date: **7/17/2019** SeqNo: **2082843** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	23	5.0	25.00	0	93.9	80	120			

Sample ID: **MB-45432** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **45432** RunNo: **61442**

Prep Date: **6/6/2019** Analysis Date: **7/17/2019** SeqNo: **2082846** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	5.0								

Sample ID: **LCS-45432** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **45432** RunNo: **61442**

Prep Date: **6/6/2019** Analysis Date: **7/17/2019** SeqNo: **2082847** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	24	5.0	25.00	0	94.0	80	120			

Sample ID: **1906009-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-052919-JP** Batch ID: **45344** RunNo: **61442**

Prep Date: **6/3/2019** Analysis Date: **7/17/2019** SeqNo: **2082861** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	10	26.02	0	0	75	125			S

Sample ID: **1906009-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-052919-JP** Batch ID: **45344** RunNo: **61442**

Prep Date: **6/3/2019** Analysis Date: **7/17/2019** SeqNo: **2082862** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	11	26.47	0	0	75	125	0	20	S

Sample ID: **1906009-021AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-053019-JP** Batch ID: **45432** RunNo: **61442**

Prep Date: **6/6/2019** Analysis Date: **7/17/2019** SeqNo: **2082890** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	17	43.53	0	35.4	75	125			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1906009**
18-Jul-19

Client: GHD
Project: Jal Landfarm

Sample ID: **1906009-021AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-053019-JP** Batch ID: **45432** RunNo: **61442**
Prep Date: **6/6/2019** Analysis Date: **7/17/2019** SeqNo: **2082893** Units: **mg/Kg-dry**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	21	18	43.99	0	47.0	75	125	29.2	20	RS

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 1906009 | RcptNo: 1

Received By: **Yazmine Garduno** 6/1/2019 8:30:00 AM

Completed By: **Erin Melendrez** 6/3/2019 8:36:19 AM

Reviewed By: DAD 6/3/19

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JJC 6-3-19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good	Yes			
2	2.3	Good	Yes			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 08214&8 ENM 6131A Per Christine M

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

Sample Temperature: 3.4°C - 0.2°F = 3.2°C 2.5 - 0.2°F = 2.3°C

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www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1906009	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Mercury 6020		Metals (See below)		Air Bubbles (Y or N)
5-29-19	1025	S	S-082148-052919-JP-V-1-5'	2x 4oz glass Jar	ICE	-001	X		X					X				X		X		
	1105		S-082148-052919-JP-V2-5'			-002	X		X					X				X		X		
	1505		S-082148-052919-JP-V3-5'			-003	X		X					X				X		X		
	1130		S-082148-052919-JP-V4-5'			-004	X		X					X				X		X		
	1200		S-082148-052919-JP-V5-5'			-005	X		X					X				X		X		
	1220		S-082148-052919-JP-V6-5'			-006	X		X					X				X		X		
	1255		S-082148-052919-JP-V7-5'			-007	X		X					X				X		X		
	1320		S-082148-052919-JP-V8-5'			-008	X		X					X				X		X		
	1340		S-082148-052919-JP-V9-5'			-009	X		X					X				X		X		
	1355		S-082148-052919-JP-V10-5'			-010	X		X					X				X		X		
	1535		S-082148-052919-JP-V11-5'			-011	X		X					X				X		X		
	1555		S-082148-052919-JP-V12-5'			-012	X		X					X				X		X		

Date	Time	Relinquished by:	Received by:	Date	Time
5-31-19	930			5/31/19	0930
5/31/19	1900		courier	6/1/19	8:30

Remarks: Metals: Sb, As, Ba, Cd, Cr, Co, Fe, Mn method (6010) Pb, Se, Ag, Tl (Thallium), Zn, Be, Hg
TPH - use method 8015M

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: christine Mathews

Sampler: Joshua Pigg

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.4 (-0.2 CF) = 3.2°

2.5° - 0.2 CF = 2.3

HEAL No. 1906009

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMBs (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Mercury 6020		Metals (See below)		Air Bubbles (Y or N)
5-29-19	1415	S	S-082148-052919-JP-V13-5'	4 oz glass Jar	ICE	-013	X		X					X				X		X		
↓	1445	↓	S-082148-052919-JP-V14-5'	↓	↓	-014	X		X					X				X		X		
↓	1525	↓	S-082148-052919-JP-V15-5'	↓	↓	-015	X		X					X				X		X		
							X															
							X															
							X															
							X															
							X															
							X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-31-19	930			5/31/19	0930
Date:	Time:	Relinquished by:	Received by:	Date	Time
5/31/19	1910			6/1/19	8:30

Remarks: Metals: Sb, As, Ba, Cd, Cr, Cu, Fe, Mn method (6010) Pb, Se, Ag, Tl (Thallium), Zn, Be, Hg

TPH - use method 8015M

Disregard "x's in BTEX line 4 through 9

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): 3.4 + 0.2 CF = 3.2 °C
2.3 + 0.2 CF = 2.3C FNH 6/3/19

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1906049	BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Ⓒ F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)		Mercury 6020	Metals (See below)		% moisture	
5-30-19	1030	S	S-082148-053019-JP-T1-	4 oz glass Jar	ICE	-00116	X	X					X					X	X		X	
	1045		S-082148-053019-JP-T2			-00217	X	X					X					X	X		X	
	1100		S-082148-053019-JP-T3			-00318	X	X					X					X	X		X	
	1120		S-082148-053019-JP-T4			-00419	X	X					X					X	X		X	
	1135		S-082148-053019-JP-T5			-00520	X	X					X					X	X		X	
	1152		S-082148-053019-JP-T6			-00621	X	X					X					X	X		X	
	1200		S-082148-053019-JP-T7			-00722	X	X					X					X	X		X	
	1225		S-082148-053019-JP-T8			-00823	X	X					X					X	X		X	
	1240		S-082148-053019-JP-T9			-00924	X	X					X					X	X		X	
	1249		S-082148-053019-JP-T10			-01025	X	X					X					X	X		X	
	1403		S-082148-053019-JP-T11			-01126	X	X					X					X	X		X	
	1350		S-082148-053019-JP-T12			-01227	X	X					X					X	X		X	

FNH 6/3/19

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5-31-19	930				5/31/19	0930
5/31/19	1900			courier	6/1/19	830

Remarks: Metals: As, Ba, Cd, Cr, Cu, Fe, Mn, Pb, Se method(6010) Ag, Zn, Sb, Be, Tl(thallium), Hg
TPH - Method 8015M

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush_____

Project Name: Jal Landfarm

Project #: 082148

Project Manager: christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): 3.4 - 0.2CF = 3.2C (2.5C - 0.2CF = 2.3C)

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Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1906010 9
5-30-19	1305	S	S-082148-053019-JP-T13	4 oz Jar glass	ICE	-01328
5-30-19	1330	S	S-082148-053019-JP-T14	↓	↓	-01429
5-30-19	1435	S	S-082148-053019-JP-T15	↓	↓	-01530

ENH 6/3/19

Analysis Request

BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl), F, Br, NO_3, NO_2, PO_4, (SO_4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)		Mercury 6020	Metals (see below)		% moisture	
X	X					X					X	X		X	
X	X					X					X	X		X	
X	X					X					X	X		X	

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5-31-19	930				5/31/19	0930
5/31/19	1900			courier	6/1/19	730

Remarks: Metals: As, Ba, Cd, Cr, Cu, Fe, Mn, Pb, Se method (6010) Ag, Zn, Sb, Be, Tl (thallium), Hg
TPH - method 8015M

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 25, 2019

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 1908E59

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 15 sample(s) on 8/23/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-001 **Collection Date:** 8/21/2019 9:50:00 AM
Client Sample ID: S-082148-082119-JP-V1-5.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.9		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Arsenic	ND	4.9		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Barium	150	0.20		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Beryllium	0.35	0.29		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Cadmium	ND	0.20		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Chromium	5.3	0.59		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Copper	2.2	0.59		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Iron	5100	250		mg/Kg	100	9/4/2019 9:09:07 AM	47070
Lead	1.1	0.49		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Manganese	53	0.20		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Selenium	ND	4.9		mg/Kg	2	9/4/2019 1:03:13 PM	47070
Silver	0.59	0.49		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Thallium	ND	4.9		mg/Kg	2	9/4/2019 10:49:22 AM	47070
Uranium	ND	9.8		mg/Kg	2	9/4/2019 1:03:13 PM	47070
Zinc	10	2.5		mg/Kg	1	8/29/2019 3:20:54 PM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/29/2019 2:03:33 AM	47074
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/29/2019 2:03:33 AM	47074
Surr: DNOP	88.4	70-130		%Rec	1	8/29/2019 2:03:33 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/27/2019 11:35:57 AM	47066
Surr: BFB	93.7	77.4-118		%Rec	1	8/27/2019 11:35:57 AM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/27/2019 11:35:57 AM	47066
Toluene	ND	0.050		mg/Kg	1	8/27/2019 11:35:57 AM	47066
Ethylbenzene	ND	0.050		mg/Kg	1	8/27/2019 11:35:57 AM	47066
Xylenes, Total	ND	0.099		mg/Kg	1	8/27/2019 11:35:57 AM	47066
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	8/27/2019 11:35:57 AM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-002 **Collection Date:** 8/21/2019 10:20:00 AM
Client Sample ID: S-082148-082119-JP-V2-5.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.9		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Arsenic	ND	4.9		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Barium	53	0.20		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Beryllium	0.60	0.30		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Cadmium	ND	0.20		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Chromium	9.9	0.59		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Copper	1.4	0.59		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Iron	9400	250		mg/Kg	100	9/4/2019 9:10:48 AM	47070
Lead	0.81	0.49		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Manganese	42	0.20		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Selenium	ND	4.9		mg/Kg	2	9/4/2019 1:11:22 PM	47070
Silver	ND	0.49		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Thallium	ND	4.9		mg/Kg	2	9/4/2019 10:51:03 AM	47070
Uranium	ND	9.9		mg/Kg	2	9/4/2019 1:11:22 PM	47070
Zinc	21	4.9		mg/Kg	2	9/4/2019 10:51:03 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/29/2019 3:10:29 AM	47074
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/29/2019 3:10:29 AM	47074
Surr: DNOP	79.1	70-130		%Rec	1	8/29/2019 3:10:29 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/27/2019 12:46:42 PM	47066
Surr: BFB	96.6	77.4-118		%Rec	1	8/27/2019 12:46:42 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 12:46:42 PM	47066
Toluene	ND	0.049		mg/Kg	1	8/27/2019 12:46:42 PM	47066
Ethylbenzene	ND	0.049		mg/Kg	1	8/27/2019 12:46:42 PM	47066
Xylenes, Total	ND	0.097		mg/Kg	1	8/27/2019 12:46:42 PM	47066
Surr: 4-Bromofluorobenzene	96.1	80-120		%Rec	1	8/27/2019 12:46:42 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-003 **Collection Date:** 8/21/2019 10:40:00 AM
Client Sample ID: S-082148-082119-JP-V3-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.8		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Arsenic	ND	4.8		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Barium	37	0.19		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Beryllium	0.46	0.29		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Chromium	7.6	0.58		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Copper	1.1	0.58		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Iron	8000	240		mg/Kg	100	9/4/2019 9:12:23 AM	47070
Lead	1.2	0.48		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Manganese	38	0.19		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Selenium	ND	4.8		mg/Kg	2	9/4/2019 1:12:46 PM	47070
Silver	ND	0.48		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Thallium	ND	4.8		mg/Kg	2	9/4/2019 10:52:37 AM	47070
Uranium	ND	9.6		mg/Kg	2	9/4/2019 1:12:46 PM	47070
Zinc	17	4.8		mg/Kg	2	9/4/2019 10:52:37 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/29/2019 3:32:57 AM	47074
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/29/2019 3:32:57 AM	47074
Surr: DNOP	86.1	70-130		%Rec	1	8/29/2019 3:32:57 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/27/2019 7:16:16 PM	47066
Surr: BFB	94.2	77.4-118		%Rec	1	8/27/2019 7:16:16 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	8/27/2019 7:16:16 PM	47066
Toluene	ND	0.046		mg/Kg	1	8/27/2019 7:16:16 PM	47066
Ethylbenzene	ND	0.046		mg/Kg	1	8/27/2019 7:16:16 PM	47066
Xylenes, Total	ND	0.092		mg/Kg	1	8/27/2019 7:16:16 PM	47066
Surr: 4-Bromofluorobenzene	86.2	80-120		%Rec	1	8/27/2019 7:16:16 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-004 **Collection Date:** 8/21/2019 11:00:00 AM
Client Sample ID: S-082148-082119-JP-V5-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 7471: MERCURY						Analyst: **rde**	
Mercury	ND	0.031	H	mg/Kg	1	9/24/2019 1:33:37 PM	47663
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	5.0		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Arsenic	ND	5.0		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Barium	90	0.20		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Beryllium	0.50	0.30		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Cadmium	ND	0.20		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Chromium	7.8	0.60		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Copper	2.5	0.60		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Iron	8000	250		mg/Kg	100	9/4/2019 9:13:58 AM	47070
Lead	2.3	0.50		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Manganese	51	0.20		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Selenium	ND	5.0		mg/Kg	2	9/4/2019 1:14:09 PM	47070
Silver	ND	0.50		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Thallium	ND	5.0		mg/Kg	2	9/4/2019 10:54:11 AM	47070
Uranium	ND	10		mg/Kg	2	9/4/2019 1:14:09 PM	47070
Zinc	21	5.0		mg/Kg	2	9/4/2019 10:54:11 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/29/2019 3:55:12 AM	47074
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/29/2019 3:55:12 AM	47074
Surr: DNOP	91.9	70-130		%Rec	1	8/29/2019 3:55:12 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/27/2019 7:39:17 PM	47066
Surr: BFB	97.2	77.4-118		%Rec	1	8/27/2019 7:39:17 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	8/27/2019 7:39:17 PM	47066
Toluene	ND	0.047		mg/Kg	1	8/27/2019 7:39:17 PM	47066
Ethylbenzene	ND	0.047		mg/Kg	1	8/27/2019 7:39:17 PM	47066
Xylenes, Total	ND	0.093		mg/Kg	1	8/27/2019 7:39:17 PM	47066
Surr: 4-Bromofluorobenzene	89.2	80-120		%Rec	1	8/27/2019 7:39:17 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-005 **Collection Date:** 8/21/2019 11:15:00 AM
Client Sample ID: S-082148-082119-JP-V6-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.8		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Arsenic	18	4.8		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Barium	140	0.19		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Beryllium	0.88	0.29		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Chromium	14	0.58		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Copper	2.1	0.58		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Iron	16000	240		mg/Kg	100	9/4/2019 9:15:33 AM	47070
Lead	ND	0.48		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Manganese	83	0.19		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Selenium	ND	4.8		mg/Kg	2	9/4/2019 1:15:34 PM	47070
Silver	ND	0.48		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Thallium	ND	4.8		mg/Kg	2	9/4/2019 10:55:52 AM	47070
Uranium	ND	9.6		mg/Kg	2	9/4/2019 1:15:34 PM	47070
Zinc	34	4.8		mg/Kg	2	9/4/2019 10:55:52 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/29/2019 4:17:29 AM	47074
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/29/2019 4:17:29 AM	47074
Surr: DNOP	83.0	70-130		%Rec	1	8/29/2019 4:17:29 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/27/2019 8:02:18 PM	47066
Surr: BFB	93.8	77.4-118		%Rec	1	8/27/2019 8:02:18 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 8:02:18 PM	47066
Toluene	ND	0.049		mg/Kg	1	8/27/2019 8:02:18 PM	47066
Ethylbenzene	ND	0.049		mg/Kg	1	8/27/2019 8:02:18 PM	47066
Xylenes, Total	ND	0.098		mg/Kg	1	8/27/2019 8:02:18 PM	47066
Surr: 4-Bromofluorobenzene	85.9	80-120		%Rec	1	8/27/2019 8:02:18 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-006 **Collection Date:** 8/21/2019 11:35:00 AM
Client Sample ID: S-082148-082119-JP-V7-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.8		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Arsenic	ND	4.8		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Barium	77	0.19		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Beryllium	0.39	0.29		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Chromium	6.9	0.58		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Copper	1.6	0.58		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Iron	5800	240		mg/Kg	100	9/4/2019 9:17:08 AM	47070
Lead	1.1	0.48		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Manganese	41	0.19		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Selenium	ND	4.8		mg/Kg	2	9/4/2019 1:16:57 PM	47070
Silver	ND	0.48		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Thallium	ND	4.8		mg/Kg	2	9/4/2019 11:09:55 AM	47070
Uranium	ND	9.6		mg/Kg	2	9/4/2019 1:16:57 PM	47070
Zinc	14	4.8		mg/Kg	2	9/4/2019 11:09:55 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/29/2019 4:39:41 AM	47074
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/29/2019 4:39:41 AM	47074
Surr: DNOP	95.4	70-130		%Rec	1	8/29/2019 4:39:41 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/27/2019 8:25:17 PM	47066
Surr: BFB	95.9	77.4-118		%Rec	1	8/27/2019 8:25:17 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 8:25:17 PM	47066
Toluene	ND	0.048		mg/Kg	1	8/27/2019 8:25:17 PM	47066
Ethylbenzene	ND	0.048		mg/Kg	1	8/27/2019 8:25:17 PM	47066
Xylenes, Total	ND	0.096		mg/Kg	1	8/27/2019 8:25:17 PM	47066
Surr: 4-Bromofluorobenzene	86.4	80-120		%Rec	1	8/27/2019 8:25:17 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-007 **Collection Date:** 8/21/2019 11:55:00 AM
Client Sample ID: S-082148-082119-JP-V8-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.8		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Arsenic	ND	4.8		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Barium	69	0.19		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Beryllium	ND	0.29		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Chromium	5.3	0.58		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Copper	1.4	0.58		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Iron	4500	240		mg/Kg	100	9/4/2019 9:18:42 AM	47070
Lead	1.5	0.48		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Manganese	35	0.19		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Selenium	ND	4.8		mg/Kg	2	9/4/2019 1:18:22 PM	47070
Silver	ND	0.48		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Thallium	ND	4.8		mg/Kg	2	9/4/2019 11:11:36 AM	47070
Uranium	ND	9.6		mg/Kg	2	9/4/2019 1:18:22 PM	47070
Zinc	10	4.8		mg/Kg	2	9/4/2019 11:11:36 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/29/2019 5:01:57 AM	47074
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/29/2019 5:01:57 AM	47074
Surr: DNOP	59.8	70-130	S	%Rec	1	8/29/2019 5:01:57 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/27/2019 8:48:20 PM	47066
Surr: BFB	94.6	77.4-118		%Rec	1	8/27/2019 8:48:20 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 8:48:20 PM	47066
Toluene	ND	0.048		mg/Kg	1	8/27/2019 8:48:20 PM	47066
Ethylbenzene	ND	0.048		mg/Kg	1	8/27/2019 8:48:20 PM	47066
Xylenes, Total	ND	0.096		mg/Kg	1	8/27/2019 8:48:20 PM	47066
Surr: 4-Bromofluorobenzene	86.1	80-120		%Rec	1	8/27/2019 8:48:20 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-008 **Collection Date:** 8/21/2019 12:20:00 PM
Client Sample ID: S-082148-082119-JP-V4-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.9		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Arsenic	ND	4.9		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Barium	44	0.20		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Beryllium	0.32	0.30		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Cadmium	ND	0.20		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Chromium	5.9	0.59		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Copper	0.93	0.59		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Iron	5100	250		mg/Kg	100	9/4/2019 9:20:17 AM	47070
Lead	1.6	0.49		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Manganese	34	0.20		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Selenium	ND	4.9		mg/Kg	2	9/4/2019 1:19:46 PM	47070
Silver	ND	0.49		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Thallium	ND	4.9		mg/Kg	2	9/4/2019 11:13:16 AM	47070
Uranium	ND	9.9		mg/Kg	2	9/4/2019 1:19:46 PM	47070
Zinc	13	4.9		mg/Kg	2	9/4/2019 11:13:16 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/29/2019 5:24:01 AM	47074
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/29/2019 5:24:01 AM	47074
Surr: DNOP	86.8	70-130		%Rec	1	8/29/2019 5:24:01 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/27/2019 9:11:18 PM	47066
Surr: BFB	97.0	77.4-118		%Rec	1	8/27/2019 9:11:18 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 9:11:18 PM	47066
Toluene	ND	0.048		mg/Kg	1	8/27/2019 9:11:18 PM	47066
Ethylbenzene	ND	0.048		mg/Kg	1	8/27/2019 9:11:18 PM	47066
Xylenes, Total	ND	0.095		mg/Kg	1	8/27/2019 9:11:18 PM	47066
Surr: 4-Bromofluorobenzene	87.6	80-120		%Rec	1	8/27/2019 9:11:18 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-009 **Collection Date:** 8/21/2019 12:55:00 PM
Client Sample ID: S-082148-082119-JP-V9-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.9		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Arsenic	ND	4.9		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Barium	81	0.20		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Beryllium	0.30	0.30		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Cadmium	ND	0.20		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Chromium	5.0	0.59		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Copper	1.8	0.59		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Iron	5000	250		mg/Kg	100	9/4/2019 9:21:52 AM	47070
Lead	0.72	0.49		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Manganese	46	0.20		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Selenium	ND	4.9		mg/Kg	2	9/4/2019 1:21:09 PM	47070
Silver	ND	0.49		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Thallium	ND	4.9		mg/Kg	2	9/4/2019 11:14:50 AM	47070
Uranium	ND	9.8		mg/Kg	2	9/4/2019 1:21:09 PM	47070
Zinc	11	4.9		mg/Kg	2	9/4/2019 11:14:50 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/29/2019 5:46:17 AM	47074
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/29/2019 5:46:17 AM	47074
Surr: DNOP	82.0	70-130		%Rec	1	8/29/2019 5:46:17 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/27/2019 9:34:20 PM	47066
Surr: BFB	97.1	77.4-118		%Rec	1	8/27/2019 9:34:20 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 9:34:20 PM	47066
Toluene	ND	0.048		mg/Kg	1	8/27/2019 9:34:20 PM	47066
Ethylbenzene	ND	0.048		mg/Kg	1	8/27/2019 9:34:20 PM	47066
Xylenes, Total	ND	0.096		mg/Kg	1	8/27/2019 9:34:20 PM	47066
Surr: 4-Bromofluorobenzene	88.1	80-120		%Rec	1	8/27/2019 9:34:20 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-010 **Collection Date:** 8/21/2019 1:05:00 PM
Client Sample ID: S-082148-082119-JP-V13-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.9		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Arsenic	ND	4.9		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Barium	52	0.19		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Beryllium	ND	0.29		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Chromium	4.5	0.58		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Copper	2.2	0.58		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Iron	4700	240		mg/Kg	100	9/4/2019 9:29:01 AM	47070
Lead	1.6	0.49		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Manganese	64	0.19		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Selenium	ND	4.9		mg/Kg	2	9/4/2019 1:22:33 PM	47070
Silver	ND	0.49		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Thallium	ND	4.9		mg/Kg	2	9/4/2019 11:16:30 AM	47070
Uranium	ND	9.7		mg/Kg	2	9/4/2019 1:22:33 PM	47070
Zinc	14	4.9		mg/Kg	2	9/4/2019 11:16:30 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/29/2019 6:08:31 AM	47074
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/29/2019 6:08:31 AM	47074
Surr: DNOP	84.2	70-130		%Rec	1	8/29/2019 6:08:31 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/27/2019 9:57:21 PM	47066
Surr: BFB	96.2	77.4-118		%Rec	1	8/27/2019 9:57:21 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	8/27/2019 9:57:21 PM	47066
Toluene	ND	0.046		mg/Kg	1	8/27/2019 9:57:21 PM	47066
Ethylbenzene	ND	0.046		mg/Kg	1	8/27/2019 9:57:21 PM	47066
Xylenes, Total	ND	0.092		mg/Kg	1	8/27/2019 9:57:21 PM	47066
Surr: 4-Bromofluorobenzene	87.1	80-120		%Rec	1	8/27/2019 9:57:21 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-011 **Collection Date:** 8/21/2019 1:30:00 PM
Client Sample ID: S-082148-082119-JP-V12-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.9		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Arsenic	6.3	4.9		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Barium	70	0.20		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Beryllium	0.72	0.29		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Cadmium	ND	0.20		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Chromium	11	0.59		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Copper	2.6	0.59		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Iron	11000	250		mg/Kg	100	9/4/2019 9:30:37 AM	47070
Lead	ND	0.49		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Manganese	53	0.20		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Selenium	ND	4.9		mg/Kg	2	9/4/2019 1:26:35 PM	47070
Silver	ND	0.49		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Thallium	ND	4.9		mg/Kg	2	9/4/2019 11:18:11 AM	47070
Uranium	ND	9.8		mg/Kg	2	9/4/2019 1:26:35 PM	47070
Zinc	26	4.9		mg/Kg	2	9/4/2019 11:18:11 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/29/2019 6:30:53 AM	47074
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/29/2019 6:30:53 AM	47074
Surr: DNOP	72.3	70-130		%Rec	1	8/29/2019 6:30:53 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/27/2019 10:20:24 PM	47066
Surr: BFB	97.3	77.4-118		%Rec	1	8/27/2019 10:20:24 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 10:20:24 PM	47066
Toluene	ND	0.047		mg/Kg	1	8/27/2019 10:20:24 PM	47066
Ethylbenzene	ND	0.047		mg/Kg	1	8/27/2019 10:20:24 PM	47066
Xylenes, Total	ND	0.094		mg/Kg	1	8/27/2019 10:20:24 PM	47066
Surr: 4-Bromofluorobenzene	88.2	80-120		%Rec	1	8/27/2019 10:20:24 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-012 **Collection Date:** 8/21/2019 1:55:00 PM
Client Sample ID: S-082148-082119-JP-V10-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.8		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Arsenic	ND	4.8		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Barium	81	0.19		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Beryllium	0.39	0.29		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Chromium	6.6	0.58		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Copper	2.3	0.58		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Iron	6400	240		mg/Kg	100	9/4/2019 9:32:11 AM	47070
Lead	2.2	0.48		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Manganese	57	0.19		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Selenium	ND	4.8		mg/Kg	2	9/4/2019 1:27:57 PM	47070
Silver	ND	0.48		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Thallium	ND	4.8		mg/Kg	2	9/4/2019 11:19:53 AM	47070
Uranium	ND	9.7		mg/Kg	2	9/4/2019 1:27:57 PM	47070
Zinc	16	4.8		mg/Kg	2	9/4/2019 11:19:53 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/29/2019 6:55:18 AM	47074
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/29/2019 6:55:18 AM	47074
Surr: DNOP	66.0	70-130	S	%Rec	1	8/29/2019 6:55:18 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/27/2019 10:43:23 PM	47066
Surr: BFB	96.8	77.4-118		%Rec	1	8/27/2019 10:43:23 PM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2019 10:43:23 PM	47066
Toluene	ND	0.048		mg/Kg	1	8/27/2019 10:43:23 PM	47066
Ethylbenzene	ND	0.048		mg/Kg	1	8/27/2019 10:43:23 PM	47066
Xylenes, Total	ND	0.097		mg/Kg	1	8/27/2019 10:43:23 PM	47066
Surr: 4-Bromofluorobenzene	88.3	80-120		%Rec	1	8/27/2019 10:43:23 PM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-013 **Collection Date:** 8/21/2019 2:15:00 PM
Client Sample ID: S-082148-082119-JP-V11-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.8		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Arsenic	7.1	4.8		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Barium	45	0.19		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Beryllium	0.48	0.29		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Chromium	7.4	0.58		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Copper	1.6	0.58		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Iron	8000	240		mg/Kg	100	9/4/2019 9:33:45 AM	47070
Lead	1.4	0.48		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Manganese	45	0.19		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Selenium	ND	4.8		mg/Kg	2	9/4/2019 1:29:22 PM	47070
Silver	ND	0.48		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Thallium	ND	4.8		mg/Kg	2	9/4/2019 11:28:48 AM	47070
Uranium	ND	9.6		mg/Kg	2	9/4/2019 1:29:22 PM	47070
Zinc	18	4.8		mg/Kg	2	9/4/2019 11:28:48 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	8/29/2019 7:17:34 AM	47074
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/29/2019 7:17:34 AM	47074
Surr: DNOP	69.1	70-130	S	%Rec	1	8/29/2019 7:17:34 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/28/2019 12:15:13 AM	47066
Surr: BFB	95.6	77.4-118		%Rec	1	8/28/2019 12:15:13 AM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/28/2019 12:15:13 AM	47066
Toluene	ND	0.048		mg/Kg	1	8/28/2019 12:15:13 AM	47066
Ethylbenzene	ND	0.048		mg/Kg	1	8/28/2019 12:15:13 AM	47066
Xylenes, Total	ND	0.096		mg/Kg	1	8/28/2019 12:15:13 AM	47066
Surr: 4-Bromofluorobenzene	88.9	80-120		%Rec	1	8/28/2019 12:15:13 AM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-014 **Collection Date:** 8/21/2019 2:35:00 PM
Client Sample ID: S-082148-082119-JP-V15-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.8		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Arsenic	ND	4.8		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Barium	89	0.19		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Beryllium	0.39	0.29		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Cadmium	ND	0.19		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Chromium	5.5	0.58		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Copper	3.6	0.58		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Iron	5200	240		mg/Kg	100	9/4/2019 9:35:20 AM	47070
Lead	0.61	0.48		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Manganese	38	0.19		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Selenium	ND	4.8		mg/Kg	2	9/4/2019 1:30:46 PM	47070
Silver	ND	0.48		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Thallium	ND	4.8		mg/Kg	2	9/4/2019 11:30:25 AM	47070
Uranium	ND	9.7		mg/Kg	2	9/4/2019 1:30:46 PM	47070
Zinc	12	4.8		mg/Kg	2	9/4/2019 11:30:25 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/29/2019 7:39:45 AM	47074
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/29/2019 7:39:45 AM	47074
Surr: DNOP	67.9	70-130	S	%Rec	1	8/29/2019 7:39:45 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/28/2019 12:38:12 AM	47066
Surr: BFB	94.5	77.4-118		%Rec	1	8/28/2019 12:38:12 AM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/28/2019 12:38:12 AM	47066
Toluene	ND	0.048		mg/Kg	1	8/28/2019 12:38:12 AM	47066
Ethylbenzene	ND	0.048		mg/Kg	1	8/28/2019 12:38:12 AM	47066
Xylenes, Total	ND	0.097		mg/Kg	1	8/28/2019 12:38:12 AM	47066
Surr: 4-Bromofluorobenzene	86.2	80-120		%Rec	1	8/28/2019 12:38:12 AM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1908E59
Project: Jal Landfarm

Lab ID: 1908E59-015 **Collection Date:** 8/21/2019 3:00:00 PM
Client Sample ID: S-082148-082119-JP-V14-5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **bcv**	
Antimony	ND	4.9		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Arsenic	ND	4.9		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Barium	69	0.20		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Beryllium	0.32	0.30		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Cadmium	ND	0.20		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Chromium	5.7	0.59		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Copper	1.3	0.59		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Iron	5300	250		mg/Kg	100	9/4/2019 9:36:54 AM	47070
Lead	1.9	0.49		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Manganese	40	0.20		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Selenium	ND	4.9		mg/Kg	2	9/4/2019 1:32:10 PM	47070
Silver	ND	0.49		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Thallium	ND	4.9		mg/Kg	2	9/4/2019 11:32:07 AM	47070
Uranium	ND	9.9		mg/Kg	2	9/4/2019 1:32:10 PM	47070
Zinc	13	4.9		mg/Kg	2	9/4/2019 11:32:07 AM	47070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/29/2019 8:02:01 AM	47074
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/29/2019 8:02:01 AM	47074
Surr: DNOP	83.6	70-130		%Rec	1	8/29/2019 8:02:01 AM	47074
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/28/2019 1:01:09 AM	47066
Surr: BFB	92.7	77.4-118		%Rec	1	8/28/2019 1:01:09 AM	47066
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	8/28/2019 1:01:09 AM	47066
Toluene	ND	0.046		mg/Kg	1	8/28/2019 1:01:09 AM	47066
Ethylbenzene	ND	0.046		mg/Kg	1	8/28/2019 1:01:09 AM	47066
Xylenes, Total	ND	0.093		mg/Kg	1	8/28/2019 1:01:09 AM	47066
Surr: 4-Bromofluorobenzene	84.0	80-120		%Rec	1	8/28/2019 1:01:09 AM	47066

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	190828055
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1908E59
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number 190828055-001 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-001B/S-082148-082119-JP-V1-5.5 **Sampling Time** 9:50 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	9/20/2019 7:34:00 PM	MAM	EPA 6020A	
%moisture	8.3	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-002 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-002B/S-082148-082119-JP-V2-5 **Sampling Time** 10:20 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0515	9/20/2019 8:06:00 PM	MAM	EPA 6020A	
%moisture	7.4	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-003 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-003B/S-082148-082119-JP-V3-5 **Sampling Time** 10:40 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.054	9/20/2019 8:11:00 PM	MAM	EPA 6020A	
%moisture	7.8	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190828055
Project Name: 1908E59

Analytical Results Report

Sample Number 190828055-004 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-004B/S-082148-082119-JP-V5-5 **Sampling Time** 11:00 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.052	9/20/2019 8:15:00 PM	MAM	EPA 6020A	
%moisture	5.6	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-005 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-005B/S-082148-082119-JP-V6-5 **Sampling Time** 11:15 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0555	9/20/2019 8:20:00 PM	MAM	EPA 6020A	
%moisture	11.0	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-006 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-006B/S-082148-082119-JP-V7-5 **Sampling Time** 11:35 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.05	9/20/2019 8:48:00 PM	MAM	EPA 6020A	
%moisture	9.4	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190828055
Project Name: 1908E59

Analytical Results Report

Sample Number 190828055-007 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-007B/S-082148-082119-JP-V8-5 **Sampling Time** 11:55 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.052	9/20/2019 8:53:00 PM	MAM	EPA 6020A	
%moisture	5.4	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-008 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-008B/S-082148-082119-JP-V4-5 **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	9/20/2019 8:57:00 PM	MAM	EPA 6020A	
%moisture	9.2	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-009 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-009B/S-082148-082119-JP-V9-5 **Sampling Time** 12:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	9/20/2019 9:02:00 PM	MAM	EPA 6020A	
%moisture	9.4	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190828055
Project Name: 1908E59

Analytical Results Report

Sample Number 190828055-010 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-010B/S-082148-082119-JP-V13-5 **Sampling Time** 1:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.054	9/20/2019 9:06:00 PM	MAM	EPA 6020A	
%moisture	8.7	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-011 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-011B/S-082148-082119-JP-V12-5 **Sampling Time** 1:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	9/20/2019 9:11:00 PM	MAM	EPA 6020A	
%moisture	6.6	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-012 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-012B/S-082148-082119-JP-V10-5 **Sampling Time** 1:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	9/20/2019 9:15:00 PM	MAM	EPA 6020A	
%moisture	4.7	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190828055
Project Name: 1908E59

Analytical Results Report

Sample Number 190828055-013 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-013B/S-082148-082119-JP-V11-5 **Sampling Time** 2:15 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	9/20/2019 9:20:00 PM	MAM	EPA 6020A	
%moisture	5.4	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-014 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-014B/S-082148-082119-JP-V15-5 **Sampling Time** 2:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	9/20/2019 9:25:00 PM	MAM	EPA 6020A	
%moisture	8.9	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Sample Number 190828055-015 **Sampling Date** 8/21/2019 **Date/Time Received** 8/28/2019 11:55 AM
Client Sample ID 1908E59-015B/S-082148-082119-JP-V14-5 **Sampling Time** 3:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	9/20/2019 9:29:00 PM	MAM	EPA 6020A	
%moisture	6.2	Percent		9/10/2019 10:06:00 AM	MAM	%moisture	

Authorized Signature

Todd Taruscio, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 190828055
Project Name: 1908E59

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
MERCURY-ICPMS	0.0268	mg/kg	0.025	107.2	80-120	9/10/2019	9/20/2019

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
190828055-001A	MERCURY-ICPMS	ND	0.269	mg/kg	0.273	98.5	75-125	9/10/2019	9/20/2019

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
MERCURY-ICPMS	0.283	mg/kg	0.273	103.7	5.1	0-20	9/10/2019	9/20/2019

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Mercury-ICPMS	ND	mg/Kg	0.0001	9/10/2019	9/20/2019

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**
25-Sep-19

Client: GHD
Project: Jal Landfarm

Sample ID: **1908E59-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-082119-JP** Batch ID: **47074** RunNo: **62465**
Prep Date: **8/27/2019** Analysis Date: **8/29/2019** SeqNo: **2125451** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.3	46.69	0	88.9	57	142			
Surr: DNOP	3.3		4.669		70.2	70	130			

Sample ID: **1908E59-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-082119-JP** Batch ID: **47074** RunNo: **62465**
Prep Date: **8/27/2019** Analysis Date: **8/29/2019** SeqNo: **2125452** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.9	49.55	0	73.5	57	142	13.1	20	
Surr: DNOP	2.1		4.955		41.6	70	130	0	0	S

Sample ID: **LCS-47074** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **47074** RunNo: **62465**
Prep Date: **8/27/2019** Analysis Date: **8/29/2019** SeqNo: **2125469** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	111	63.9	124			
Surr: DNOP	5.0		5.000		100	70	130			

Sample ID: **MB-47074** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **47074** RunNo: **62465**
Prep Date: **8/27/2019** Analysis Date: **8/29/2019** SeqNo: **2125471** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		117	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**

25-Sep-19

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-47066**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **47066**	RunNo: **62443**
Prep Date: **8/26/2019**	Analysis Date: **8/27/2019**	SeqNo: **2123881** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.3	77.4	118			

Sample ID: **LCS-47066**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **47066**	RunNo: **62443**
Prep Date: **8/26/2019**	Analysis Date: **8/27/2019**	SeqNo: **2123882** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.1	80	120			
Surr: BFB	1100		1000		105	77.4	118			

Sample ID: **1908E59-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-082119-JP**	Batch ID: **47066**	RunNo: **62443**
Prep Date: **8/26/2019**	Analysis Date: **8/27/2019**	SeqNo: **2123885** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.6	23.04	0	98.6	69.1	142			
Surr: BFB	1000		921.7		109	77.4	118			

Sample ID: **1908E59-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-082148-082119-JP**	Batch ID: **47066**	RunNo: **62443**
Prep Date: **8/26/2019**	Analysis Date: **8/27/2019**	SeqNo: **2123886** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.63	0	101	69.1	142	5.08	20	
Surr: BFB	1000		945.2		109	77.4	118	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**
25-Sep-19

Client: GHD
Project: Jal Landfarm

Sample ID: **MB-47066** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **47066** RunNo: **62443**
Prep Date: **8/26/2019** Analysis Date: **8/27/2019** SeqNo: **2123918** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	80	120			

Sample ID: **LCS-47066** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **47066** RunNo: **62443**
Prep Date: **8/26/2019** Analysis Date: **8/27/2019** SeqNo: **2123919** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	80	120			
Toluene	0.97	0.050	1.000	0	96.8	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.6	80	120			

Sample ID: **1908E59-002AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-082119-JP** Batch ID: **47066** RunNo: **62443**
Prep Date: **8/26/2019** Analysis Date: **8/27/2019** SeqNo: **2123925** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9569	0	115	76	123			
Toluene	1.2	0.048	0.9569	0.009533	122	80.3	127			
Ethylbenzene	1.2	0.048	0.9569	0	126	80.2	131			
Xylenes, Total	3.6	0.096	2.871	0	127	78	133			
Surr: 4-Bromofluorobenzene	0.93		0.9569		97.3	80	120			

Sample ID: **1908E59-002AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-082148-082119-JP** Batch ID: **47066** RunNo: **62443**
Prep Date: **8/26/2019** Analysis Date: **8/27/2019** SeqNo: **2123926** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9569	0	120	76	123	4.53	20	
Toluene	1.2	0.048	0.9569	0.009533	126	80.3	127	3.20	20	
Ethylbenzene	1.2	0.048	0.9569	0	130	80.2	131	3.08	20	
Xylenes, Total	3.8	0.096	2.871	0	131	78	133	2.87	20	
Surr: 4-Bromofluorobenzene	0.95		0.9569		99.8	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**
25-Sep-19

Client: GHD
Project: Jal Landfarm

Sample ID: **MB-47663**	SampType: **MBLK**	TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS**	Batch ID: **47663**	RunNo: **63152**
Prep Date: **9/23/2019**	Analysis Date: **9/24/2019**	SeqNo: **2154423** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID: **LCS-47663**	SampType: **LCS**	TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS**	Batch ID: **47663**	RunNo: **63152**
Prep Date: **9/23/2019**	Analysis Date: **9/24/2019**	SeqNo: **2154424** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Sample ID: **LLLCS-47663**	SampType: **LCSLL**	TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC**	Batch ID: **47663**	RunNo: **63152**
Prep Date: **9/23/2019**	Analysis Date: **9/24/2019**	SeqNo: **2154425** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	96.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**
25-Sep-19

Client: GHD
Project: Jal Landfarm

Sample ID: **MB-47070**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **47070**	RunNo: **62494**
Prep Date: **8/26/2019**	Analysis Date: **8/28/2019**	SeqNo: **2125893** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Thallium	ND	2.5								
Zinc	ND	2.5								

Sample ID: **LCS-47070**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **47070**	RunNo: **62494**
Prep Date: **8/26/2019**	Analysis Date: **8/28/2019**	SeqNo: **2125898** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	26	2.5	25.00	0	103	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	98.9	80	120			
Copper	26	0.30	25.00	0	102	80	120			
Iron	27	2.5	25.00	0	109	80	120			
Lead	25	0.25	25.00	0	99.9	80	120			
Manganese	25	0.10	25.00	0	101	80	120			
Selenium	23	2.5	25.00	0	93.3	80	120			
Silver	5.1	0.25	5.000	0	102	80	120			
Thallium	24	2.5	25.00	0	94.1	80	120			
Zinc	25	2.5	25.00	0	98.2	80	120			

Sample ID: **MB-47070**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **47070**	RunNo: **62543**
Prep Date: **8/26/2019**	Analysis Date: **8/29/2019**	SeqNo: **2127853** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**

25-Sep-19

Client: GHD

Project: Jal Landfarm

Sample ID: **LCS-47070** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **47070** RunNo: **62543**

Prep Date: **8/26/2019** Analysis Date: **8/29/2019** SeqNo: **2127855** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	25.00	0	93.6	80	120			

Sample ID: **1908E59-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62543**

Prep Date: **8/26/2019** Analysis Date: **8/29/2019** SeqNo: **2127901** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	29	2.5	24.67	10.37	76.7	75	125			

Sample ID: **1908E59-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62543**

Prep Date: **8/26/2019** Analysis Date: **8/29/2019** SeqNo: **2127902** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	31	2.5	24.81	10.37	81.7	75	125	4.56	20	

Sample ID: **1908E59-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**

Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	9.8	4.9	24.67	0	39.6	75	125			S
Arsenic	24	4.9	24.67	0	98.7	75	125			
Barium	170	0.20	24.67	145.5	105	75	125			
Beryllium	25	0.30	24.67	0.3550	100	75	125			
Cadmium	23	0.20	24.67	0	94.6	75	125			
Chromium	29	0.59	24.67	5.303	94.6	75	125			
Copper	26	0.59	24.67	2.185	96.1	75	125			
Lead	23	0.49	24.67	1.082	90.4	75	125			
Manganese	72	0.20	24.67	52.74	77.5	75	125			
Silver	5.4	0.49	4.934	0.5936	96.6	75	125			
Thallium	15	4.9	24.67	0	60.5	75	125			S

Sample ID: **1908E59-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**

Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	7.7	5.0	24.81	0	31.0	75	125	24.1	20	RS
Arsenic	25	5.0	24.81	0	101	75	125	2.90	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**
25-Sep-19

Client: GHD
Project: Jal Landfarm

Sample ID: **1908E59-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**
Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	190	0.20	24.81	145.5	182	75	125	10.6	20	S
Beryllium	26	0.30	24.81	0.3550	103	75	125	2.88	20	
Cadmium	24	0.20	24.81	0	95.6	75	125	1.65	20	
Chromium	29	0.60	24.81	5.303	96.7	75	125	2.27	20	
Copper	27	0.60	24.81	2.185	99.6	75	125	3.83	20	
Lead	24	0.50	24.81	1.082	91.6	75	125	1.74	20	
Manganese	77	0.20	24.81	52.74	96.7	75	125	6.57	20	
Silver	5.4	0.50	4.963	0.5936	97.8	75	125	1.62	20	
Thallium	14	5.0	24.81	0	56.4	75	125	6.44	20	S

Sample ID: **1908E59-001A** SampType: **PS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**
Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132270** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	47	4.9	49.15	0	95.5	80	120			
Barium	190	0.20	49.15	145.5	94.8	80	120			
Thallium	37	4.9	49.15	0	75.1	80	120			S

Sample ID: **MB-47070** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **47070** RunNo: **62634**
Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132295** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	2.5								
Uranium	ND	5.0								

Sample ID: **LCS-47070** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **47070** RunNo: **62634**
Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132296** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	24	2.5	25.00	0	96.5	80	120			
Uranium	24	5.0	25.00	0	94.7	80	120			

Sample ID: **1908E59-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**
Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132340** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908E59**

25-Sep-19

Client: GHD

Project: Jal Landfarm

Sample ID: **1908E59-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**

Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132340** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	22	4.9	24.67	0	88.1	75	125			
Uranium	ND	9.9	24.67	0	0	75	125			S

Sample ID: **1908E59-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**

Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132341** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	25	5.0	24.81	0	102	75	125	15.6	20	
Uranium	ND	9.9	24.81	0	0	75	125	0	20	S

Sample ID: **1908E59-001A** SampType: **PS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-082119-JP** Batch ID: **47070** RunNo: **62634**

Prep Date: **8/26/2019** Analysis Date: **9/4/2019** SeqNo: **2132344** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	20	9.8	49.15	0	40.2	80	120			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: **1908E59** | RcptNo: 1

Received By: Daniel M. **8/23/2019 9:35:00 AM**

Completed By: Leah Baca **8/26/2019 8:26:54 AM** Leah Baca

Reviewed By: LB 8/26/19

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 8/26/19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			
2	1.7	Good	Yes			
3	4.0	Good	Yes			
4	3.3	Good	Yes			

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE

Suite 200, Albuquerque NM 87110

Phone #: (505) 884-0672

email or Fax#: christine.mathews@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

# of Coolers: 4

Cooler Temp(including CF): Remarks

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1908 F59	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	TPH 8015 M	Metals 6010	Mercury 6020	BTEX [redacted] 8021 B		
8-21-19	950	S	S-082148-082119-JP-V1-5.5	3x40z glass Jar	ICE	-001											X	X	X	X		
	1020		S-082148-082119-JP-V2-5.5			-002											X	X	X	X		
	1040		S-082148-082119-JP-V3-5			-003											X	X	X	X		
	1100		S-082148-082119-JP-V5-5'			-004											X	X	X	X		
	1115		S-082148-082119-JP-V6-5'			-005											X	X	X	X		
	1135		S-082148-082119-JP-V7-5'			-006											X	X	X	X		
	1155		S-082148-082119-JP-V8-5'			-007											X	X	X	X		
	1220		S-082148-082119-JP-V4-5'			-008											X	X	X	X		
	1255		S-082148-082119-JP-V9-5'			-009											X	X	X	X		
	1305		S-082148-082119-JP-V13-5'			-010											X	X	X	X		
	1330		S-082148-082119-JP-V12-5			-011											X	X	X	X		
	1355		S-082148-082119-JP-V10-5			-012											X	X	X	X		

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8-22-19	1200				8/22/19	1200
8/22/19	1940			Courier	8/23/19	935

Remarks: Metals 6010: Antimony, Arsenic, Barium, Beryllium, Cadmium, Copper, Iron, Lead, Manganese Selenium, Silver, Thallium, Uranium, Zinc

1.4 - 0.3 = 1.1°C 4.3 - 0.3 = 4.0°C

2.0 - 0.3 1.7°C 3.6 - 0.3 = 3.3°C

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #:

email or Fax#: christine.mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 082148

Project Manager: Christine Mathews

Sampler: Joshua Pigg

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF):

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1908E591	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	TPH 8015M	Metals 6010	Mercury 6020	BTEX 8021B		
8-21-19	1415	S	S-082148-082119-JP-VIF-S	3x 4oz glass Jar	ICE	-013											x	x	x	x		
8-21-19	1435	S	S-082148-082119-JP-VIS-S	↓	↓	-014											x	x	x	x		
8-21-19	1500	S	S-082148-082119-JP-VH-S	↓	↓	-015											x	x	x	x		

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8-22-19	1200				8/23/19	1200
8/22/19	1710		Courier		8/23/19	9:35

Remarks: Metals 6010: Antimony, Arsenic, Barium, Beryllium, Cadmium, Copper, Iron, Lead, Manganese, Selenium, Silver, Thallium, Uranium, Zinc.
1.4 - 0.3 = 1.1%
2.0 - 0.3 = 1.7%
4.3 - 0.3 = 4.0%
3.6 - 0.3 = 3.3%

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 02, 2020

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal 4 Landfarm OrderNo.: 1911678

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 60 sample(s) on 11/15/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 31, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-001 **Collection Date:** 11/13/2019 9:50:00 AM
Client Sample ID: S-082148-111319-CN-C1-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	12/3/2019 5:31:02 PM	48975
Arsenic	7.5	5.2		mg/Kg	2	12/6/2019 11:50:33 AM	48975
Barium	100	0.21		mg/Kg	2	12/3/2019 5:31:02 PM	48975
Beryllium	0.51	0.31		mg/Kg	2	12/3/2019 5:31:02 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 5:31:02 PM	48975
Chromium	7.8	0.62		mg/Kg	2	12/3/2019 5:31:02 PM	48975
Copper	1.3	0.61		mg/Kg	2	12/11/2019 5:22:50 PM	49252
Iron	9200	260		mg/Kg	100	12/6/2019 11:52:04 AM	48975
Lead	0.80	0.52		mg/Kg	2	12/6/2019 11:50:33 AM	48975
Manganese	49	0.21		mg/Kg	2	12/3/2019 5:31:02 PM	48975
Selenium	ND	5.2		mg/Kg	2	12/6/2019 11:50:33 AM	48975
Silver	ND	0.52		mg/Kg	2	12/3/2019 5:31:02 PM	48975
Titanium	140	26		mg/Kg	100	12/6/2019 11:52:04 AM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 11:50:33 AM	48975
Zinc	15	5.2		mg/Kg	2	12/3/2019 5:31:02 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/19/2019 11:55:23 AM	48831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/19/2019 11:55:23 AM	48831
Surr: DNOP	118	70-130		%Rec	1	11/19/2019 11:55:23 AM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/18/2019 11:03:24 AM	48822
Surr: BFB	100	77.4-118		%Rec	1	11/18/2019 11:03:24 AM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/18/2019 11:03:24 AM	48822
Toluene	ND	0.049		mg/Kg	1	11/18/2019 11:03:24 AM	48822
Ethylbenzene	ND	0.049		mg/Kg	1	11/18/2019 11:03:24 AM	48822
Xylenes, Total	ND	0.098		mg/Kg	1	11/18/2019 11:03:24 AM	48822
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	11/18/2019 11:03:24 AM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-002
Collection Date: 11/13/2019 10:00:00 AM
Client Sample ID: S-082148-111319-CN-C1-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Barium	76	0.20		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Beryllium	0.37	0.30		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Chromium	6.7	0.60		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Copper	2.1	0.60		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Iron	5800	250		mg/Kg	100	11/22/2019 6:59:53 PM	48837
Lead	2.1	0.50		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Manganese	64	0.20		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Selenium	ND	5.0		mg/Kg	2	12/6/2019 11:53:34 AM	48837
Silver	ND	0.50		mg/Kg	2	11/22/2019 6:53:28 PM	48837
Titanium	130	1.2		mg/Kg	5	12/6/2019 11:59:34 AM	48837
Uranium	ND	9.9		mg/Kg	2	11/25/2019 7:32:07 PM	48837
Zinc	13	5.0		mg/Kg	2	11/22/2019 6:53:28 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-003 **Collection Date:** 11/13/2019 2:00:00 PM
Client Sample ID: S-082148-111319-CN-C1-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 8:39:25 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.9		mg/Kg	2	12/3/2019 5:43:32 PM	48975
Arsenic	ND	4.9		mg/Kg	2	12/6/2019 12:10:56 PM	48975
Barium	110	0.19		mg/Kg	2	12/3/2019 5:43:32 PM	48975
Beryllium	0.34	0.29		mg/Kg	2	12/3/2019 5:43:32 PM	48975
Cadmium	ND	0.19		mg/Kg	2	12/3/2019 5:43:32 PM	48975
Chromium	5.3	0.58		mg/Kg	2	12/3/2019 5:43:32 PM	48975
Copper	2.4	0.60		mg/Kg	2	12/11/2019 5:26:28 PM	49252
Iron	5700	240		mg/Kg	100	12/6/2019 12:13:57 PM	48975
Lead	ND	0.49		mg/Kg	2	12/6/2019 12:10:56 PM	48975
Manganese	54	0.19		mg/Kg	2	12/3/2019 5:43:32 PM	48975
Selenium	ND	4.9		mg/Kg	2	12/6/2019 12:10:56 PM	48975
Silver	ND	0.49		mg/Kg	2	12/3/2019 5:43:32 PM	48975
Titanium	130	1.2		mg/Kg	5	12/6/2019 12:12:27 PM	48975
Uranium	ND	9.7		mg/Kg	2	12/6/2019 12:10:56 PM	48975
Zinc	11	4.9		mg/Kg	2	12/3/2019 5:43:32 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	12	10		mg/Kg	1	11/19/2019 2:25:18 PM	48831
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/19/2019 2:25:18 PM	48831
Surr: DNOP	100	70-130		%Rec	1	11/19/2019 2:25:18 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/18/2019 11:26:55 AM	48822
Surr: BFB	96.4	77.4-118		%Rec	1	11/18/2019 11:26:55 AM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-004
Collection Date: 11/13/2019 2:05:00 PM
Client Sample ID: S-082148-111319-CN-C1-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Arsenic	ND	5.1		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Barium	110	0.20		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Beryllium	0.34	0.31		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Chromium	5.1	0.61		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Copper	3.2	0.61		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Iron	5600	260		mg/Kg	100	11/22/2019 7:03:16 PM	48837
Lead	1.5	0.51		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Manganese	61	0.20		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Selenium	ND	5.1		mg/Kg	2	11/26/2019 7:05:36 PM	48837
Silver	0.53	0.51		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Titanium	97	0.51		mg/Kg	2	11/22/2019 7:01:41 PM	48837
Uranium	ND	10		mg/Kg	2	11/25/2019 7:39:02 PM	48837
Zinc	11	5.1		mg/Kg	2	11/22/2019 7:01:41 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-005 **Collection Date:** 11/13/2019 10:22:00 AM
Client Sample ID: S-082148-111319-CN-C2-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	12/3/2019 5:45:03 PM	48975
Arsenic	ND	5.2		mg/Kg	2	12/6/2019 12:15:27 PM	48975
Barium	79	0.21		mg/Kg	2	12/3/2019 5:45:03 PM	48975
Beryllium	0.37	0.31		mg/Kg	2	12/3/2019 5:45:03 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 5:45:03 PM	48975
Chromium	6.3	0.63		mg/Kg	2	12/3/2019 5:45:03 PM	48975
Copper	1.5	0.61		mg/Kg	2	12/11/2019 5:49:19 PM	49252
Iron	6400	260		mg/Kg	100	12/6/2019 12:18:28 PM	48975
Lead	0.97	0.52		mg/Kg	2	12/6/2019 12:15:27 PM	48975
Manganese	43	0.21		mg/Kg	2	12/3/2019 5:45:03 PM	48975
Selenium	ND	5.2		mg/Kg	2	12/6/2019 12:15:27 PM	48975
Silver	ND	0.52		mg/Kg	2	12/3/2019 5:45:03 PM	48975
Titanium	140	1.3		mg/Kg	5	12/6/2019 12:16:57 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 12:15:27 PM	48975
Zinc	11	5.2		mg/Kg	2	12/3/2019 5:45:03 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/19/2019 2:34:33 PM	48831
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/19/2019 2:34:33 PM	48831
Surr: DNOP	123	70-130		%Rec	1	11/19/2019 2:34:33 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2019 11:50:32 AM	48822
Surr: BFB	105	77.4-118		%Rec	1	11/18/2019 11:50:32 AM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/18/2019 11:50:32 AM	48822
Toluene	ND	0.048		mg/Kg	1	11/18/2019 11:50:32 AM	48822
Ethylbenzene	ND	0.048		mg/Kg	1	11/18/2019 11:50:32 AM	48822
Xylenes, Total	ND	0.096		mg/Kg	1	11/18/2019 11:50:32 AM	48822
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	11/18/2019 11:50:32 AM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-006
Collection Date: 11/13/2019 10:45:00 AM
Client Sample ID: S-082148-111319-CN-C2-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/26/2019 7:14:24 PM	48837
Barium	68	0.20		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Beryllium	ND	0.30		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Chromium	5.3	0.60		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Copper	1.0	0.60		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Iron	5400	250		mg/Kg	100	11/22/2019 7:12:56 PM	48837
Lead	1.3	0.50		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Manganese	43	0.20		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/26/2019 7:14:24 PM	48837
Silver	ND	0.50		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Titanium	99	0.50		mg/Kg	2	11/22/2019 7:11:20 PM	48837
Uranium	ND	10		mg/Kg	2	11/25/2019 7:40:46 PM	48837
Zinc	10	5.0		mg/Kg	2	11/25/2019 7:40:46 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-007 **Collection Date:** 11/13/2019 2:10:00 PM
Client Sample ID: S-082148-111319-CN-C2-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	61		mg/Kg	20	11/19/2019 8:51:49 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	12/3/2019 5:46:34 PM	48975
Arsenic	ND	5.2		mg/Kg	2	12/6/2019 12:19:58 PM	48975
Barium	110	0.21		mg/Kg	2	12/3/2019 5:46:34 PM	48975
Beryllium	0.34	0.31		mg/Kg	2	12/3/2019 5:46:34 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 5:46:34 PM	48975
Chromium	6.1	0.62		mg/Kg	2	12/3/2019 5:46:34 PM	48975
Copper	2.3	0.60		mg/Kg	2	12/11/2019 5:51:07 PM	49252
Iron	6200	260		mg/Kg	100	12/6/2019 12:22:59 PM	48975
Lead	1.4	0.52		mg/Kg	2	12/6/2019 12:19:58 PM	48975
Manganese	54	0.21		mg/Kg	2	12/3/2019 5:46:34 PM	48975
Selenium	ND	5.2		mg/Kg	2	12/6/2019 12:19:58 PM	48975
Silver	ND	0.52		mg/Kg	2	12/3/2019 5:46:34 PM	48975
Titanium	110	1.3		mg/Kg	5	12/6/2019 12:21:29 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 12:19:58 PM	48975
Zinc	11	5.2		mg/Kg	2	12/3/2019 5:46:34 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	12	9.8		mg/Kg	1	11/20/2019 2:50:26 PM	48831
Motor Oil Range Organics (MRO)	75	49		mg/Kg	1	11/20/2019 2:50:26 PM	48831
Surr: DNOP	110	70-130		%Rec	1	11/20/2019 2:50:26 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/18/2019 12:14:11 PM	48822
Surr: BFB	97.9	77.4-118		%Rec	1	11/18/2019 12:14:11 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-008 **Collection Date:** 11/13/2019 2:15:00 PM
Client Sample ID: S-082148-111319-CN-C2-T2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Arsenic	ND	5.0		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Barium	190	0.20		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Beryllium	0.46	0.30		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Chromium	7.9	0.60		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Copper	5.7	0.60		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Iron	14000	260		mg/Kg	100	12/6/2019 12:24:29 PM	49091
Lead	1.5	0.50		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Manganese	120	0.20		mg/Kg	2	12/18/2019 1:37:22 PM	48958
Selenium	ND	5.0		mg/Kg	2	11/26/2019 4:22:22 PM	48958
Silver	ND	0.50		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Titanium	88	0.50		mg/Kg	2	11/22/2019 7:14:43 PM	48958
Uranium	ND	10		mg/Kg	2	11/25/2019 7:42:30 PM	48958
Zinc	14	5.0		mg/Kg	2	11/25/2019 7:42:30 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-009 **Collection Date:** 11/13/2019 11:05:00 AM
Client Sample ID: S-082148-111319-CN-C3-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 12:31:22 PM	48975
Barium	22	0.20		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Beryllium	0.35	0.30		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Chromium	6.2	0.61		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Copper	ND	0.60		mg/Kg	2	12/11/2019 5:52:56 PM	49252
Iron	5700	250		mg/Kg	100	12/6/2019 12:34:22 PM	48975
Lead	0.96	0.51		mg/Kg	2	12/6/2019 12:31:22 PM	48975
Manganese	27	0.20		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 12:31:22 PM	48975
Silver	ND	0.51		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Titanium	91	0.51		mg/Kg	2	12/3/2019 5:48:05 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 12:31:22 PM	48975
Zinc	10	5.1		mg/Kg	2	12/3/2019 5:48:05 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/19/2019 3:03:30 PM	48831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/19/2019 3:03:30 PM	48831
Surr: DNOP	106	70-130		%Rec	1	11/19/2019 3:03:30 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/18/2019 12:37:55 PM	48822
Surr: BFB	98.7	77.4-118		%Rec	1	11/18/2019 12:37:55 PM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/18/2019 12:37:55 PM	48822
Toluene	ND	0.050		mg/Kg	1	11/18/2019 12:37:55 PM	48822
Ethylbenzene	ND	0.050		mg/Kg	1	11/18/2019 12:37:55 PM	48822
Xylenes, Total	ND	0.10		mg/Kg	1	11/18/2019 12:37:55 PM	48822
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/18/2019 12:37:55 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-010
Collection Date: 11/13/2019 11:16:00 AM
Client Sample ID: S-082148-111319-CN-C3-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.9		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Arsenic	5.3	4.9		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Barium	51	0.20		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Beryllium	0.60	0.30		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Chromium	10	0.59		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Copper	2.0	0.59		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Iron	11000	250		mg/Kg	100	11/22/2019 7:24:35 PM	48837
Lead	1.4	0.49		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Manganese	120	0.20		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Selenium	ND	4.9		mg/Kg	2	11/26/2019 7:15:58 PM	48837
Selenium	ND	12		mg/Kg	5	12/3/2019 5:49:36 PM	48837
Silver	ND	0.49		mg/Kg	2	11/22/2019 7:22:59 PM	48837
Titanium	150	1.2		mg/Kg	5	12/3/2019 5:49:36 PM	48837
Uranium	ND	9.8		mg/Kg	2	11/25/2019 7:56:48 PM	48837
Zinc	19	4.9		mg/Kg	2	11/25/2019 7:56:48 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-011 **Collection Date:** 11/13/2019 10:55:00 AM
Client Sample ID: S-082148-111319-CN-C3-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 9:04:13 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	12/3/2019 5:51:06 PM	48975
Arsenic	ND	5.2		mg/Kg	2	12/6/2019 12:35:53 PM	48975
Barium	67	0.21		mg/Kg	2	12/3/2019 5:51:06 PM	48975
Beryllium	0.40	0.31		mg/Kg	2	12/3/2019 5:51:06 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 5:51:06 PM	48975
Chromium	6.9	0.62		mg/Kg	2	12/3/2019 5:51:06 PM	48975
Copper	1.6	0.60		mg/Kg	2	12/11/2019 5:54:44 PM	49252
Iron	7000	260		mg/Kg	100	12/6/2019 12:38:52 PM	48975
Lead	1.2	0.52		mg/Kg	2	12/6/2019 12:35:53 PM	48975
Manganese	54	0.21		mg/Kg	2	12/3/2019 5:51:06 PM	48975
Selenium	ND	5.2		mg/Kg	2	12/6/2019 12:35:53 PM	48975
Silver	ND	0.52		mg/Kg	2	12/3/2019 5:51:06 PM	48975
Titanium	120	1.3		mg/Kg	5	12/6/2019 12:37:23 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 12:35:53 PM	48975
Zinc	14	5.2		mg/Kg	2	12/3/2019 5:51:06 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	270	90		mg/Kg	10	11/20/2019 3:12:34 PM	48831
Motor Oil Range Organics (MRO)	840	450		mg/Kg	10	11/20/2019 3:12:34 PM	48831
Surr: DNOP	0	70-130	S	%Rec	10	11/20/2019 3:12:34 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/18/2019 1:01:39 PM	48822
Surr: BFB	97.3	77.4-118		%Rec	1	11/18/2019 1:01:39 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-012
Collection Date: 11/13/2019 11:00:00 AM
Client Sample ID: S-082148-111319-CN-C3-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Barium	61	0.20		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Beryllium	0.31	0.30		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Chromium	5.7	0.60		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Copper	1.6	0.60		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Iron	5700	250		mg/Kg	100	11/22/2019 7:35:54 PM	48837
Lead	1.9	0.50		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Manganese	43	0.20		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Selenium	ND	5.0		mg/Kg	2	12/6/2019 12:40:22 PM	48837
Silver	ND	0.50		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Titanium	85	0.50		mg/Kg	2	11/22/2019 7:26:23 PM	48837
Uranium	ND	10		mg/Kg	2	11/25/2019 7:58:32 PM	48837
Zinc	12	5.0		mg/Kg	2	11/25/2019 7:58:32 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-013 **Collection Date:** 11/13/2019 11:30:00 AM
Client Sample ID: S-082148-111319-CN-C4-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	12/3/2019 5:54:09 PM	48975
Arsenic	ND	5.0		mg/Kg	2	12/6/2019 12:41:52 PM	48975
Barium	47	0.20		mg/Kg	2	12/3/2019 5:54:09 PM	48975
Beryllium	0.37	0.30		mg/Kg	2	12/3/2019 5:54:09 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 5:54:09 PM	48975
Chromium	7.6	0.59		mg/Kg	2	12/3/2019 5:54:09 PM	48975
Copper	0.96	0.60		mg/Kg	2	12/11/2019 5:56:32 PM	49252
Iron	6800	250		mg/Kg	100	12/6/2019 12:44:52 PM	48975
Lead	0.86	0.50		mg/Kg	2	12/6/2019 12:41:52 PM	48975
Manganese	34	0.20		mg/Kg	2	12/3/2019 5:54:09 PM	48975
Selenium	ND	5.0		mg/Kg	2	12/6/2019 12:41:52 PM	48975
Silver	ND	0.50		mg/Kg	2	12/3/2019 5:54:09 PM	48975
Titanium	140	1.2		mg/Kg	5	12/6/2019 12:43:22 PM	48975
Uranium	ND	9.9		mg/Kg	2	12/6/2019 12:41:52 PM	48975
Zinc	14	5.0		mg/Kg	2	12/3/2019 5:54:09 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/19/2019 3:22:08 PM	48831
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/19/2019 3:22:08 PM	48831
Surr: DNOP	110	70-130		%Rec	1	11/19/2019 3:22:08 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/18/2019 2:36:15 PM	48822
Surr: BFB	97.1	77.4-118		%Rec	1	11/18/2019 2:36:15 PM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/18/2019 2:36:15 PM	48822
Toluene	ND	0.050		mg/Kg	1	11/18/2019 2:36:15 PM	48822
Ethylbenzene	ND	0.050		mg/Kg	1	11/18/2019 2:36:15 PM	48822
Xylenes, Total	ND	0.099		mg/Kg	1	11/18/2019 2:36:15 PM	48822
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	11/18/2019 2:36:15 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-014
Collection Date: 11/13/2019 11:35:00 AM
Client Sample ID: S-082148-111319-CN-C4-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Barium	64	0.20		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Beryllium	0.34	0.30		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Chromium	6.7	0.60		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Copper	1.6	0.60		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Iron	5600	250		mg/Kg	100	11/22/2019 7:39:19 PM	48837
Lead	2.1	0.50		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Manganese	45	0.20		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 7:37:43 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:00:14 PM	48837
Titanium	130	1.3		mg/Kg	5	11/25/2019 8:01:57 PM	48837
Uranium	ND	10		mg/Kg	2	11/25/2019 8:00:14 PM	48837
Zinc	12	5.0		mg/Kg	2	11/25/2019 8:00:14 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-015 **Collection Date:** 11/13/2019 11:25:00 AM
Client Sample ID: S-082148-111319-CN-C4-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 9:16:38 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 6:01:04 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 12:51:48 PM	48975
Barium	76	0.21		mg/Kg	2	12/3/2019 6:01:04 PM	48975
Beryllium	0.37	0.31		mg/Kg	2	12/3/2019 6:01:04 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 6:01:04 PM	48975
Chromium	6.1	0.62		mg/Kg	2	12/3/2019 6:01:04 PM	48975
Copper	1.7	0.61		mg/Kg	2	12/11/2019 5:58:19 PM	49252
Iron	6300	260		mg/Kg	100	12/6/2019 12:54:52 PM	48975
Lead	1.7	0.51		mg/Kg	2	12/6/2019 12:51:48 PM	48975
Manganese	51	0.21		mg/Kg	2	12/3/2019 6:01:04 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 12:51:48 PM	48975
Silver	ND	0.51		mg/Kg	2	12/3/2019 6:01:04 PM	48975
Titanium	130	1.3		mg/Kg	5	12/6/2019 12:53:21 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 12:51:48 PM	48975
Zinc	12	5.1		mg/Kg	2	12/3/2019 6:01:04 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	110	48		mg/Kg	5	11/20/2019 3:34:37 PM	48831
Motor Oil Range Organics (MRO)	330	240		mg/Kg	5	11/20/2019 3:34:37 PM	48831
Surr: DNOP	108	70-130		%Rec	5	11/20/2019 3:34:37 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/18/2019 2:59:41 PM	48822
Surr: BFB	96.7	77.4-118		%Rec	1	11/18/2019 2:59:41 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-016
Collection Date: 11/13/2019 11:28:00 AM
Client Sample ID: S-082148-111319-CN-C4-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Barium	84	0.20		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Beryllium	0.36	0.30		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Chromium	5.3	0.60		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Copper	1.7	0.60		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Iron	5800	250		mg/Kg	100	11/22/2019 7:42:42 PM	48837
Lead	2.5	0.50		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Manganese	54	0.20		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:03:41 PM	48837
Titanium	70	0.50		mg/Kg	2	11/22/2019 7:41:06 PM	48837
Uranium	ND	10		mg/Kg	2	11/25/2019 8:03:41 PM	48837
Zinc	12	5.0		mg/Kg	2	11/25/2019 8:03:41 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-017 **Collection Date:** 11/13/2019 11:50:00 AM
Client Sample ID: S-082148-111319-CN-C5-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	12/3/2019 6:02:37 PM	48975
Arsenic	ND	5.0		mg/Kg	2	12/6/2019 12:56:22 PM	48975
Barium	55	0.20		mg/Kg	2	12/3/2019 6:02:37 PM	48975
Beryllium	0.58	0.30		mg/Kg	2	12/3/2019 6:02:37 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:02:37 PM	48975
Chromium	9.8	0.60		mg/Kg	2	12/3/2019 6:02:37 PM	48975
Copper	1.4	0.59		mg/Kg	2	12/11/2019 6:00:07 PM	49252
Iron	9700	250		mg/Kg	100	12/6/2019 12:59:24 PM	48975
Lead	1.2	0.50		mg/Kg	2	12/6/2019 12:56:22 PM	48975
Manganese	50	0.20		mg/Kg	2	12/3/2019 6:02:37 PM	48975
Selenium	ND	5.0		mg/Kg	2	12/6/2019 12:56:22 PM	48975
Silver	ND	0.50		mg/Kg	2	12/3/2019 6:02:37 PM	48975
Titanium	150	1.2		mg/Kg	5	12/6/2019 12:57:54 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 12:56:22 PM	48975
Zinc	19	5.0		mg/Kg	2	12/3/2019 6:02:37 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/19/2019 3:40:50 PM	48831
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/19/2019 3:40:50 PM	48831
Surr: DNOP	103	70-130		%Rec	1	11/19/2019 3:40:50 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/18/2019 3:23:01 PM	48822
Surr: BFB	99.0	77.4-118		%Rec	1	11/18/2019 3:23:01 PM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/18/2019 3:23:01 PM	48822
Toluene	ND	0.049		mg/Kg	1	11/18/2019 3:23:01 PM	48822
Ethylbenzene	ND	0.049		mg/Kg	1	11/18/2019 3:23:01 PM	48822
Xylenes, Total	ND	0.098		mg/Kg	1	11/18/2019 3:23:01 PM	48822
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/18/2019 3:23:01 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-018
Collection Date: 11/13/2019 12:00:00 PM
Client Sample ID: S-082148-111319-CN-C5-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Barium	61	0.20		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Beryllium	0.41	0.30		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Chromium	6.9	0.60		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Copper	1.0	0.60		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Iron	7400	250		mg/Kg	100	11/22/2019 7:46:06 PM	48837
Lead	2.0	0.50		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Manganese	34	0.20		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:05:23 PM	48837
Titanium	73	0.50		mg/Kg	2	11/22/2019 7:44:30 PM	48837
Uranium	ND	10		mg/Kg	2	11/25/2019 8:05:23 PM	48837
Zinc	13	5.0		mg/Kg	2	11/25/2019 8:05:23 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-019 **Collection Date:** 11/13/2019 11:45:00 AM
Client Sample ID: S-082148-111319-CN-C5-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 9:29:02 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	12/3/2019 6:04:07 PM	48975
Arsenic	ND	5.2		mg/Kg	2	12/6/2019 1:00:54 PM	48975
Barium	800	0.52		mg/Kg	5	12/6/2019 1:02:25 PM	48975
Beryllium	ND	0.31		mg/Kg	2	12/3/2019 6:04:07 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 6:04:07 PM	48975
Chromium	8.5	0.62		mg/Kg	2	12/3/2019 6:04:07 PM	48975
Copper	5.9	0.60		mg/Kg	2	12/11/2019 6:07:29 PM	49252
Iron	5800	260		mg/Kg	100	12/6/2019 1:03:55 PM	48975
Lead	6.9	0.52		mg/Kg	2	12/6/2019 1:00:54 PM	48975
Manganese	80	0.21		mg/Kg	2	12/3/2019 6:04:07 PM	48975
Selenium	ND	5.2		mg/Kg	2	12/6/2019 1:00:54 PM	48975
Silver	ND	0.52		mg/Kg	2	12/3/2019 6:04:07 PM	48975
Titanium	92	0.52		mg/Kg	2	12/6/2019 1:00:54 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 1:00:54 PM	48975
Zinc	22	5.2		mg/Kg	2	12/3/2019 6:04:07 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/20/2019 3:56:44 PM	48831
Motor Oil Range Organics (MRO)	90	50		mg/Kg	1	11/20/2019 3:56:44 PM	48831
Surr: DNOP	109	70-130		%Rec	1	11/20/2019 3:56:44 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2019 3:46:16 PM	48822
Surr: BFB	98.5	77.4-118		%Rec	1	11/18/2019 3:46:16 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-020 **Collection Date:** 11/13/2019 11:47:00 AM
Client Sample ID: S-082148-111319-CN-C5-T2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.9		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Arsenic	ND	4.9		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Barium	81	0.20		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Beryllium	ND	0.29		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Chromium	6.5	0.59		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Copper	3.5	0.59		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Iron	5300	240		mg/Kg	100	11/22/2019 7:49:30 PM	48837
Lead	2.4	0.49		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Manganese	60	0.20		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Selenium	ND	4.9		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Silver	ND	0.49		mg/Kg	2	11/25/2019 8:07:06 PM	48837
Titanium	72	0.49		mg/Kg	2	11/22/2019 7:47:54 PM	48837
Uranium	ND	9.8		mg/Kg	2	11/25/2019 8:07:06 PM	48837
Zinc	16	4.9		mg/Kg	2	11/25/2019 8:07:06 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-021 **Collection Date:** 11/13/2019 12:10:00 PM
Client Sample ID: S-082148-111319-CN-C6-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 6:05:39 PM	48975
Arsenic	5.5	5.1		mg/Kg	2	12/6/2019 1:05:26 PM	48975
Barium	55	0.20		mg/Kg	2	12/3/2019 6:05:39 PM	48975
Beryllium	0.44	0.30		mg/Kg	2	12/3/2019 6:05:39 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:05:39 PM	48975
Chromium	8.0	0.61		mg/Kg	2	12/3/2019 6:05:39 PM	48975
Copper	1.0	0.62		mg/Kg	2	12/11/2019 6:09:19 PM	49252
Iron	8600	250		mg/Kg	100	12/6/2019 1:15:35 PM	48975
Lead	0.88	0.51		mg/Kg	2	12/6/2019 1:05:26 PM	48975
Manganese	42	0.20		mg/Kg	2	12/3/2019 6:05:39 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 1:05:26 PM	48975
Silver	ND	0.51		mg/Kg	2	12/3/2019 6:05:39 PM	48975
Titanium	130	1.3		mg/Kg	5	12/6/2019 1:14:04 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 1:05:26 PM	48975
Zinc	15	5.1		mg/Kg	2	12/3/2019 6:05:39 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	11/19/2019 3:59:33 PM	48831
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/19/2019 3:59:33 PM	48831
Surr: DNOP	119	70-130		%Rec	1	11/19/2019 3:59:33 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/18/2019 4:09:36 PM	48822
Surr: BFB	101	77.4-118		%Rec	1	11/18/2019 4:09:36 PM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/18/2019 4:09:36 PM	48822
Toluene	ND	0.049		mg/Kg	1	11/18/2019 4:09:36 PM	48822
Ethylbenzene	ND	0.049		mg/Kg	1	11/18/2019 4:09:36 PM	48822
Xylenes, Total	ND	0.097		mg/Kg	1	11/18/2019 4:09:36 PM	48822
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	11/18/2019 4:09:36 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-022
Collection Date: 11/13/2019 12:20:00 PM
Client Sample ID: S-082148-111319-CN-C6-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Barium	51	0.20		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Beryllium	0.50	0.30		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Chromium	8.4	0.60		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Copper	0.77	0.60		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Iron	9100	250		mg/Kg	100	11/22/2019 8:00:50 PM	48837
Lead	0.97	0.50		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Manganese	45	0.20		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 7:51:18 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:08:49 PM	48837
Titanium	120	1.2		mg/Kg	5	11/25/2019 8:10:32 PM	48837
Uranium	ND	9.9		mg/Kg	2	11/25/2019 8:08:49 PM	48837
Zinc	17	5.0		mg/Kg	2	11/25/2019 8:08:49 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-023 **Collection Date:** 11/13/2019 12:05:00 PM
Client Sample ID: S-082148-111319-CN-C6-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	59		mg/Kg	20	11/19/2019 9:41:27 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	12/3/2019 6:07:10 PM	48975
Arsenic	ND	5.0		mg/Kg	2	12/6/2019 1:17:05 PM	48975
Barium	92	0.20		mg/Kg	2	12/3/2019 6:07:10 PM	48975
Beryllium	0.31	0.30		mg/Kg	2	12/3/2019 6:07:10 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:07:10 PM	48975
Chromium	5.6	0.60		mg/Kg	2	12/3/2019 6:07:10 PM	48975
Copper	2.5	0.60		mg/Kg	2	12/11/2019 6:11:07 PM	49252
Iron	5700	250		mg/Kg	100	12/6/2019 1:20:05 PM	48975
Lead	1.3	0.50		mg/Kg	2	12/6/2019 1:17:05 PM	48975
Manganese	60	0.20		mg/Kg	2	12/3/2019 6:07:10 PM	48975
Selenium	ND	5.0		mg/Kg	2	12/6/2019 1:17:05 PM	48975
Silver	ND	0.50		mg/Kg	2	12/3/2019 6:07:10 PM	48975
Titanium	120	1.2		mg/Kg	5	12/6/2019 1:18:35 PM	48975
Uranium	ND	9.9		mg/Kg	2	12/6/2019 1:17:05 PM	48975
Zinc	12	5.0		mg/Kg	2	12/3/2019 6:07:10 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2019 4:40:43 PM	48831
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/20/2019 4:40:43 PM	48831
Surr: DNOP	110	70-130		%Rec	1	11/20/2019 4:40:43 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/18/2019 4:33:00 PM	48822
Surr: BFB	97.6	77.4-118		%Rec	1	11/18/2019 4:33:00 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-024
Collection Date: 11/13/2019 12:07:00 PM
Client Sample ID: S-082148-111319-CN-C6-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/26/2019 7:19:08 PM	48837
Barium	89	0.20		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Beryllium	ND	0.30		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Chromium	5.0	0.60		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Copper	2.1	0.60		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Iron	5000	250		mg/Kg	100	11/22/2019 8:04:15 PM	48837
Lead	1.7	0.50		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Manganese	53	0.20		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:12:14 PM	48837
Titanium	110	1.2		mg/Kg	5	11/25/2019 8:22:51 PM	48837
Uranium	ND	10		mg/Kg	2	11/22/2019 8:02:39 PM	48837
Zinc	11	5.0		mg/Kg	2	11/25/2019 8:12:14 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-025 **Collection Date:** 11/13/2019 12:40:00 PM
Client Sample ID: S-082148-111319-CN-C7-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 6:08:41 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 1:21:34 PM	48975
Barium	300	0.21		mg/Kg	2	12/3/2019 6:08:41 PM	48975
Beryllium	0.36	0.31		mg/Kg	2	12/3/2019 6:08:41 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 6:08:41 PM	48975
Chromium	6.2	0.62		mg/Kg	2	12/3/2019 6:08:41 PM	48975
Copper	3.4	0.62		mg/Kg	2	12/11/2019 6:12:55 PM	48975
Iron	6400	260		mg/Kg	100	12/6/2019 1:24:34 PM	48975
Lead	0.77	0.51		mg/Kg	2	12/6/2019 1:21:34 PM	48975
Manganese	80	0.21		mg/Kg	2	12/3/2019 6:08:41 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 1:21:34 PM	48975
Silver	0.66	0.51		mg/Kg	2	12/3/2019 6:08:41 PM	48975
Titanium	150	1.3		mg/Kg	5	12/6/2019 1:23:04 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 1:21:34 PM	48975
Zinc	12	5.1		mg/Kg	2	12/3/2019 6:08:41 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	11/19/2019 4:18:19 PM	48831
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	11/19/2019 4:18:19 PM	48831
Surr: DNOP	85.9	70-130		%Rec	1	11/19/2019 4:18:19 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2019 4:56:16 PM	48822
Surr: BFB	101	77.4-118		%Rec	1	11/18/2019 4:56:16 PM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/18/2019 4:56:16 PM	48822
Toluene	ND	0.048		mg/Kg	1	11/18/2019 4:56:16 PM	48822
Ethylbenzene	ND	0.048		mg/Kg	1	11/18/2019 4:56:16 PM	48822
Xylenes, Total	ND	0.097		mg/Kg	1	11/18/2019 4:56:16 PM	48822
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	11/18/2019 4:56:16 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-026
Collection Date: 11/13/2019 12:55:00 PM
Client Sample ID: S-082148-111319-CN-C7-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/26/2019 7:22:19 PM	48837
Barium	27	0.20		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Beryllium	0.45	0.30		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Chromium	7.9	0.60		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Copper	0.89	0.60		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Iron	8300	250		mg/Kg	100	11/22/2019 8:07:38 PM	48837
Lead	0.98	0.50		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Manganese	44	0.20		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:24:35 PM	48837
Titanium	110	1.2		mg/Kg	5	11/25/2019 8:26:17 PM	48837
Uranium	ND	9.9		mg/Kg	2	11/22/2019 8:06:02 PM	48837
Zinc	16	5.0		mg/Kg	2	11/26/2019 7:22:19 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-027 **Collection Date:** 11/13/2019 12:35:00 PM
Client Sample ID: S-082148-111319-CN-C7-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 10:43:28 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 6:10:13 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 1:26:04 PM	48975
Barium	100	0.20		mg/Kg	2	12/3/2019 6:10:13 PM	48975
Beryllium	0.31	0.30		mg/Kg	2	12/3/2019 6:10:13 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:10:13 PM	48975
Chromium	5.3	0.61		mg/Kg	2	12/3/2019 6:10:13 PM	48975
Copper	2.5	0.61		mg/Kg	2	12/11/2019 6:14:46 PM	48975
Iron	5300	250		mg/Kg	100	12/6/2019 1:34:32 PM	48975
Lead	0.93	0.51		mg/Kg	2	12/6/2019 1:26:04 PM	48975
Manganese	58	0.20		mg/Kg	2	12/3/2019 6:10:13 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 1:26:04 PM	48975
Silver	ND	0.51		mg/Kg	2	12/3/2019 6:10:13 PM	48975
Titanium	120	1.3		mg/Kg	5	12/6/2019 1:27:36 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 1:26:04 PM	48975
Zinc	10	5.1		mg/Kg	2	12/3/2019 6:10:13 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/20/2019 5:02:45 PM	48831
Motor Oil Range Organics (MRO)	66	50		mg/Kg	1	11/20/2019 5:02:45 PM	48831
Surr: DNOP	122	70-130		%Rec	1	11/20/2019 5:02:45 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/18/2019 5:19:30 PM	48822
Surr: BFB	96.4	77.4-118		%Rec	1	11/18/2019 5:19:30 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-028
Collection Date: 11/13/2019 12:37:00 PM
Client Sample ID: S-082148-111319-CN-C7-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.9		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Arsenic	ND	4.9		mg/Kg	2	11/26/2019 7:25:27 PM	48837
Barium	100	0.19		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Beryllium	ND	0.29		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Cadmium	ND	0.19		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Chromium	4.5	0.58		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Copper	2.3	0.58		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Iron	4900	240		mg/Kg	100	11/26/2019 7:27:02 PM	48837
Lead	0.82	0.49		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Manganese	48	0.19		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Selenium	ND	4.9		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Silver	0.52	0.49		mg/Kg	2	11/25/2019 8:27:59 PM	48837
Titanium	95	0.49		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Uranium	ND	9.7		mg/Kg	2	11/22/2019 8:09:26 PM	48837
Zinc	10	4.9		mg/Kg	2	11/26/2019 7:25:27 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-029 **Collection Date:** 11/13/2019 1:45:00 PM
Client Sample ID: S-082148-111319-CN-C8-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 6:11:44 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 1:36:04 PM	48975
Barium	220	0.21		mg/Kg	2	12/3/2019 6:11:44 PM	48975
Beryllium	ND	0.31		mg/Kg	2	12/3/2019 6:11:44 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/3/2019 6:11:44 PM	48975
Chromium	6.4	0.62		mg/Kg	2	12/3/2019 6:11:44 PM	48975
Copper	1.5	0.62		mg/Kg	2	12/11/2019 6:16:35 PM	49252
Iron	4900	260		mg/Kg	100	12/6/2019 1:39:06 PM	48975
Lead	1.2	0.51		mg/Kg	2	12/6/2019 1:36:04 PM	48975
Manganese	51	0.21		mg/Kg	2	12/3/2019 6:11:44 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 1:36:04 PM	48975
Silver	ND	0.51		mg/Kg	2	12/3/2019 6:11:44 PM	48975
Titanium	120	1.3		mg/Kg	5	12/6/2019 1:37:36 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 2:27:42 PM	48975
Zinc	9.6	5.1		mg/Kg	2	12/3/2019 6:11:44 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/19/2019 4:37:02 PM	48831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/19/2019 4:37:02 PM	48831
Surr: DNOP	102	70-130		%Rec	1	11/19/2019 4:37:02 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2019 5:42:42 PM	48822
Surr: BFB	103	77.4-118		%Rec	1	11/18/2019 5:42:42 PM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/18/2019 5:42:42 PM	48822
Toluene	ND	0.048		mg/Kg	1	11/18/2019 5:42:42 PM	48822
Ethylbenzene	ND	0.048		mg/Kg	1	11/18/2019 5:42:42 PM	48822
Xylenes, Total	ND	0.097		mg/Kg	1	11/18/2019 5:42:42 PM	48822
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	11/18/2019 5:42:42 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-030
Collection Date: 11/13/2019 2:20:00 PM
Client Sample ID: S-082148-111319-CN-C8-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Arsenic	ND	5.0		mg/Kg	2	11/26/2019 7:28:36 PM	48837
Barium	86	0.20		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Beryllium	ND	0.30		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Chromium	5.1	0.59		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Copper	ND	0.59		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Iron	5400	250		mg/Kg	100	11/22/2019 8:14:25 PM	48837
Lead	1.3	0.50		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Manganese	31	0.20		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:29:42 PM	48837
Titanium	110	1.2		mg/Kg	5	11/25/2019 8:31:26 PM	48837
Uranium	ND	9.9		mg/Kg	2	11/22/2019 8:12:49 PM	48837
Zinc	9.7	5.0		mg/Kg	2	11/26/2019 7:28:36 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-031 **Collection Date:** 11/13/2019 1:10:00 PM
Client Sample ID: S-082148-111319-CN-C8-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 10:55:52 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 6:13:15 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 1:40:37 PM	48975
Barium	74	0.20		mg/Kg	2	12/3/2019 6:13:15 PM	48975
Beryllium	0.31	0.31		mg/Kg	2	12/3/2019 6:13:15 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:13:15 PM	48975
Chromium	5.7	0.61		mg/Kg	2	12/3/2019 6:13:15 PM	48975
Copper	2.2	0.62		mg/Kg	2	12/11/2019 6:18:23 PM	49252
Iron	6000	260		mg/Kg	100	12/6/2019 1:43:37 PM	48975
Lead	2.5	0.51		mg/Kg	2	12/6/2019 1:40:37 PM	48975
Manganese	59	0.20		mg/Kg	2	12/3/2019 6:13:15 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 1:40:37 PM	48975
Silver	ND	0.51		mg/Kg	2	12/3/2019 6:13:15 PM	48975
Titanium	110	1.3		mg/Kg	5	12/6/2019 1:42:07 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 2:29:12 PM	48975
Zinc	11	5.1		mg/Kg	2	12/3/2019 6:13:15 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/19/2019 4:46:26 PM	48831
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/19/2019 4:46:26 PM	48831
Surr: DNOP	95.9	70-130		%Rec	1	11/19/2019 4:46:26 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2019 6:05:57 PM	48822
Surr: BFB	101	77.4-118		%Rec	1	11/18/2019 6:05:57 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-032
Collection Date: 11/13/2019 1:12:00 PM
Client Sample ID: S-082148-111319-CN-C8-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Arsenic	ND	5.0		mg/Kg	2	12/3/2019 6:14:46 PM	48837
Barium	110	0.20		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Beryllium	ND	0.30		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Chromium	7.4	0.60		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Copper	2.5	0.60		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Iron	4600	250		mg/Kg	100	11/22/2019 8:25:46 PM	48837
Lead	2.4	0.50		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Manganese	50	0.20		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:33:08 PM	48837
Titanium	96	0.50		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Uranium	ND	10		mg/Kg	2	11/22/2019 8:16:13 PM	48837
Zinc	16	5.0		mg/Kg	2	11/26/2019 7:38:47 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-033 **Collection Date:** 11/13/2019 2:40:00 PM
Client Sample ID: S-082148-111319-CN-C9-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	12/3/2019 6:21:42 PM	48975
Arsenic	ND	5.0		mg/Kg	2	12/6/2019 1:45:08 PM	48975
Barium	72	0.20		mg/Kg	2	12/3/2019 6:21:42 PM	48975
Beryllium	0.31	0.30		mg/Kg	2	12/3/2019 6:21:42 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:21:42 PM	48975
Chromium	6.6	0.60		mg/Kg	2	12/3/2019 6:21:42 PM	48975
Copper	ND	0.59		mg/Kg	2	12/11/2019 6:20:13 PM	49252
Iron	6200	250		mg/Kg	100	12/6/2019 1:48:04 PM	48975
Lead	1.3	0.50		mg/Kg	2	12/6/2019 1:45:08 PM	48975
Manganese	31	0.20		mg/Kg	2	12/3/2019 6:21:42 PM	48975
Selenium	ND	5.0		mg/Kg	2	12/6/2019 1:45:08 PM	48975
Silver	ND	0.50		mg/Kg	2	12/3/2019 6:21:42 PM	48975
Titanium	120	1.2		mg/Kg	5	12/6/2019 1:46:38 PM	48975
Uranium	ND	10		mg/Kg	2	12/6/2019 2:30:43 PM	48975
Zinc	11	5.0		mg/Kg	2	12/3/2019 6:21:42 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/19/2019 4:55:50 PM	48831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/19/2019 4:55:50 PM	48831
Surr: DNOP	86.4	70-130		%Rec	1	11/19/2019 4:55:50 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/18/2019 7:15:53 PM	48822
Surr: BFB	100	77.4-118		%Rec	1	11/18/2019 7:15:53 PM	48822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	11/18/2019 7:15:53 PM	48822
Toluene	ND	0.047		mg/Kg	1	11/18/2019 7:15:53 PM	48822
Ethylbenzene	ND	0.047		mg/Kg	1	11/18/2019 7:15:53 PM	48822
Xylenes, Total	ND	0.094		mg/Kg	1	11/18/2019 7:15:53 PM	48822
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	11/18/2019 7:15:53 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-034
Collection Date: 11/13/2019 2:42:00 PM
Client Sample ID: S-082148-111319-CN-C9-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Arsenic	ND	5.2		mg/Kg	2	12/3/2019 6:23:15 PM	48837
Barium	61	0.21		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Beryllium	ND	0.31		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Cadmium	ND	0.21		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Chromium	4.6	0.62		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Copper	0.64	0.62		mg/Kg	2	11/25/2019 8:34:52 PM	48837
Iron	4200	260		mg/Kg	100	11/22/2019 8:29:25 PM	48837
Lead	2.0	0.52		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Manganese	28	0.21		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Selenium	ND	5.2		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Silver	ND	0.52		mg/Kg	2	11/25/2019 8:34:52 PM	48837
Titanium	96	0.52		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Uranium	ND	10		mg/Kg	2	11/22/2019 8:27:51 PM	48837
Zinc	8.2	5.2		mg/Kg	2	11/26/2019 7:40:24 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-035 **Collection Date:** 11/13/2019 2:33:00 PM
Client Sample ID: S-082148-111319-CN-C9-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 11:08:17 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.9		mg/Kg	2	12/3/2019 6:24:45 PM	48975
Arsenic	ND	4.9		mg/Kg	2	12/6/2019 1:56:33 PM	48975
Barium	82	0.20		mg/Kg	2	12/3/2019 6:24:45 PM	48975
Beryllium	ND	0.29		mg/Kg	2	12/3/2019 6:24:45 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:24:45 PM	48975
Chromium	5.7	0.59		mg/Kg	2	12/3/2019 6:24:45 PM	48975
Copper	2.3	0.59		mg/Kg	2	12/11/2019 6:21:59 PM	49252
Iron	6000	240		mg/Kg	100	12/6/2019 1:59:35 PM	48975
Lead	1.7	0.49		mg/Kg	2	12/6/2019 1:56:33 PM	48975
Manganese	58	0.20		mg/Kg	2	12/3/2019 6:24:45 PM	48975
Selenium	ND	4.9		mg/Kg	2	12/6/2019 1:56:33 PM	48975
Silver	ND	0.49		mg/Kg	2	12/3/2019 6:24:45 PM	48975
Titanium	120	1.2		mg/Kg	5	12/6/2019 1:58:05 PM	48975
Uranium	ND	9.8		mg/Kg	2	12/6/2019 2:39:24 PM	48975
Zinc	13	4.9		mg/Kg	2	12/3/2019 6:24:45 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	11/20/2019 5:24:53 PM	48831
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	11/20/2019 5:24:53 PM	48831
Surr: DNOP	133	70-130	S	%Rec	1	11/20/2019 5:24:53 PM	48831
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2019 7:39:16 PM	48822
Surr: BFB	97.6	77.4-118		%Rec	1	11/18/2019 7:39:16 PM	48822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-036
Collection Date: 11/13/2019 2:35:00 PM
Client Sample ID: S-082148-111319-CN-C9-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Arsenic	ND	5.0		mg/Kg	2	12/3/2019 6:26:16 PM	48837
Barium	75	0.20		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Beryllium	ND	0.30		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Chromium	4.9	0.60		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Copper	4.1	0.60		mg/Kg	2	11/25/2019 8:36:34 PM	48837
Iron	5100	250		mg/Kg	100	11/22/2019 8:33:03 PM	48837
Lead	1.7	0.50		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Manganese	51	0.20		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:36:34 PM	48837
Titanium	110	1.2		mg/Kg	5	12/11/2019 4:41:20 PM	48837
Uranium	ND	10		mg/Kg	2	11/22/2019 8:31:27 PM	48837
Zinc	11	5.0		mg/Kg	2	11/26/2019 7:41:58 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-037 **Collection Date:** 11/13/2019 3:00:00 PM
Client Sample ID: S-082148-111319-CN-C10-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.9		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Arsenic	ND	4.9		mg/Kg	2	12/3/2019 6:27:47 PM	48958
Barium	92	0.20		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Beryllium	0.40	0.30		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Chromium	5.9	0.59		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Copper	3.1	0.59		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Iron	5700	260		mg/Kg	100	12/6/2019 2:42:25 PM	49091
Lead	0.89	0.49		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Manganese	70	0.20		mg/Kg	2	12/6/2019 2:40:54 PM	49091
Selenium	ND	4.9		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Silver	ND	0.49		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Titanium	140	1.2		mg/Kg	5	12/3/2019 6:29:18 PM	48958
Uranium	ND	9.9		mg/Kg	2	11/26/2019 4:28:56 PM	48958
Zinc	12	4.9		mg/Kg	2	11/26/2019 4:28:56 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2019 7:52:56 AM	48883
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	11/20/2019 7:52:56 AM	48883
Surr: DNOP	99.2	70-130		%Rec	1	11/20/2019 7:52:56 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2019 1:14:51 PM	48877
Surr: BFB	104	77.4-118		%Rec	1	11/21/2019 1:14:51 PM	48877
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/21/2019 1:14:51 PM	48877
Toluene	ND	0.049		mg/Kg	1	11/21/2019 1:14:51 PM	48877
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2019 1:14:51 PM	48877
Xylenes, Total	ND	0.097		mg/Kg	1	11/21/2019 1:14:51 PM	48877
Surr: 4-Bromofluorobenzene	95.3	80-120		%Rec	1	11/21/2019 1:14:51 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-038
Collection Date: 11/13/2019 3:20:00 PM
Client Sample ID: S-082148-111319-CN-C10-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Arsenic	ND	5.1		mg/Kg	2	12/3/2019 6:30:49 PM	48837
Barium	90	0.21		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Beryllium	0.42	0.31		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Cadmium	ND	0.21		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Chromium	7.0	0.62		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Copper	1.2	0.62		mg/Kg	2	11/25/2019 8:38:16 PM	48837
Iron	8000	260		mg/Kg	100	11/22/2019 8:36:25 PM	48837
Lead	ND	0.51		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Manganese	42	0.21		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Selenium	ND	5.1		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Silver	ND	0.51		mg/Kg	2	11/25/2019 8:38:16 PM	48837
Titanium	130	1.3		mg/Kg	5	12/3/2019 6:32:21 PM	48837
Uranium	ND	10		mg/Kg	2	11/22/2019 8:34:50 PM	48837
Zinc	15	5.1		mg/Kg	2	11/26/2019 7:43:34 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-039
Collection Date: 11/13/2019 3:05:00 PM
Client Sample ID: S-082148-111319-CN-C10-T1
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 11:20:42 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:39:28 PM	48958
Barium	53	0.20		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Beryllium	0.30	0.30		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Chromium	5.0	0.61		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Copper	2.1	0.61		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Iron	4600	260		mg/Kg	100	12/6/2019 2:45:25 PM	49091
Lead	0.81	0.51		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Manganese	40	0.21		mg/Kg	2	12/6/2019 2:43:55 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Titanium	90	0.51		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 4:32:04 PM	48958
Zinc	9.1	5.1		mg/Kg	2	11/26/2019 4:32:04 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/20/2019 8:20:12 AM	48883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/20/2019 8:20:12 AM	48883
Surr: DNOP	106	70-130		%Rec	1	11/20/2019 8:20:12 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/21/2019 1:37:45 PM	48877
Surr: BFB	99.2	77.4-118		%Rec	1	11/21/2019 1:37:45 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-040 **Collection Date:** 11/13/2019 3:10:00 PM
Client Sample ID: S-082148-111319-CN-C10-T2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Arsenic	ND	5.0		mg/Kg	2	12/3/2019 6:33:52 PM	48837
Barium	70	0.20		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Beryllium	ND	0.30		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Cadmium	ND	0.20		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Chromium	5.5	0.60		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Copper	2.7	0.60		mg/Kg	2	11/25/2019 8:47:30 PM	48837
Iron	5900	250		mg/Kg	100	11/22/2019 8:39:47 PM	48837
Lead	1.4	0.50		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Manganese	50	0.20		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Selenium	ND	5.0		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Silver	ND	0.50		mg/Kg	2	11/25/2019 8:47:30 PM	48837
Titanium	110	1.3		mg/Kg	5	11/25/2019 8:49:15 PM	48837
Uranium	ND	10		mg/Kg	2	11/22/2019 8:38:12 PM	48837
Zinc	12	5.0		mg/Kg	2	11/26/2019 7:45:10 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-041 **Collection Date:** 11/14/2019 9:15:00 AM
Client Sample ID: S-082148-111419-CN-C11-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:41:03 PM	48958
Barium	130	0.20		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Beryllium	0.72	0.31		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Chromium	12	0.61		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Copper	2.5	0.61		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Iron	12000	260		mg/Kg	100	12/6/2019 2:48:25 PM	49091
Lead	ND	0.51		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Manganese	66	0.21		mg/Kg	2	12/6/2019 2:46:55 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Titanium	150	1.3		mg/Kg	5	12/10/2019 4:26:29 PM	49091
Uranium	ND	10		mg/Kg	2	11/26/2019 4:35:14 PM	48958
Zinc	27	5.1		mg/Kg	2	11/26/2019 4:35:14 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2019 8:29:19 AM	48883
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/20/2019 8:29:19 AM	48883
Surr: DNOP	87.2	70-130		%Rec	1	11/20/2019 8:29:19 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2019 2:00:45 PM	48877
Surr: BFB	103	77.4-118		%Rec	1	11/21/2019 2:00:45 PM	48877
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/21/2019 2:00:45 PM	48877
Toluene	ND	0.049		mg/Kg	1	11/21/2019 2:00:45 PM	48877
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2019 2:00:45 PM	48877
Xylenes, Total	ND	0.098		mg/Kg	1	11/21/2019 2:00:45 PM	48877
Surr: 4-Bromofluorobenzene	93.1	80-120		%Rec	1	11/21/2019 2:00:45 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-042 **Collection Date:** 11/14/2019 9:23:00 AM
Client Sample ID: S-082148-111419-CN-C11-V2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Arsenic	ND	5.1		mg/Kg	2	12/18/2019 3:11:28 PM	48837
Barium	56	0.21		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Beryllium	0.39	0.31		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Cadmium	ND	0.21		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Chromium	6.8	0.62		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Copper	1.4	0.62		mg/Kg	2	11/25/2019 8:50:58 PM	48837
Iron	8000	260		mg/Kg	100	11/22/2019 8:52:43 PM	48837
Lead	1.5	0.51		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Manganese	37	0.21		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Selenium	ND	5.1		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Silver	ND	0.51		mg/Kg	2	11/25/2019 8:50:58 PM	48837
Titanium	140	1.3		mg/Kg	5	11/25/2019 8:52:40 PM	48837
Uranium	ND	10		mg/Kg	2	11/22/2019 8:41:34 PM	48837
Zinc	14	5.1		mg/Kg	2	11/26/2019 7:48:18 PM	48837

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-043 **Collection Date:** 11/14/2019 9:10:00 AM
Client Sample ID: S-082148-111419-CN-C11-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/19/2019 11:33:06 PM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:42:39 PM	48958
Barium	83	0.20		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Beryllium	0.30	0.30		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Chromium	4.8	0.61		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Copper	3.1	0.61		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Iron	5400	250		mg/Kg	100	12/6/2019 2:51:25 PM	49091
Lead	1.6	0.51		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Manganese	58	0.20		mg/Kg	2	12/6/2019 2:49:55 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Titanium	95	0.51		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 4:44:33 PM	48958
Zinc	10	5.1		mg/Kg	2	11/26/2019 4:44:33 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/20/2019 8:38:27 AM	48883
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/20/2019 8:38:27 AM	48883
Surr: DNOP	102	70-130		%Rec	1	11/20/2019 8:38:27 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/21/2019 2:23:31 PM	48877
Surr: BFB	100	77.4-118		%Rec	1	11/21/2019 2:23:31 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-044
Collection Date: 11/14/2019 9:12:00 AM
Client Sample ID: S-082148-111419-CN-C11-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:49:49 PM	48958
Barium	170	0.21		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Beryllium	0.31	0.31		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Cadmium	ND	0.21		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Chromium	5.2	0.62		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Copper	4.0	0.62		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Iron	9100	250		mg/Kg	100	12/6/2019 2:59:55 PM	49091
Lead	1.2	0.51		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Manganese	89	0.20		mg/Kg	2	12/6/2019 2:58:22 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Titanium	96	0.51		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 4:47:44 PM	48958
Zinc	11	5.1		mg/Kg	2	11/26/2019 4:47:44 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-045 **Collection Date:** 11/14/2019 9:35:00 AM
Client Sample ID: S-082148-111419-CN-C12-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.8		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Arsenic	ND	4.8		mg/Kg	2	11/26/2019 5:51:26 PM	48958
Barium	39	0.19		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Beryllium	0.58	0.29		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Cadmium	ND	0.19		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Chromium	9.3	0.58		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Copper	1.6	0.58		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Iron	11000	250		mg/Kg	100	12/6/2019 3:02:55 PM	49091
Lead	0.77	0.48		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Manganese	70	0.20		mg/Kg	2	12/6/2019 3:01:25 PM	49091
Selenium	ND	4.8		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Silver	ND	0.48		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Titanium	55	0.48		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Uranium	ND	9.7		mg/Kg	2	11/26/2019 4:50:55 PM	48958
Zinc	20	4.8		mg/Kg	2	11/26/2019 4:50:55 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/20/2019 8:47:36 AM	48883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/20/2019 8:47:36 AM	48883
Surr: DNOP	90.8	70-130		%Rec	1	11/20/2019 8:47:36 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2019 2:46:24 PM	48877
Surr: BFB	100	77.4-118		%Rec	1	11/21/2019 2:46:24 PM	48877
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/21/2019 2:46:24 PM	48877
Toluene	ND	0.049		mg/Kg	1	11/21/2019 2:46:24 PM	48877
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2019 2:46:24 PM	48877
Xylenes, Total	ND	0.098		mg/Kg	1	11/21/2019 2:46:24 PM	48877
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	1	11/21/2019 2:46:24 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-046
Collection Date: 11/14/2019 9:42:00 AM
Client Sample ID: S-082148-111419-CN-C12-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Arsenic	ND	5.0		mg/Kg	2	11/26/2019 5:53:01 PM	48958
Barium	32	0.20		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Beryllium	0.60	0.30		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Chromium	9.3	0.60		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Copper	1.5	0.60		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Iron	9800	260		mg/Kg	100	12/6/2019 3:05:55 PM	49091
Lead	0.81	0.50		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Manganese	42	0.20		mg/Kg	2	12/6/2019 3:04:25 PM	49091
Selenium	ND	5.0		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Silver	ND	0.50		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Titanium	80	0.50		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 4:54:06 PM	48958
Zinc	19	5.0		mg/Kg	2	11/26/2019 4:54:06 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-047 **Collection Date:** 11/14/2019 9:37:00 AM
Client Sample ID: S-082148-111419-CN-C12-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/20/2019 12:10:19 AM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Arsenic	ND	5.0		mg/Kg	2	11/26/2019 5:54:37 PM	48958
Barium	55	0.20		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Beryllium	0.40	0.30		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Chromium	11	0.60		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Copper	130	0.60		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Iron	9300	250		mg/Kg	100	12/6/2019 3:08:55 PM	49091
Lead	1.9	0.50		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Manganese	87	0.20		mg/Kg	2	12/6/2019 3:07:25 PM	49091
Selenium	ND	5.0		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Silver	ND	0.50		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Titanium	84	0.50		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 4:57:15 PM	48958
Zinc	15	5.0		mg/Kg	2	11/26/2019 4:57:15 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/20/2019 8:56:45 AM	48883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/20/2019 8:56:45 AM	48883
Surr: DNOP	86.8	70-130		%Rec	1	11/20/2019 8:56:45 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2019 5:03:53 PM	48877
Surr: BFB	98.8	77.4-118		%Rec	1	11/21/2019 5:03:53 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-048 **Collection Date:** 11/14/2019 9:40:00 AM
Client Sample ID: S-082148-111419-CN-C12-T2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	11/26/2019 5:56:13 PM	48958
Arsenic	ND	5.2		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Barium	86	0.21		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Beryllium	0.41	0.31		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Cadmium	ND	0.21		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Chromium	8.3	0.62		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Copper	47	0.62		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Iron	8100	260		mg/Kg	100	12/6/2019 3:11:56 PM	49091
Lead	2.6	0.52		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Manganese	68	0.21		mg/Kg	2	12/6/2019 3:10:25 PM	49091
Selenium	ND	5.2		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Silver	ND	0.52		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Titanium	90	0.52		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 5:07:23 PM	48958
Zinc	16	5.2		mg/Kg	2	11/26/2019 5:07:23 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-049 **Collection Date:** 11/14/2019 9:52:00 AM
Client Sample ID: S-082148-111419-CN-C13-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	4.8		mg/Kg	2	11/26/2019 5:57:49 PM	48958
Arsenic	ND	4.8		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Barium	73	0.19		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Beryllium	0.38	0.29		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Cadmium	ND	0.19		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Chromium	5.4	0.57		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Copper	2.4	0.57		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Iron	6200	260		mg/Kg	100	12/6/2019 3:20:28 PM	49091
Lead	1.0	0.48		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Manganese	51	0.21		mg/Kg	2	12/6/2019 3:18:54 PM	49091
Selenium	ND	4.8		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Silver	ND	0.48		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Titanium	81	0.48		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Uranium	ND	9.5		mg/Kg	2	11/26/2019 5:10:34 PM	48958
Zinc	11	4.8		mg/Kg	2	11/26/2019 5:10:34 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/20/2019 9:05:54 AM	48883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/20/2019 9:05:54 AM	48883
Surr: DNOP	92.7	70-130		%Rec	1	11/20/2019 9:05:54 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/21/2019 5:26:47 PM	48877
Surr: BFB	100	77.4-118		%Rec	1	11/21/2019 5:26:47 PM	48877
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	11/21/2019 5:26:47 PM	48877
Toluene	ND	0.047		mg/Kg	1	11/21/2019 5:26:47 PM	48877
Ethylbenzene	ND	0.047		mg/Kg	1	11/21/2019 5:26:47 PM	48877
Xylenes, Total	ND	0.094		mg/Kg	1	11/21/2019 5:26:47 PM	48877
Surr: 4-Bromofluorobenzene	91.0	80-120		%Rec	1	11/21/2019 5:26:47 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-050
Collection Date: 11/14/2019 10:00:00 AM
Client Sample ID: S-082148-111419-CN-C13-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.0		mg/Kg	2	11/26/2019 5:59:25 PM	48958
Arsenic	ND	5.0		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Barium	42	0.20		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Beryllium	ND	0.30		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Chromium	4.4	0.60		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Copper	2.5	0.60		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Iron	4200	250		mg/Kg	100	12/6/2019 3:23:29 PM	49091
Lead	0.80	0.50		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Manganese	56	0.20		mg/Kg	2	12/6/2019 3:21:59 PM	49091
Selenium	ND	5.0		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Silver	ND	0.50		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Titanium	78	0.50		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 5:13:42 PM	48958
Zinc	10	5.0		mg/Kg	2	11/26/2019 5:13:42 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-051 **Collection Date:** 11/14/2019 9:54:00 AM
Client Sample ID: S-082148-111419-CN-C13-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	81	60		mg/Kg	20	11/20/2019 12:22:44 AM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 6:01:01 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Barium	79	0.20		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Beryllium	0.41	0.30		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Chromium	6.0	0.61		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Copper	4.2	0.61		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Iron	5700	260		mg/Kg	100	12/6/2019 3:28:03 PM	49091
Lead	0.71	0.51		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Manganese	72	0.21		mg/Kg	2	12/6/2019 3:24:59 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Titanium	120	1.3		mg/Kg	5	12/6/2019 3:26:32 PM	49091
Uranium	ND	10		mg/Kg	2	11/26/2019 5:16:52 PM	48958
Zinc	14	5.1		mg/Kg	2	11/26/2019 5:16:52 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/20/2019 9:15:03 AM	48883
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/20/2019 9:15:03 AM	48883
Surr: DNOP	105	70-130		%Rec	1	11/20/2019 9:15:03 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2019 5:49:42 PM	48877
Surr: BFB	99.6	77.4-118		%Rec	1	11/21/2019 5:49:42 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-052 **Collection Date:** 11/14/2019 9:57:00 AM
Client Sample ID: S-082148-111419-CN-C13-T2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	11/26/2019 6:02:37 PM	48958
Arsenic	ND	5.2		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Barium	95	0.21		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Beryllium	0.31	0.31		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Cadmium	ND	0.21		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Chromium	5.5	0.62		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Copper	3.6	0.62		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Iron	5200	260		mg/Kg	100	12/6/2019 3:32:33 PM	49091
Lead	ND	0.52		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Manganese	68	0.21		mg/Kg	2	12/6/2019 3:29:33 PM	49091
Selenium	ND	5.2		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Silver	ND	0.52		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Titanium	130	1.3		mg/Kg	5	12/6/2019 3:31:03 PM	49091
Uranium	ND	10		mg/Kg	2	11/26/2019 5:20:01 PM	48958
Zinc	11	5.2		mg/Kg	2	11/26/2019 5:20:01 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-053 **Collection Date:** 11/14/2019 10:15:00 AM
Client Sample ID: S-082148-111419-CN-C14-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 6:04:11 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Barium	95	0.20		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Beryllium	0.41	0.31		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Chromium	7.2	0.61		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Copper	4.1	0.61		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Iron	7100	260		mg/Kg	100	12/6/2019 3:42:35 PM	49091
Lead	1.3	0.51		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Manganese	87	0.21		mg/Kg	2	12/6/2019 3:39:32 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Titanium	140	1.3		mg/Kg	5	12/6/2019 3:41:05 PM	49091
Uranium	ND	10		mg/Kg	2	11/26/2019 5:28:28 PM	48958
Zinc	16	5.1		mg/Kg	2	11/26/2019 5:28:28 PM	48958
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/20/2019 9:24:11 AM	48883
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/20/2019 9:24:11 AM	48883
Surr: DNOP	72.9	70-130		%Rec	1	11/20/2019 9:24:11 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/21/2019 6:12:30 PM	48877
Surr: BFB	99.1	77.4-118		%Rec	1	11/21/2019 6:12:30 PM	48877
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/21/2019 6:12:30 PM	48877
Toluene	ND	0.047		mg/Kg	1	11/21/2019 6:12:30 PM	48877
Ethylbenzene	ND	0.047		mg/Kg	1	11/21/2019 6:12:30 PM	48877
Xylenes, Total	ND	0.095		mg/Kg	1	11/21/2019 6:12:30 PM	48877
Surr: 4-Bromofluorobenzene	89.1	80-120		%Rec	1	11/21/2019 6:12:30 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-054
Collection Date: 11/14/2019 10:29:00 AM
Client Sample ID: S-082148-111419-CN-C14-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 6:11:23 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Barium	52	0.21		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Beryllium	0.41	0.31		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Cadmium	ND	0.21		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Chromium	6.8	0.62		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Copper	1.1	0.62		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Iron	7100	260		mg/Kg	100	12/6/2019 3:47:06 PM	49091
Lead	ND	0.51		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Manganese	38	0.21		mg/Kg	2	12/6/2019 3:44:05 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Titanium	120	1.3		mg/Kg	5	12/6/2019 3:45:35 PM	49091
Uranium	ND	10		mg/Kg	2	11/26/2019 5:31:36 PM	48958
Zinc	14	5.1		mg/Kg	2	11/26/2019 5:31:36 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-055 **Collection Date:** 11/14/2019 10:13:00 AM
Client Sample ID: S-082148-111419-CN-C14-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	11/20/2019 12:35:09 AM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Barium	150	0.21		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Beryllium	0.31	0.31		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Cadmium	ND	0.21		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Chromium	5.0	0.62		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Copper	2.4	0.61		mg/Kg	2	12/11/2019 6:23:47 PM	49252
Iron	4600	260		mg/Kg	100	12/10/2019 4:17:18 PM	48975
Lead	1.2	0.51		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Manganese	60	0.21		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Silver	ND	0.51		mg/Kg	2	12/10/2019 4:15:28 PM	48975
Titanium	110	1.3		mg/Kg	5	12/10/2019 6:09:26 PM	48975
Uranium	ND	10		mg/Kg	2	12/10/2019 6:07:36 PM	48975
Zinc	11	5.1		mg/Kg	2	12/10/2019 4:15:28 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/20/2019 9:33:19 AM	48883
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/20/2019 9:33:19 AM	48883
Surr: DNOP	107	70-130		%Rec	1	11/20/2019 9:33:19 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/21/2019 6:35:24 PM	48877
Surr: BFB	99.5	77.4-118		%Rec	1	11/21/2019 6:35:24 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-056
Collection Date: 11/14/2019 10:17:00 AM
Client Sample ID: S-082148-111419-CN-C14-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 6:12:59 PM	48958
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Barium	59	0.21		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Beryllium	ND	0.31		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Cadmium	ND	0.21		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Chromium	4.2	0.62		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Copper	2.2	0.62		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Iron	4000	260		mg/Kg	100	12/10/2019 4:28:18 PM	49091
Lead	1.6	0.51		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Manganese	46	0.21		mg/Kg	2	12/6/2019 3:48:37 PM	49091
Selenium	ND	5.1		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Silver	ND	0.51		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Titanium	76	0.51		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Uranium	ND	10		mg/Kg	2	11/26/2019 5:34:44 PM	48958
Zinc	9.9	5.1		mg/Kg	2	11/26/2019 5:34:44 PM	48958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-057 **Collection Date:** 11/14/2019 10:47:00 AM
Client Sample ID: S-082148-111419-CN-C15-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	12/3/2019 6:35:23 PM	48975
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 2:01:06 PM	48975
Barium	140	0.20		mg/Kg	2	12/3/2019 6:35:23 PM	48975
Beryllium	ND	0.31		mg/Kg	2	12/3/2019 6:35:23 PM	48975
Cadmium	ND	0.20		mg/Kg	2	12/3/2019 6:35:23 PM	48975
Chromium	4.5	0.61		mg/Kg	2	12/3/2019 6:35:23 PM	48975
Copper	3.5	0.62		mg/Kg	2	12/11/2019 6:31:08 PM	49252
Iron	9900	250		mg/Kg	100	12/6/2019 2:18:37 PM	48975
Lead	0.83	0.51		mg/Kg	2	12/6/2019 2:01:06 PM	48975
Manganese	55	0.20		mg/Kg	2	12/3/2019 6:35:23 PM	48975
Selenium	ND	5.1		mg/Kg	2	12/6/2019 2:01:06 PM	48975
Silver	ND	0.51		mg/Kg	2	12/3/2019 6:35:23 PM	48975
Titanium	160	1.3		mg/Kg	5	12/6/2019 2:07:09 PM	48975
Uranium	ND	10		mg/Kg	2	12/10/2019 6:11:28 PM	48975
Zinc	9.6	5.1		mg/Kg	2	12/3/2019 6:35:23 PM	48975
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/20/2019 9:42:28 AM	48883
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/20/2019 9:42:28 AM	48883
Surr: DNOP	102	70-130		%Rec	1	11/20/2019 9:42:28 AM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/21/2019 6:58:18 PM	48877
Surr: BFB	101	77.4-118		%Rec	1	11/21/2019 6:58:18 PM	48877
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/21/2019 6:58:18 PM	48877
Toluene	ND	0.049		mg/Kg	1	11/21/2019 6:58:18 PM	48877
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2019 6:58:18 PM	48877
Xylenes, Total	ND	0.098		mg/Kg	1	11/21/2019 6:58:18 PM	48877
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	11/21/2019 6:58:18 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-058 **Collection Date:** 11/14/2019 10:56:00 AM
Client Sample ID: S-082148-111419-CN-C15-V2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Arsenic	ND	5.1		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Barium	93	0.20		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Beryllium	0.41	0.31		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Chromium	6.7	0.61		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Copper	3.2	0.61		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Iron	6600	260		mg/Kg	100	11/26/2019 6:22:27 PM	48959
Lead	1.2	0.51		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Manganese	100	0.20		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Selenium	ND	5.1		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Silver	ND	0.51		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Titanium	140	1.3		mg/Kg	5	12/3/2019 6:46:58 PM	48959
Uranium	ND	10		mg/Kg	2	11/26/2019 6:16:08 PM	48959
Zinc	16	5.1		mg/Kg	2	11/26/2019 6:16:08 PM	48959

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 1911678
Project: Jal 4 Landfarm

Lab ID: 1911678-059 **Collection Date:** 11/14/2019 10:42:00 AM
Client Sample ID: S-082148-111419-CN-C15-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	59		mg/Kg	20	11/20/2019 1:12:23 AM	48900
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.2		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Arsenic	ND	5.2		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Barium	180	0.21		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Beryllium	0.31	0.31		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Cadmium	ND	0.21		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Chromium	15	0.62		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Copper	170	0.62		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Iron	14000	260		mg/Kg	100	11/26/2019 6:25:37 PM	48959
Lead	5.7	0.52		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Manganese	110	0.21		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Selenium	ND	5.2		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Silver	ND	0.52		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Titanium	69	0.52		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Uranium	ND	10		mg/Kg	2	11/26/2019 6:24:02 PM	48959
Zinc	26	5.2		mg/Kg	2	11/26/2019 6:24:02 PM	48959
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	53	19		mg/Kg	2	11/20/2019 5:46:55 PM	48883
Motor Oil Range Organics (MRO)	210	95		mg/Kg	2	11/20/2019 5:46:55 PM	48883
Surr: DNOP	102	70-130		%Rec	2	11/20/2019 5:46:55 PM	48883
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/21/2019 7:21:14 PM	48877
Surr: BFB	99.6	77.4-118		%Rec	1	11/21/2019 7:21:14 PM	48877

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal 4 Landfarm
Lab Order: 1911678

Lab ID: 1911678-060
Collection Date: 11/14/2019 10:45:00 AM
Client Sample ID: S-082148-111419-CN-C15-T2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: **pmf**	
Antimony	ND	5.1		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Arsenic	ND	5.1		mg/Kg	2	12/6/2019 2:20:07 PM	48959
Barium	190	0.20		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Beryllium	0.41	0.30		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Cadmium	ND	0.20		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Chromium	17	0.61		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Copper	250	0.61		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Iron	13000	250		mg/Kg	100	11/26/2019 6:34:23 PM	48959
Lead	7.3	0.51		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Manganese	120	0.20		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Selenium	ND	5.1		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Silver	ND	0.51		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Titanium	96	0.51		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Uranium	ND	10		mg/Kg	2	11/26/2019 6:32:45 PM	48959
Zinc	33	5.1		mg/Kg	2	11/26/2019 6:32:45 PM	48959

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-001 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-001B/S-082148-111319-CN-C1-V1 **Sampling Time** 9:50 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	12/4/2019 6:54:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/4/2019 6:54:00 PM	MAM	EPA 6020A	
%moisture	6.5	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-002 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-002B/S-082148-111319-CN-C1-V2 **Sampling Time** 10:00 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	12/4/2019 7:35:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/4/2019 7:35:00 PM	MAM	EPA 6020A	
%moisture	5.4	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-003 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-003C/S-082148-111319-CN-C1-T1 **Sampling Time** 2:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.054	12/4/2019 7:59:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.54	12/4/2019 7:59:00 PM	MAM	EPA 6020A	
%moisture	7.4	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-004 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-004B/S-082148-111319-CN-C1-T2 **Sampling Time** 2:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.326	mg/Kg	0.0545	12/4/2019 8:05:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/4/2019 8:05:00 PM	MAM	EPA 6020A	
%moisture	8.1	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-005 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-005B/S-082148-111319-CN-C2-V1 **Sampling Time** 10:22 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0555	12/4/2019 8:11:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.555	12/4/2019 8:11:00 PM	MAM	EPA 6020A	
%moisture	10.4	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-006 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-006B/S-082148-111319-CN-C2-V2 **Sampling Time** 10:45 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/4/2019 8:17:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/4/2019 8:17:00 PM	MAM	EPA 6020A	
%moisture	6.9	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-007 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-007C/S-082148-111319-CN-C2-T1 **Sampling Time** 2:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.135	mg/Kg	0.053	12/4/2019 8:23:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/4/2019 8:23:00 PM	MAM	EPA 6020A	
%moisture	7.0	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-008 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-008B/S-082148-111319-CN-C2-T2 **Sampling Time** 10:00 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.125	mg/Kg	0.0545	12/4/2019 8:28:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/4/2019 8:28:00 PM	MAM	EPA 6020A	
%moisture	7.9	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

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Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-009 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-009B/S-082148-111319-CN-C3-V1 **Sampling Time** 11:05 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/4/2019 8:34:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/4/2019 8:34:00 PM	MAM	EPA 6020A	
%moisture	6.0	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-010 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-010B/S-082148-111319-CN-C3-V2 **Sampling Time** 11:16 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.054	12/4/2019 8:40:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.54	12/4/2019 8:40:00 PM	MAM	EPA 6020A	
%moisture	8.6	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-011 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-011C/S-082148-111319-CN-C3-T1 **Sampling Time** 10:55 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.181	mg/Kg	0.0525	12/4/2019 8:46:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/4/2019 8:46:00 PM	MAM	EPA 6020A	
%moisture	6.6	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

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Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-012 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-012B/S-082148-111319-CN-C3-T2 **Sampling Time** 11:00 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.323	mg/Kg	0.0535	12/4/2019 8:52:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/4/2019 8:52:00 PM	MAM	EPA 6020A	
%moisture	6.9	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-013 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-013B/S-082148-111319-CN-C4-V1 **Sampling Time** 11:30 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/4/2019 9:16:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/4/2019 9:16:00 PM	MAM	EPA 6020A	
%moisture	7.0	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-014 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-014B/S-082148-111319-CN-C4-V2 **Sampling Time** 11:35 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	12/4/2019 9:22:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/4/2019 9:22:00 PM	MAM	EPA 6020A	
%moisture	8.4	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-015 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-015C/S-082148-111319-CN-C4-T1 **Sampling Time** 11:25 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.054	12/4/2019 9:28:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.54	12/4/2019 9:28:00 PM	MAM	EPA 6020A	
%moisture	7.0	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-016 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-016B/S-082148-111319-CN-C4-T2 **Sampling Time** 11:28 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/4/2019 9:34:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/4/2019 9:34:00 PM	MAM	EPA 6020A	
%moisture	7.1	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-017 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-017B/S-082148-111319-CN-C5-V1 **Sampling Time** 11:50 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	12/4/2019 9:40:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/4/2019 9:40:00 PM	MAM	EPA 6020A	
%moisture	6.3	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-018 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-018B/S-082148-111319-CN-C5-V2 **Sampling Time** 12:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	12/4/2019 9:46:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/4/2020 9:46:00 PM	MAM	EPA 6020A	
%moisture	8.7	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-019 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-019C/S-082148-111319-CN-C5-T1 **Sampling Time** 11:45 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.185	mg/Kg	0.052	12/4/2019 9:52:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.52	12/4/2019 9:52:00 PM	MAM	EPA 6020A	
%moisture	4.7	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

Sample Number 191119022-020 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-020B/S-082148-111319-CN-C5-T2 **Sampling Time** 11:47 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.169	mg/Kg	0.0515	12/4/2019 9:58:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.515	12/4/2019 9:58:00 PM	MAM	EPA 6020A	
%moisture	4.4	Percent		11/26/2019 1:59:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-021 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-021B/S-082148-111319-CN-C6-V1 **Sampling Time** 12:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0515	12/4/2019 11:21:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.515	12/4/2019 11:21:00 PM	MAM	EPA 6020A	
%moisture	3.8	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-022 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-022B/S-082148-111319-CN-C6-V2 **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/4/2019 11:57:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/4/2019 11:57:00 PM	MAM	EPA 6020A	
%moisture	6.2	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-023 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-023C/S-082148-111319-CN-C6-T1 **Sampling Time** 12:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0699	mg/Kg	0.0525	12/5/2019 12:03:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/5/2019 12:03:00 AM	MAM	EPA 6020A	
%moisture	5.7	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

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Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-024 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-024B/S-082148-111319-CN-C6-T2 **Sampling Time** 12:07 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/5/2019 12:09:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/5/2019 12:09:00 AM	MAM	EPA 6020A	
%moisture	6.1	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-025 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-025B/S-082148-111319-CN-C7-V1 **Sampling Time** 12:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0605	12/5/2019 12:15:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.605	12/5/2019 12:15:00 AM	MAM	EPA 6020A	
%moisture	18.0	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-026 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-026B/S-082148-111319-CN-C7-V2 **Sampling Time** 12:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	12/5/2019 12:21:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/5/2019 12:21:00 AM	MAM	EPA 6020A	
%moisture	7.2	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

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Project Name: 1911678

Analytical Results Report

Sample Number 191119022-027 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-027C/S-082148-111319-CN-C7-T1 **Sampling Time** 12:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0715	mg/Kg	0.054	12/5/2019 12:27:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.54	12/5/2019 12:27:00 AM	MAM	EPA 6020A	
%moisture	7.3	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-028 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-028B/S-082148-111319-CN-C7-T2 **Sampling Time** 12:37 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.054	12/5/2019 12:51:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.54	12/5/2019 12:51:00 AM	MAM	EPA 6020A	
%moisture	7.9	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-029 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-029B/S-082148-111319-CN-C8-V1 **Sampling Time** 1:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0565	12/5/2019 12:57:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.565	12/5/2019 12:57:00 AM	MAM	EPA 6020A	
%moisture	11.3	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

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Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-030 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-030B/S-082148-111319-CN-C8-V2 **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	12/5/2019 1:03:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/5/2019 1:03:00 AM	MAM	EPA 6020A	
%moisture	4.4	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-031 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-031C/S-082148-111319-CN-C8-T1 **Sampling Time** 1:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	12/5/2019 1:09:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/5/2019 1:09:00 AM	MAM	EPA 6020A	
%moisture	8.8	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-032 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-032B/S-082148-111319-CN-C8-T2 **Sampling Time** 1:12 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0868	mg/Kg	0.0535	12/5/2019 1:15:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/5/2019 1:15:00 AM	MAM	EPA 6020A	
%moisture	6.7	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

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Analytical Results Report

Sample Number 191119022-033 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-033B/S-082148-111319-CN-C9-V1 **Sampling Time** 2:40 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	12/5/2019 1:21:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/5/2019 1:21:00 AM	MAM	EPA 6020A	
%moisture	5.1	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-034 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-034B/S-082148-111319-CN-C9-V2 **Sampling Time** 2:42 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	12/5/2019 1:27:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/5/2019 1:27:00 AM	MAM	EPA 6020A	
%moisture	6.6	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-035 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-035C/S-082148-111319-CN-C9-T1 **Sampling Time** 2:33 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0571	mg/Kg	0.0525	12/5/2019 1:32:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/5/2019 1:32:00 AM	MAM	EPA 6020A	
%moisture	5.9	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

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Project Name: 1911678

Analytical Results Report

Sample Number 191119022-036 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-036B/S-082148-111319-CN-C9-T2 **Sampling Time** 2:35 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0666	mg/Kg	0.053	12/5/2019 1:38:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/5/2019 1:38:00 AM	MAM	EPA 6020A	
%moisture	6.4	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-037 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-037B/S-082148-111319-CN-C10-V1 **Sampling Time** 3:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0565	12/5/2019 1:44:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.565	12/5/2019 1:44:00 AM	MAM	EPA 6020A	
%moisture	11.8	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-038 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-038B/S-082148-111319-CN-C10-V2 **Sampling Time** 3:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0545	12/5/2019 2:08:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/5/2019 2:08:00 AM	MAM	EPA 6020A	
%moisture	9.4	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

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Project Name: 1911678

Analytical Results Report

Sample Number 191119022-039 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-039C/S-082148-111319-CN-C10-T1 **Sampling Time** 3:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	12/5/2019 2:14:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/5/2019 2:14:00 AM	MAM	EPA 6020A	
%moisture	5.3	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-040 **Sampling Date** 11/13/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-040B/S-082148-111319-CN-C10-T2 **Sampling Time** 3:10 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0539	mg/Kg	0.0535	12/5/2019 2:20:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/5/2019 2:20:00 AM	MAM	EPA 6020A	
%moisture	6.6	Percent		11/27/2019 10:12:00 AM	MAM	%moisture	

Sample Number 191119022-041 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-041B/S-082148-111419-CN-C11-V1 **Sampling Time** 9:15 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/11/2019 5:04:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/11/2019 5:04:00 PM	MAM	EPA 6020A	
%moisture	6.5	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

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Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-042 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-042B/S-082148-111419-CN-C11-V2 **Sampling Time** 9:23 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.052	12/11/2019 5:40:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.52	12/11/2019 5:40:00 PM	MAM	EPA 6020A	
%moisture	4.9	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-043 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-043C/S-082148-111419-CN-C11-T1 **Sampling Time** 9:10 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.154	mg/Kg	0.053	12/11/2019 5:46:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/11/2019 5:46:00 PM	MAM	EPA 6020A	
%moisture	5.8	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-044 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-044B/S-082148-111419-CN-C11-T2 **Sampling Time** 9:12 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.111	mg/Kg	0.052	12/11/2019 5:52:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.52	12/11/2019 5:52:00 PM	MAM	EPA 6020A	
%moisture	5.1	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

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Analytical Results Report

Sample Number 191119022-045 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-045B/S-082148-111419-CN-C12-V1 **Sampling Time** 9:35 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/11/2019 5:58:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/11/2019 5:58:00 PM	MAM	EPA 6020A	
%moisture	7.2	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-046 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-046B/S-082148-111419-CN-C12-V2 **Sampling Time** 9:42 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/11/2019 6:04:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/11/2019 6:04:00 PM	MAM	EPA 6020A	
%moisture	6.2	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-047 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-047C/S-082148-111419-CN-C12-T1 **Sampling Time** 9:37 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.116	mg/Kg	0.0535	12/11/2019 6:10:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/11/2019 6:10:00 PM	MAM	EPA 6020A	
%moisture	7.1	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

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Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-048 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-048B/S-082148-111419-CN-C12-T2 **Sampling Time** 9:40 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0918	mg/Kg	0.054	12/11/2019 6:16:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.54	12/11/2019 6:16:00 PM	MAM	EPA 6020A	
%moisture	7.2	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-049 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-049B/S-082148-111419-CN-C13-V1 **Sampling Time** 9:52 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	12/11/2019 6:21:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/11/2019 6:21:00 PM	MAM	EPA 6020A	
%moisture	6.0	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-050 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-050B/S-082148-111419-CN-C13-V2 **Sampling Time** 10:00 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0515	12/11/2019 6:51:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.515	12/11/2019 6:51:00 PM	MAM	EPA 6020A	
%moisture	4.3	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

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Analytical Results Report

Sample Number 191119022-051 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-051C/S-082148-111419-CN-C13-T1 **Sampling Time** 9:54 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.111	mg/Kg	0.054	12/11/2019 6:57:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.54	12/11/2019 6:57:00 PM	MAM	EPA 6020A	
%moisture	7.3	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-052 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-052B/S-082148-111419-CN-C13-T2 **Sampling Time** 9:57 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0904	mg/Kg	0.0535	12/11/2019 7:03:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/11/2019 7:03:00 PM	MAM	EPA 6020A	
%moisture	6.7	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-053 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-053B/S-082148-111419-CN-C14-V1 **Sampling Time** 10:15 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	12/11/2019 7:09:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/11/2019 7:09:00 PM	MAM	EPA 6020A	
%moisture	5.6	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-054 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-054B/S-082148-111419-CN-C14-V2 **Sampling Time** 10:29 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.053	12/11/2019 7:15:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/11/2019 7:15:00 PM	MAM	EPA 6020A	
%moisture	6.0	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-055 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-055C/S-082148-111419-CN-C14-T1 **Sampling Time** 10:13 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0535	12/11/2019 7:21:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.535	12/11/2019 7:21:00 PM	MAM	EPA 6020A	
%moisture	6.8	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-056 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-056B/S-082148-111419-CN-C14-T2 **Sampling Time** 10:17 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0525	12/11/2019 7:27:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.525	12/11/2019 7:27:00 PM	MAM	EPA 6020A	
%moisture	4.8	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-057 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-057B/S-082148-111419-CN-C15-V1 **Sampling Time** 10:47 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0565	12/11/2019 7:33:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.565	12/11/2019 7:33:00 PM	MAM	EPA 6020A	
%moisture	11.9	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-058 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-058B/S-082148-111419-CN-C15-V2 **Sampling Time** 10:56 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0555	12/11/2019 7:39:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.555	12/11/2019 7:39:00 PM	MAM	EPA 6020A	
%moisture	9.7	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Sample Number 191119022-059 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-059C/S-082148-111419-CN-C15-T1 **Sampling Time** 10:42 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0696	mg/Kg	0.0545	12/11/2019 7:45:00 PM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.545	12/11/2019 7:45:00 PM	MAM	EPA 6020A	
%moisture	7.2	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Sample Number 191119022-060 **Sampling Date** 11/14/2019 **Date/Time Received** 11/19/2019 11:47 AM
Client Sample ID 1911678-060B/S-082148-111419-CN-C15-T2 **Sampling Time** 10:45 AM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0872	mg/Kg	0.053	12/17/2019 1:23:00 AM	MAM	EPA 6020A	
Thallium	ND	mg/Kg	0.53	12/17/2019 1:23:00 AM	MAM	EPA 6020A	
%moisture	6.7	Percent		12/4/2019 1:51:00 PM	MAM	%moisture	

Authorized Signature

Todd Taruscio, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Thallium	1.95	mg/kg	2	97.5	80-120	12/6/2019	12/17/2019
MERCURY-ICPMS	0.0273	mg/kg	0.025	109.2	80-120	12/6/2019	12/17/2019
Thallium	1.92	mg/kg	2	96.0	80-120	12/6/2019	12/11/2019
MERCURY-ICPMS	0.0277	mg/kg	0.025	110.8	80-120	12/6/2019	12/11/2019
Thallium	0.0406	mg/kg	0.04	101.5	80-120	12/2/2019	12/4/2019
MERCURY-ICPMS	0.0289	mg/kg	0.025	111.6	80-120	12/2/2019	12/4/2019
Thallium	1.91	mg/kg	2	95.5	80-120	12/2/2019	12/4/2019
MERCURY-ICPMS	0.0272	mg/kg	0.025	108.8	80-120	12/2/2019	12/4/2019

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
191119022-041A	Thallium	ND	21	mg/kg	21	100.0	75-125	12/6/2019	12/17/2019
191119022-021A	Thallium	ND	21.7	mg/kg	20.6	105.3	75-125	12/2/2019	12/4/2019
191119022-001A	Thallium	ND	20.7	mg/kg	21.2	97.6	75-125	12/2/2019	12/4/2019
191119022-041A	MERCURY-ICPMS	ND	0.306	mg/kg	0.318	96.2	75-125	12/6/2019	12/17/2019
191119022-041B	MERCURY-ICPMS	ND	0.322	mg/kg	0.318	101.3	75-125	12/6/2019	12/11/2019
191119022-021A	MERCURY-ICPMS	ND	0.352	mg/kg	0.318	110.7	75-125	12/2/2019	12/4/2019
191119022-001A	MERCURY-ICPMS	ND	0.307	mg/kg	0.318	96.5	75-125	12/2/2019	12/4/2019

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Thallium	21	mg/kg	21	100.0	0.0	0-20	12/6/2019	12/17/2019
Thallium	21.4	mg/kg	20.6	103.9	1.4	0-20	12/2/2019	12/4/2019
Thallium	20.7	mg/kg	21.2	97.6	0.0	0-20	12/2/2019	12/4/2019
MERCURY-ICPMS	0.324	mg/kg	0.315	102.9	5.7	0-20	12/6/2019	12/17/2019
MERCURY-ICPMS	0.268	mg/kg	0.315	85.1	18.3	0-20	12/6/2019	12/11/2019
MERCURY-ICPMS	0.317	mg/kg	0.315	100.6	10.5	0-20	12/2/2019	12/4/2019
MERCURY-ICPMS	0.306	mg/kg	0.315	97.1	0.3	0-20	12/2/2019	12/4/2019

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 191119022
Project Name: 1911678

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Mercury-ICPMS	ND	mg/Kg	0.0001	12/6/2019	12/17/2019
Mercury-ICPMS	ND	mg/Kg	0.0001	12/6/2019	12/11/2019
Mercury-ICPMS	ND	mg/Kg	0.0001	12/2/2019	12/4/2019
Mercury-ICPMS	ND	mg/Kg	0.0001	12/2/2019	12/4/2019
Thallium	ND	mg/Kg	0.001	12/6/2019	12/17/2019
Thallium	ND	mg/Kg	0.001	12/6/2019	12/11/2019
Thallium	ND	mg/Kg	0.001	12/2/2019	12/4/2019
Thallium	ND	mg/Kg	0.001	12/2/2019	12/4/2019

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN
Project Name: 1911678
Comment:

Sample #: 191119022-001 **Customer Sample #:** 1911678-001B/S-082148-111319-CN-C1-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:50 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-001A **Customer Sample #:** METALS QC

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:50 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-002 **Customer Sample #:** 1911678-002B/S-082148-111319-CN-C1-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN
Project Name: 1911678

Comment:

Sample #: 191119022-003 **Customer Sample #:** 1911678-003C/S-082148-111319-CN-C1-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-004 **Customer Sample #:** 1911678-004B/S-082148-111319-CN-C1-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 2:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-005 **Customer Sample #:** 1911678-005B/S-082148-111319-CN-C2-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:22 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-006 **Customer Sample #:** 1911678-006B/S-082148-111319-CN-C2-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:45 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-007 **Customer Sample #:** 1911678-007C/S-082148-111319-CN-C2-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 2:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-008 **Customer Sample #:** 1911678-008B/S-082148-111319-CN-C2-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-009 **Customer Sample #:** 1911678-009B/S-082148-111319-CN-C3-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:05 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-010 **Customer Sample #:** 1911678-010B/S-082148-111319-CN-C3-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:16 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-011 **Customer Sample #:** 1911678-011C/S-082148-111319-CN-C3-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:55 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-012 **Customer Sample #:** 1911678-012B/S-082148-111319-CN-C3-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-013 **Customer Sample #:** 1911678-013B/S-082148-111319-CN-C4-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:30 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-014 **Customer Sample #:** 1911678-014B/S-082148-111319-CN-C4-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:35 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-015 **Customer Sample #:** 1911678-015C/S-082148-111319-CN-C4-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:25 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-016 **Customer Sample #:** 1911678-016B/S-082148-111319-CN-C4-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:28 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-017 **Customer Sample #:** 1911678-017B/S-082148-111319-CN-C5-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:50 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-018 **Customer Sample #:** 1911678-018B/S-082148-111319-CN-C5-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-019 **Customer Sample #:** 1911678-019C/S-082148-111319-CN-C5-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:45 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-020 **Customer Sample #:** 1911678-020B/S-082148-111319-CN-C5-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 11:47 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-021 **Customer Sample #:** 1911678-021B/S-082148-111319-CN-C6-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-021A **Customer Sample #:** METALS QC

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/13/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-022 **Customer Sample #:** 1911678-022B/S-082148-111319-CN-C6-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:20 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-023 **Customer Sample #:** 1911678-023C/S-082148-111319-CN-C6-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-024 **Customer Sample #:** 1911678-024B/S-082148-111319-CN-C6-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:07 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-025 **Customer Sample #:** 1911678-025B/S-082148-111319-CN-C7-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-026 **Customer Sample #:** 1911678-026B/S-082148-111319-CN-C7-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:55 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-027 **Customer Sample #:** 1911678-027C/S-082148-111319-CN-C7-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:35 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-028 **Customer Sample #:** 1911678-028B/S-082148-111319-CN-C7-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:37 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-029 **Customer Sample #:** 1911678-029B/S-082148-111319-CN-C8-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 1:45 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-030 **Customer Sample #:** 1911678-030B/S-082148-111319-CN-C8-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 12:20 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-031 **Customer Sample #:** 1911678-031C/S-082148-111319-CN-C8-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 1:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-032 **Customer Sample #:** 1911678-032B/S-082148-111319-CN-C8-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 1:12 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-033 **Customer Sample #:** 1911678-033B/S-082148-111319-CN-C9-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 2:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-034 **Customer Sample #:** 1911678-034B/S-082148-111319-CN-C9-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 2:42 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-035 **Customer Sample #:** 1911678-035C/S-082148-111319-CN-C9-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 2:33 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-036 **Customer Sample #:** 1911678-036B/S-082148-111319-CN-C9-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 2:35 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-037 **Customer Sample #:** 1911678-037B/S-082148-111319-CN-C10-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 3:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-038 **Customer Sample #:** 1911678-038B/S-082148-111319-CN-C10-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 3:20 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-039 **Customer Sample #:** 1911678-039C/S-082148-111319-CN-C10-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 3:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-040 **Customer Sample #:** 1911678-040B/S-082148-111319-CN-C10-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/13/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 3:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-041 **Customer Sample #:** 1911678-041B/S-082148-111419-CN-C11-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:15 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-041A **Customer Sample #:** METALS QC

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:15 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/14/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-041B **Customer Sample #:** METALS QC

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:15 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	11/14/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-042 **Customer Sample #:** 1911678-042B/S-082148-111419-CN-C11-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:23 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-043 **Customer Sample #:** 1911678-043C/S-082148-111419-CN-C11-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:10 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-044 **Customer Sample #:** 1911678-044B/S-082148-111419-CN-C11-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:12 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-045 **Customer Sample #:** 1911678-045B/S-082148-111419-CN-C12-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:35 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-046 **Customer Sample #:** 1911678-046B/S-082148-111419-CN-C12-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:42 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-047 **Customer Sample #:** 1911678-047C/S-082148-111419-CN-C12-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:37 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-048 **Customer Sample #:** 1911678-048B/S-082148-111419-CN-C12-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:40 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-049 **Customer Sample #:** 1911678-049B/S-082148-111419-CN-C13-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:52 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-050 **Customer Sample #:** 1911678-050B/S-082148-111419-CN-C13-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-051 **Customer Sample #:** 1911678-051C/S-082148-111419-CN-C13-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:54 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-052 **Customer Sample #:** 1911678-052B/S-082148-111419-CN-C13-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 9:57 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-053 **Customer Sample #:** 1911678-053B/S-082148-111419-CN-C14-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:15 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-054 **Customer Sample #:** 1911678-054B/S-082148-111419-CN-C14-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:29 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-055 **Customer Sample #:** 1911678-055C/S-082148-111419-CN-C14-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:13 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-056 **Customer Sample #:** 1911678-056B/S-082148-111419-CN-C14-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:17 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-057 **Customer Sample #:** 1911678-057B/S-082148-111419-CN-C15-V1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:47 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-058 **Customer Sample #:** 1911678-058B/S-082148-111419-CN-C15-V2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:56 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Sample #: 191119022-059 **Customer Sample #:** 1911678-059C/S-082148-111419-CN-C15-T1

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019
Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:42 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 191119022
Order Date: 11/19/2019

Contact Name: ANDY FREEMAN

Project Name: 1911678

Comment:

Sample #: 191119022-060 **Customer Sample #:** 1911678-060B/S-082148-111419-CN-C15-T2

Recv'd: ☑ **Matrix:** Soil **Collector:** **Date Collected:** 11/14/2019

Quantity: 1 **Date Received:** 11/19/2019 11:47:00 AM **Time Collected:** 10:45 AM

Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	12/3/2019	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	12/3/2019	***Normal (~10 Days)***
THALLIUM	M	EPA 6020A	11/29/2019	***Normal (~10 Days)***

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	3.8
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	N/A
Is there a trip blank to accompany VOC samples?	N/A
Labels and chain agree?	Yes
Total number of containers?	60

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 5

191119 022 HALL Last Due 12/3/2019
1st SAMP 11/13/201 1st RCVD 11/19/2019
1911678

SUB CONTRATOR: Anatek Labs	COMPANY: Anatek Labs, Inc.	PHONE: (208) 883-2839	FAX: (208) 882-9246
ADDRESS: 1282 Alturas Dr		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: Moscow, ID 83843			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
-001 1	1911678-001B	S-082148-111319-CN-C1-V1	4OZGU	Soil	11/13/2019 9:50:00 AM	1	Hg by 6020
-002 2	1911678-002B	S-082148-111319-CN-C1-V2	4OZGU	Soil	11/13/2019 10:00:00 AM	1	Hg by 6020
-003 3	1911678-003C	S-082148-111319-CN-C1-T1	4OZGU	Soil	11/13/2019 2:00:00 PM	1	Hg by 6020
-004 4	1911678-004B	S-082148-111319-CN-C1-T2	4OZGU	Soil	11/13/2019 2:05:00 PM	1	Hg by 6020
-005 5	1911678-005B	S-082148-111319-CN-C2-V1	4OZGU	Soil	11/13/2019 10:22:00 AM	1	Hg by 6020
-006 6	1911678-006B	S-082148-111319-CN-C2-V2	4OZGU	Soil	11/13/2019 10:45:00 AM	1	Hg by 6020
-007 7	1911678-007C	S-082148-111319-CN-C2-T1	4OZGU	Soil	11/13/2019 2:10:00 PM	1	Hg by 6020
-008 8	1911678-008B	S-082148-111319-CN-C2-T2	4OZGU	Soil	11/13/2019 10:00:00 AM	1	Hg by 6020
-009 9	1911678-009B	S-082148-111319-CN-C3-V1	4OZGU	Soil	11/13/2019 11:05:00 AM	1	Hg by 6020
-010 10	1911678-010B	S-082148-111319-CN-C3-V2	4OZGU	Soil	11/13/2019 11:16:00 AM	1	Hg by 6020
-011 11	1911678-011C	S-082148-111319-CN-C3-T1	4OZGU	Soil	11/13/2019 10:55:00 AM	1	Hg by 6020
-012 12	1911678-012B	S-082148-111319-CN-C3-T2	4OZGU	Soil	11/13/2019 11:00:00 AM	1	Hg by 6020
-013 13	1911678-013B	S-082148-111319-CN-C4-V1	4OZGU	Soil	11/13/2019 11:30:00 AM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 11/15/2019	Time: 10:04 AM	Received By: KMK	Date: 11-19-19	Time: 11:47
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 2 OF: 5

191119 022 HALL Last Due 12/3/2019
1st SAMP 11/13/201 1st RCVD 11/19/2019
1911678

SUB CONTRATOR: Anatek Labs	COMPANY: Anatek Labs, Inc.	PHONE: (208) 883-2839	FAX: (208) 882-9246
ADDRESS: 1282 Alturas Dr		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: Moscow, ID 83843			

	ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
-014	14	1911678-014B	S-082148-111319-CN-C4-V2	4OZGU	Soil	11/13/2019 11:35:00 AM	1	Hg by 6020
-015	15	1911678-015C	S-082148-111319-CN-C4-T1	4OZGU	Soil	11/13/2019 11:25:00 AM	1	Hg by 6020
-016	16	1911678-016B	S-082148-111319-CN-C4-T2	4OZGU	Soil	11/13/2019 11:28:00 AM	1	Hg by 6020
-017	17	1911678-017B	S-082148-111319-CN-C5-V1	4OZGU	Soil	11/13/2019 11:50:00 AM	1	Hg by 6020
-018	18	1911678-018B	S-082148-111319-CN-C5-V2	4OZGU	Soil	11/13/2019 12:00:00 PM	1	Hg by 6020
-019	19	1911678-019C	S-082148-111319-CN-C5-T1	4OZGU	Soil	11/13/2019 11:45:00 AM	1	Hg by 6020
-020	20	1911678-020B	S-082148-111319-CN-C5-T2	4OZGU	Soil	11/13/2019 11:47:00 AM	1	Hg by 6020
-021	21	1911678-021B	S-082148-111319-CN-C6-V1	4OZGU	Soil	11/13/2019 12:10:00 PM	1	Hg by 6020
-022	22	1911678-022B	S-082148-111319-CN-C6-V2	4OZGU	Soil	11/13/2019 12:20:00 PM	1	Hg by 6020
-023	23	1911678-023C	S-082148-111319-CN-C6-T1	4OZGU	Soil	11/13/2019 12:05:00 PM	1	Hg by 6020
-024	24	1911678-024B	S-082148-111319-CN-C6-T2	4OZGU	Soil	11/13/2019 12:07:00 PM	1	Hg by 6020
-025	25	1911678-025B	S-082148-111319-CN-C7-V1	4OZGU	Soil	11/13/2019 12:40:00 PM	1	Hg by 6020
-026	26	1911678-026B	S-082148-111319-CN-C7-V2	4OZGU	Soil	11/13/2019 12:55:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 11/15/2019	Time: 10:05 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples _____ °C Attempt to Cool ? _____

Comments: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 3 OF: 5

191119 022 HALL Last Due 12/3/2019
1st SAMP 11/13/201 1st RCVD 11/19/2019
1911678

SUB CONTRATOR: **Anatek Labs**	COMPANY: **Anatek Labs, Inc.**	PHONE: **(208) 883-2839**	FAX: **(208) 882-9246**
ADDRESS: **1282 Alturas Dr**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Moscow, ID 83843**			

	ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
-027	27	1911678-027C	S-082148-111319-CN-C7-T1	4OZGU	Soil	11/13/2019 12:35:00 PM	1	Hg by 6020
-028	28	1911678-028B	S-082148-111319-CN-C8-T2	4OZGU	Soil	11/13/2019 12:37:00 PM	1	Hg by 6020
-029	29	1911678-029B	S-082148-111319-CN-C8-V1	4OZGU	Soil	11/13/2019 1:45:00 PM	1	Hg by 6020
-030	30	1911678-030B	S-082148-111319-CN-C8-V2	4OZGU	Soil	11/13/2019 2:20:00 PM	1	Hg by 6020
-031	31	1911678-031C	S-082148-111319-CN-C8-T1	4OZGU	Soil	11/13/2019 1:10:00 PM	1	Hg by 6020
-032	32	1911678-032B	S-082148-111319-CN-C8-T2	4OZGU	Soil	11/13/2019 1:12:00 PM	1	Hg by 6020
-033	33	1911678-033B	S-082148-111319-CN-C9-V1	4OZGU	Soil	11/13/2019 2:40:00 PM	1	Hg by 6020
-034	34	1911678-034B	S-082148-111319-CN-C9-V2	4OZGU	Soil	11/13/2019 2:42:00 PM	1	Hg by 6020
-035	35	1911678-035C	S-082148-111319-CN-C9-T1	4OZGU	Soil	11/13/2019 2:33:00 PM	1	Hg by 6020
-036	36	1911678-036B	S-082148-111319-CN-C9-T2	4OZGU	Soil	11/13/2019 2:35:00 PM	1	Hg by 6020
-037	37	1911678-037B	S-082148-111319-CN-C10-V1	4OZGU	Soil	11/13/2019 3:00:00 PM	1	Hg by 6020
-038	38	1911678-038B	S-082148-111319-CN-C10-V2	4OZGU	Soil	11/13/2019 3:20:00 PM	1	Hg by 6020
-039	39	1911678-039C	S-082148-111319-CN-C10-T1	4OZGU	Soil	11/13/2019 3:05:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
	11/15/2019	10:05 AM			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 4 OF: 5

191119 022 HALL Last Due 12/3/2019
1st SAMP 11/13/201 1st RCVD 11/19/2019
1911678

SUB CONTRATOR: **Anatek Labs**	COMPANY: **Anatek Labs, Inc.**	PHONE: **(208) 883-2839**	FAX: **(208) 882-9246**
ADDRESS: **1282 Alturas Dr**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Moscow, ID 83843**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
-040 40	1911678-040B	S-082148-111319-CN-C10-T2	4OZGU	Soil	11/13/2019 3:10:00 PM	1	Hg by 6020
-041 41	1911678-041B	S-082148-111419-CN-C11-V1	4OZGU	Soil	11/14/2019 9:15:00 AM	1	Hg by 6020
-042 42	1911678-042B	S-082148-111419-CN-C11-V2	4OZGU	Soil	11/14/2019 9:23:00 AM	1	Hg by 6020
-043 43	1911678-043C	S-082148-111419-CN-C11-T1	4OZGU	Soil	11/14/2019 9:10:00 AM	1	Hg by 6020
-044 44	1911678-044B	S-082148-111419-CN-C11-T2	4OZGU	Soil	11/14/2019 9:12:00 AM	1	Hg by 6020
-045 45	1911678-045B	S-082148-111419-CN-C12-V1	4OZGU	Soil	11/14/2019 9:35:00 AM	1	Hg by 6020
-046 46	1911678-046B	S-082148-111419-CN-C12-V2	4OZGU	Soil	11/14/2019 9:42:00 AM	1	Hg by 6020
-047 47	1911678-047C	S-082148-111419-CN-C12-T1	4OZGU	Soil	11/14/2019 9:37:00 AM	1	Hg by 6020
-048 48	1911678-048B	S-082148-111419-CN-C12-T2	4OZGU	Soil	11/14/2019 9:40:00 AM	1	Hg by 6020
-049 49	1911678-049B	S-082148-111419-CN-C13-V1	4OZGU	Soil	11/14/2019 9:52:00 AM	1	Hg by 6020
-050 50	1911678-050B	S-082148-111419-CN-C13-V2	4OZGU	Soil	11/14/2019 10:00:00 AM	1	Hg by 6020
-051 51	1911678-051C	S-082148-111419-CN-C13-T1	4OZGU	Soil	11/14/2019 9:54:00 AM	1	Hg by 6020
-052 52	1911678-052B	S-082148-111419-CN-C13-T2	4OZGU	Soil	11/14/2019 9:57:00 AM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
	11/15/2019	10:05 AM			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ **RUSH** Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 5 OF: 5

191119 022 HALL Last Due 12/3/2019
1st SAMP 11/13/201 1st RCVD 11/19/2019
1911678

SUB CONTRATOR: **Anatek Labs**	COMPANY: **Anatek Labs, Inc.**	PHONE: **(208) 883-2839**	FAX: **(208) 882-9246**
ADDRESS: **1282 Alturas Dr**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Moscow, ID 83843**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
-053 53	1911678-053B	S-082148-111419-CN-C14-V1	4OZGU	Soil	11/14/2019 10:15:00 AM	1	Hg by 6020
-054 54	1911678-054B	S-082148-111319-CN-C14-V2	4OZGU	Soil	11/13/2019 10:29:00 AM	1	Hg by 6020
-055 55	1911678-055C	S-082148-111419-CN-C14-T1	4OZGU	Soil	11/14/2019 10:13:00 AM	1	Hg by 6020
-056 56	1911678-056B	S-082148-111419-CN-C14-T2	4OZGU	Soil	11/14/2019 10:17:00 AM	1	Hg by 6020
-057 57	1911678-057B	S-082148-111419-CN-C15-V1	4OZGU	Soil	11/14/2019 10:47:00 AM	1	Hg by 6020
-058 58	1911678-058B	S-082148-111419-CN-C15-V2	4OZGU	Soil	11/14/2019 10:56:00 AM	1	Hg by 6020
-059 59	1911678-059C	S-082148-111419-CN-C15-T1	4OZGU	Soil	11/14/2019 10:42:00 AM	1	Hg by 6020
-060 60	1911678-060B	S-082148-111419-CN-C15-T2	4OZGU	Soil	11/14/2019 10:45:00 AM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: **11/15/2019**	Time: **10:05 AM**	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ **RUSH** Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples ____ °C Attempt to Cool ? ____
Comments: ____

Anatek Labs, Inc.

Sample Receipt and Preservation Form

191119 022 HALL Last Due 12/3/2019
1st SAMP 11/13/201 1st RCVD 11/19/2019
1911678

Client Name: HALL Project: 1911678

TAT: (Normal) RUSH: _____ days

Samples Received From: (FedEx) UPS USPS Client Courier Other: _____

Custody Seal on Cooler/Box: (Yes) No Custody Seals Intact: (Yes) No N/A

Number of Coolers/Boxes: 4 5 KHK Type of Ice: Ice/Ice Packs (Blue Ice) Dry Ice None

Packing Material: (Bubble Wrap) Bags Foam/Peanuts None Other: _____

Cooler Temp As Read (°C): 3.8 Cooler Temp Corrected (°C): 3.8 Thermometer Used: IR3

				Comments:
Samples Received Intact?	Yes	(No)	N/A	-060
Chain of Custody Present?	(Yes)	No	N/A	
Samples Received Within Hold Time?	(Yes)	No	N/A	
Samples Properly Preserved?	Yes	No	(N/A)	
VOC Vials Free of Headspace (<6mm)?	Yes	No	(N/A)	
VOC Trip Blanks Present?	Yes	No	(N/A)	
Labels and Chains Agree?	(Yes)	No	N/A	
Total Number of Sample Bottles Received: 060				

Chain of Custody Fully Completed?	(Yes)	No	N/A	
Correct Containers Received?	(Yes)	No	N/A	
Anatek Bottles Used?	Yes	(No)	Unknown	

Record preservatives (and lot numbers, if known) for containers below:

Notes, comments, etc. (also use this space if contacting the client - record names and date/time)

-060 → replaced broken lid 191119022

Received/Inspected By: KHK Date/Time: 11-19-19 11:47

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **MB-48900**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **48900**	RunNo: **64625**
Prep Date: **11/19/2019**	Analysis Date: **11/19/2019**	SeqNo: **2213578** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-48900**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **48900**	RunNo: **64625**
Prep Date: **11/19/2019**	Analysis Date: **11/19/2019**	SeqNo: **2213579** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.4	90	110			

Sample ID: **1911678-023BMS**	SampType: **ms**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-082148-111319-C**	Batch ID: **48900**	RunNo: **64625**
Prep Date: **11/19/2019**	Analysis Date: **11/19/2019**	SeqNo: **2213586** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	61	30.00	0	0	54	141			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **LCS-48831**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **48831**			RunNo: **64601**					
Prep Date: **11/18/2019**	Analysis Date: **11/19/2019**			SeqNo: **2212601**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	107	63.9	124			
Surr: DNOP	4.4		5.000		88.0	70	130			

Sample ID: **MB-48831**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **48831**			RunNo: **64601**					
Prep Date: **11/18/2019**	Analysis Date: **11/19/2019**			SeqNo: **2212604**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		123	70	130			

Sample ID: **1911678-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **S-082148-111319-C**	Batch ID: **48831**			RunNo: **64601**					
Prep Date: **11/18/2019**	Analysis Date: **11/19/2019**			SeqNo: **2212950**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.3	46.55	0	122	57	142			
Surr: DNOP	5.1		4.655		110	70	130			

Sample ID: **1911678-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **S-082148-111319-C**	Batch ID: **48831**			RunNo: **64601**					
Prep Date: **11/18/2019**	Analysis Date: **11/19/2019**			SeqNo: **2212953**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.9	49.60	0	105	57	142	8.98	20	
Surr: DNOP	4.1		4.960		83.5	70	130	0	0	

Sample ID: **1911678-037AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **S-082148-111319-C**	Batch ID: **48883**			RunNo: **64627**					
Prep Date: **11/19/2019**	Analysis Date: **11/20/2019**			SeqNo: **2213658**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.9	49.70	2.245	111	57	142			
Surr: DNOP	5.5		4.970		110	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**
02-Apr-20

Client: GHD
Project: Jal 4 Landfarm

Sample ID: **1911678-037AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-082148-111319-C** Batch ID: **48883** RunNo: **64627**
Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2213659** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.5	47.57	2.245	89.1	57	142	24.8	20	R
Surr: DNOP	3.8		4.757		80.8	70	130	0	0	

Sample ID: **LCS-48883** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **48883** RunNo: **64627**
Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2213674** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.1	63.9	124			
Surr: DNOP	4.3		5.000		85.7	70	130			

Sample ID: **MB-48883** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **48883** RunNo: **64627**
Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2213675** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		96.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **MB-48822**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **48822**	RunNo: **64583**
Prep Date: **11/15/2019**	Analysis Date: **11/18/2019**	SeqNo: **2211939** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	77.4	118			

Sample ID: **LCS-48822**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **48822**	RunNo: **64583**
Prep Date: **11/15/2019**	Analysis Date: **11/18/2019**	SeqNo: **2211940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	106	80	120			
Surr: BFB	1100		1000		112	77.4	118			

Sample ID: **MB-48877**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **48877**	RunNo: **64687**
Prep Date: **11/19/2019**	Analysis Date: **11/21/2019**	SeqNo: **2216247** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.1	77.4	118			

Sample ID: **LCS-48877**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **48877**	RunNo: **64687**
Prep Date: **11/19/2019**	Analysis Date: **11/21/2019**	SeqNo: **2216248** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	80	120			
Surr: BFB	1100		1000		113	77.4	118			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **MB-48822**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **48822**	RunNo: **64583**
Prep Date: **11/15/2019**	Analysis Date: **11/18/2019**	SeqNo: **2211967** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID: **LCS-48822**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **48822**	RunNo: **64583**
Prep Date: **11/15/2019**	Analysis Date: **11/18/2019**	SeqNo: **2211968** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.4	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	105	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **MB-48877**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **48877**	RunNo: **64687**
Prep Date: **11/19/2019**	Analysis Date: **11/21/2019**	SeqNo: **2216287** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.5	80	120			

Sample ID: **LCS-48877**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **48877**	RunNo: **64687**
Prep Date: **11/19/2019**	Analysis Date: **11/21/2019**	SeqNo: **2216288** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.4	80	120			
Toluene	0.90	0.050	1.000	0	89.6	80	120			
Ethylbenzene	0.89	0.050	1.000	0	88.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	88.9	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.9	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**
02-Apr-20

Client: GHD
Project: Jal 4 Landfarm

Sample ID: **MB-48959** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **48959** RunNo: **64742**
Prep Date: **11/21/2019** Analysis Date: **11/22/2019** SeqNo: **2218468** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Titanium	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID: **LCS-48959** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **48959** RunNo: **64742**
Prep Date: **11/21/2019** Analysis Date: **11/22/2019** SeqNo: **2218470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.5	80	120			
Arsenic	23	2.5	25.00	0	91.4	80	120			
Barium	23	0.10	25.00	0	92.7	80	120			
Beryllium	24	0.15	25.00	0	95.2	80	120			
Cadmium	23	0.10	25.00	0	91.6	80	120			
Chromium	23	0.30	25.00	0	92.4	80	120			
Copper	26	0.30	25.00	0	102	80	120			
Iron	29	2.5	25.00	0	116	80	120			
Lead	24	0.25	25.00	0	95.8	80	120			
Manganese	24	0.10	25.00	0	95.0	80	120			
Selenium	22	2.5	25.00	0	86.1	80	120			
Silver	4.7	0.25	5.000	0	94.6	80	120			
Titanium	24	0.25	25.00	0	97.9	80	120			
Uranium	22	5.0	25.00	0	89.9	80	120			
Zinc	23	2.5	25.00	0	90.4	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**
02-Apr-20

Client: GHD
Project: Jal 4 Landfarm

Sample ID: **MB-48837** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **48837** RunNo: **64742**
Prep Date: **11/18/2019** Analysis Date: **11/22/2019** SeqNo: **2218474** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Iron	ND	2.5								
Lead	ND	0.25								
Manganese	ND	0.10								
Selenium	ND	2.5								
Silver	ND	0.25								
Titanium	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID: **LCS-48837** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **48837** RunNo: **64742**
Prep Date: **11/18/2019** Analysis Date: **11/22/2019** SeqNo: **2218476** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	97.1	80	120			
Arsenic	24	2.5	25.00	0	96.5	80	120			
Barium	24	0.10	25.00	0	94.6	80	120			
Beryllium	24	0.15	25.00	0	94.8	80	120			
Cadmium	23	0.10	25.00	0	93.3	80	120			
Chromium	24	0.30	25.00	0	94.8	80	120			
Copper	26	0.30	25.00	0	103	80	120			
Iron	25	2.5	25.00	0	100	80	120			
Lead	24	0.25	25.00	0	96.1	80	120			
Manganese	24	0.10	25.00	0	94.8	80	120			
Selenium	22	2.5	25.00	0	87.2	80	120			
Silver	4.8	0.25	5.000	0	95.8	80	120			
Titanium	25	0.25	25.00	0	98.6	80	120			
Uranium	24	5.0	25.00	0	94.5	80	120			
Zinc	22	2.5	25.00	0	89.9	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**
02-Apr-20

Client: GHD
Project: Jal 4 Landfarm

Sample ID: **MB-48958**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **48958**	RunNo: **64742**
Prep Date: **11/21/2019**	Analysis Date: **11/22/2019**	SeqNo: **2218477** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								
Titanium	ND	0.25								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID: **LCS-48958**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **48958**	RunNo: **64742**
Prep Date: **11/21/2019**	Analysis Date: **11/22/2019**	SeqNo: **2218484** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.4	80	120			
Arsenic	24	2.5	25.00	0	94.1	80	120			
Barium	23	0.10	25.00	0	92.5	80	120			
Beryllium	23	0.15	25.00	0	93.0	80	120			
Cadmium	23	0.10	25.00	0	91.8	80	120			
Chromium	23	0.30	25.00	0	92.7	80	120			
Copper	25	0.30	25.00	0	101	80	120			
Lead	24	0.25	25.00	0	95.8	80	120			
Selenium	20	2.5	25.00	0	81.0	80	120			
Silver	4.7	0.25	5.000	0	94.4	80	120			
Titanium	24	0.25	25.00	0	96.6	80	120			
Uranium	23	5.0	25.00	0	90.7	80	120			
Zinc	23	2.5	25.00	0	90.3	80	120			

Sample ID: **1911678-002AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-111319-C**	Batch ID: **48837**	RunNo: **64742**
Prep Date: **11/18/2019**	Analysis Date: **11/22/2019**	SeqNo: **2218566** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	6.1	5.0	25.07	0	24.5	75	125			S
Arsenic	21	5.0	25.07	0	81.9	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **1911678-002AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48837** RunNo: **64742**

Prep Date: **11/18/2019** Analysis Date: **11/22/2019** SeqNo: **2218566** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	97	0.20	25.07	76.14	83.3	75	125			
Beryllium	25	0.30	25.07	0.3679	97.5	75	125			
Cadmium	24	0.20	25.07	0	97.5	75	125			
Chromium	31	0.60	25.07	6.720	97.6	75	125			
Copper	30	0.60	25.07	2.088	110	75	125			
Lead	26	0.50	25.07	2.089	96.8	75	125			
Manganese	88	0.20	25.07	64.23	93.8	75	125			
Silver	5.2	0.50	5.015	0	104	75	125			
Zinc	35	5.0	25.07	13.20	85.9	75	125			

Sample ID: **1911678-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48837** RunNo: **64742**

Prep Date: **11/18/2019** Analysis Date: **11/22/2019** SeqNo: **2218567** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.5	5.0	25.15	0	21.8	75	125	11.3	20	S
Arsenic	26	5.0	25.15	0	102	75	125	22.6	20	R
Barium	99	0.20	25.15	76.14	92.7	75	125	2.47	20	
Beryllium	24	0.30	25.15	0.3679	94.8	75	125	2.49	20	
Cadmium	24	0.20	25.15	0	93.9	75	125	3.38	20	
Chromium	30	0.60	25.15	6.720	93.8	75	125	2.88	20	
Copper	29	0.60	25.15	2.088	106	75	125	3.04	20	
Lead	24	0.50	25.15	2.089	88.6	75	125	7.89	20	
Manganese	86	0.20	25.15	64.23	84.9	75	125	2.50	20	
Silver	5.0	0.50	5.031	0	99.1	75	125	4.90	20	
Zinc	34	5.0	25.15	13.20	82.2	75	125	2.48	20	

Sample ID: **1911678-002APS** SampType: **PS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48837** RunNo: **64742**

Prep Date: Analysis Date: **11/22/2019** SeqNo: **2218568** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	47	5.0	49.66	0	94.0	80	120			
Arsenic	48	5.0	49.66	0	97.1	80	120			

Sample ID: **1911678-008AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64742**

Prep Date: **11/21/2019** Analysis Date: **11/22/2019** SeqNo: **2218578** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **1911678-008AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64742**

Prep Date: **11/21/2019** Analysis Date: **11/22/2019** SeqNo: **2218578** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.8	5.1	25.40	0	22.7	75	125			S
Arsenic	25	5.1	25.40	3.060	87.7	75	125			
Barium	190	0.20	25.40	189.9	-7.91	75	125			S
Beryllium	23	0.30	25.40	0.4618	90.0	75	125			
Cadmium	23	0.20	25.40	0	88.9	75	125			
Chromium	31	0.61	25.40	7.854	90.9	75	125			
Copper	31	0.61	25.40	5.673	101	75	125			
Lead	25	0.51	25.40	1.451	91.2	75	125			
Silver	5.1	0.51	5.081	0.4524	91.7	75	125			
Titanium	130	0.51	25.40	87.66	175	75	125			ES

Sample ID: **1911678-008AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64742**

Prep Date: **11/21/2019** Analysis Date: **11/22/2019** SeqNo: **2218579** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	7.0	5.1	25.41	0	27.5	75	125	19.1	20	S
Arsenic	25	5.1	25.41	3.060	84.7	75	125	3.01	20	
Barium	240	0.20	25.41	189.9	217	75	125	26.4	20	RS
Beryllium	24	0.30	25.41	0.4618	92.8	75	125	3.02	20	
Cadmium	23	0.20	25.41	0	90.6	75	125	1.95	20	
Chromium	32	0.61	25.41	7.854	93.5	75	125	2.17	20	
Copper	33	0.61	25.41	5.673	107	75	125	4.29	20	
Lead	25	0.51	25.41	1.451	93.3	75	125	2.22	20	
Silver	5.2	0.51	5.083	0.4524	93.9	75	125	2.14	20	
Titanium	130	0.51	25.41	87.66	175	75	125	0.162	20	ES

Sample ID: **1911678-008APS** SampType: **PS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64742**

Prep Date: Analysis Date: **11/22/2019** SeqNo: **2218580** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	46	5.0	49.90	0	92.5	80	120			
Barium	250	0.20	49.90	189.9	112	80	120			

Sample ID: **MB-48958** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **48958** RunNo: **64789**

Prep Date: **11/21/2019** Analysis Date: **11/25/2019** SeqNo: **2220396** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **MB-48958** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **48958** RunNo: **64789**

Prep Date: **11/21/2019** Analysis Date: **11/25/2019** SeqNo: **2220396** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.19	0.10								

Sample ID: **LCS-48958** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **48958** RunNo: **64789**

Prep Date: **11/21/2019** Analysis Date: **11/25/2019** SeqNo: **2220398** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	24	0.10	25.00	0	96.7	80	120			B

Sample ID: **1911678-002AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48837** RunNo: **64789**

Prep Date: **11/18/2019** Analysis Date: **11/25/2019** SeqNo: **2220459** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	22	10	25.07	0	89.0	75	125			

Sample ID: **1911678-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48837** RunNo: **64789**

Prep Date: **11/18/2019** Analysis Date: **11/25/2019** SeqNo: **2220460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	24	10	25.15	0	94.4	75	125	6.27	20	

Sample ID: **1911678-008AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64789**

Prep Date: **11/21/2019** Analysis Date: **11/25/2019** SeqNo: **2220465** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	22	10	25.40	0	85.4	75	125			
Zinc	37	5.1	25.40	14.20	90.3	75	125			

Sample ID: **1911678-008AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64789**

Prep Date: **11/21/2019** Analysis Date: **11/25/2019** SeqNo: **2220466** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	20	10	25.41	0	79.7	75	125	6.87	20	
Zinc	38	5.1	25.41	14.20	95.2	75	125	3.29	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **1911678-008AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64788**

Prep Date: **11/21/2019** Analysis Date: **11/26/2019** SeqNo: **2221364** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	19	5.1	25.40	0	73.2	75	125			S

Sample ID: **1911678-008AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64788**

Prep Date: **11/21/2019** Analysis Date: **11/26/2019** SeqNo: **2221365** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	19	5.1	25.41	0	74.8	75	125	2.20	20	S

Sample ID: **1911678-008APS** SampType: **PS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **64788**

Prep Date: Analysis Date: **11/26/2019** SeqNo: **2221366** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	40	5.0	49.90	0	80.4	80	120			

Sample ID: **1911678-058AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48959** RunNo: **64788**

Prep Date: **11/21/2019** Analysis Date: **11/26/2019** SeqNo: **2221428** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.1	25.74	0	17.6	75	125			S
Arsenic	29	5.1	25.74	0	112	75	125			
Barium	120	0.21	25.74	93.05	93.2	75	125			
Beryllium	27	0.31	25.74	0.4099	104	75	125			
Cadmium	27	0.21	25.74	0	105	75	125			
Chromium	34	0.62	25.74	6.661	105	75	125			
Copper	33	0.62	25.74	3.177	116	75	125			
Lead	28	0.51	25.74	1.230	102	75	125			
Manganese	140	0.21	25.74	104.1	154	75	125			S
Selenium	21	5.1	25.74	0	80.8	75	125			
Silver	5.7	0.51	5.147	0	110	75	125			
Uranium	22	10	25.74	0	86.8	75	125			
Zinc	41	5.1	25.74	16.09	97.9	75	125			

Sample ID: **1911678-058AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48959** RunNo: **64788**

Prep Date: **11/21/2019** Analysis Date: **11/26/2019** SeqNo: **2221429** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**
02-Apr-20

Client: GHD
Project: Jal 4 Landfarm

Sample ID: **1911678-058AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-111419-C** Batch ID: **48959** RunNo: **64788**
Prep Date: **11/21/2019** Analysis Date: **11/26/2019** SeqNo: **2221429** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.1	25.38	0	13.6	75	125	0	20	RS
Arsenic	27	5.1	25.38	0	108	75	125	5.04	20	
Barium	120	0.20	25.38	93.05	88.9	75	125	1.22	20	
Beryllium	26	0.30	25.38	0.4099	99.6	75	125	6.03	20	
Cadmium	25	0.20	25.38	0	99.2	75	125	6.89	20	
Chromium	31	0.61	25.38	6.661	97.0	75	125	7.08	20	
Copper	31	0.61	25.38	3.177	109	75	125	6.82	20	
Lead	25	0.51	25.38	1.230	95.6	75	125	7.95	20	
Manganese	130	0.20	25.38	104.1	90.9	75	125	12.3	20	
Selenium	21	5.1	25.38	0	82.8	75	125	1.04	20	
Silver	5.5	0.51	5.076	0	108	75	125	3.24	20	
Uranium	20	10	25.38	0	78.4	75	125	11.6	20	
Zinc	38	5.1	25.38	16.09	86.2	75	125	8.37	20	

Sample ID: **1911678-058APS** SampType: **PS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-111419-C** Batch ID: **48959** RunNo: **64788**
Prep Date: Analysis Date: **11/26/2019** SeqNo: **2221430** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	48	5.1	51.24	0	93.8	80	120			
Manganese	150	0.20	51.24	104.1	82.4	80	120			

Sample ID: **1911678-057AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **64909**
Prep Date: **11/22/2019** Analysis Date: **12/3/2019** SeqNo: **2225845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.2	26.09	0	0	75	125			S
Barium	60	0.21	26.09	139.5	-304	75	125			S
Beryllium	0.53	0.31	26.09	0.2548	1.07	75	125			S
Cadmium	ND	0.21	26.09	0	0	75	125			S
Chromium	9.4	0.63	26.09	4.542	18.6	75	125			S
Manganese	55	0.21	26.09	55.30	0.711	75	125			S
Silver	ND	0.52	5.218	0.2420	-4.64	75	125			S
Zinc	18	5.2	26.09	9.592	30.6	75	125			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **1911678-057AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **64909**

Prep Date: **11/22/2019** Analysis Date: **12/3/2019** SeqNo: **2225846** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.6	5.1	25.29	0	22.0	75	125	200	20	RS
Barium	89	0.20	25.29	139.5	-200	75	125	38.5	20	RS
Beryllium	25	0.30	25.29	0.2548	97.4	75	125	192	20	R
Cadmium	24	0.20	25.29	0	93.3	75	125	200	20	R
Chromium	33	0.61	25.29	4.542	111	75	125	111	20	R
Manganese	78	0.20	25.29	55.30	89.5	75	125	33.6	20	R
Silver	4.5	0.51	5.058	0.2420	83.4	75	125	200	20	R
Zinc	38	5.1	25.29	9.592	111	75	125	72.7	20	R

Sample ID: **MB-48975** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **48975** RunNo: **64909**

Prep Date: **11/22/2019** Analysis Date: **12/3/2019** SeqNo: **2225858** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Iron	ND	2.5								
Manganese	ND	0.10								
Silver	ND	0.25								
Titanium	ND	0.25								
Zinc	ND	2.5								

Sample ID: **LCS-48975** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **48975** RunNo: **64909**

Prep Date: **11/22/2019** Analysis Date: **12/3/2019** SeqNo: **2225860** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	94.9	80	120			
Barium	24	0.10	25.00	0	94.0	80	120			
Beryllium	23	0.15	25.00	0	94.0	80	120			
Cadmium	23	0.10	25.00	0	93.2	80	120			
Chromium	23	0.30	25.00	0	92.9	80	120			
Iron	25	2.5	25.00	0	100	80	120			
Manganese	23	0.10	25.00	0	94.0	80	120			
Silver	5.0	0.25	5.000	0	101	80	120			
Titanium	25	0.25	25.00	0	98.4	80	120			
Zinc	22	2.5	25.00	0	88.1	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **MB-48975**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **48975**	RunNo: **65017**
Prep Date: **11/22/2019**	Analysis Date: **12/6/2019**	SeqNo: **2229976** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Lead	ND	0.25								
Selenium	ND	2.5								
Uranium	ND	5.0								

Sample ID: **LCS-48975**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **48975**	RunNo: **65017**
Prep Date: **11/22/2019**	Analysis Date: **12/6/2019**	SeqNo: **2229978** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0	102	80	120			
Lead	25	0.25	25.00	0	98.8	80	120			
Selenium	25	2.5	25.00	0	98.6	80	120			
Uranium	23	5.0	25.00	0	94.0	80	120			

Sample ID: **MB-49091**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **49091**	RunNo: **65017**
Prep Date: **12/2/2019**	Analysis Date: **12/6/2019**	SeqNo: **2229979** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	2.5								
Manganese	ND	0.10								
Titanium	ND	0.25								

Sample ID: **LCS-49091**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **49091**	RunNo: **65017**
Prep Date: **12/2/2019**	Analysis Date: **12/6/2019**	SeqNo: **2229981** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	2.5	25.00	0	104	80	120			
Manganese	25	0.10	25.00	0	101	80	120			
Titanium	25	0.25	25.00	0	102	80	120			

Sample ID: **1911678-002AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-082148-111319-C**	Batch ID: **48837**	RunNo: **65017**
Prep Date: **11/18/2019**	Analysis Date: **12/6/2019**	SeqNo: **2229989** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	23	5.0	25.07	0	91.2	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **1911678-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48837** RunNo: **65017**

Prep Date: **11/18/2019** Analysis Date: **12/6/2019** SeqNo: **2229990** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	75	5.0	25.15	0	299	75	125	107	20	RS

Sample ID: **1911678-057AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **65017**

Prep Date: **11/22/2019** Analysis Date: **12/6/2019** SeqNo: **2230097** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	28	5.2	26.09	0	109	75	125			
Lead	28	0.52	26.09	0.8307	106	75	125			
Selenium	23	5.2	26.09	0	90.0	75	125			

Sample ID: **1911678-057AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **65017**

Prep Date: **11/22/2019** Analysis Date: **12/6/2019** SeqNo: **2230099** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	5.1	25.29	0	102	75	125	10.0	20	
Lead	25	0.51	25.29	0.8307	96.0	75	125	12.4	20	
Selenium	25	5.1	25.29	0	98.5	75	125	5.87	20	

Sample ID: **1911678-057AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **65017**

Prep Date: **11/22/2019** Analysis Date: **12/6/2019** SeqNo: **2230108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Titanium	190	1.3	26.09	162.6	118	75	125			

Sample ID: **1911678-057AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **65017**

Prep Date: **11/22/2019** Analysis Date: **12/6/2019** SeqNo: **2230110** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Titanium	190	1.3	25.29	162.6	114	75	125	0.997	20	

Sample ID: **1911678-057AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **65088**

Prep Date: **11/22/2019** Analysis Date: **12/10/2019** SeqNo: **2233331** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	11	10	26.09	0	42.4	75	125			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **1911678-057AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **48975** RunNo: **65088**

Prep Date: **11/22/2019** Analysis Date: **12/10/2019** SeqNo: **2233335** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	10	10	25.29	0	40.4	75	125	7.95	20	S

Sample ID: **MB-49252** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **49252** RunNo: **65116**

Prep Date: **12/10/2019** Analysis Date: **12/11/2019** SeqNo: **2234338** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.30								

Sample ID: **LCS-49252** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **49252** RunNo: **65116**

Prep Date: **12/10/2019** Analysis Date: **12/11/2019** SeqNo: **2234340** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	26	0.30	25.00	0	104	80	120			

Sample ID: **1911678-057AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **49252** RunNo: **65116**

Prep Date: **12/10/2019** Analysis Date: **12/11/2019** SeqNo: **2234416** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	34	0.60	24.87	3.475	122	75	125			

Sample ID: **1911678-057AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **49252** RunNo: **65116**

Prep Date: **12/10/2019** Analysis Date: **12/11/2019** SeqNo: **2234417** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	33	0.61	25.50	3.475	116	75	125	2.04	20	

Sample ID: **1911678-057APS** SampType: **PS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111419-C** Batch ID: **49252** RunNo: **65116**

Prep Date: Analysis Date: **12/11/2019** SeqNo: **2234418** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	57	0.62	51.32	3.475	104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1911678**

02-Apr-20

Client: GHD

Project: Jal 4 Landfarm

Sample ID: **MB-49252** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **49252** RunNo: **65261**

Prep Date: **12/10/2019** Analysis Date: **12/18/2019** SeqNo: **2241099** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.30								

Sample ID: **LCS-49252** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **49252** RunNo: **65261**

Prep Date: **12/10/2019** Analysis Date: **12/18/2019** SeqNo: **2241101** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	25	0.30	25.00	0	102	80	120			

Sample ID: **1911678-008AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **65261**

Prep Date: **11/21/2019** Analysis Date: **12/18/2019** SeqNo: **2241142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	120	0.20	25.40	116.6	26.9	75	125			S

Sample ID: **1911678-008AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-082148-111319-C** Batch ID: **48958** RunNo: **65261**

Prep Date: **11/21/2019** Analysis Date: **12/18/2019** SeqNo: **2241143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	130	0.20	25.41	116.6	59.3	75	125	6.45	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **GHD** Work Order Number: **1911678** RcptNo: **1**

Received By: **Isaiah Ortiz** **11/15/2019 9:15:00 AM** I-Ox

Completed By: **Leah Baca** **11/15/2019 10:05:30 AM** Leah S Baca

Reviewed By: LB 11/15/19

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	# of preserved bottles checked for pH: (<2 or >12 unless noted)
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: YG 11/15/19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good				
2	3.4	Good				
3	0.1	Good				
4	1.0	Good				

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE #200

ALbuquerque, NM 87110

Phone #: 5E+09

email or Fax#: Christine.mathews@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day

☐ XStanc ☐ Rush

Project Name: Jal-4 Landfarm

Project #: 82148

Project Mana Christine Mathews

Sampler: CN

On Ice: ■ Yes ☐ No

# of Coolers: 4

Cooler Temp(including CF): Remarks

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1911678	BTEX 8021	TPH DRO/GRO 8015	Metals x 6010	Mercury x 6020	Chloride x 300
11/13/2019	0950	S	S-082148-111319-CN-C1-V1	3		-001	X	X	X	X	
11/13/2019	1000	S	S-082148-111319-CN-C1-V2	2		-002			X	X	
11/13/2019	1400	S	S-082148-111319-CN-C1-T1	3		-003		X	X	X	X
11/13/2019	1405	S	S-082148-111319-CN-C1-T2	2		-004			X	X	
11/13/2019	1022	S	S-082148-111319-CN-C2-V1	3		-005	X	X	X	X	
11/13/2019	1045	S	S-082148-111319-CN-C2-V2	2		-006			X	X	
11/13/2019	1410	S	S-082148-111319-CN-C2-T1	3		-007		X	X	X	X
11/13/2019	1415	S	S-082148-111319-CN-C2-T2	2		-008			X	X	
11/13/2019	1105	S	S-082148-111319-CN-C3-V1	3		-009	X	X	X	X	
11/13/2019	1116	S	S-082148-111319-CN-C3-V2	2		-010			X	X	
11/13/2019	1055	S	S-082148-111319-CN-C3-T1	3		-011		X	X	X	X
11/13/2019	1100	S	S-082148-111319-CN-C3-T2	2		-012			X	X	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-14-19	1400				11/14	1500
11/14	1900			I-O courier	11/15/19	0915

Remarks: Metals: Sb, As, Ba, Be, Cd, Cr Co, Fe, Mn, Pb, Se, Ag, Ti, U, Zn

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

$1.4^{\circ}C - 0.2\,(CF) = 1.2^{\circ}C$

$3.4^{\circ}C$ $3.2^{\circ}C$

$0.1^{\circ}C$ $0.2^{\circ}C$

Chain-of-Custody Record

Client:	GHD
Mailing Address:	6121 Indian School Rd NE #200
ALbuquerque, NM 87110	
Phone #:	##
email or Fax#:	Christine.mathews@ghd.com
QA/QC Package:	
☐ Standard	☐ Level 4 (Full Validation)
Accreditation:	☐ Az Compliance
☐ NELAC	☐ Other_____
☐ EDD (Type) _____	

Turn-Around Time: 5 Day
☐ XStal ☐ Rush_____

Project Nai Jal-4 Landfarm

Project #: 82148

Project Ma Christine Mathews

Sampler: CN

On Ice: ■ Yes ☐ No

# of Coolers: 4

Cooler Temp(including CF): Below

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Ma	Sample Name	Container Type and #	Preservative Type	HEAL No. 1911678	BTEX 8021	TPH DRO/MRO/GRO 8015	Metals x 6010	Mercury x 6020	Chlorides x 300
11/13/2019	1130	S	S-082148-111319-CN-C4-V1	3		-013	X	X	XX	XX	
11/13/2019	1135	S	S-082148-111319-CN-C4-V2	2		-014			XX	XX	
11/13/2019	1125	S	S-082148-111319-CN-C4-T1	3		-015		X	XX	XX	X
11/13/2019	1128	S	S-082148-111319-CN-C4-T2	2		-016			XX	XX	
11/13/2019	1150	S	S-082148-111319-CN-C5-V1	3		-017	X	X	XX	XX	
11/13/2019	1200	S	S-082148-111319-CN-C5-V2	2		-018			XX	XX	
11/13/2019	1145	S	S-082148-111319-CN-C5-T1	3		-019		X	XX	XX	X
11/13/2019	1147	S	S-082148-111319-CN-C5-T2	2		-020			XX	XX	
11/13/2019	1210	S	S-082148-111319-CN-C6-V1	3		-021	X	X	XX	XX	
11/13/2019	1220	S	S-082148-111319-CN-C6-V2	2		-022			XX	XX	
11/13/2019	1205	S	S-082148-111319-CN-C6-T1	3		-023		X	XX	XX	X
11/13/2019	1207	S	S-082148-111319-CN-C6-T2	2		-024			XX	XX	

Date: 11-14-19	Time: 1400	Relinquished by:	Received by:	Via:	Date 11/15/19	Time 0730
Date: 11/14	Time: 1900	Relinquished by:	Received by:	Via: courier	Date 11/14	Time 0915

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

$1.4 - 0.2|CF| = 1.2^{\cdot C}$

3.4 = $3.2^{\cdot C}$
0.4 = $0.2^{\cdot C}$
1.0 = $0.8^{\cdot C}$

Metals
Sb, As, Ba, Be, Cd, Cr
Co, Fe, Mn, Pb, Se, Ag, Ti,
U, Zn

Chain-of-Custody Record

Client:	GHD
Mailing Address:	6121 Indian School Rd NE #200
ALbuquerque, NM 87110	
Phone #:	##
email or Fax#:	Christine.mathews@ghd.com
QA/QC Package:	
☐ Standard	☐ Level 4 (Full Validation)
Accreditation:	☐ Az Compliance
☐ NELAC	☐ Other_____
☐ EDD (Type) _____	

Turn-Around Time: 5 Day
☐ XStal ☐ Rush_____

Project Nai Jal-4 Landfarm

Project #: 82148

Project Ma Christine Mathews

Sampler: CN

On Ice: ☑ Yes ☐ No

# of Coolers: 4

Cooler Temp(including CF): Below

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Ma	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX 8021	TPH GRO/MRO/DRO 8015	Metals x 6010	Mercury x 6020	Chlorides x 300
11/13/2019	1240	S	S-082148-111319-CN-C7-V1	3		-075	X	X	X	X	
11/13/2019	1255	S	S-082148-111319-CN-C7-V2	2		-076			X	X	
11/13/2019	1235	S	S-082148-111319-CN-C7-T1	3		-077		X	X	X	X
11/13/2019	1237	S	S-082148-111319-CN-C8-T2	2	pH bottle 11/14/19	-078			X	X	
11/13/2019	1345	S	S-082148-111319-CN-C8-V1	3		-079	X	X	X	X	
11/13/2019	1420	S	S-082148-111319-CN-C8-V2	2		-080			X	X	
11/13/2019	1310	S	S-082148-111319-CN-C8-T1	3		-081		X	X	X	X
11/13/2019	1312	S	S-082148-111319-CN-C8-T2	2		-082			X	X	
11/13/2019	1490	S	S-082148-111319-CN-C9-V1	3		-083	X	X	X	X	
11/13/2019	1442	S	S-082148-111319-CN-C9-V2	2		-084			X	X	
11/13/2019	1433	S	S-082148-111319-CN-C9-T1	3		-085		X	X	X	X
11/13/2019	1435	S	S-082148-111319-CN-C9-T2	2		-086			X	X	

Date: 11-14-19	Time: 1400	Relinquished by:	Received by:	Via:	Date 11/14 Time 1500	Remarks:
Date: 11/14	Time: 1900	Relinquished by:	Received by:	Via: Courier	Date 11/15 Time 0915	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

1.4 − 0.2|CF| = 1.2°C

3.4 = 3.2°C

0.4 = 0.2°C

1.0 = 0.8°C

Metals
Sb, As, Ba, Be, Cd, Cr, Co, Fe, Mn
Pb, Se, Ag, Ti, U, Zn

Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE #200
ALbuquerque, NM 87110
Phone #: ####
email or Fax#: Christine.mathews@ghd.com
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time: 5 Day
☐ XSta ☐ Rush_____
Project Nai Jal-4 Landfarm
Project #: 82148
Project Ma Christine Mathews

Sampler: CN
On Ice: ■ Yes ☐ No
# of Coolers: 4
Cooler Temp(including CF): Below

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matr	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX x 8021	TPH GRO/MRO/DRO 8015	Metals x 6010	Mercury x 6020	Chlorides x 300
11/13/2019	1500	S	S-082148-111319-CN-C10-V1	3		-037 -049	X	X	X	X	
11/13/2019	1520	S	S-082148-111319-CN-C10-V2	2		-038 -050			X	X	
11/13/2019	1505	S	S-082148-111319-CN-C10-T1	3		-039 -051		X	X	X	X
11/13/2019	1510	S	S-082148-111319-CN-C10-T2	2		-040 -052			X	X	
11/14/2019	0915	S	S-082148-111419-CN-C11-V1	3		-041 -053	X	X	X	X	
11/14/2019	0923	S	S-082148-111419-CN-C11-V2	2		-042 -054			X	X	
11/14/2019	0910	S	S-082148-111419-CN-C11-T1	3		-043 -055		X	X	X	X
11/14/2019	0912	S	S-082148-111419-CN-C12-T2	2		-044 -056			X	X	
11/14/2019	0935	S	S-082148-111419-CN-C12-V1	3		-045 -057	X	X	X	X	
11/14/2019	0942	S	S-082148-111419-CN-C12-V2	2		-046 -058			X	X	
11/14/2019	0937	S	S-082148-111419-CN-C12-T1	3		-047 -059		X	X	X	X
11/14/2019	0940	S	S-082148-111419-CN-C12-T2	2		-048 -060			X	X	

Date: 11-14-19 Time: 1400 Relinquished by: Received by: Via: Date: Time: Remarks:
Date: 11/14 Time: 1900 Relinquished by: Received by: T. O. Via: carrier Date: 11/15 Time: 915

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

1.4 - 0.2|CF| = 1.2°C
3.4 - | = 3.2°C
0.4 - | = 0.2°C
1.0 - | = 0.8°C

Metals
Sb, As, Ba, Be, Cd, Cr, Co, Fe, Mn, Pb
Se, Ag, Ti, Ni, Zn

Chain-of-Custody Record

Client:	GHD
Mailing Address:	6121 Indian School Rd NE #200
ALbuquerque, NM 87110	
Phone #:	##
email or Fax#:	Christine.mathews@ghd.com
QA/QC Package:	
☐ Standard	☐ Level 4 (Full Validation)
Accreditation:	☐ Az Compliance
☐ NELAC	☐ Other_____
☐ EDD (Type) _____	

Turn-Around Time: 5 Day

☐ XStal ☐ Rush_____

Project Nai Jal-4 Landfarm

Project #: 82148

Project Ma Christine Mathews

Sampler: CN

On Ice: ☑ Yes ☐ No

# of Coolers: 4

Cooler Temp(including CF): Below

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Ma	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX x 8021	TPH DRO/MRO/GRO 8015	Metals x 6010	Mercury x 6020	Chlorides x 300
11/14/2019	0952	S	S-082148-111419-CN-C13-V1	3		-049 -037	X	X	X	X	
11/14/2019	1000	S	S-082148-111419-CN-C13-V2	2		-050 -038			X	X	
11/14/2019	0954	S	S-082148-111419-CN-C13-T1	3		-051 -039		X	X	X	X
11/14/2019	0957	S	S-082148-111419-CN-C13-T2	2		-052 -040			X	X	
11/14/2019	1015	S	S-082148-111419-CN-C14-V1	3		-053 -041	X	X	X	X	
11/14/2019	1029	S	S-082148-111419-CN-C14-V2	2		-054 -042			X	X	
11/14/2019	1013	S	S-082148-111419-CN-C14-T1	3		-055 -043		X	X	X	X
11/14/2019	1017	S	S-082148-111419-CN-C14-T2	2		-056 -044			X	X	
11/14/2019	1047	S	S-082148-111419-CN-C15-V1	3		-057 -045	X	X	X	X	
11/14/2019	1056	S	S-082148-111419-CN-C15-V2	2		-058 -046			X	X	
11/14/2019	1042	S	S-082148-111419-CN-C15-T1	3		-059 -047		X	X	X	X
11/14/2019	1045	S	S-082148-111419-CN-C15-T2	2		-060 -048			X	X	

Date: 11-14-19	Time: 1500	Relinquished by:	Received by:	Via:	Date 11/14	Time 1500
Date: 11/14	Time: 1900	Relinquished by:	Received by:	Via: Courier	Date 11/15	Time 0915

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

1.4 - 0.2 |CF| = 1.2°C

3.4 - | = 3.2°C

0.4 - | = 0.2°C

1.0 - | = 0.8°C

Metals: Sb, As, Ba, Be, Cd, Cr Co, Fe, Mn, Pb, Se, Ag, Ti, Ni, Zn

Analytical Data 2020

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 20, 2020

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX:

RE: Jal Landfarm OrderNo.: 2003D30

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 30 sample(s) on 3/31/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T1
Project: Jal Landfarm
Collection Date: 3/26/2020 10:35:00 AM
Lab ID: 2003D30-001 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 1:28:39 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Barium	110	0.20		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Beryllium	0.47	0.30		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Chromium	5.9	0.60		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Copper	1.9	0.80		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Iron	6100	250		mg/Kg	100	4/8/2020 7:59:33 AM	51629
Lead	ND	0.60		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Manganese	60	0.40		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Silver	0.66	0.50		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Zinc	13	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Surr: BFB	98.1	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	22	8.9		mg/Kg	1	4/6/2020 5:47:26 AM	51498
Motor Oil Range Organics (MRO)	57	44		mg/Kg	1	4/6/2020 5:47:26 AM	51498
Surr: DNOP	108	55.1-146		%Rec	1	4/6/2020 5:47:26 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Toluene	ND	0.047		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Xylenes, Total	ND	0.094		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Surr: 1,2-Dichloroethane-d4	87.3	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
Surr: Dibromofluoromethane	95.0	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
Surr: Toluene-d8	102	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V1
Project: Jal Landfarm
Collection Date: 3/26/2020 10:40:00 AM
Lab ID: 2003D30-002 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 2:05:40 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Arsenic	17	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Barium	83	0.20		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Beryllium	0.66	0.29		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Chromium	9.3	0.59		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Copper	1.2	0.79		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Iron	9800	250		mg/Kg	100	4/8/2020 8:01:08 AM	51629
Lead	ND	0.59		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Manganese	250	0.39		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:27:44 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:22:33 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Zinc	21	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Surr: BFB	99.0	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/4/2020 9:29:13 AM	51498
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/4/2020 9:29:13 AM	51498
Surr: DNOP	73.8	55.1-146		%Rec	1	4/4/2020 9:29:13 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Toluene	ND	0.049		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
Surr: Toluene-d8	106	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T2
Project: Jal Landfarm
Collection Date: 3/26/2020 11:00:00 AM
Lab ID: 2003D30-003 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 2:18:00 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Barium	260	0.20		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Beryllium	0.59	0.30		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Chromium	8.1	0.60		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Copper	3.6	0.80		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Iron	8300	250		mg/Kg	100	4/8/2020 8:02:35 AM	51629
Lead	ND	0.60		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Manganese	72	0.40		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:29:18 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:23:55 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Zinc	16	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Surr: BFB	96.3	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	23	9.9		mg/Kg	1	4/4/2020 9:51:22 AM	51498
Motor Oil Range Organics (MRO)	76	49		mg/Kg	1	4/4/2020 9:51:22 AM	51498
Surr: DNOP	76.3	55.1-146		%Rec	1	4/4/2020 9:51:22 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
Surr: Dibromofluoromethane	100	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
Surr: Toluene-d8	103	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V2
Project: Jal Landfarm
Collection Date: 3/26/2020 1:30:00 PM
Lab ID: 2003D30-004 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 2:30:22 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Barium	87	0.20		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Beryllium	0.44	0.30		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Chromium	8.5	0.60		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Copper	2.4	0.80		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Iron	6100	250		mg/Kg	100	4/8/2020 8:04:01 AM	51629
Lead	0.64	0.60		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Manganese	63	0.40		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:30:53 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:25:16 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Zinc	13	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Surr: BFB	99.1	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/4/2020 10:13:17 AM	51498
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 10:13:17 AM	51498
Surr: DNOP	83.5	55.1-146		%Rec	1	4/4/2020 10:13:17 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
Surr: Toluene-d8	108	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T3
Project: Jal Landfarm
Collection Date: 3/26/2020 1:40:00 PM
Lab ID: 2003D30-005 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:07:23 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Arsenic	5.6	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Barium	55	0.20		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Beryllium	0.44	0.29		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Chromium	5.9	0.59		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Copper	ND	0.78		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Iron	6000	250		mg/Kg	100	4/8/2020 8:05:28 AM	51629
Lead	0.70	0.59		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Manganese	29	0.39		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:32:27 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:26:37 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Zinc	12	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Surr: BFB	96.7	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/4/2020 10:35:25 AM	51498
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 10:35:25 AM	51498
Surr: DNOP	72.9	55.1-146		%Rec	1	4/4/2020 10:35:25 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Toluene	ND	0.048		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
Surr: Toluene-d8	102	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V3
Project: Jal Landfarm
Collection Date: 3/26/2020 1:45:00 PM
Lab ID: 2003D30-006 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:19:43 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Barium	63	0.20		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Beryllium	0.47	0.30		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Chromium	6.6	0.60		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Copper	1.6	0.79		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Iron	6400	250		mg/Kg	100	4/8/2020 8:06:55 AM	51629
Lead	0.93	0.60		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Manganese	54	0.40		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:34:01 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:27:52 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Uranium	ND	9.9		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Zinc	15	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Surr: BFB	98.8	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	290	92		mg/Kg	10	4/6/2020 12:23:01 PM	51498
Motor Oil Range Organics (MRO)	690	460		mg/Kg	10	4/6/2020 12:23:01 PM	51498
Surr: DNOP	0	55.1-146	S	%Rec	10	4/6/2020 12:23:01 PM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Toluene	ND	0.047		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Xylenes, Total	ND	0.094		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
Surr: Toluene-d8	111	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T4
Project: Jal Landfarm
Collection Date: 3/26/2020 1:50:00 PM
Lab ID: 2003D30-007 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:32:03 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Barium	66	0.20		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Beryllium	0.45	0.29		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Chromium	5.7	0.59		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Copper	1.3	0.79		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Iron	6000	250		mg/Kg	100	4/8/2020 8:08:23 AM	51629
Lead	ND	0.59		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Manganese	50	0.39		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:35:36 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:29:07 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Zinc	14	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Surr: BFB	102	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	52	9.0		mg/Kg	1	4/4/2020 11:19:40 AM	51498
Motor Oil Range Organics (MRO)	120	45		mg/Kg	1	4/4/2020 11:19:40 AM	51498
Surr: DNOP	83.8	55.1-146		%Rec	1	4/4/2020 11:19:40 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
Surr: Toluene-d8	107	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-v4
Project: Jal Landfarm
Collection Date: 3/26/2020 1:50:00 PM
Lab ID: 2003D30-008 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:44:23 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Barium	63	0.20		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Beryllium	0.43	0.30		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Chromium	6.5	0.59		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Copper	ND	0.79		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Iron	6100	250		mg/Kg	100	4/8/2020 8:09:50 AM	51629
Lead	ND	0.59		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Manganese	41	0.40		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:44:13 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:30:22 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Uranium	ND	9.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Zinc	14	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Surr: BFB	99.4	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/4/2020 11:41:36 AM	51498
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 11:41:36 AM	51498
Surr: DNOP	77.2	55.1-146		%Rec	1	4/4/2020 11:41:36 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
Surr: Dibromofluoromethane	97.5	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
Surr: Toluene-d8	106	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T5
Project: Jal Landfarm
Collection Date: 3/26/2020 2:05:00 PM
Lab ID: 2003D30-009 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:56:44 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Arsenic	ND	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Barium	45	0.19		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Beryllium	0.38	0.29		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Cadmium	ND	0.19		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Chromium	6.2	0.58		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Copper	3.5	0.77		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Iron	5000	240		mg/Kg	100	4/8/2020 8:11:17 AM	51629
Lead	3.0	0.58		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Manganese	67	0.39		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Selenium	ND	4.8		mg/Kg	2	4/8/2020 11:45:49 AM	51629
Silver	ND	0.48		mg/Kg	2	4/8/2020 1:31:43 PM	51629
Thallium	ND	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Zinc	21	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Surr: BFB	98.1	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	8.3		mg/Kg	1	4/4/2020 12:03:45 PM	51498
Motor Oil Range Organics (MRO)	ND	41		mg/Kg	1	4/4/2020 12:03:45 PM	51498
Surr: DNOP	79.1	55.1-146		%Rec	1	4/4/2020 12:03:45 PM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Toluene	ND	0.048		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
Surr: Dibromofluoromethane	95.0	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
Surr: Toluene-d8	100	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V5
Project: Jal Landfarm
Collection Date: 3/26/2020 2:00:00 PM
Lab ID: 2003D30-010 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 4:09:05 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Barium	51	0.20		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Beryllium	0.42	0.30		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Chromium	8.1	0.60		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Copper	3.0	0.80		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Iron	5900	250		mg/Kg	100	4/8/2020 8:12:44 AM	51629
Lead	3.8	0.60		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Manganese	53	0.40		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:47:22 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:32:58 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Zinc	24	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Surr: BFB	96.7	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 12:25:49 PM	51498
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 12:25:49 PM	51498
Surr: DNOP	72.7	55.1-146		%Rec	1	4/4/2020 12:25:49 PM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Toluene	ND	0.047		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Xylenes, Total	ND	0.094		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
Surr: Toluene-d8	103	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T6
Project: Jal Landfarm
Collection Date: 3/26/2020 2:10:00 PM
Lab ID: 2003D30-011 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 11:51:40 AM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 9:18:20 AM	51507
Barium	100	0.20		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Beryllium	0.36	0.31		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Chromium	5.6	0.61		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Copper	2.1	0.82		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Iron	5800	260		mg/Kg	100	4/6/2020 9:53:47 AM	51507
Lead	0.88	0.61		mg/Kg	2	4/8/2020 9:18:20 AM	51507
Manganese	58	0.41		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/8/2020 10:35:04 AM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:18:20 AM	51507
Zinc	13	5.1		mg/Kg	2	4/6/2020 2:26:29 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Surr: BFB	95.8	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/5/2020 6:15:07 PM	51523
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/5/2020 6:15:07 PM	51523
Surr: DNOP	118	55.1-146		%Rec	1	4/5/2020 6:15:07 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Toluene	ND	0.050		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Ethylbenzene	ND	0.050		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Xylenes, Total	ND	0.10		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
Surr: Dibromofluoromethane	93.0	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
Surr: Toluene-d8	94.2	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V6
Project: Jal Landfarm
Collection Date: 3/26/2020 2:15:00 PM
Lab ID: 2003D30-012 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	59		mg/Kg	20	4/4/2020 12:28:41 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.8		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Arsenic	ND	4.8		mg/Kg	2	4/8/2020 9:26:09 AM	51507
Barium	130	0.19		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Beryllium	0.31	0.29		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Chromium	5.2	0.58		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Copper	1.4	0.77		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Iron	4700	240		mg/Kg	100	4/6/2020 9:55:52 AM	51507
Lead	0.90	0.58		mg/Kg	2	4/8/2020 9:26:09 AM	51507
Manganese	37	0.39		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Selenium	ND	4.8		mg/Kg	2	4/8/2020 10:36:39 AM	51507
Silver	0.58	0.48		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Thallium	ND	4.8		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:26:09 AM	51507
Zinc	10	4.8		mg/Kg	2	4/6/2020 2:28:13 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Surr: BFB	99.3	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/4/2020 10:01:12 AM	51523
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/4/2020 10:01:12 AM	51523
Surr: DNOP	74.0	55.1-146		%Rec	1	4/4/2020 10:01:12 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Toluene	ND	0.049		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
Surr: Dibromofluoromethane	91.8	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
Surr: Toluene-d8	98.3	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T7
Project: Jal Landfarm
Collection Date: 3/26/2020 2:25:00 PM
Lab ID: 2003D30-013 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 1:30:26 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 9:27:45 AM	51507
Barium	51	0.20		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Beryllium	ND	0.31		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Chromium	4.9	0.61		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Copper	2.2	0.82		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Iron	4900	260		mg/Kg	100	4/6/2020 9:57:57 AM	51507
Lead	0.98	0.61		mg/Kg	2	4/8/2020 9:27:45 AM	51507
Manganese	61	0.41		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/8/2020 10:38:12 AM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:27:45 AM	51507
Zinc	12	5.1		mg/Kg	2	4/6/2020 2:29:54 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Surr: BFB	97.3	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/4/2020 10:25:23 AM	51523
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 10:25:23 AM	51523
Surr: DNOP	73.6	55.1-146		%Rec	1	4/4/2020 10:25:23 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
Surr: Dibromofluoromethane	89.8	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
Surr: Toluene-d8	97.5	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V7
Project: Jal Landfarm
Collection Date: 3/26/2020 2:30:00 PM
Lab ID: 2003D30-014 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 1:42:47 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 9:29:19 AM	51507
Barium	75	0.20		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Beryllium	0.36	0.30		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Chromium	6.2	0.61		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Copper	1.2	0.81		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Iron	5700	250		mg/Kg	100	4/6/2020 10:14:38 AM	51507
Lead	0.84	0.61		mg/Kg	2	4/8/2020 9:29:19 AM	51507
Manganese	48	0.40		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/8/2020 10:39:45 AM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:29:19 AM	51507
Zinc	13	5.1		mg/Kg	2	4/6/2020 2:31:36 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Surr: BFB	100	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 10:49:33 AM	51523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/4/2020 10:49:33 AM	51523
Surr: DNOP	66.2	55.1-146		%Rec	1	4/4/2020 10:49:33 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
Surr: Dibromofluoromethane	94.1	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
Surr: Toluene-d8	97.8	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T8
Project: Jal Landfarm
Collection Date: 3/26/2020 2:40:00 PM
Lab ID: 2003D30-015 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 1:55:07 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.8		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Arsenic	ND	4.8		mg/Kg	2	4/8/2020 9:30:52 AM	51507
Barium	99	0.19		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Beryllium	0.39	0.29		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Chromium	5.8	0.58		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Copper	1.7	0.77		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Iron	6000	240		mg/Kg	100	4/6/2020 10:16:45 AM	51507
Lead	0.68	0.58		mg/Kg	2	4/8/2020 9:30:52 AM	51507
Manganese	54	0.39		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Selenium	ND	4.8		mg/Kg	2	4/8/2020 10:41:19 AM	51507
Silver	ND	0.48		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Thallium	ND	4.8		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:30:52 AM	51507
Zinc	13	4.8		mg/Kg	2	4/6/2020 2:33:18 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Surr: BFB	96.5	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	440	99		mg/Kg	10	4/5/2020 7:29:15 PM	51523
Motor Oil Range Organics (MRO)	510	490		mg/Kg	10	4/5/2020 7:29:15 PM	51523
Surr: DNOP	0	55.1-146	S	%Rec	10	4/5/2020 7:29:15 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
Surr: Dibromofluoromethane	91.2	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
Surr: Toluene-d8	94.7	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V8
Project: Jal Landfarm
Collection Date: 3/26/2020 2:50:00 PM
Lab ID: 2003D30-016 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:07:29 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:32:26 AM	51507
Barium	110	0.19		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Beryllium	0.46	0.29		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Chromium	7.2	0.58		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Copper	ND	0.78		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Iron	7600	240		mg/Kg	100	4/6/2020 10:18:50 AM	51507
Lead	ND	0.58		mg/Kg	2	4/8/2020 9:32:26 AM	51507
Manganese	46	0.39		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/8/2020 10:42:53 AM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:32:26 AM	51507
Zinc	14	4.9		mg/Kg	2	4/6/2020 2:35:02 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Surr: BFB	99.2	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/4/2020 11:38:12 AM	51523
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 11:38:12 AM	51523
Surr: DNOP	66.0	55.1-146		%Rec	1	4/4/2020 11:38:12 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
Surr: Toluene-d8	96.7	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T9
Project: Jal Landfarm
Collection Date: 3/26/2020 4:25:00 PM
Lab ID: 2003D30-017 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:19:49 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:34:01 AM	51507
Barium	100	0.20		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Beryllium	0.31	0.30		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Chromium	5.1	0.60		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Copper	2.3	0.80		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Iron	5600	250		mg/Kg	100	4/6/2020 10:20:43 AM	51507
Lead	0.64	0.60		mg/Kg	2	4/8/2020 9:34:01 AM	51507
Manganese	59	0.40		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:44:27 AM	51507
Silver	0.61	0.50		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:34:01 AM	51507
Zinc	14	5.0		mg/Kg	2	4/6/2020 2:36:43 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Surr: BFB	96.7	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 12:02:37 PM	51523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/4/2020 12:02:37 PM	51523
Surr: DNOP	111	55.1-146		%Rec	1	4/4/2020 12:02:37 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
Surr: Dibromofluoromethane	93.4	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
Surr: Toluene-d8	94.2	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V9
Project: Jal Landfarm
Collection Date: 3/26/2020 4:35:00 PM
Lab ID: 2003D30-018 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:32:09 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:35:35 AM	51507
Barium	94	0.19		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Beryllium	0.50	0.29		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Chromium	8.1	0.58		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Copper	ND	0.78		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Iron	8300	240		mg/Kg	100	4/6/2020 10:22:48 AM	51507
Lead	ND	0.58		mg/Kg	2	4/8/2020 9:35:35 AM	51507
Manganese	37	0.39		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/8/2020 10:46:02 AM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:35:35 AM	51507
Zinc	17	4.9		mg/Kg	2	4/6/2020 2:38:25 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Surr: BFB	98.7	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 12:26:57 PM	51523
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 12:26:57 PM	51523
Surr: DNOP	93.1	55.1-146		%Rec	1	4/4/2020 12:26:57 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Xylenes, Total	ND	0.098		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
Surr: Dibromofluoromethane	93.1	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T10
Project: Jal Landfarm
Collection Date: 3/26/2020 2:10:00 PM
Lab ID: 2003D30-019 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:44:30 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:37:09 AM	51507
Barium	56	0.20		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Beryllium	0.30	0.30		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Chromium	5.2	0.60		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Copper	1.7	0.80		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Iron	5400	250		mg/Kg	100	4/6/2020 10:24:35 AM	51507
Lead	1.0	0.60		mg/Kg	2	4/8/2020 9:37:09 AM	51507
Manganese	43	0.40		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:47:36 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Uranium	ND	9.9		mg/Kg	2	4/8/2020 9:37:09 AM	51507
Zinc	11	5.0		mg/Kg	2	4/6/2020 2:40:06 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Surr: BFB	101	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	28	9.7		mg/Kg	1	4/4/2020 12:51:27 PM	51523
Motor Oil Range Organics (MRO)	91	48		mg/Kg	1	4/4/2020 12:51:27 PM	51523
Surr: DNOP	114	55.1-146		%Rec	1	4/4/2020 12:51:27 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Xylenes, Total	ND	0.095		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V10
Project: Jal Landfarm
Collection Date: 3/26/2020 2:15:00 PM
Lab ID: 2003D30-020 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:56:52 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.2		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Arsenic	ND	5.2		mg/Kg	2	4/8/2020 9:38:43 AM	51507
Barium	130	0.21		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Beryllium	0.33	0.31		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Cadmium	ND	0.21		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Chromium	5.4	0.62		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Copper	2.3	0.83		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Iron	5400	260		mg/Kg	100	4/6/2020 10:26:40 AM	51507
Lead	ND	0.62		mg/Kg	2	4/8/2020 9:38:43 AM	51507
Manganese	49	0.41		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Selenium	ND	5.2		mg/Kg	2	4/8/2020 10:59:03 AM	51507
Silver	ND	0.52		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Thallium	ND	5.2		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:38:43 AM	51507
Zinc	12	5.2		mg/Kg	2	4/6/2020 2:41:48 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Surr: BFB	100	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/4/2020 2:05:08 PM	51523
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 2:05:08 PM	51523
Surr: DNOP	85.2	55.1-146		%Rec	1	4/4/2020 2:05:08 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Xylenes, Total	ND	0.098		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
Surr: Dibromofluoromethane	94.2	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
Surr: Toluene-d8	98.9	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T11
Project: Jal Landfarm
Collection Date: 3/26/2020 3:35:00 PM
Lab ID: 2003D30-021 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 3:33:55 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:40:18 AM	51507
Barium	100	0.20		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Beryllium	0.34	0.30		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Chromium	5.6	0.60		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Copper	2.0	0.80		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Iron	6300	250		mg/Kg	100	4/6/2020 10:28:45 AM	51507
Lead	1.1	0.60		mg/Kg	2	4/8/2020 9:40:18 AM	51507
Manganese	60	0.40		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:40:18 AM	51507
Zinc	13	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Surr: BFB	97.4	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/4/2020 2:29:58 PM	51523
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/4/2020 2:29:58 PM	51523
Surr: DNOP	82.4	55.1-146		%Rec	1	4/4/2020 2:29:58 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Xylenes, Total	ND	0.095		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
Surr: Toluene-d8	99.9	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V11
Project: Jal Landfarm
Collection Date: 3/26/2020 3:40:00 PM
Lab ID: 2003D30-022 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 3:46:16 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 11:00:38 AM	51507
Barium	80	0.20		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Beryllium	0.42	0.29		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Chromium	7.1	0.59		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Copper	ND	0.79		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Iron	7100	250		mg/Kg	100	4/6/2020 10:30:50 AM	51507
Lead	0.64	0.59		mg/Kg	2	4/8/2020 9:48:53 AM	51507
Manganese	34	0.39		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:48:53 AM	51507
Zinc	14	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Surr: BFB	99.6	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	4/4/2020 2:48:06 PM	51523
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	4/4/2020 2:48:06 PM	51523
Surr: DNOP	86.1	55.1-146		%Rec	1	4/4/2020 2:48:06 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Toluene	ND	0.048		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Ethylbenzene	ND	0.048		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Xylenes, Total	ND	0.096		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
Surr: Toluene-d8	99.1	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T12
Project: Jal Landfarm
Collection Date: 3/26/2020 3:20:00 PM
Lab ID: 2003D30-023 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 3:58:36 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 11:02:14 AM	51507
Barium	88	0.20		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Beryllium	0.42	0.29		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Chromium	8.1	0.59		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Copper	28	0.79		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Iron	8300	250		mg/Kg	100	4/6/2020 10:32:55 AM	51507
Lead	1.4	0.59		mg/Kg	2	4/8/2020 9:50:28 AM	51507
Manganese	62	0.39		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:50:28 AM	51507
Zinc	16	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Surr: BFB	98.5	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	30	9.1		mg/Kg	1	4/5/2020 7:53:55 PM	51523
Motor Oil Range Organics (MRO)	90	45		mg/Kg	1	4/5/2020 7:53:55 PM	51523
Surr: DNOP	106	55.1-146		%Rec	1	4/5/2020 7:53:55 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
Surr: Toluene-d8	99.2	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V12
Project: Jal Landfarm
Collection Date: 3/26/2020 3:25:00 PM
Lab ID: 2003D30-024 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 4:10:57 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Arsenic	12	5.0		mg/Kg	2	4/8/2020 11:03:49 AM	51507
Barium	60	0.20		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Beryllium	0.69	0.30		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Chromium	9.9	0.60		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Copper	2.6	0.80		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Iron	12000	250		mg/Kg	100	4/6/2020 10:46:34 AM	51507
Lead	ND	0.60		mg/Kg	2	4/8/2020 9:52:03 AM	51507
Manganese	130	0.40		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:52:03 AM	51507
Zinc	23	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Surr: BFB	99.0	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/4/2020 4:04:59 PM	51523
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 4:04:59 PM	51523
Surr: DNOP	76.9	55.1-146		%Rec	1	4/4/2020 4:04:59 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Toluene	ND	0.048		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Ethylbenzene	ND	0.048		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Xylenes, Total	ND	0.096		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T13
Project: Jal Landfarm
Collection Date: 3/26/2020 3:05:00 PM
Lab ID: 2003D30-025 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 4:23:17 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 11:09:54 AM	51507
Barium	84	0.20		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Beryllium	0.39	0.30		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Chromium	6.3	0.61		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Copper	2.8	0.81		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Iron	6700	250		mg/Kg	100	4/6/2020 10:48:24 AM	51507
Lead	ND	0.61		mg/Kg	2	4/8/2020 9:58:20 AM	51507
Manganese	71	0.41		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:58:20 AM	51507
Zinc	13	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Surr: BFB	102	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	25	9.4		mg/Kg	1	4/4/2020 4:53:47 PM	51523
Motor Oil Range Organics (MRO)	81	47		mg/Kg	1	4/4/2020 4:53:47 PM	51523
Surr: DNOP	95.7	55.1-146		%Rec	1	4/4/2020 4:53:47 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Toluene	ND	0.046		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Ethylbenzene	ND	0.046		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Xylenes, Total	ND	0.092		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
Surr: Dibromofluoromethane	93.3	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V13
Project: Jal Landfarm
Collection Date: 3/26/2020 3:00:00 PM
Lab ID: 2003D30-026 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	83	60		mg/Kg	20	4/4/2020 4:35:38 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Arsenic	5.8	5.1		mg/Kg	2	4/8/2020 11:11:21 AM	51507
Barium	75	0.20		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Beryllium	0.65	0.31		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Chromium	10	0.61		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Copper	1.5	0.81		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Iron	11000	250		mg/Kg	100	4/6/2020 10:50:29 AM	51507
Lead	ND	0.61		mg/Kg	2	4/8/2020 9:59:54 AM	51507
Manganese	77	0.41		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:59:54 AM	51507
Zinc	23	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Surr: BFB	99.2	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/4/2020 6:07:21 PM	51523
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/4/2020 6:07:21 PM	51523
Surr: DNOP	97.4	55.1-146		%Rec	1	4/4/2020 6:07:21 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Toluene	ND	0.050		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
Surr: Dibromofluoromethane	95.6	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
Surr: Toluene-d8	97.9	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T14
Project: Jal Landfarm
Collection Date: 3/26/2020 3:10:00 PM
Lab ID: 2003D30-027 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 4:47:59 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:12:52 AM	51507
Barium	210	0.20		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Beryllium	0.33	0.30		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Chromium	4.6	0.60		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Copper	2.0	0.80		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Iron	4500	250		mg/Kg	100	4/6/2020 10:52:16 AM	51507
Lead	ND	0.60		mg/Kg	2	4/8/2020 10:01:28 AM	51507
Manganese	52	0.40		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Silver	1.5	0.50		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 10:01:28 AM	51507
Zinc	11	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Surr: BFB	99.0	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	11	8.8		mg/Kg	1	4/4/2020 6:31:54 PM	51523
Motor Oil Range Organics (MRO)	50	44		mg/Kg	1	4/4/2020 6:31:54 PM	51523
Surr: DNOP	108	55.1-146		%Rec	1	4/4/2020 6:31:54 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Xylenes, Total	ND	0.093		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
Surr: Toluene-d8	99.3	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V14
Project: Jal Landfarm
Collection Date: 3/26/2020 3:15:00 PM
Lab ID: 2003D30-028 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 5:00:19 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:21:26 AM	51507
Barium	63	0.20		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Beryllium	0.39	0.30		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Chromium	7.7	0.60		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Copper	ND	0.80		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Iron	7700	250		mg/Kg	100	4/6/2020 10:54:21 AM	51507
Lead	ND	0.60		mg/Kg	2	4/8/2020 10:03:02 AM	51507
Manganese	40	0.40		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:03:02 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 10:03:02 AM	51507
Zinc	16	5.0		mg/Kg	2	4/6/2020 3:15:52 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Surr: BFB	98.6	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/4/2020 7:45:36 PM	51523
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/4/2020 7:45:36 PM	51523
Surr: DNOP	84.7	55.1-146		%Rec	1	4/4/2020 7:45:36 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
Surr: Dibromofluoromethane	92.9	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
Surr: Toluene-d8	99.8	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T15
Project: Jal Landfarm
Collection Date: 3/26/2020 4:00:00 PM
Lab ID: 2003D30-029 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 7:53:12 PM	51561
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:23:01 AM	51507
Barium	210	0.20		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Beryllium	0.44	0.30		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Chromium	19	0.60		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Copper	230	0.79		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Iron	17000	250		mg/Kg	100	4/6/2020 10:56:08 AM	51507
Lead	3.9	0.60		mg/Kg	2	4/8/2020 10:10:53 AM	51507
Manganese	130	0.40		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:10:53 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Uranium	ND	9.9		mg/Kg	2	4/8/2020 10:10:53 AM	51507
Zinc	35	5.0		mg/Kg	2	4/6/2020 3:17:35 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Surr: BFB	97.0	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	180	9.2		mg/Kg	1	4/5/2020 8:18:26 PM	51523
Motor Oil Range Organics (MRO)	310	46		mg/Kg	1	4/5/2020 8:18:26 PM	51523
Surr: DNOP	120	55.1-146		%Rec	1	4/5/2020 8:18:26 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Xylenes, Total	ND	0.095		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
Surr: Dibromofluoromethane	94.3	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
Surr: Toluene-d8	97.4	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V15
Project: Jal Landfarm
Collection Date: 3/26/2020 4:05:00 PM
Lab ID: 2003D30-030 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 8:54:56 PM	51561
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:24:35 AM	51507
Barium	67	0.20		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Beryllium	0.37	0.30		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Chromium	6.1	0.60		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Copper	3.3	0.80		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Iron	7000	250		mg/Kg	100	4/6/2020 10:57:55 AM	51507
Lead	0.98	0.60		mg/Kg	2	4/8/2020 10:12:29 AM	51507
Manganese	120	0.40		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:12:29 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 10:12:29 AM	51507
Zinc	18	5.0		mg/Kg	2	4/6/2020 3:19:17 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Surr: BFB	99.3	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/4/2020 8:34:43 PM	51523
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/4/2020 8:34:43 PM	51523
Surr: DNOP	75.0	55.1-146		%Rec	1	4/4/2020 8:34:43 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Xylenes, Total	ND	0.093		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
Surr: Dibromofluoromethane	96.5	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
Surr: Toluene-d8	99.8	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-001 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-001A/S-11208903-032620-CN-T1 **Sampling Time** 10:35 AM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0579	4/22/2020 8:29:00 PM	MAM	EPA 6020A	
%moisture	6.5	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-002 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-002A/S-11208903-032620-CN-V1 **Sampling Time** 10:40 AM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0666	4/22/2020 9:08:00 PM	MAM	EPA 6020A	
%moisture	11.1	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-003 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-003A/S-11208903-032620-CN-T2 **Sampling Time** 11:00 AM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0654	4/22/2020 9:12:00 PM	MAM	EPA 6020A	
%moisture	7.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-004 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-004A/S-11208903-032620-CN-V2 **Sampling Time** 1:30 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0663	4/22/2020 9:16:00 PM	MAM	EPA 6020A	
%moisture	6	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-005 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-005A/S-11208903-032620-CN-T3 **Sampling Time** 1:40 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0584	4/22/2020 9:20:00 PM	MAM	EPA 6020A	
%moisture	5.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-006 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-006A/S-11208903-032620-CN-V3 **Sampling Time** 1:45 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.232	mg/Kg	0.0629	4/22/2020 9:25:00 PM	MAM	EPA 6020A	
%moisture	7.2	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-007 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-007A/S-11208903-032620-CN-T4 **Sampling Time** 1:50 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0583	4/22/2020 9:29:00 PM	MAM	EPA 6020A	
%moisture	7.2	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-008 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-008A/S-11208903-032620-CN-V4 **Sampling Time** 1:50 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0616	4/22/2020 9:33:00 PM	MAM	EPA 6020A	
%moisture	8.2	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-009 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-009A/S-11208903-032620-CN-T5 **Sampling Time** 2:05 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0860	mg/Kg	0.0523	4/22/2020 9:37:00 PM	MAM	EPA 6020A	
%moisture	18.9	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-010 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0010A/S-11208903-032620-CN-V5 **Sampling Time** 2:00 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0908	mg/Kg	0.0563	4/22/2020 9:42:00 PM	MAM	EPA 6020A	
%moisture	3.9	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-011 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0011A/S-11208903-032620-CN-T6 **Sampling Time** 2:10 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0551	4/22/2020 9:46:00 PM	MAM	EPA 6020A	
%moisture	6.5	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-012 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0012A/S-11208903-032620-CN-V6 **Sampling Time** 2:15 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.06	4/22/2020 10:07:00 PM	MAM	EPA 6020A	
%moisture	4.3	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-013 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0013A/S-11208903-032620-CN-T7 **Sampling Time** 2:25 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0628	4/28/2020 6:39:00 PM	MAM	EPA 6020A	
%moisture	20.1	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-014 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0014A/S-11208903-032620-CN-V7 **Sampling Time** 2:30 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0632	4/22/2020 10:16:00 PM	MAM	EPA 6020A	
%moisture	7.9	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-015 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0015A/S-11208903-032620-CN-T8 **Sampling Time** 2:40 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0609	4/22/2020 10:20:00 PM	MAM	EPA 6020A	
%moisture	7.1	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-016 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0016A/S-11208903-032620-CN-V8 **Sampling Time** 2:50 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0553	4/22/2020 10:24:00 PM	MAM	EPA 6020A	
%moisture	7.6	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-017 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0017A/S-11208903-032620-CN-T9 **Sampling Time** 4:25 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0926	mg/Kg	0.0566	4/22/2020 10:29:00 PM	MAM	EPA 6020A	
%moisture	6.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-018 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0018A/S-11208903-032620-CN-V9 **Sampling Time** 4:35 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0591	4/22/2020 10:33:00 PM	MAM	EPA 6020A	
%moisture	6	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-019 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0019A/S-11208903-032620-CN-T10 **Sampling Time** 2:10 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0763	mg/Kg	0.0622	4/22/2020 10:37:00 PM	MAM	EPA 6020A	
%moisture	6.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-020 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0020A/S-11208903-032620-CN-V10 **Sampling Time** 2:15 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0618	4/22/2020 10:41:00 PM	MAM	EPA 6020A	
%moisture	6.8	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-021 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0021A/S-11208903-032620-CN-T11 **Sampling Time** 3:35 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0625	4/14/2020 5:06:00 PM	MAM	EPA 6020A	
%moisture	6.1	%		4/14/2020 2:12:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-022 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0022A/S-11208903-032620-CN-V11 **Sampling Time** 3:40 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0645	4/14/2020 5:36:00 PM	MAM	EPA 6020A	
%moisture	7	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-023 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0023A/S-11208903-032620-CN-T12 **Sampling Time** 3:20 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0782	mg/Kg	0.0605	4/14/2020 5:40:00 PM	MAM	EPA 6020A	
%moisture	6.9	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-024 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0024A/S-11208903-032620-CN-V12 **Sampling Time** 3:25 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0636	4/14/2020 5:44:00 PM	MAM	EPA 6020A	
%moisture	10.3	%		4/14/2020 2:12:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-025 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0025A/S-11208903-032620-CN-T13 **Sampling Time** 3:05 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.268	mg/Kg	0.06	4/14/2020 6:05:00 PM	MAM	EPA 6020A	
%moisture	9.4	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-026 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0026A/S-11208903-032620-CN-V13 **Sampling Time** 3:00 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0628	4/14/2020 6:10:00 PM	MAM	EPA 6020A	
%moisture	9.1	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-027 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0027A/S-11208903-032620-CN-T14 **Sampling Time** 3:10 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.059	4/14/2020 6:14:00 PM	MAM	EPA 6020A	
%moisture	7.7	%		4/14/2020 2:12:00 PM	MAM	%moisture	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-028 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0028A/S-11208903-032620-CN-V14 **Sampling Time** 3:15 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0623	4/14/2020 6:18:00 PM	MAM	EPA 6020A	
%moisture	2.3	%		4/14/2020 2:12:00 PM	MAM	%moisture	

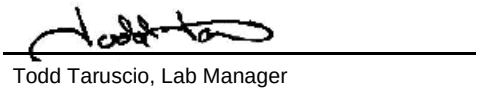
Sample Number 200408003-029 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0029A/S-11208903-032620-CN-T15 **Sampling Time** 4:00 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.321	mg/Kg	0.0662	4/14/2020 6:23:00 PM	MAM	EPA 6020A	
%moisture	9.6	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-030 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0030A/S-11208903-032620-CN-V15 **Sampling Time** 4:05 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0641	4/14/2020 6:27:00 PM	MAM	EPA 6020A	
%moisture	7.7	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Authorized Signature



Todd Taruscio, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Mercury-ICPMS	0.0271	mg/Kg	0.025	108.4	80-120	4/20/2020	4/28/2020
Mercury-ICPMS	0.0283	mg/Kg	0.025	113.2	80-120	4/20/2020	4/22/2020
Mercury-ICPMS	0.0260	mg/Kg	0.025	104.0	80-120	4/14/2020	4/14/2020

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
200408003-001A	Mercury-ICPMS	ND	0.348	mg/Kg	0.29	120.0	75-125	4/20/2020	4/28/2020
200408003-001	Mercury-ICPMS	ND	0.355	mg/kg	0.29	122.4	75-125	4/20/2020	4/22/2020
200408003-021	Mercury-ICPMS	ND	0.388	mg/Kg	0.313	124.0	75-125	4/14/2020	4/14/2020

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Mercury-ICPMS	0.346	mg/Kg	0.29	119.3	0.6	0-20	4/20/2020	4/28/2020
Mercury-ICPMS	0.346	mg/Kg	0.29	119.3	2.6	0-20	4/20/2020	4/22/2020
Mercury-ICPMS	0.403	mg/Kg	0.313	128.8	3.8	0-20	4/14/2020	4/14/2020

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Mercury-ICPMS	ND	mg/Kg	0.0001	4/20/2020	4/28/2020
Mercury-ICPMS	ND	mg/Kg	0.0001	4/20/2020	4/22/2020
Mercury-ICPMS	ND	mg/Kg	0.0001	4/14/2020	4/14/2020

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30

Comment:

Sample #: 200408003-001 **Customer Sample #:** 2003D30-001A/S-11208903-032620-CN-T1

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 10:35 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-002 **Customer Sample #:** 2003D30-002A/S-11208903-032620-CN-V1

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 10:40 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-003 **Customer Sample #:** 2003D30-003A/S-11208903-032620-CN-T2

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 11:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-004 **Customer Sample #:** 2003D30-004A/S-11208903-032620-CN-V2

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-005 **Customer Sample #:** 2003D30-005A/S-11208903-032620-CN-T3

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-006 **Customer Sample #:** 2003D30-006A/S-11208903-032620-CN-V3

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:45 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-007 **Customer Sample #:** 2003D30-007A/S-11208903-032620-CN-T4

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:50 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-008 **Customer Sample #:** 2003D30-008A/S-11208903-032620-CN-V4

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:50 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-009 **Customer Sample #:** 2003D30-009A/S-11208903-032620-CN-T5

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-010 **Customer Sample #:** 2003D30-0010A/S-11208903-032620-CN-V5

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-011 **Customer Sample #:** 2003D30-0011A/S-11208903-032620-CN-T6

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN

Project Name: 2003D30

Comment:

Sample #: 200408003-012 **Customer Sample #:** 2003D30-0012A/S-11208903-032620-CN-V6

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:15 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-013 **Customer Sample #:** 2003D30-0013A/S-11208903-032620-CN-T7

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:25 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-014 **Customer Sample #:** 2003D30-0014A/S-11208903-032620-CN-V7

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-015 **Customer Sample #:** 2003D30-0015A/S-11208903-032620-CN-T8

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-016 **Customer Sample #:** 2003D30-0016A/S-11208903-032620-CN-V8

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:50 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-017 **Customer Sample #:** 2003D30-0017A/S-11208903-032620-CN-T9

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:25 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-018 **Customer Sample #:** 2003D30-0018A/S-11208903-032620-CN-V9

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:35 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-019 **Customer Sample #:** 2003D30-0019A/S-11208903-032620-CN-T10

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-020 **Customer Sample #:** 2003D30-0020A/S-11208903-032620-CN-V10

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:15 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-021 **Customer Sample #:** 2003D30-0021A/S-11208903-032620-CN-T11

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:35 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-022 **Customer Sample #:** 2003D30-0022A/S-11208903-032620-CN-V11

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-023 **Customer Sample #:** 2003D30-0023A/S-11208903-032620-CN-T12

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:20 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-024 **Customer Sample #:** 2003D30-0024A/S-11208903-032620-CN-V12

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:25 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-025 **Customer Sample #:** 2003D30-0025A/S-11208903-032620-CN-T13

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-026 **Customer Sample #:** 2003D30-0026A/S-11208903-032620-CN-V13

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-027 **Customer Sample #:** 2003D30-0027A/S-11208903-032620-CN-T14

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-028 **Customer Sample #:** 2003D30-0028A/S-11208903-032620-CN-V14

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:15 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-029 **Customer Sample #:** 2003D30-0029A/S-11208903-032620-CN-T15

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-030 **Customer Sample #:** 2003D30-0030A/S-11208903-032620-CN-V15

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name:	HALL ENVIRONMENTAL ANALYSIS LAB			**Order ID:**	200408003
	4901 HAWKINS NE SUITE D			**Order Date:**	4/8/2020
	ALBUQUERQUE	NM	87109		
Contact Name:	ANDY FREEMAN			**Project Name:**	2003D30
Comment:					

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	4.6
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	N/A
Are VOC samples free of headspace?	N/A
Is there a trip blank to accompany VOC samples?	N/A
Labels and chain agree?	Yes
Total number of containers?	30

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 3

200408 003 HALL Last Due 4/20/2020
1st SAMP 3/26/2020 1st RCVD 4/8/2020
2003D30

SUB CONTRATOR:	Anatek Labs	COMPANY:	Anatek Labs, Inc.	PHONE: (208) 883-2839	FAX: (208) 882-9246
ADDRESS:	1282 Alturas Dr			ACCOUNT #:	EMAIL:
CITY, STATE, ZIP:	Moscow, ID 83843				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2003D30-001B	S-11208903-032620-CN-T1	4OZGU	Soil	3/26/2020 10:35:00 AM	1	Hg by 6020
2	2003D30-002B	S-11208903-032620-CN-V1	4OZGU	Soil	3/26/2020 10:40:00 AM	1	Hg by 6020
3	2003D30-003B	S-11208903-032620-CN-T2	4OZGU	Soil	3/26/2020 11:00:00 AM	1	Hg by 6020
4	2003D30-004B	S-11208903-032620-CN-V2	4OZGU	Soil	3/26/2020 1:30:00 PM	1	Hg by 6020
5	2003D30-005B	S-11208903-032620-CN-T3	4OZGU	Soil	3/26/2020 1:40:00 PM	1	Hg by 6020
6	2003D30-006B	S-11208903-032620-CN-V3	4OZGU	Soil	3/26/2020 1:45:00 PM	1	Hg by 6020
7	2003D30-007B	S-11208903-032620-CN-T4	4OZGU	Soil	3/26/2020 1:50:00 PM	1	Hg by 6020
8	2003D30-008B	S-11208903-032620-CN-v4	4OZGU	Soil	3/26/2020 1:50:00 PM	1	Hg by 6020
9	2003D30-009B	S-11208903-032620-CN-T5	4OZGU	Soil	3/26/2020 2:05:00 PM	1	Hg by 6020
10	2003D30-010B	S-11208903-032620-CN-V5	4OZGU	Soil	3/26/2020 2:00:00 PM	1	Hg by 6020
11	2003D30-011B	S-11208903-032620-CN-T6	4OZGU	Soil	3/26/2020 2:10:00 PM	1	Hg by 6020
12	2003D30-012B	S-11208903-032620-CN-V6	4OZGU	Soil	3/26/2020 2:15:00 PM	1	Hg by 6020
13	2003D30-013B	S-11208903-032620-CN-T7	4OZGU	Soil	3/26/2020 2:25:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 4/7/2020	Time: 12:00 PM	Received By: HS	Date: 4-8-20	Time: 11:54
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples ____ °C Attempt to Cool ? ____
Comments: ____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 2 OF: 3

200408 003 HALL Last Due 4/20/2020
1st SAMP 3/26/2020 1st RCVD 4/8/2020
2003D30

SUB CONTRATOR:	Anatek Labs	COMPANY:	Anatek Labs, Inc.	PHONE: (208) 883-2839	FAX: (208) 882-9246
ADDRESS:	1282 Alturas Dr			ACCOUNT #:	EMAIL:
CITY, STATE, ZIP:	Moscow, ID 83843				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
14	2003D30-014B	S-11208903-032620-CN-V7	4OZGU	Soil	3/26/2020 2:30:00 PM	1	Hg by 6020
15	2003D30-015B	S-11208903-032620-CN-T8	4OZGU	Soil	3/26/2020 2:40:00 PM	1	Hg by 6020
16	2003D30-016B	S-11208903-032620-CN-V8	4OZGU	Soil	3/26/2020 2:50:00 PM	1	Hg by 6020
17	2003D30-017B	S-11208903-032620-CN-T9	4OZGU	Soil	3/26/2020 4:25:00 PM	1	Hg by 6020
18	2003D30-018B	S-11208903-032620-CN-V9	4OZGU	Soil	3/26/2020 4:35:00 PM	1	Hg by 6020
19	2003D30-019B	S-11208903-032620-CN-T10	4OZGU	Soil	3/26/2020 2:10:00 PM	1	Hg by 6020
20	2003D30-020B	S-11208903-032620-CN-V10	4OZGU	Soil	3/26/2020 2:15:00 PM	1	Hg by 6020
21	2003D30-021B	S-11208903-032620-CN-T11	4OZGU	Soil	3/26/2020 3:35:00 PM	1	Hg by 6020
22	2003D30-022B	S-11208903-032620-CN-V11	4OZGU	Soil	3/26/2020 3:40:00 PM	1	Hg by 6020
23	2003D30-023B	S-11208903-032620-CN-T12	4OZGU	Soil	3/26/2020 3:20:00 PM	1	Hg by 6020
24	2003D30-024B	S-11208903-032620-CN-V12	4OZGU	Soil	3/26/2020 3:25:00 PM	1	Hg by 6020
25	2003D30-025B	S-11208903-032620-CN-T13	4OZGU	Soil	3/26/2020 3:05:00 PM	1	Hg by 6020
26	2003D30-026B	S-11208903-032620-CN-V13	4OZGU	Soil	3/26/2020 3:00:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 4/7/2020	Time: 12:00 PM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples ℃ Attempt to Cool?
Comments:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 3 OF: 3

200408 003 HALL Last Due 4/20/2020

1st SAMP 3/26/2020 1st RCVD 4/8/2020

2003D30

www.hallenvironmental.com

SUB CONTRATOR: Anatek Labs	COMPANY: Anatek Labs, Inc.		PHONE: (208) 883-2839	FAX: (208) 882-9246	
ADDRESS: 1282 Alturas Dr			ACCOUNT #:	EMAIL:	
CITY, STATE, ZIP: Moscow, ID 83843					

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
27	2003D30-027B	S-11208903-032620-CN-T14	4OZGU	Soil	3/26/2020 3:10:00 PM	1	Hg by 6020
28	2003D30-028B	S-11208903-032620-CN-V14	4OZGU	Soil	3/26/2020 3:15:00 PM	1	Hg by 6020
29	2003D30-029B	S-11208903-032620-CN-T15	4OZGU	Soil	3/26/2020 4:00:00 PM	1	Hg by 6020
30	2003D30-030B	S-11208903-032620-CN-V15	4OZGU	Soil	3/26/2020 4:05:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 4/7/2020	Time: 12:00 PM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples ____ °C Attempt to Cool ? ____

Comments: ____

Hannah Sullivan

From: Andy Freeman <andy@hallenvironmental.com>
Sent: Wednesday, April 8, 2020 1:45 PM
To: Hannah Sullivan
Subject: RE: Sample ID issue

Hi Hannah,

It is fine to use the A jars. You can log in as A.

We have two different jars per sample. A and B. We just sent the A instead of B. They are the same thing.

Thank you,

Andy Freeman - Hall Environmental, 4901 Hawkins NE, Albuquerque, NM 87109, 505-345-3975, 505-345-4107 fax
www.hallenvironmental.com - andy@hallenvironmental.com - https://www.surveymonkey.com/r/NGVXRBV

For easy access to all of your past reports, setup an account on the Hall Environmental Web Portal. Just visit our website and follow the instructions for setting up an account.
We welcome your feedback. Please visit the survey monkey link to complete a brief survey on your experience with Hall Environmental.

From: Hannah Sullivan <hannahs@anateklabs.com>
Sent: Wednesday, April 8, 2020 2:42 PM
To: Andy Freeman <andy@hallenvironmental.com>
Subject: Sample ID issue

Hi Andy,

We received the thirty soil samples for Hg 6020 analysis and have just a slight issue with the labels. The chain lists them as 2003D30-001B through -030B, but the jars all have -001A through -030A instead. The sample time and client IDs match exactly for all 30 though, so I wanted to check and see if that was a typo.

Thanks!

Hannah Sullivan
Shipping & Receiving
Anatek Labs, Inc
1282 Alturas Dr
Moscow, ID 83843
(208) 883-2839

Notice of Confidentiality

This message contains confidential information intended exclusively for the intended recipient. This message should not be forwarded to any other party. Use or disclosure of information transmitted in error is prohibited. Please delete the message along with any attachments and alert the sender by return e-mail if this message was received in error.

Anatek Labs, Inc.

Sample Receipt and Preservation Form

200408 003 **HALL** Last Due 4/20/2020

1st SAMP 3/26/2020 1st RCVD 4/8/2020

Client Name: Hall Project: 2003D30

TAT: (Normal) RUSH: _____ days

Samples Received From: (FedEx) UPS USPS Client Courier Other: _____

Custody Seal on Cooler/Box: (Yes) No Custody Seals Intact: (Yes) No N/A

Number of Coolers/Boxes: 1 Type of Ice: Ice/(Ice Packs) Blue Ice Dry Ice None

Packing Material: (Bubble Wrap) Bags Foam/Peanuts (None) Other: paper

Cooler Temp As Read (°C): 4.6 Cooler Temp Corrected (°C): 4.6 Thermometer Used: IR-3

				Comments:
Samples Received Intact?	(Yes)	No	N/A	
Chain of Custody Present?	(Yes)	No	N/A	
Samples Received Within Hold Time?	(Yes)	No	N/A	
Samples Properly Preserved?	Yes	No	(N/A)	
VOC Vials Free of Headspace (<6mm)?	Yes	No	(N/A)	
VOC Trip Blanks Present?	Yes	No	(N/A)	
Labels and Chains Agree?	(Yes)	(No)	N/A	chain lists - XXXB, containers - XXXA
Total Number of Sample Bottles Received: 30				client ID is the same though. probably a typo, but will email to double check
Chain of Custody Fully Completed?	(Yes)	No	N/A	
Correct Containers Received?	(Yes)	No	N/A	
Anatek Bottles Used?	Yes	(No)	Unknown	

Record preservatives (and lot numbers, if known) for containers below:

None

Notes, comments, etc. (also use this space if contacting the client - record names and date/time)

see attached email HB

Received/Inspected By: HB Date/Time: 4-8-20 11:54

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-51532**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51532**	RunNo: **67815**							
Prep Date: **4/3/2020**	Analysis Date: **4/3/2020**	SeqNo: **2342819**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51532**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51532**	RunNo: **67815**							
Prep Date: **4/3/2020**	Analysis Date: **4/3/2020**	SeqNo: **2342820**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: **MB-51558**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51558**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343754**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51558**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51558**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343755**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			

Sample ID: **MB-51561**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51561**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343786**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51561**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51561**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343787**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
20-May-20

Client: GHD
Project: Jal Landfarm

Sample ID: **LCS-51498**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **51498**	RunNo: **67841**							
Prep Date: **4/1/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343245**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	93.0	70	130			
Surr: DNOP	4.4		5.000		88.7	55.1	146			

Sample ID: **MB-51498**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **51498**	RunNo: **67841**							
Prep Date: **4/1/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343246**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		82.4	55.1	146			

Sample ID: **MB-51523**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **51523**	RunNo: **67837**							
Prep Date: **4/2/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343707**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		105	55.1	146			

Sample ID: **LCS-51523**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **51523**	RunNo: **67837**							
Prep Date: **4/2/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343709**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	70	130			
Surr: DNOP	4.3		5.000		86.3	55.1	146			

Sample ID: **2003D30-011AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **S-11208903-032620-**	Batch ID: **51523**	RunNo: **67858**							
Prep Date: **4/2/2020**	Analysis Date: **4/5/2020**	SeqNo: **2344533**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	9.2	45.87	0	119	47.4	136			
Surr: DNOP	5.1		4.587		111	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **2003D30-011AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-11208903-032620-** Batch ID: **51523** RunNo: **67858**

Prep Date: **4/2/2020** Analysis Date: **4/5/2020** SeqNo: **2344534** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	68	9.9	49.60	0	137	47.4	136	21.6	43.4	S
Surr: DNOP	5.8		4.960		118	55.1	146	0	0	

Sample ID: **2003D30-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-11208903-032620-** Batch ID: **51498** RunNo: **67874**

Prep Date: **4/1/2020** Analysis Date: **4/6/2020** SeqNo: **2344753** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	66	9.6	47.89	22.36	91.5	47.4	136			
Surr: DNOP	5.1		4.789		107	55.1	146			

Sample ID: **2003D30-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-11208903-032620-** Batch ID: **51498** RunNo: **67874**

Prep Date: **4/1/2020** Analysis Date: **4/6/2020** SeqNo: **2344756** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.7	48.69	22.36	73.4	47.4	136	13.0	43.4	
Surr: DNOP	4.4		4.869		91.4	55.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **mb-51485**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **51485**	RunNo: **67805**
Prep Date: **4/1/2020**	Analysis Date: **4/2/2020**	SeqNo: **2342066** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.9	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.4	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.4	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

Sample ID: **lcs-51485**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **51485**	RunNo: **67805**
Prep Date: **4/1/2020**	Analysis Date: **4/2/2020**	SeqNo: **2342067** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	70	130			
Toluene	1.1	0.050	1.000	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.3	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID: **mb-51487**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345162** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.2	70	130			
Surr: Toluene-d8	0.49		0.5000		98.8	70	130			

Sample ID: **lcs-51487**	SampType: **LCS4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345164** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **lcs-51487** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **51487** RunNo: **67881**

Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345164** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.6	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	0.48		0.5000		97.0	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID: **2003d30-011ams** SampType: **MS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **S-11208903-032620-** Batch ID: **51487** RunNo: **67881**

Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345169** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	0.9852	0	86.5	80	120			
Toluene	0.95	0.049	0.9852	0	96.6	80	120			
Ethylbenzene	0.99	0.049	0.9852	0	100	80	120			
Xylenes, Total	2.9	0.099	2.956	0	97.6	80	120			
Surr: 4-Bromofluorobenzene	0.45		0.4926		92.0	70	130			
Surr: Toluene-d8	0.48		0.4926		96.5	70	130			

Sample ID: **2003d30-011amsd** SampType: **MSD4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **S-11208903-032620-** Batch ID: **51487** RunNo: **67881**

Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345171** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.023	0.9200	0	89.1	80	120	3.83	20	
Toluene	0.94	0.046	0.9200	0	102	80	120	1.02	20	
Ethylbenzene	0.98	0.046	0.9200	0	106	80	120	1.03	20	
Xylenes, Total	2.8	0.092	2.760	0	102	80	120	2.43	20	
Surr: 4-Bromofluorobenzene	0.44		0.4600		96.6	70	130	0	0	
Surr: Toluene-d8	0.45		0.4600		98.4	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
20-May-20

Client: GHD
Project: Jal Landfarm

Sample ID: **LCS-51507** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **51507** RunNo: **67877**
Prep Date: **4/2/2020** Analysis Date: **4/6/2020** SeqNo: **2345006** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	22	2.5	25.00	0	88.5	80	120			
Barium	24	0.10	25.00	0	95.4	80	120			
Beryllium	24	0.15	25.00	0	95.9	80	120			
Cadmium	24	0.10	25.00	0	96.2	80	120			
Chromium	24	0.30	25.00	0	96.2	80	120			
Copper	26	0.40	25.00	0	105	80	120			
Iron	26	2.5	25.00	0	104	80	120			B
Lead	23	0.30	25.00	0	92.9	80	120			
Manganese	24	0.20	25.00	0	96.1	80	120			
Selenium	23	2.5	25.00	0	90.9	80	120			
Silver	4.4	0.25	5.000	0	87.3	80	120			
Zinc	24	2.5	25.00	0	95.9	80	120			

Sample ID: **MB-51507** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **51507** RunNo: **67877**
Prep Date: **4/2/2020** Analysis Date: **4/6/2020** SeqNo: **2345007** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	3.6	2.5								

Sample ID: **MB-51507** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **51507** RunNo: **67877**
Prep Date: **4/2/2020** Analysis Date: **4/6/2020** SeqNo: **2345024** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.40								
Lead	ND	0.30								
Manganese	ND	0.20								
Selenium	ND	2.5								
Silver	ND	0.25								
Zinc	ND	2.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-51507**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345681** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Thallium	ND	2.5								

Sample ID: **LCS-51507**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345683** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.7	80	120			
Thallium	23	2.5	25.00	0	93.3	80	120			

Sample ID: **2003D30-024AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345724** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	25.24	0	0	75	125			S
Barium	82	0.20	25.24	60.30	86.0	75	125			
Beryllium	26	0.30	25.24	0.6851	102	75	125			
Cadmium	24	0.20	25.24	0	96.5	75	125			
Chromium	35	0.61	25.24	9.932	100	75	125			
Copper	28	0.81	25.24	2.618	99.9	75	125			
Manganese	86	0.40	25.24	134.1	-191	75	125			S
Selenium	21	5.0	25.24	0	83.8	75	125			
Silver	2.8	0.50	5.047	0	55.4	75	125			S
Thallium	ND	5.0	25.24	0	0	75	125			S
Zinc	49	5.0	25.24	23.18	102	75	125			

Sample ID: **2003D30-024AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345725** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	4.8	24.00	0	18.2	75	125	0	20	RS
Barium	94	0.19	24.00	60.30	139	75	125	13.3	20	S
Beryllium	24	0.29	24.00	0.6851	97.6	75	125	9.06	20	
Cadmium	23	0.19	24.00	0	94.3	75	125	7.32	20	
Chromium	34	0.58	24.00	9.932	98.4	75	125	4.96	20	
Copper	28	0.77	24.00	2.618	106	75	125	0.414	20	
Manganese	74	0.38	24.00	134.1	-249	75	125	14.5	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
20-May-20

Client: GHD
Project: Jal Landfarm

Sample ID: **2003D30-024AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-** Batch ID: **51507** RunNo: **67877**
Prep Date: **4/2/2020** Analysis Date: **4/6/2020** SeqNo: **2345725** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	19	4.8	24.00	0	78.3	75	125	11.9	20	
Silver	2.8	0.48	4.799	0	58.8	75	125	0.821	20	S
Thallium	ND	4.8	24.00	0	0	75	125	0	20	S
Zinc	46	4.8	24.00	23.18	95.6	75	125	6.16	20	

Sample ID: **LCS-51629** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **51629** RunNo: **67961**
Prep Date: **4/7/2020** Analysis Date: **4/8/2020** SeqNo: **2348144** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.0	80	120			
Arsenic	24	2.5	25.00	0	95.9	80	120			
Barium	24	0.10	25.00	0	96.5	80	120			
Beryllium	25	0.15	25.00	0	102	80	120			
Cadmium	24	0.10	25.00	0	95.5	80	120			
Chromium	24	0.30	25.00	0	96.9	80	120			
Copper	26	0.40	25.00	0	102	80	120			B
Iron	27	2.5	25.00	0	107	80	120			
Lead	24	0.30	25.00	0	97.3	80	120			
Manganese	24	0.20	25.00	0	97.7	80	120			
Selenium	25	2.5	25.00	0	98.6	80	120			
Silver	4.7	0.25	5.000	0	93.0	80	120			
Thallium	24	2.5	25.00	0	95.5	80	120			
Uranium	25	5.0	25.00	0	101	80	120			
Zinc	23	2.5	25.00	0	93.9	80	120			

Sample ID: **MB-51629** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **51629** RunNo: **67961**
Prep Date: **4/7/2020** Analysis Date: **4/8/2020** SeqNo: **2348146** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	0.45	0.40								
Iron	ND	2.5								
Lead	ND	0.30								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-51629**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51629**	RunNo: **67961**
Prep Date: **4/7/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348146** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	ND	0.20								
Selenium	ND	2.5								
Silver	ND	0.25								
Thallium	ND	2.5								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID: **MB-51507**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348150** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	5.0								

Sample ID: **LCS-51507**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348151** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	25	5.0	25.00	0	99.3	80	120			

Sample ID: **2003D30-024AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348224** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	24	0.61	25.24	0	96.1	75	125			
Uranium	ND	10	25.24	0	0	75	125			S

Sample ID: **2003D30-024AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	22	0.58	24.00	0	91.0	75	125	10.4	20	
Uranium	ND	9.6	24.00	0	0	75	125	0	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **2003D30-024AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-11208903-032620-** Batch ID: **51507** RunNo: **67961**

Prep Date: **4/2/2020** Analysis Date: **4/8/2020** SeqNo: **2348264** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	42	5.0	25.24	12.40	117	75	125			

Sample ID: **2003D30-024AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **S-11208903-032620-** Batch ID: **51507** RunNo: **67961**

Prep Date: **4/2/2020** Analysis Date: **4/8/2020** SeqNo: **2348265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	28	4.8	24.00	12.40	64.4	75	125	40.3	20	RS

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

20-May-20

Client: GHD

Project: Jal Landfarm

Sample ID: **mb-51485**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51485**	RunNo: **67805**
Prep Date: **4/1/2020**	Analysis Date: **4/2/2020**	SeqNo: **2342171** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	470		500.0		94.7	70	130			

Sample ID: **lcs-51485**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51485**	RunNo: **67805**
Prep Date: **4/1/2020**	Analysis Date: **4/2/2020**	SeqNo: **2342172** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.5	70	130			
Surr: BFB	490		500.0		98.5	70	130			

Sample ID: **mb-51487**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345213** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		98.6	70	130			

Sample ID: **lcs-51487**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345214** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.2	70	130			
Surr: BFB	500		500.0		99.3	70	130			

Sample ID: **2003d30-012ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-032620-**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345218** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.37	0	93.0	70	130			
Surr: BFB	480		487.3		98.2	70	130			

Sample ID: **2003d30-012amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-032620-**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
20-May-20

Client: GHD
Project: Jal Landfarm

Sample ID: **2003d30-012amsd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-032620-** Batch ID: **51487** RunNo: **67881**
Prep Date: **4/1/2020** Analysis Date: **4/6/2020** SeqNo: **2345219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.32	0	98.2	70	130	1.05	20	
Surr: BFB	470		466.4		101	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 2003D30 | RcptNo: 1

Received By: **Isaiah Ortiz** 3/31/2020 8:50:00 AM I-OK

Completed By: **John Caldwell** 3/31/2020 1:19:52 PM John Caldwell

Reviewed By: LB 4/1/2020 LB

Chain of Custody

1. Is Chain of Custody sufficiently complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	FedEx		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 4/1/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified:	Christine Matthews
By Whom:	Leah Baca
Regarding:	switched collection times on labels for -005, -006
Client Instructions:	Go with the collection times on COC

Date: 4/7/20 Via: ☒ eMail ☐ Phone ☐ Fax ☐ In Person

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good				
2	0.4	Good				

Chain-of-Custody Record

Client: CHD Services	Turn-Around Time: ☐ XStandard ☐ Rush
	Project Name: Jal Landfarm
Mailing Address: 6121 Indian School Rd NE #200 Albuquerque NM, 87110	Project #: 11208903
Phone #: 5058840672	
email or Fax#:	Project Manager: Christine Mathews
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other ☐ EDD (Type)	Sampler: CN On Ice: ☒ XYes ☐ No Sample Temperature: 0.1-0.1(CF) 0.0°C 0.5-0.1(CF) 0.4°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2003030	Analysis Request: 8021 BTEX	8015 TPH GRO DRO ORO	300.0 Chloride	6010 Metals (see notes)	6020 Mercury	Air Bubbles (Y or N)
3/26/2020	1035	S	S-11208903-032620-CN-T1	Various	none	-001	X	X	X	X	X	
3/26/2020	1040	S	S-11208903-032620-CN-V1	Various	none	-002	X	X	X	X	X	
3/26/2020	1100	S	S-11208903-032620-CN-T2	Various	none	-003	X	X	X	X	X	
3/26/2020	1330	S	S-11208903-032620-CN-V2	Various	none	-004	X	X	X	X	X	
3/26/2020	1340	S	S-11208903-032620-CN-T3	Various	none	-005	X	X	X	X	X	
3/26/2020	1345	S	S-11208903-032620-CN-V3	Various	none	-006	X	X	X	X	X	
3/26/2020	1350	S	S-11208903-032620-CN-T4	Various	none	-007	X	X	X	X	X	
3/26/2020	1350	S	S-11208903-032620-CN-V4	Various	none	-008	X	X	X	X	X	
3/26/2020	1405	S	S-11208903-032620-CN-T5	Various	none	-009	X	X	X	X	X	
3/26/2020	1400	S	S-11208903-032620-CN-V5	Various	none	-010	X	X	X	X	X	
3/26/2020	1410	S	S-11208903-032620-CN-T6	Various	none	-011	X	X	X	X	X	
3/26/2020	1415	S	S-11208903-032620-CN-V6	Various	none	-012	X	X	X	X	X	

Date	Time	Relinquished by	Received by	Date	Time
3-30-20	0930	Chad Nelig	Fedex	3/31/20	0850

Remarks:
Metals List: Sb, AS, Ba, Be, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Tl (thallium), Zn, Hg, U

1/2 coolers 0.2-0.1(cf)/0.1

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: CHD Services

Mailing Address: 6121 Indian School Rd NE #200
Albuquerque NM, 87110

Phone #: 5058840672

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☐ XStandard ☐ Rush_____

Project Name: Jal Landfarm

Project #: 11208903

Project Manager: Christine Mathews

Sampler: CN
On Ice: ☒ XYes ☐ No
Sample Temperature: 0.1-0.1(F) 0.0°C 0.5-0.1(C) 0.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2003030	Analysis Request: 8021 BTEX	8015 TPH GRO DRO ORO	300.0 Chloride	6010 Metals (see notes)	6020 Mercury	Air Bubbles (Y or N)
3/26/2020	1425	S	S-11208903-032620-CN-T7	Various	none	-013	X	X	X	X	X	
3/26/2020	1430	S	S-11208903-032620-CN-V7	Various	none	-014	X	X	X	X	X	
3/26/2020	1440	S	S-11208903-032620-CN-T8	Various	none	-015	X	X	X	X	X	
3/26/2020	1450	S	S-11208903-032620-CN-V8	Various	none	-016	X	X	X	X	X	
3/26/2020	1625	S	S-11208903-032620-CN-T9	Various	none	-017	X	X	X	X	X	
3/26/2020	1635	S	S-11208903-032620-CN-V9	Various	none	-018	X	X	X	X	X	
3/26/2020	1610	S	S-11208903-032620-CN-T10	Various	none	-019	X	X	X	X	X	
3/26/2020	1615	S	S-11208903-032620-CN-V10	Various	none	-020	X	X	X	X	X	
3/26/2020	1535	S	S-11208903-032620-CN-T11	Various	none	-021	X	X	X	X	X	
3/26/2020	1540	S	S-11208903-032620-CN-V11	Various	none	-022	X	X	X	X	X	
3/26/2020	1520	S	S-11208903-032620-CN-T12	Various	none	-023	X	X	X	X	X	
3/26/2020	1525	S	S-11208903-032620-CN-V12	Various	none	-024	X	X	X	X	X	

Date	Time	Relinquished by	Received by	Date	Time
3/30/20	0820	Chris Neyra	Fedex	3/31/20	0850

Remarks:
Metals List: Sb, AS, Ba, Be, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Tl (thallium), Zn, Hg, U

2/3 bottles

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: CHD Services	Turn-Around Time: ☐ XStandard ☐ Rush
	Project Name: Jal Landfarm
Mailing Address: 6121 Indian School Rd NE #200 Albuquerque NM, 87110	Project #: 11208903
Phone #: 5058840672	
email or Fax#:	Project Manager: Christine Mathews
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other_____ ☐ EDD (Type) _____	Sampler: CN On Ice: ☐ XYes ☐ No Sample Temperature: 0.1-0.1/CF/0.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	0.5-0.1/CF/0.4 HEAL No. 2003D30	Analysis Request: 8021 BTEX	8015 TPH GRO DRO ORO	300.0 Chloride	6010 Metals (see notes)	6020 Mercury	Air Bubbles (Y or N)
3/26/2020	1505	S	S-11208903-032620-CN-T13	Various	none	-025	X	X	X	X	X	
3/26/2020	1500	S	S-11208903-032620-CN-V13	Various	none	-026	X	X	X	X	X	
3/26/2020	1510	S	S-11208903-032620-CN-T14	Various	none	-027	X	X	X	X	X	
3/26/2020	1515	S	S-11208903-032620-CN-V14	Various	none	-028	X	X	X	X	X	
3/26/2020	1600	S	S-11208903-032620-CN-T15	Various	none	-029	X	X	X	X	X	
3/26/2020	1605	S	S-11208903-032620-CN-V15	Various	none	-030	X	X	X	X	X	

Date	Time	Relinquished by	Received by	Date	Time
3.30.20	0930	Charles Nelson	Fedex	3/31/20	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Metals List: Sb, AS, Ba, Be, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Tl (thallium), Zn, Hg, U

3/3 coolers. 0.2-0.1/CF/0.1°C

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 10, 2020

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX:

RE: Jal Landfarm OrderNo.: 2003D30

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 30 sample(s) on 3/31/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T1
Project: Jal Landfarm
Collection Date: 3/26/2020 10:35:00 AM
Lab ID: 2003D30-001 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 1:28:39 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Barium	110	0.20		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Beryllium	0.47	0.30		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Chromium	5.9	0.60		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Copper	1.9	0.80		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Iron	6100	250		mg/Kg	100	4/8/2020 7:59:33 AM	51629
Lead	ND	0.60		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Manganese	60	0.40		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Silver	0.66	0.50		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 8:53:47 AM	51629
Zinc	13	5.0		mg/Kg	2	4/8/2020 8:53:47 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Surr: BFB	98.1	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	22	8.9		mg/Kg	1	4/6/2020 5:47:26 AM	51498
Motor Oil Range Organics (MRO)	57	44		mg/Kg	1	4/6/2020 5:47:26 AM	51498
Surr: DNOP	108	55.1-146		%Rec	1	4/6/2020 5:47:26 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Toluene	ND	0.047		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Xylenes, Total	ND	0.094		mg/Kg	1	4/3/2020 2:36:22 AM	51485
Surr: 1,2-Dichloroethane-d4	87.3	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
Surr: Dibromofluoromethane	95.0	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485
Surr: Toluene-d8	102	70-130		%Rec	1	4/3/2020 2:36:22 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V1
Project: Jal Landfarm
Collection Date: 3/26/2020 10:40:00 AM
Lab ID: 2003D30-002 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 2:05:40 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Arsenic	17	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Barium	83	0.20		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Beryllium	0.66	0.29		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Chromium	9.3	0.59		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Copper	1.2	0.79		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Iron	9800	250		mg/Kg	100	4/8/2020 8:01:08 AM	51629
Lead	ND	0.59		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Manganese	250	0.39		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:27:44 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:22:33 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:04:17 AM	51629
Zinc	21	4.9		mg/Kg	2	4/8/2020 9:04:17 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Surr: BFB	99.0	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/4/2020 9:29:13 AM	51498
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/4/2020 9:29:13 AM	51498
Surr: DNOP	73.8	55.1-146		%Rec	1	4/4/2020 9:29:13 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Toluene	ND	0.049		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2020 3:05:06 AM	51485
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485
Surr: Toluene-d8	106	70-130		%Rec	1	4/3/2020 3:05:06 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T2
Project: Jal Landfarm
Collection Date: 3/26/2020 11:00:00 AM
Lab ID: 2003D30-003 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 2:18:00 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Barium	260	0.20		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Beryllium	0.59	0.30		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Chromium	8.1	0.60		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Copper	3.6	0.80		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Iron	8300	250		mg/Kg	100	4/8/2020 8:02:35 AM	51629
Lead	ND	0.60		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Manganese	72	0.40		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:29:18 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:23:55 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 9:05:52 AM	51629
Zinc	16	5.0		mg/Kg	2	4/8/2020 9:05:52 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Surr: BFB	96.3	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	23	9.9		mg/Kg	1	4/4/2020 9:51:22 AM	51498
Motor Oil Range Organics (MRO)	76	49		mg/Kg	1	4/4/2020 9:51:22 AM	51498
Surr: DNOP	76.3	55.1-146		%Rec	1	4/4/2020 9:51:22 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2020 3:33:51 AM	51485
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
Surr: Dibromofluoromethane	100	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485
Surr: Toluene-d8	103	70-130		%Rec	1	4/3/2020 3:33:51 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V2
Project: Jal Landfarm
Collection Date: 3/26/2020 1:30:00 PM
Lab ID: 2003D30-004 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 2:30:22 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Barium	87	0.20		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Beryllium	0.44	0.30		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Chromium	8.5	0.60		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Copper	2.4	0.80		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Iron	6100	250		mg/Kg	100	4/8/2020 8:04:01 AM	51629
Lead	0.64	0.60		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Manganese	63	0.40		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:30:53 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:25:16 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 9:07:26 AM	51629
Zinc	13	5.0		mg/Kg	2	4/8/2020 9:07:26 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Surr: BFB	99.1	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/4/2020 10:13:17 AM	51498
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 10:13:17 AM	51498
Surr: DNOP	83.5	55.1-146		%Rec	1	4/4/2020 10:13:17 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2020 4:02:35 AM	51485
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485
Surr: Toluene-d8	108	70-130		%Rec	1	4/3/2020 4:02:35 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V3
Project: Jal Landfarm
Collection Date: 3/26/2020 1:40:00 PM
Lab ID: 2003D30-005 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:07:23 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Arsenic	5.6	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Barium	55	0.20		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Beryllium	0.44	0.29		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Chromium	5.9	0.59		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Copper	ND	0.78		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Iron	6000	250		mg/Kg	100	4/8/2020 8:05:28 AM	51629
Lead	0.70	0.59		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Manganese	29	0.39		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:32:27 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:26:37 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:08:59 AM	51629
Zinc	12	4.9		mg/Kg	2	4/8/2020 9:08:59 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Surr: BFB	96.7	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/4/2020 10:35:25 AM	51498
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 10:35:25 AM	51498
Surr: DNOP	72.9	55.1-146		%Rec	1	4/4/2020 10:35:25 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Toluene	ND	0.048		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2020 4:31:16 AM	51485
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485
Surr: Toluene-d8	102	70-130		%Rec	1	4/3/2020 4:31:16 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T3
Project: Jal Landfarm
Collection Date: 3/26/2020 1:45:00 PM
Lab ID: 2003D30-006 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:19:43 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Barium	63	0.20		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Beryllium	0.47	0.30		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Chromium	6.6	0.60		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Copper	1.6	0.79		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Iron	6400	250		mg/Kg	100	4/8/2020 8:06:55 AM	51629
Lead	0.93	0.60		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Manganese	54	0.40		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:34:01 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:27:52 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Uranium	ND	9.9		mg/Kg	2	4/8/2020 9:10:32 AM	51629
Zinc	15	5.0		mg/Kg	2	4/8/2020 9:10:32 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Surr: BFB	98.8	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	290	92		mg/Kg	10	4/6/2020 12:23:01 PM	51498
Motor Oil Range Organics (MRO)	690	460		mg/Kg	10	4/6/2020 12:23:01 PM	51498
Surr: DNOP	0	55.1-146	S	%Rec	10	4/6/2020 12:23:01 PM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Toluene	ND	0.047		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Xylenes, Total	ND	0.094		mg/Kg	1	4/3/2020 4:59:55 AM	51485
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485
Surr: Toluene-d8	111	70-130		%Rec	1	4/3/2020 4:59:55 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T4
Project: Jal Landfarm
Collection Date: 3/26/2020 1:50:00 PM
Lab ID: 2003D30-007 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:32:03 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Barium	66	0.20		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Beryllium	0.45	0.29		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Chromium	5.7	0.59		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Copper	1.3	0.79		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Iron	6000	250		mg/Kg	100	4/8/2020 8:08:23 AM	51629
Lead	ND	0.59		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Manganese	50	0.39		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:35:36 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:29:07 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:12:05 AM	51629
Zinc	14	4.9		mg/Kg	2	4/8/2020 9:12:05 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Surr: BFB	102	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	52	9.0		mg/Kg	1	4/4/2020 11:19:40 AM	51498
Motor Oil Range Organics (MRO)	120	45		mg/Kg	1	4/4/2020 11:19:40 AM	51498
Surr: DNOP	83.8	55.1-146		%Rec	1	4/4/2020 11:19:40 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2020 5:28:33 AM	51485
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485
Surr: Toluene-d8	107	70-130		%Rec	1	4/3/2020 5:28:33 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-v4
Project: Jal Landfarm
Collection Date: 3/26/2020 1:50:00 PM
Lab ID: 2003D30-008 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:44:23 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Barium	63	0.20		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Beryllium	0.43	0.30		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Chromium	6.5	0.59		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Copper	ND	0.79		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Iron	6100	250		mg/Kg	100	4/8/2020 8:09:50 AM	51629
Lead	ND	0.59		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Manganese	41	0.40		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Selenium	ND	4.9		mg/Kg	2	4/8/2020 11:44:13 AM	51629
Silver	ND	0.49		mg/Kg	2	4/8/2020 1:30:22 PM	51629
Thallium	ND	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Uranium	ND	9.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
Zinc	14	4.9		mg/Kg	2	4/8/2020 9:13:39 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Surr: BFB	99.4	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/4/2020 11:41:36 AM	51498
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 11:41:36 AM	51498
Surr: DNOP	77.2	55.1-146		%Rec	1	4/4/2020 11:41:36 AM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Toluene	ND	0.050		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2020 5:56:57 AM	51485
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
Surr: Dibromofluoromethane	97.5	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485
Surr: Toluene-d8	106	70-130		%Rec	1	4/3/2020 5:56:57 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T5
Project: Jal Landfarm
Collection Date: 3/26/2020 2:05:00 PM
Lab ID: 2003D30-009 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 3:56:44 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Arsenic	ND	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Barium	45	0.19		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Beryllium	0.38	0.29		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Cadmium	ND	0.19		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Chromium	6.2	0.58		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Copper	3.5	0.77		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Iron	5000	240		mg/Kg	100	4/8/2020 8:11:17 AM	51629
Lead	3.0	0.58		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Manganese	67	0.39		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Selenium	ND	4.8		mg/Kg	2	4/8/2020 11:45:49 AM	51629
Silver	ND	0.48		mg/Kg	2	4/8/2020 1:31:43 PM	51629
Thallium	ND	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:15:13 AM	51629
Zinc	21	4.8		mg/Kg	2	4/8/2020 9:15:13 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Surr: BFB	98.1	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	8.3		mg/Kg	1	4/4/2020 12:03:45 PM	51498
Motor Oil Range Organics (MRO)	ND	41		mg/Kg	1	4/4/2020 12:03:45 PM	51498
Surr: DNOP	79.1	55.1-146		%Rec	1	4/4/2020 12:03:45 PM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Toluene	ND	0.048		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2020 6:25:30 AM	51485
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
Surr: Dibromofluoromethane	95.0	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485
Surr: Toluene-d8	100	70-130		%Rec	1	4/3/2020 6:25:30 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V5
Project: Jal Landfarm
Collection Date: 3/26/2020 2:00:00 PM
Lab ID: 2003D30-010 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/3/2020 4:09:05 PM	51532
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Barium	51	0.20		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Beryllium	0.42	0.30		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Cadmium	ND	0.20		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Chromium	8.1	0.60		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Copper	3.0	0.80		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Iron	5900	250		mg/Kg	100	4/8/2020 8:12:44 AM	51629
Lead	3.8	0.60		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Manganese	53	0.40		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Selenium	ND	5.0		mg/Kg	2	4/8/2020 11:47:22 AM	51629
Silver	ND	0.50		mg/Kg	2	4/8/2020 1:32:58 PM	51629
Thallium	ND	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Uranium	ND	10		mg/Kg	2	4/8/2020 9:16:47 AM	51629
Zinc	24	5.0		mg/Kg	2	4/8/2020 9:16:47 AM	51629
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Surr: BFB	96.7	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 12:25:49 PM	51498
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 12:25:49 PM	51498
Surr: DNOP	72.7	55.1-146		%Rec	1	4/4/2020 12:25:49 PM	51498
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Toluene	ND	0.047		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Xylenes, Total	ND	0.094		mg/Kg	1	4/3/2020 6:53:59 AM	51485
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485
Surr: Toluene-d8	103	70-130		%Rec	1	4/3/2020 6:53:59 AM	51485

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T6
Project: Jal Landfarm
Collection Date: 3/26/2020 2:10:00 PM
Lab ID: 2003D30-011 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 11:51:40 AM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 9:18:20 AM	51507
Barium	100	0.20		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Beryllium	0.36	0.31		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Chromium	5.6	0.61		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Copper	2.1	0.82		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Iron	5800	260		mg/Kg	100	4/6/2020 9:53:47 AM	51507
Lead	0.88	0.61		mg/Kg	2	4/8/2020 9:18:20 AM	51507
Manganese	58	0.41		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/8/2020 10:35:04 AM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 2:26:29 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:18:20 AM	51507
Zinc	13	5.1		mg/Kg	2	4/6/2020 2:26:29 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Surr: BFB	95.8	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/5/2020 6:15:07 PM	51523
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/5/2020 6:15:07 PM	51523
Surr: DNOP	118	55.1-146		%Rec	1	4/5/2020 6:15:07 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Toluene	ND	0.050		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Ethylbenzene	ND	0.050		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Xylenes, Total	ND	0.10		mg/Kg	1	4/5/2020 9:28:31 PM	51487
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
Surr: Dibromofluoromethane	93.0	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487
Surr: Toluene-d8	94.2	70-130		%Rec	1	4/5/2020 9:28:31 PM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V6
Project: Jal Landfarm
Collection Date: 3/26/2020 2:15:00 PM
Lab ID: 2003D30-012 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	59		mg/Kg	20	4/4/2020 12:28:41 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.8		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Arsenic	ND	4.8		mg/Kg	2	4/8/2020 9:26:09 AM	51507
Barium	130	0.19		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Beryllium	0.31	0.29		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Chromium	5.2	0.58		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Copper	1.4	0.77		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Iron	4700	240		mg/Kg	100	4/6/2020 9:55:52 AM	51507
Lead	0.90	0.58		mg/Kg	2	4/8/2020 9:26:09 AM	51507
Manganese	37	0.39		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Selenium	ND	4.8		mg/Kg	2	4/8/2020 10:36:39 AM	51507
Silver	0.58	0.48		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Thallium	ND	4.8		mg/Kg	2	4/6/2020 2:28:13 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:26:09 AM	51507
Zinc	10	4.8		mg/Kg	2	4/6/2020 2:28:13 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Surr: BFB	99.3	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/4/2020 10:01:12 AM	51523
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/4/2020 10:01:12 AM	51523
Surr: DNOP	74.0	55.1-146		%Rec	1	4/4/2020 10:01:12 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Toluene	ND	0.049		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/5/2020 10:57:49 PM	51487
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
Surr: Dibromofluoromethane	91.8	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487
Surr: Toluene-d8	98.3	70-130		%Rec	1	4/5/2020 10:57:49 PM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T7
Project: Jal Landfarm
Collection Date: 3/26/2020 2:25:00 PM
Lab ID: 2003D30-013 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 1:30:26 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 9:27:45 AM	51507
Barium	51	0.20		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Beryllium	ND	0.31		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Chromium	4.9	0.61		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Copper	2.2	0.82		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Iron	4900	260		mg/Kg	100	4/6/2020 9:57:57 AM	51507
Lead	0.98	0.61		mg/Kg	2	4/8/2020 9:27:45 AM	51507
Manganese	61	0.41		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/8/2020 10:38:12 AM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 2:29:54 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:27:45 AM	51507
Zinc	12	5.1		mg/Kg	2	4/6/2020 2:29:54 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Surr: BFB	97.3	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/4/2020 10:25:23 AM	51523
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 10:25:23 AM	51523
Surr: DNOP	73.6	55.1-146		%Rec	1	4/4/2020 10:25:23 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 2:26:11 AM	51487
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
Surr: Dibromofluoromethane	89.8	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487
Surr: Toluene-d8	97.5	70-130		%Rec	1	4/6/2020 2:26:11 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V7
Project: Jal Landfarm
Collection Date: 3/26/2020 2:30:00 PM
Lab ID: 2003D30-014 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 1:42:47 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 9:29:19 AM	51507
Barium	75	0.20		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Beryllium	0.36	0.30		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Chromium	6.2	0.61		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Copper	1.2	0.81		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Iron	5700	250		mg/Kg	100	4/6/2020 10:14:38 AM	51507
Lead	0.84	0.61		mg/Kg	2	4/8/2020 9:29:19 AM	51507
Manganese	48	0.40		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/8/2020 10:39:45 AM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 2:31:36 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:29:19 AM	51507
Zinc	13	5.1		mg/Kg	2	4/6/2020 2:31:36 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Surr: BFB	100	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 10:49:33 AM	51523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/4/2020 10:49:33 AM	51523
Surr: DNOP	66.2	55.1-146		%Rec	1	4/4/2020 10:49:33 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 2:55:52 AM	51487
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
Surr: Dibromofluoromethane	94.1	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487
Surr: Toluene-d8	97.8	70-130		%Rec	1	4/6/2020 2:55:52 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T8
Project: Jal Landfarm
Collection Date: 3/26/2020 2:40:00 PM
Lab ID: 2003D30-015 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 1:55:07 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.8		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Arsenic	ND	4.8		mg/Kg	2	4/8/2020 9:30:52 AM	51507
Barium	99	0.19		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Beryllium	0.39	0.29		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Chromium	5.8	0.58		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Copper	1.7	0.77		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Iron	6000	240		mg/Kg	100	4/6/2020 10:16:45 AM	51507
Lead	0.68	0.58		mg/Kg	2	4/8/2020 9:30:52 AM	51507
Manganese	54	0.39		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Selenium	ND	4.8		mg/Kg	2	4/8/2020 10:41:19 AM	51507
Silver	ND	0.48		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Thallium	ND	4.8		mg/Kg	2	4/6/2020 2:33:18 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:30:52 AM	51507
Zinc	13	4.8		mg/Kg	2	4/6/2020 2:33:18 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Surr: BFB	96.5	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	440	99		mg/Kg	10	4/5/2020 7:29:15 PM	51523
Motor Oil Range Organics (MRO)	510	490		mg/Kg	10	4/5/2020 7:29:15 PM	51523
Surr: DNOP	0	55.1-146	S	%Rec	10	4/5/2020 7:29:15 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 3:25:29 AM	51487
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
Surr: Dibromofluoromethane	91.2	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487
Surr: Toluene-d8	94.7	70-130		%Rec	1	4/6/2020 3:25:29 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V8
Project: Jal Landfarm
Collection Date: 3/26/2020 2:50:00 PM
Lab ID: 2003D30-016 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:07:29 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:32:26 AM	51507
Barium	110	0.19		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Beryllium	0.46	0.29		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Chromium	7.2	0.58		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Copper	ND	0.78		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Iron	7600	240		mg/Kg	100	4/6/2020 10:18:50 AM	51507
Lead	ND	0.58		mg/Kg	2	4/8/2020 9:32:26 AM	51507
Manganese	46	0.39		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/8/2020 10:42:53 AM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:35:02 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:32:26 AM	51507
Zinc	14	4.9		mg/Kg	2	4/6/2020 2:35:02 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Surr: BFB	99.2	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/4/2020 11:38:12 AM	51523
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 11:38:12 AM	51523
Surr: DNOP	66.0	55.1-146		%Rec	1	4/4/2020 11:38:12 AM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 3:55:06 AM	51487
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487
Surr: Toluene-d8	96.7	70-130		%Rec	1	4/6/2020 3:55:06 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T9
Project: Jal Landfarm
Collection Date: 3/26/2020 4:25:00 PM
Lab ID: 2003D30-017 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:19:49 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:34:01 AM	51507
Barium	100	0.20		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Beryllium	0.31	0.30		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Chromium	5.1	0.60		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Copper	2.3	0.80		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Iron	5600	250		mg/Kg	100	4/6/2020 10:20:43 AM	51507
Lead	0.64	0.60		mg/Kg	2	4/8/2020 9:34:01 AM	51507
Manganese	59	0.40		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:44:27 AM	51507
Silver	0.61	0.50		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:36:43 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:34:01 AM	51507
Zinc	14	5.0		mg/Kg	2	4/6/2020 2:36:43 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Surr: BFB	96.7	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 12:02:37 PM	51523
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/4/2020 12:02:37 PM	51523
Surr: DNOP	111	55.1-146		%Rec	1	4/4/2020 12:02:37 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 4:24:40 AM	51487
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
Surr: Dibromofluoromethane	93.4	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487
Surr: Toluene-d8	94.2	70-130		%Rec	1	4/6/2020 4:24:40 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V9
Project: Jal Landfarm
Collection Date: 3/26/2020 4:35:00 PM
Lab ID: 2003D30-018 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:32:09 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 9:35:35 AM	51507
Barium	94	0.19		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Beryllium	0.50	0.29		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Cadmium	ND	0.19		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Chromium	8.1	0.58		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Copper	ND	0.78		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Iron	8300	240		mg/Kg	100	4/6/2020 10:22:48 AM	51507
Lead	ND	0.58		mg/Kg	2	4/8/2020 9:35:35 AM	51507
Manganese	37	0.39		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/8/2020 10:46:02 AM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:38:25 PM	51507
Uranium	ND	9.7		mg/Kg	2	4/8/2020 9:35:35 AM	51507
Zinc	17	4.9		mg/Kg	2	4/6/2020 2:38:25 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Surr: BFB	98.7	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2020 12:26:57 PM	51523
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 12:26:57 PM	51523
Surr: DNOP	93.1	55.1-146		%Rec	1	4/4/2020 12:26:57 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Xylenes, Total	ND	0.098		mg/Kg	1	4/6/2020 4:53:27 AM	51487
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
Surr: Dibromofluoromethane	93.1	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 4:53:27 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T10
Project: Jal Landfarm
Collection Date: 3/26/2020 2:10:00 PM
Lab ID: 2003D30-019 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:44:30 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:37:09 AM	51507
Barium	56	0.20		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Beryllium	0.30	0.30		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Chromium	5.2	0.60		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Copper	1.7	0.80		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Iron	5400	250		mg/Kg	100	4/6/2020 10:24:35 AM	51507
Lead	1.0	0.60		mg/Kg	2	4/8/2020 9:37:09 AM	51507
Manganese	43	0.40		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:47:36 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:40:06 PM	51507
Uranium	ND	9.9		mg/Kg	2	4/8/2020 9:37:09 AM	51507
Zinc	11	5.0		mg/Kg	2	4/6/2020 2:40:06 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Surr: BFB	101	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	28	9.7		mg/Kg	1	4/4/2020 12:51:27 PM	51523
Motor Oil Range Organics (MRO)	91	48		mg/Kg	1	4/4/2020 12:51:27 PM	51523
Surr: DNOP	114	55.1-146		%Rec	1	4/4/2020 12:51:27 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Xylenes, Total	ND	0.095		mg/Kg	1	4/6/2020 5:22:48 AM	51487
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 5:22:48 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V10
Project: Jal Landfarm
Collection Date: 3/26/2020 2:15:00 PM
Lab ID: 2003D30-020 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 2:56:52 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.2		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Arsenic	ND	5.2		mg/Kg	2	4/8/2020 9:38:43 AM	51507
Barium	130	0.21		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Beryllium	0.33	0.31		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Cadmium	ND	0.21		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Chromium	5.4	0.62		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Copper	2.3	0.83		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Iron	5400	260		mg/Kg	100	4/6/2020 10:26:40 AM	51507
Lead	ND	0.62		mg/Kg	2	4/8/2020 9:38:43 AM	51507
Manganese	49	0.41		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Selenium	ND	5.2		mg/Kg	2	4/8/2020 10:59:03 AM	51507
Silver	ND	0.52		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Thallium	ND	5.2		mg/Kg	2	4/6/2020 2:41:48 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:38:43 AM	51507
Zinc	12	5.2		mg/Kg	2	4/6/2020 2:41:48 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Surr: BFB	100	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/4/2020 2:05:08 PM	51523
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2020 2:05:08 PM	51523
Surr: DNOP	85.2	55.1-146		%Rec	1	4/4/2020 2:05:08 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Xylenes, Total	ND	0.098		mg/Kg	1	4/6/2020 5:51:59 AM	51487
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
Surr: Dibromofluoromethane	94.2	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487
Surr: Toluene-d8	98.9	70-130		%Rec	1	4/6/2020 5:51:59 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T11
Project: Jal Landfarm
Collection Date: 3/26/2020 3:35:00 PM
Lab ID: 2003D30-021 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 3:33:55 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 9:40:18 AM	51507
Barium	100	0.20		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Beryllium	0.34	0.30		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Chromium	5.6	0.60		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Copper	2.0	0.80		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Iron	6300	250		mg/Kg	100	4/6/2020 10:28:45 AM	51507
Lead	1.1	0.60		mg/Kg	2	4/8/2020 9:40:18 AM	51507
Manganese	60	0.40		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:40:18 AM	51507
Zinc	13	5.0		mg/Kg	2	4/6/2020 2:51:09 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Surr: BFB	97.4	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/4/2020 2:29:58 PM	51523
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/4/2020 2:29:58 PM	51523
Surr: DNOP	82.4	55.1-146		%Rec	1	4/4/2020 2:29:58 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Xylenes, Total	ND	0.095		mg/Kg	1	4/6/2020 6:21:17 AM	51487
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487
Surr: Toluene-d8	99.9	70-130		%Rec	1	4/6/2020 6:21:17 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V11
Project: Jal Landfarm
Collection Date: 3/26/2020 3:40:00 PM
Lab ID: 2003D30-022 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 3:46:16 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 11:00:38 AM	51507
Barium	80	0.20		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Beryllium	0.42	0.29		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Chromium	7.1	0.59		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Copper	ND	0.79		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Iron	7100	250		mg/Kg	100	4/6/2020 10:30:50 AM	51507
Lead	0.64	0.59		mg/Kg	2	4/8/2020 9:48:53 AM	51507
Manganese	34	0.39		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:48:53 AM	51507
Zinc	14	4.9		mg/Kg	2	4/6/2020 2:52:52 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Surr: BFB	99.6	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	4/4/2020 2:48:06 PM	51523
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	4/4/2020 2:48:06 PM	51523
Surr: DNOP	86.1	55.1-146		%Rec	1	4/4/2020 2:48:06 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Toluene	ND	0.048		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Ethylbenzene	ND	0.048		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Xylenes, Total	ND	0.096		mg/Kg	1	4/6/2020 6:50:36 AM	51487
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487
Surr: Toluene-d8	99.1	70-130		%Rec	1	4/6/2020 6:50:36 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T12
Project: Jal Landfarm
Collection Date: 3/26/2020 3:20:00 PM
Lab ID: 2003D30-023 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 3:58:36 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Arsenic	ND	4.9		mg/Kg	2	4/8/2020 11:02:14 AM	51507
Barium	88	0.20		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Beryllium	0.42	0.29		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Chromium	8.1	0.59		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Copper	28	0.79		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Iron	8300	250		mg/Kg	100	4/6/2020 10:32:55 AM	51507
Lead	1.4	0.59		mg/Kg	2	4/8/2020 9:50:28 AM	51507
Manganese	62	0.39		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Selenium	ND	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Silver	ND	0.49		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Thallium	ND	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
Uranium	ND	9.8		mg/Kg	2	4/8/2020 9:50:28 AM	51507
Zinc	16	4.9		mg/Kg	2	4/6/2020 2:54:33 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Surr: BFB	98.5	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	30	9.1		mg/Kg	1	4/5/2020 7:53:55 PM	51523
Motor Oil Range Organics (MRO)	90	45		mg/Kg	1	4/5/2020 7:53:55 PM	51523
Surr: DNOP	106	55.1-146		%Rec	1	4/5/2020 7:53:55 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 7:19:55 AM	51487
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487
Surr: Toluene-d8	99.2	70-130		%Rec	1	4/6/2020 7:19:55 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V12
Project: Jal Landfarm
Collection Date: 3/26/2020 3:25:00 PM
Lab ID: 2003D30-024 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 4:10:57 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Arsenic	12	5.0		mg/Kg	2	4/8/2020 11:03:49 AM	51507
Barium	60	0.20		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Beryllium	0.69	0.30		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Chromium	9.9	0.60		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Copper	2.6	0.80		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Iron	12000	250		mg/Kg	100	4/6/2020 10:46:34 AM	51507
Lead	ND	0.60		mg/Kg	2	4/8/2020 9:52:03 AM	51507
Manganese	130	0.40		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:52:03 AM	51507
Zinc	23	5.0		mg/Kg	2	4/6/2020 2:56:15 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Surr: BFB	99.0	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/4/2020 4:04:59 PM	51523
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/4/2020 4:04:59 PM	51523
Surr: DNOP	76.9	55.1-146		%Rec	1	4/4/2020 4:04:59 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Toluene	ND	0.048		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Ethylbenzene	ND	0.048		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Xylenes, Total	ND	0.096		mg/Kg	1	4/6/2020 7:49:00 AM	51487
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 7:49:00 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T13
Project: Jal Landfarm
Collection Date: 3/26/2020 3:05:00 PM
Lab ID: 2003D30-025 **Matrix:** SOIL
Received Date: 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 4:23:17 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Arsenic	ND	5.1		mg/Kg	2	4/8/2020 11:09:54 AM	51507
Barium	84	0.20		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Beryllium	0.39	0.30		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Chromium	6.3	0.61		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Copper	2.8	0.81		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Iron	6700	250		mg/Kg	100	4/6/2020 10:48:24 AM	51507
Lead	ND	0.61		mg/Kg	2	4/8/2020 9:58:20 AM	51507
Manganese	71	0.41		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:58:20 AM	51507
Zinc	13	5.1		mg/Kg	2	4/6/2020 3:03:06 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Surr: BFB	102	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	25	9.4		mg/Kg	1	4/4/2020 4:53:47 PM	51523
Motor Oil Range Organics (MRO)	81	47		mg/Kg	1	4/4/2020 4:53:47 PM	51523
Surr: DNOP	95.7	55.1-146		%Rec	1	4/4/2020 4:53:47 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Toluene	ND	0.046		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Ethylbenzene	ND	0.046		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Xylenes, Total	ND	0.092		mg/Kg	1	4/6/2020 8:18:26 AM	51487
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
Surr: Dibromofluoromethane	93.3	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487
Surr: Toluene-d8	101	70-130		%Rec	1	4/6/2020 8:18:26 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V13
Project: Jal Landfarm
Collection Date: 3/26/2020 3:00:00 PM
Lab ID: 2003D30-026 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	83	60		mg/Kg	20	4/4/2020 4:35:38 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Arsenic	5.8	5.1		mg/Kg	2	4/8/2020 11:11:21 AM	51507
Barium	75	0.20		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Beryllium	0.65	0.31		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Chromium	10	0.61		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Copper	1.5	0.81		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Iron	11000	250		mg/Kg	100	4/6/2020 10:50:29 AM	51507
Lead	ND	0.61		mg/Kg	2	4/8/2020 9:59:54 AM	51507
Manganese	77	0.41		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Selenium	ND	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Silver	ND	0.51		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Thallium	ND	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 9:59:54 AM	51507
Zinc	23	5.1		mg/Kg	2	4/6/2020 3:04:49 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Surr: BFB	99.2	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/4/2020 6:07:21 PM	51523
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/4/2020 6:07:21 PM	51523
Surr: DNOP	97.4	55.1-146		%Rec	1	4/4/2020 6:07:21 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Toluene	ND	0.050		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2020 8:47:58 AM	51487
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
Surr: Dibromofluoromethane	95.6	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487
Surr: Toluene-d8	97.9	70-130		%Rec	1	4/6/2020 8:47:58 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T14
Project: Jal Landfarm
Collection Date: 3/26/2020 3:10:00 PM
Lab ID: 2003D30-027 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 4:47:59 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:12:52 AM	51507
Barium	210	0.20		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Beryllium	0.33	0.30		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Chromium	4.6	0.60		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Copper	2.0	0.80		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Iron	4500	250		mg/Kg	100	4/6/2020 10:52:16 AM	51507
Lead	ND	0.60		mg/Kg	2	4/8/2020 10:01:28 AM	51507
Manganese	52	0.40		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Silver	1.5	0.50		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 10:01:28 AM	51507
Zinc	11	5.0		mg/Kg	2	4/6/2020 3:06:31 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Surr: BFB	99.0	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	11	8.8		mg/Kg	1	4/4/2020 6:31:54 PM	51523
Motor Oil Range Organics (MRO)	50	44		mg/Kg	1	4/4/2020 6:31:54 PM	51523
Surr: DNOP	108	55.1-146		%Rec	1	4/4/2020 6:31:54 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Xylenes, Total	ND	0.093		mg/Kg	1	4/6/2020 9:17:20 AM	51487
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487
Surr: Toluene-d8	99.3	70-130		%Rec	1	4/6/2020 9:17:20 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V14
Project: Jal Landfarm
Collection Date: 3/26/2020 3:15:00 PM
Lab ID: 2003D30-028 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 5:00:19 PM	51558
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:21:26 AM	51507
Barium	63	0.20		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Beryllium	0.39	0.30		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Chromium	7.7	0.60		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Copper	ND	0.80		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Iron	7700	250		mg/Kg	100	4/6/2020 10:54:21 AM	51507
Lead	ND	0.60		mg/Kg	2	4/8/2020 10:03:02 AM	51507
Manganese	40	0.40		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:03:02 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:15:52 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 10:03:02 AM	51507
Zinc	16	5.0		mg/Kg	2	4/6/2020 3:15:52 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Surr: BFB	98.6	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/4/2020 7:45:36 PM	51523
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/4/2020 7:45:36 PM	51523
Surr: DNOP	84.7	55.1-146		%Rec	1	4/4/2020 7:45:36 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Toluene	ND	0.049		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Xylenes, Total	ND	0.097		mg/Kg	1	4/6/2020 9:46:25 AM	51487
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
Surr: Dibromofluoromethane	92.9	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487
Surr: Toluene-d8	99.8	70-130		%Rec	1	4/6/2020 9:46:25 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-T15
Project: Jal Landfarm
Collection Date: 3/26/2020 4:00:00 PM
Lab ID: 2003D30-029 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 7:53:12 PM	51561
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:23:01 AM	51507
Barium	210	0.20		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Beryllium	0.44	0.30		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Chromium	19	0.60		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Copper	230	0.79		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Iron	17000	250		mg/Kg	100	4/6/2020 10:56:08 AM	51507
Lead	3.9	0.60		mg/Kg	2	4/8/2020 10:10:53 AM	51507
Manganese	130	0.40		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:10:53 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:17:35 PM	51507
Uranium	ND	9.9		mg/Kg	2	4/8/2020 10:10:53 AM	51507
Zinc	35	5.0		mg/Kg	2	4/6/2020 3:17:35 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Surr: BFB	97.0	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	180	9.2		mg/Kg	1	4/5/2020 8:18:26 PM	51523
Motor Oil Range Organics (MRO)	310	46		mg/Kg	1	4/5/2020 8:18:26 PM	51523
Surr: DNOP	120	55.1-146		%Rec	1	4/5/2020 8:18:26 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Xylenes, Total	ND	0.095		mg/Kg	1	4/6/2020 10:15:58 AM	51487
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
Surr: Dibromofluoromethane	94.3	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487
Surr: Toluene-d8	97.4	70-130		%Rec	1	4/6/2020 10:15:58 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: S-11208903-032620-CN-V15
Project: Jal Landfarm
Collection Date: 3/26/2020 4:05:00 PM
Lab ID: 2003D30-030 **Matrix:** SOIL **Received Date:** 3/31/2020 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/4/2020 8:54:56 PM	51561
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Antimony	ND	5.0		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Arsenic	ND	5.0		mg/Kg	2	4/8/2020 11:24:35 AM	51507
Barium	67	0.20		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Beryllium	0.37	0.30		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Cadmium	ND	0.20		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Chromium	6.1	0.60		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Copper	3.3	0.80		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Iron	7000	250		mg/Kg	100	4/6/2020 10:57:55 AM	51507
Lead	0.98	0.60		mg/Kg	2	4/8/2020 10:12:29 AM	51507
Manganese	120	0.40		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Selenium	ND	5.0		mg/Kg	2	4/8/2020 10:12:29 AM	51507
Silver	ND	0.50		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Thallium	ND	5.0		mg/Kg	2	4/6/2020 3:19:17 PM	51507
Uranium	ND	10		mg/Kg	2	4/8/2020 10:12:29 AM	51507
Zinc	18	5.0		mg/Kg	2	4/6/2020 3:19:17 PM	51507
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Surr: BFB	99.3	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/4/2020 8:34:43 PM	51523
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/4/2020 8:34:43 PM	51523
Surr: DNOP	75.0	55.1-146		%Rec	1	4/4/2020 8:34:43 PM	51523
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Toluene	ND	0.047		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Xylenes, Total	ND	0.093		mg/Kg	1	4/6/2020 10:45:38 AM	51487
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
Surr: Dibromofluoromethane	96.5	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487
Surr: Toluene-d8	99.8	70-130		%Rec	1	4/6/2020 10:45:38 AM	51487

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-001 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-001A/S-11208903-032620-CN-T1 **Sampling Time** 10:35 AM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0579	4/22/2020 8:29:00 PM	MAM	EPA 6020A	
%moisture	6.5	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-002 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-002A/S-11208903-032620-CN-V1 **Sampling Time** 10:40 AM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0666	4/22/2020 9:08:00 PM	MAM	EPA 6020A	
%moisture	11.1	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-003 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-003A/S-11208903-032620-CN-T2 **Sampling Time** 11:00 AM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0654	4/22/2020 9:12:00 PM	MAM	EPA 6020A	
%moisture	7.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-004 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-004A/S-11208903-032620-CN-V2 **Sampling Time** 1:30 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0663	4/22/2020 9:16:00 PM	MAM	EPA 6020A	
%moisture	6	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-005 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-005A/S-11208903-032620-CN-V3 **Sampling Time** 1:40 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0584	4/22/2020 9:20:00 PM	MAM	EPA 6020A	
%moisture	5.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-006 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-006A/S-11208903-032620-CN-T3 **Sampling Time** 1:45 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.232	mg/Kg	0.0629	4/22/2020 9:25:00 PM	MAM	EPA 6020A	
%moisture	7.2	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-007 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-007A/S-11208903-032620-CN-T4 **Sampling Time** 1:50 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0583	4/22/2020 9:29:00 PM	MAM	EPA 6020A	
%moisture	7.2	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-008 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-008A/S-11208903-032620-CN-V4 **Sampling Time** 1:50 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0616	4/22/2020 9:33:00 PM	MAM	EPA 6020A	
%moisture	8.2	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-009 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-009A/S-11208903-032620-CN-T5 **Sampling Time** 2:05 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0860	mg/Kg	0.0523	4/22/2020 9:37:00 PM	MAM	EPA 6020A	
%moisture	18.9	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-010 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0010A/S-11208903-032620-CN-V5 **Sampling Time** 2:00 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0908	mg/Kg	0.0563	4/22/2020 9:42:00 PM	MAM	EPA 6020A	
%moisture	3.9	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-011 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0011A/S-11208903-032620-CN-T6 **Sampling Time** 2:10 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0551	4/22/2020 9:46:00 PM	MAM	EPA 6020A	
%moisture	6.5	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-012 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0012A/S-11208903-032620-CN-V6 **Sampling Time** 2:15 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.06	4/22/2020 10:07:00 PM	MAM	EPA 6020A	
%moisture	4.3	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Analytical Results Report

Sample Number 200408003-013 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0013A/S-11208903-032620-CN-T7 **Sampling Time** 2:25 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0628	4/28/2020 6:39:00 PM	MAM	EPA 6020A	
%moisture	20.1	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-014 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0014A/S-11208903-032620-CN-V7 **Sampling Time** 2:30 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0632	4/22/2020 10:16:00 PM	MAM	EPA 6020A	
%moisture	7.9	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-015 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0015A/S-11208903-032620-CN-T8 **Sampling Time** 2:40 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0609	4/22/2020 10:20:00 PM	MAM	EPA 6020A	
%moisture	7.1	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-016 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0016A/S-11208903-032620-CN-V8 **Sampling Time** 2:50 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0553	4/22/2020 10:24:00 PM	MAM	EPA 6020A	
%moisture	7.6	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-017 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0017A/S-11208903-032620-CN-T9 **Sampling Time** 4:25 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0926	mg/Kg	0.0566	4/22/2020 10:29:00 PM	MAM	EPA 6020A	
%moisture	6.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-018 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0018A/S-11208903-032620-CN-V9 **Sampling Time** 4:35 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0591	4/22/2020 10:33:00 PM	MAM	EPA 6020A	
%moisture	6	%		4/16/2020 5:06:00 PM	MAM	%moisture	

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Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-019 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0019A/S-11208903-032620-CN-T10 **Sampling Time** 2:10 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0763	mg/Kg	0.0622	4/22/2020 10:37:00 PM	MAM	EPA 6020A	
%moisture	6.7	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-020 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0020A/S-11208903-032620-CN-V10 **Sampling Time** 2:15 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0618	4/22/2020 10:41:00 PM	MAM	EPA 6020A	
%moisture	6.8	%		4/16/2020 5:06:00 PM	MAM	%moisture	

Sample Number 200408003-021 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0021A/S-11208903-032620-CN-T11 **Sampling Time** 3:35 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0625	4/14/2020 5:06:00 PM	MAM	EPA 6020A	
%moisture	6.1	%		4/14/2020 2:12:00 PM	MAM	%moisture	

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Analytical Results Report

Sample Number 200408003-022 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0022A/S-11208903-032620-CN-V11 **Sampling Time** 3:40 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0645	4/14/2020 5:36:00 PM	MAM	EPA 6020A	
%moisture	7	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-023 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0023A/S-11208903-032620-CN-T12 **Sampling Time** 3:20 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.0782	mg/Kg	0.0605	4/14/2020 5:40:00 PM	MAM	EPA 6020A	
%moisture	6.9	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-024 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0024A/S-11208903-032620-CN-V12 **Sampling Time** 3:25 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0636	4/14/2020 5:44:00 PM	MAM	EPA 6020A	
%moisture	10.3	%		4/14/2020 2:12:00 PM	MAM	%moisture	

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Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-025 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0025A/S-11208903-032620-CN-T13 **Sampling Time** 3:05 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.268	mg/Kg	0.06	4/14/2020 6:05:00 PM	MAM	EPA 6020A	
%moisture	9.4	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-026 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0026A/S-11208903-032620-CN-V13 **Sampling Time** 3:00 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0628	4/14/2020 6:10:00 PM	MAM	EPA 6020A	
%moisture	9.1	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-027 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0027A/S-11208903-032620-CN-T14 **Sampling Time** 3:10 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.059	4/14/2020 6:14:00 PM	MAM	EPA 6020A	
%moisture	7.7	%		4/14/2020 2:12:00 PM	MAM	%moisture	

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Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Sample Number 200408003-028 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0028A/S-11208903-032620-CN-V14 **Sampling Time** 3:15 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0623	4/14/2020 6:18:00 PM	MAM	EPA 6020A	
%moisture	2.3	%		4/14/2020 2:12:00 PM	MAM	%moisture	

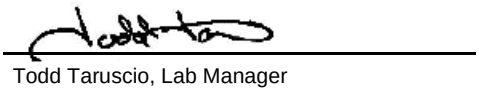
Sample Number 200408003-029 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0029A/S-11208903-032620-CN-T15 **Sampling Time** 4:00 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	0.321	mg/Kg	0.0662	4/14/2020 6:23:00 PM	MAM	EPA 6020A	
%moisture	9.6	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Sample Number 200408003-030 **Sampling Date** 3/26/2020 **Date/Time Received** 4/8/2020 11:54 AM
Client Sample ID 2003D30-0030A/S-11208903-032620-CN-V15 **Sampling Time** 4:05 PM
Matrix Solid
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Mercury-ICPMS	ND	mg/Kg	0.0641	4/14/2020 6:27:00 PM	MAM	EPA 6020A	
%moisture	7.7	%		4/14/2020 2:12:00 PM	MAM	%moisture	

Authorized Signature



Todd Taruscio, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 200408003
Project Name: 2003D30

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Mercury-ICPMS	0.0271	mg/Kg	0.025	108.4	80-120	4/20/2020	4/28/2020
Mercury-ICPMS	0.0283	mg/Kg	0.025	113.2	80-120	4/20/2020	4/22/2020
Mercury-ICPMS	0.0260	mg/Kg	0.025	104.0	80-120	4/14/2020	4/14/2020

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
200408003-001A	Mercury-ICPMS	ND	0.348	mg/Kg	0.29	120.0	75-125	4/20/2020	4/28/2020
200408003-001	Mercury-ICPMS	ND	0.355	mg/kg	0.29	122.4	75-125	4/20/2020	4/22/2020
200408003-021	Mercury-ICPMS	ND	0.388	mg/Kg	0.313	124.0	75-125	4/14/2020	4/14/2020

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Mercury-ICPMS	0.346	mg/Kg	0.29	119.3	0.6	0-20	4/20/2020	4/28/2020
Mercury-ICPMS	0.346	mg/Kg	0.29	119.3	2.6	0-20	4/20/2020	4/22/2020
Mercury-ICPMS	0.403	mg/Kg	0.313	128.8	3.8	0-20	4/14/2020	4/14/2020

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Mercury-ICPMS	ND	mg/Kg	0.0001	4/20/2020	4/28/2020
Mercury-ICPMS	ND	mg/Kg	0.0001	4/20/2020	4/22/2020
Mercury-ICPMS	ND	mg/Kg	0.0001	4/14/2020	4/14/2020

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

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Login Report

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30

Comment:

Sample #: 200408003-001 **Customer Sample #:** 2003D30-001A/S-11208903-032620-CN-T1

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 10:35 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-002 **Customer Sample #:** 2003D30-002A/S-11208903-032620-CN-V1

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 10:40 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-003 **Customer Sample #:** 2003D30-003A/S-11208903-032620-CN-T2

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 11:00 AM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-004 **Customer Sample #:** 2003D30-004A/S-11208903-032620-CN-V2

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-005 **Customer Sample #:** 2003D30-005A/S-11208903-032620-CN-T3

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-006 **Customer Sample #:** 2003D30-006A/S-11208903-032620-CN-V3

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:45 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-007 **Customer Sample #:** 2003D30-007A/S-11208903-032620-CN-T4

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:50 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-008 **Customer Sample #:** 2003D30-008A/S-11208903-032620-CN-V4

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 1:50 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-009 **Customer Sample #:** 2003D30-009A/S-11208903-032620-CN-T5

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-010 **Customer Sample #:** 2003D30-0010A/S-11208903-032620-CN-V5

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-011 **Customer Sample #:** 2003D30-0011A/S-11208903-032620-CN-T6

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN

Project Name: 2003D30

Comment:

Sample #: 200408003-012 **Customer Sample #:** 2003D30-0012A/S-11208903-032620-CN-V6

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:15 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-013 **Customer Sample #:** 2003D30-0013A/S-11208903-032620-CN-T7

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:25 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-014 **Customer Sample #:** 2003D30-0014A/S-11208903-032620-CN-V7

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:30 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-015 **Customer Sample #:** 2003D30-0015A/S-11208903-032620-CN-T8

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-016 **Customer Sample #:** 2003D30-0016A/S-11208903-032620-CN-V8

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:50 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-017 **Customer Sample #:** 2003D30-0017A/S-11208903-032620-CN-T9

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:25 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-018 **Customer Sample #:** 2003D30-0018A/S-11208903-032620-CN-V9

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:35 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-019 **Customer Sample #:** 2003D30-0019A/S-11208903-032620-CN-T10

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-020 **Customer Sample #:** 2003D30-0020A/S-11208903-032620-CN-V10

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 2:15 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-021 **Customer Sample #:** 2003D30-0021A/S-11208903-032620-CN-T11

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:35 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-022 **Customer Sample #:** 2003D30-0022A/S-11208903-032620-CN-V11

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:40 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-023 **Customer Sample #:** 2003D30-0023A/S-11208903-032620-CN-T12

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:20 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-024 **Customer Sample #:** 2003D30-0024A/S-11208903-032620-CN-V12

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:25 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-025 **Customer Sample #:** 2003D30-0025A/S-11208903-032620-CN-T13

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-026 **Customer Sample #:** 2003D30-0026A/S-11208903-032620-CN-V13

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-027 **Customer Sample #:** 2003D30-0027A/S-11208903-032620-CN-T14

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:10 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name: HALL ENVIRONMENTAL ANALYSIS LAB
4901 HAWKINS NE SUITE D
ALBUQUERQUE NM 87109

Order ID: 200408003
Order Date: 4/8/2020

Contact Name: ANDY FREEMAN
Project Name: 2003D30
Comment:

Sample #: 200408003-028 **Customer Sample #:** 2003D30-0028A/S-11208903-032620-CN-V14

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 3:15 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-029 **Customer Sample #:** 2003D30-0029A/S-11208903-032620-CN-T15

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:00 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Sample #: 200408003-030 **Customer Sample #:** 2003D30-0030A/S-11208903-032620-CN-V15

Recv'd: ☑ **Matrix:** Solid **Collector:** **Date Collected:** 3/26/2020
Quantity: 1 **Date Received:** 4/8/2020 11:54:00 AM **Time Collected:** 4:05 PM
Comment:

Test	Lab	Method	Due Date	Priority
%Moisture	M	%moisture	4/20/2020	***Normal (~10 Days)***
MERCURY-ICPMS	M	EPA 6020A	4/20/2020	***Normal (~10 Days)***

Customer Name:	HALL ENVIRONMENTAL ANALYSIS LAB			**Order ID:**	200408003
	4901 HAWKINS NE SUITE D			**Order Date:**	4/8/2020
	ALBUQUERQUE	NM	87109		
Contact Name:	ANDY FREEMAN			**Project Name:**	2003D30
Comment:					

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature of the sample(s)? (°C)	4.6
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	N/A
Are VOC samples free of headspace?	N/A
Is there a trip blank to accompany VOC samples?	N/A
Labels and chain agree?	Yes
Total number of containers?	30

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 3

200408 003 HALL Last Due 4/20/2020
1st SAMP 3/26/2020 1st RCVD 4/8/2020
2003D30

SUB CONTRATOR:	Anatek Labs	COMPANY:	Anatek Labs, Inc.	PHONE: (208) 883-2839	FAX: (208) 882-9246
ADDRESS:	1282 Alturas Dr			ACCOUNT #:	EMAIL:
CITY, STATE, ZIP:	Moscow, ID 83843				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2003D30-001B	S-11208903-032620-CN-T1	4OZGU	Soil	3/26/2020 10:35:00 AM	1	Hg by 6020
2	2003D30-002B	S-11208903-032620-CN-V1	4OZGU	Soil	3/26/2020 10:40:00 AM	1	Hg by 6020
3	2003D30-003B	S-11208903-032620-CN-T2	4OZGU	Soil	3/26/2020 11:00:00 AM	1	Hg by 6020
4	2003D30-004B	S-11208903-032620-CN-V2	4OZGU	Soil	3/26/2020 1:30:00 PM	1	Hg by 6020
5	2003D30-005B	S-11208903-032620-CN-T3	4OZGU	Soil	3/26/2020 1:40:00 PM	1	Hg by 6020
6	2003D30-006B	S-11208903-032620-CN-V3	4OZGU	Soil	3/26/2020 1:45:00 PM	1	Hg by 6020
7	2003D30-007B	S-11208903-032620-CN-T4	4OZGU	Soil	3/26/2020 1:50:00 PM	1	Hg by 6020
8	2003D30-008B	S-11208903-032620-CN-v4	4OZGU	Soil	3/26/2020 1:50:00 PM	1	Hg by 6020
9	2003D30-009B	S-11208903-032620-CN-T5	4OZGU	Soil	3/26/2020 2:05:00 PM	1	Hg by 6020
10	2003D30-010B	S-11208903-032620-CN-V5	4OZGU	Soil	3/26/2020 2:00:00 PM	1	Hg by 6020
11	2003D30-011B	S-11208903-032620-CN-T6	4OZGU	Soil	3/26/2020 2:10:00 PM	1	Hg by 6020
12	2003D30-012B	S-11208903-032620-CN-V6	4OZGU	Soil	3/26/2020 2:15:00 PM	1	Hg by 6020
13	2003D30-013B	S-11208903-032620-CN-T7	4OZGU	Soil	3/26/2020 2:25:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 4/7/2020	Time: 12:00 PM	Received By: HS	Date: 4-8-20	Time: 11:54
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples ____ °C Attempt to Cool ? ____
Comments: ____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 2 OF: 3

200408 003 HALL Last Due 4/20/2020
1st SAMP 3/26/2020 1st RCVD 4/8/2020
2003D30

SUB CONTRATOR:	Anatek Labs	COMPANY:	Anatek Labs, Inc.	PHONE: (208) 883-2839	FAX: (208) 882-9246
ADDRESS:	1282 Alturas Dr			ACCOUNT #:	EMAIL:
CITY, STATE, ZIP:	Moscow, ID 83843				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
14	2003D30-014B	S-11208903-032620-CN-V7	4OZGU	Soil	3/26/2020 2:30:00 PM	1	Hg by 6020
15	2003D30-015B	S-11208903-032620-CN-T8	4OZGU	Soil	3/26/2020 2:40:00 PM	1	Hg by 6020
16	2003D30-016B	S-11208903-032620-CN-V8	4OZGU	Soil	3/26/2020 2:50:00 PM	1	Hg by 6020
17	2003D30-017B	S-11208903-032620-CN-T9	4OZGU	Soil	3/26/2020 4:25:00 PM	1	Hg by 6020
18	2003D30-018B	S-11208903-032620-CN-V9	4OZGU	Soil	3/26/2020 4:35:00 PM	1	Hg by 6020
19	2003D30-019B	S-11208903-032620-CN-T10	4OZGU	Soil	3/26/2020 2:10:00 PM	1	Hg by 6020
20	2003D30-020B	S-11208903-032620-CN-V10	4OZGU	Soil	3/26/2020 2:15:00 PM	1	Hg by 6020
21	2003D30-021B	S-11208903-032620-CN-T11	4OZGU	Soil	3/26/2020 3:35:00 PM	1	Hg by 6020
22	2003D30-022B	S-11208903-032620-CN-V11	4OZGU	Soil	3/26/2020 3:40:00 PM	1	Hg by 6020
23	2003D30-023B	S-11208903-032620-CN-T12	4OZGU	Soil	3/26/2020 3:20:00 PM	1	Hg by 6020
24	2003D30-024B	S-11208903-032620-CN-V12	4OZGU	Soil	3/26/2020 3:25:00 PM	1	Hg by 6020
25	2003D30-025B	S-11208903-032620-CN-T13	4OZGU	Soil	3/26/2020 3:05:00 PM	1	Hg by 6020
26	2003D30-026B	S-11208903-032620-CN-V13	4OZGU	Soil	3/26/2020 3:00:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 4/7/2020	Time: 12:00 PM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples ℃ Attempt to Cool?
Comments:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 3 OF: 3

200408 003 HALL Last Due 4/20/2020

1st SAMP 3/26/2020 1st RCVD 4/8/2020

2003D30

www.hallenvironmental.com

SUB CONTRATOR: Anatek Labs	COMPANY: Anatek Labs, Inc.		PHONE: (208) 883-2839	FAX: (208) 882-9246	
ADDRESS: 1282 Alturas Dr			ACCOUNT #:	EMAIL:	
CITY, STATE, ZIP: Moscow, ID 83843					

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
27	2003D30-027B	S-11208903-032620-CN-T14	4OZGU	Soil	3/26/2020 3:10:00 PM	1	Hg by 6020
28	2003D30-028B	S-11208903-032620-CN-V14	4OZGU	Soil	3/26/2020 3:15:00 PM	1	Hg by 6020
29	2003D30-029B	S-11208903-032620-CN-T15	4OZGU	Soil	3/26/2020 4:00:00 PM	1	Hg by 6020
30	2003D30-030B	S-11208903-032620-CN-V15	4OZGU	Soil	3/26/2020 4:05:00 PM	1	Hg by 6020

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 4/7/2020	Time: 12:00 PM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples ____ °C Attempt to Cool ? ____

Comments: ____

Hannah Sullivan

From: Andy Freeman <andy@hallenvironmental.com>
Sent: Wednesday, April 8, 2020 1:45 PM
To: Hannah Sullivan
Subject: RE: Sample ID issue

Hi Hannah,

It is fine to use the A jars. You can log in as A.

We have two different jars per sample. A and B. We just sent the A instead of B. They are the same thing.

Thank you,

Andy Freeman - Hall Environmental, 4901 Hawkins NE, Albuquerque, NM 87109, 505-345-3975, 505-345-4107 fax
www.hallenvironmental.com - andy@hallenvironmental.com - https://www.surveymonkey.com/r/NGVXRBV

For easy access to all of your past reports, setup an account on the Hall Environmental Web Portal. Just visit our website and follow the instructions for setting up an account.
We welcome your feedback. Please visit the survey monkey link to complete a brief survey on your experience with Hall Environmental.

From: Hannah Sullivan <hannahs@anateklabs.com>
Sent: Wednesday, April 8, 2020 2:42 PM
To: Andy Freeman <andy@hallenvironmental.com>
Subject: Sample ID issue

Hi Andy,

We received the thirty soil samples for Hg 6020 analysis and have just a slight issue with the labels. The chain lists them as 2003D30-001B through -030B, but the jars all have -001A through -030A instead. The sample time and client IDs match exactly for all 30 though, so I wanted to check and see if that was a typo.

Thanks!

Hannah Sullivan
Shipping & Receiving
Anatek Labs, Inc
1282 Alturas Dr
Moscow, ID 83843
(208) 883-2839

Notice of Confidentiality

This message contains confidential information intended exclusively for the intended recipient. This message should not be forwarded to any other party. Use or disclosure of information transmitted in error is prohibited. Please delete the message along with any attachments and alert the sender by return e-mail if this message was received in error.

Anatek Labs, Inc.

Sample Receipt and Preservation Form

200408 003 **HALL** Last Due 4/20/2020

1st SAMP 3/26/2020 1st RCVD 4/8/2020

Client Name: Hall Project: 2003D30

TAT: (Normal) RUSH: _____ days

Samples Received From: (FedEx) UPS USPS Client Courier Other: _____

Custody Seal on Cooler/Box: (Yes) No Custody Seals Intact: (Yes) No N/A

Number of Coolers/Boxes: 1 Type of Ice: Ice/(Ice Packs) Blue Ice Dry Ice None

Packing Material: (Bubble Wrap) Bags Foam/Peanuts (None) Other: paper

Cooler Temp As Read (°C): 4.6 Cooler Temp Corrected (°C): 4.6 Thermometer Used: IR-3

				Comments:
Samples Received Intact?	(Yes)	No	N/A	
Chain of Custody Present?	(Yes)	No	N/A	
Samples Received Within Hold Time?	(Yes)	No	N/A	
Samples Properly Preserved?	Yes	No	(N/A)	
VOC Vials Free of Headspace (<6mm)?	Yes	No	(N/A)	
VOC Trip Blanks Present?	Yes	No	(N/A)	
Labels and Chains Agree?	(Yes)	(No)	N/A	chain lists - XXXB, containers - XXXA
Total Number of Sample Bottles Received: 30				client ID is the same though. probably a typo, but will email to double check
Chain of Custody Fully Completed?	(Yes)	No	N/A	
Correct Containers Received?	(Yes)	No	N/A	
Anatek Bottles Used?	Yes	(No)	Unknown	

Record preservatives (and lot numbers, if known) for containers below:

None

Notes, comments, etc. (also use this space if contacting the client - record names and date/time)

see attached email HB

Received/Inspected By: HB Date/Time: 4-8-20 11:54

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-51532**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51532**	RunNo: **67815**							
Prep Date: **4/3/2020**	Analysis Date: **4/3/2020**	SeqNo: **2342819**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51532**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51532**	RunNo: **67815**							
Prep Date: **4/3/2020**	Analysis Date: **4/3/2020**	SeqNo: **2342820**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: **MB-51558**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51558**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343754**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51558**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51558**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343755**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			

Sample ID: **MB-51561**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51561**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343786**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51561**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51561**	RunNo: **67852**							
Prep Date: **4/4/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343787**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
10-Jun-20

Client: GHD
Project: Jal Landfarm

Sample ID: **LCS-51498**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51498**	RunNo: **67841**
Prep Date: **4/1/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343245** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	93.0	70	130			
Surr: DNOP	4.4		5.000		88.7	55.1	146			

Sample ID: **MB-51498**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51498**	RunNo: **67841**
Prep Date: **4/1/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343246** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		82.4	55.1	146			

Sample ID: **MB-51523**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51523**	RunNo: **67837**
Prep Date: **4/2/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343707** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		105	55.1	146			

Sample ID: **LCS-51523**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51523**	RunNo: **67837**
Prep Date: **4/2/2020**	Analysis Date: **4/4/2020**	SeqNo: **2343709** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	70	130			
Surr: DNOP	4.3		5.000		86.3	55.1	146			

Sample ID: **2003D30-011AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-11208903-032620-**	Batch ID: **51523**	RunNo: **67858**
Prep Date: **4/2/2020**	Analysis Date: **4/5/2020**	SeqNo: **2344533** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	9.2	45.87	0	119	47.4	136			
Surr: DNOP	5.1		4.587		111	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **2003D30-011AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-11208903-032620-** Batch ID: **51523** RunNo: **67858**

Prep Date: **4/2/2020** Analysis Date: **4/5/2020** SeqNo: **2344534** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	68	9.9	49.60	0	137	47.4	136	21.6	43.4	S
Surr: DNOP	5.8		4.960		118	55.1	146	0	0	

Sample ID: **2003D30-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-11208903-032620-** Batch ID: **51498** RunNo: **67874**

Prep Date: **4/1/2020** Analysis Date: **4/6/2020** SeqNo: **2344753** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	66	9.6	47.89	22.36	91.5	47.4	136			
Surr: DNOP	5.1		4.789		107	55.1	146			

Sample ID: **2003D30-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **S-11208903-032620-** Batch ID: **51498** RunNo: **67874**

Prep Date: **4/1/2020** Analysis Date: **4/6/2020** SeqNo: **2344756** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.7	48.69	22.36	73.4	47.4	136	13.0	43.4	
Surr: DNOP	4.4		4.869		91.4	55.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
10-Jun-20

Client: GHD
Project: Jal Landfarm

Sample ID: **mb-51485** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **51485** RunNo: **67805**
Prep Date: **4/1/2020** Analysis Date: **4/2/2020** SeqNo: **2342066** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.9	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.4	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.4	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

Sample ID: **lcs-51485** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS** Batch ID: **51485** RunNo: **67805**
Prep Date: **4/1/2020** Analysis Date: **4/2/2020** SeqNo: **2342067** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	70	130			
Toluene	1.1	0.050	1.000	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.3	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID: **mb-51487** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **51487** RunNo: **67881**
Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345162** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.2	70	130			
Surr: Toluene-d8	0.49		0.5000		98.8	70	130			

Sample ID: **lcs-51487** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **51487** RunNo: **67881**
Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345164** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **lcs-51487** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **51487** RunNo: **67881**

Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345164** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.6	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	0.48		0.5000		97.0	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID: **2003d30-011ams** SampType: **MS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **S-11208903-032620-** Batch ID: **51487** RunNo: **67881**

Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345169** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	0.9852	0	86.5	80	120			
Toluene	0.95	0.049	0.9852	0	96.6	80	120			
Ethylbenzene	0.99	0.049	0.9852	0	100	80	120			
Xylenes, Total	2.9	0.099	2.956	0	97.6	80	120			
Surr: 4-Bromofluorobenzene	0.45		0.4926		92.0	70	130			
Surr: Toluene-d8	0.48		0.4926		96.5	70	130			

Sample ID: **2003d30-011amsd** SampType: **MSD4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **S-11208903-032620-** Batch ID: **51487** RunNo: **67881**

Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345171** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.023	0.9200	0	89.1	80	120	3.83	20	
Toluene	0.94	0.046	0.9200	0	102	80	120	1.02	20	
Ethylbenzene	0.98	0.046	0.9200	0	106	80	120	1.03	20	
Xylenes, Total	2.8	0.092	2.760	0	102	80	120	2.43	20	
Surr: 4-Bromofluorobenzene	0.44		0.4600		96.6	70	130	0	0	
Surr: Toluene-d8	0.45		0.4600		98.4	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **LCS-51507**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **51507**	RunNo: **67877**
Prep Date: ***4/2/2020***	Analysis Date: ***4/6/2020***	SeqNo: **2345006** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	22	2.5	25.00	0	88.5	80	120			
Barium	24	0.10	25.00	0	95.4	80	120			
Beryllium	24	0.15	25.00	0	95.9	80	120			
Cadmium	24	0.10	25.00	0	96.2	80	120			
Chromium	24	0.30	25.00	0	96.2	80	120			
Copper	26	0.40	25.00	0	105	80	120			
Iron	26	2.5	25.00	0	104	80	120			B
Lead	23	0.30	25.00	0	92.9	80	120			
Manganese	24	0.20	25.00	0	96.1	80	120			
Selenium	23	2.5	25.00	0	90.9	80	120			
Silver	4.4	0.25	5.000	0	87.3	80	120			
Zinc	24	2.5	25.00	0	95.9	80	120			

Sample ID: **MB-51507**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51507**	RunNo: **67877**
Prep Date: ***4/2/2020***	Analysis Date: ***4/6/2020***	SeqNo: **2345007** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	3.6	2.5								

Sample ID: **MB-51507**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51507**	RunNo: **67877**
Prep Date: ***4/2/2020***	Analysis Date: ***4/6/2020***	SeqNo: **2345024** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.40								
Lead	ND	0.30								
Manganese	ND	0.20								
Selenium	ND	2.5								
Silver	ND	0.25								
Zinc	ND	2.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-51507**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345681** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Thallium	ND	2.5								

Sample ID: **LCS-51507**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345683** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.7	80	120			
Thallium	23	2.5	25.00	0	93.3	80	120			

Sample ID: **2003D30-024AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345724** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	25.24	0	0	75	125			S
Barium	82	0.20	25.24	60.30	86.0	75	125			
Beryllium	26	0.30	25.24	0.6851	102	75	125			
Cadmium	24	0.20	25.24	0	96.5	75	125			
Chromium	35	0.61	25.24	9.932	100	75	125			
Copper	28	0.81	25.24	2.618	99.9	75	125			
Manganese	86	0.40	25.24	134.1	-191	75	125			S
Selenium	21	5.0	25.24	0	83.8	75	125			
Silver	2.8	0.50	5.047	0	55.4	75	125			S
Thallium	ND	5.0	25.24	0	0	75	125			S
Zinc	49	5.0	25.24	23.18	102	75	125			

Sample ID: **2003D30-024AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67877**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345725** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	4.8	24.00	0	18.2	75	125	0	20	RS
Barium	94	0.19	24.00	60.30	139	75	125	13.3	20	S
Beryllium	24	0.29	24.00	0.6851	97.6	75	125	9.06	20	
Cadmium	23	0.19	24.00	0	94.3	75	125	7.32	20	
Chromium	34	0.58	24.00	9.932	98.4	75	125	4.96	20	
Copper	28	0.77	24.00	2.618	106	75	125	0.414	20	
Manganese	74	0.38	24.00	134.1	-249	75	125	14.5	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
10-Jun-20

Client: GHD
Project: Jal Landfarm

Sample ID: **2003D30-024AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-** Batch ID: **51507** RunNo: **67877**
Prep Date: **4/2/2020** Analysis Date: **4/6/2020** SeqNo: **2345725** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	19	4.8	24.00	0	78.3	75	125	11.9	20	
Silver	2.8	0.48	4.799	0	58.8	75	125	0.821	20	S
Thallium	ND	4.8	24.00	0	0	75	125	0	20	S
Zinc	46	4.8	24.00	23.18	95.6	75	125	6.16	20	

Sample ID: **LCS-51629** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **51629** RunNo: **67961**
Prep Date: **4/7/2020** Analysis Date: **4/8/2020** SeqNo: **2348144** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.0	80	120			
Arsenic	24	2.5	25.00	0	95.9	80	120			
Barium	24	0.10	25.00	0	96.5	80	120			
Beryllium	25	0.15	25.00	0	102	80	120			
Cadmium	24	0.10	25.00	0	95.5	80	120			
Chromium	24	0.30	25.00	0	96.9	80	120			
Copper	26	0.40	25.00	0	102	80	120			B
Iron	27	2.5	25.00	0	107	80	120			
Lead	24	0.30	25.00	0	97.3	80	120			
Manganese	24	0.20	25.00	0	97.7	80	120			
Selenium	25	2.5	25.00	0	98.6	80	120			
Silver	4.7	0.25	5.000	0	93.0	80	120			
Thallium	24	2.5	25.00	0	95.5	80	120			
Uranium	25	5.0	25.00	0	101	80	120			
Zinc	23	2.5	25.00	0	93.9	80	120			

Sample ID: **MB-51629** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **51629** RunNo: **67961**
Prep Date: **4/7/2020** Analysis Date: **4/8/2020** SeqNo: **2348146** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	0.45	0.40								
Iron	ND	2.5								
Lead	ND	0.30								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-51629**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51629**	RunNo: **67961**
Prep Date: **4/7/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348146** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	ND	0.20								
Selenium	ND	2.5								
Silver	ND	0.25								
Thallium	ND	2.5								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID: **MB-51507**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348150** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	5.0								

Sample ID: **LCS-51507**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348151** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	25	5.0	25.00	0	99.3	80	120			

Sample ID: **2003D30-024AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348224** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	24	0.61	25.24	0	96.1	75	125			
Uranium	ND	10	25.24	0	0	75	125			S

Sample ID: **2003D30-024AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	22	0.58	24.00	0	91.0	75	125	10.4	20	
Uranium	ND	9.6	24.00	0	0	75	125	0	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **2003D30-024AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348264** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	42	5.0	25.24	12.40	117	75	125			

Sample ID: **2003D30-024AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **S-11208903-032620-**	Batch ID: **51507**	RunNo: **67961**
Prep Date: **4/2/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	28	4.8	24.00	12.40	64.4	75	125	40.3	20	RS

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**

10-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **mb-51485**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51485**	RunNo: **67805**
Prep Date: **4/1/2020**	Analysis Date: **4/2/2020**	SeqNo: **2342171** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	470		500.0		94.7	70	130			

Sample ID: **lcs-51485**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51485**	RunNo: **67805**
Prep Date: **4/1/2020**	Analysis Date: **4/2/2020**	SeqNo: **2342172** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.5	70	130			
Surr: BFB	490		500.0		98.5	70	130			

Sample ID: **mb-51487**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345213** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		98.6	70	130			

Sample ID: **lcs-51487**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345214** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.2	70	130			
Surr: BFB	500		500.0		99.3	70	130			

Sample ID: **2003d30-012ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-032620-**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345218** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.37	0	93.0	70	130			
Surr: BFB	480		487.3		98.2	70	130			

Sample ID: **2003d30-012amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-032620-**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003D30**
10-Jun-20

Client: GHD
Project: Jal Landfarm

Sample ID: **2003d30-012amsd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-032620-** Batch ID: **51487** RunNo: **67881**
Prep Date: **4/1/2020** Analysis Date: **4/6/2020** SeqNo: **2345219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.32	0	98.2	70	130	1.05	20	
Surr: BFB	470		466.4		101	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 2003D30 | RcptNo: 1

Received By: **Isaiah Ortiz** 3/31/2020 8:50:00 AM I-Ot

Completed By: **John Caldwell** 3/31/2020 1:19:52 PM JohnCaldwell

Reviewed By: LB 3/31/2020 LB 4/1/2020

Chain of Custody

1. Is Chain of Custody sufficiently complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	FedEx		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 4/1/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified:	Christine Matthews
Date	4/7/20
By Whom:	Leah Baca
Via:	☒ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	switched collection times on labels for -005, -006
Client Instructions:	Go with the collection times on COC

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good				
2	0.4	Good				

Chain-of-Custody Record

Client:	CHD Services
Mailing Address:	6121 Indian School Rd NE #200 Albuquerque NM, 87110
Phone #:	5058840672
email or Fax#:	
QA/QC Package:	☐ Standard ☐ Level 4 (Full Validation)
Accreditation:	☐ NELAP ☐ Other
☐ EDD (Type)	

Turn-Around Time:	☐ XStandard ☐ Rush
Project Name:	Jal Landfarm
Project #:	11208903
Project Manager:	Christine Mathews
Sampler:	CN
On Ice:	☒ XYes ☐ No
Sample Temperature:	0.1-0.1/CF/0.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2003030	8021 BTEX	8015 TPH GRO DRO ORO	300.0 Chloride	6010 Metals (see notes)	6020 Mercury	Air Bubbles (Y or N)
3/26/2020	1035	S	S-11208903-032620-CN-T1	Various	none	-001	X	X	X	X	X	
3/26/2020	1040	S	S-11208903-032620-CN-V1	Various	none	-002	X	X	X	X	X	
3/26/2020	1100	S	S-11208903-032620-CN-T2	Various	none	-003	X	X	X	X	X	
3/26/2020	1330	S	S-11208903-032620-CN-V2	Various	none	-004	X	X	X	X	X	
3/26/2020	1340	S	S-11208903-032620-CN-T3	Various	none	-005	X	X	X	X	X	
3/26/2020	1345	S	S-11208903-032620-CN-V3	Various	none	-006	X	X	X	X	X	
3/26/2020	1350	S	S-11208903-032620-CN-T4	Various	none	-007	X	X	X	X	X	
3/26/2020	1350	S	S-11208903-032620-CN-V4	Various	none	-008	X	X	X	X	X	
3/26/2020	1405	S	S-11208903-032620-CN-T5	Various	none	-009	X	X	X	X	X	
3/26/2020	1400	S	S-11208903-032620-CN-V5	Various	none	-010	X	X	X	X	X	
3/26/2020	1410	S	S-11208903-032620-CN-T6	Various	none	-011	X	X	X	X	X	
3/26/2020	1415	S	S-11208903-032620-CN-V6	Various	none	-012	X	X	X	X	X	

Date	Time	Relinquished by:	Received by:	Date	Time
3-30-20	0930		FedEx	3/31/20	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Metals List: Sb, AS, Ba, Be, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Tl (thallium), Zn, Hg, U

1/2 coolers 0.2-0.1/CF/0.1

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

* Samples -005 and -006 were swapped by CHD in field. (TS) (V3) Revise Report per cm. JWB 6/10/20

Chain-of-Custody Record

Client: CHD Services	Turn-Around Time: ☐ XStandard ☐ Rush
	Project Name: Jal Landfarm
Mailing Address: 6121 Indian School Rd NE #200	
Albuquerque NM, 87110	Project #: 11208903
Phone #: 5058840672	
email or Fax#:	Project Manager: Christine Mathews
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other	Sampler: CN
	On Ice: ☒ XYes ☐ No
☐ EDD (Type)	Sample Temperature: 0.1-0.1(F) 0.0(C) 0.5-0.1(C) 0.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2003D30	Analysis Request: 8021 BTEX	8015 TPH GRO DRO ORO	300.0 Chloride	6010 Metals (see notes)	6020 Mercury	Air Bubbles (Y or N)
3/26/2020	1425	S	S-11208903-032620-CN-T7	Various	none	-013	X	X	X	X	X	
3/26/2020	1430	S	S-11208903-032620-CN-V7	Various	none	-014	X	X	X	X	X	
3/26/2020	1440	S	S-11208903-032620-CN-T8	Various	none	-015	X	X	X	X	X	
3/26/2020	1450	S	S-11208903-032620-CN-V8	Various	none	-016	X	X	X	X	X	
3/26/2020	1625	S	S-11208903-032620-CN-T9	Various	none	-017	X	X	X	X	X	
3/26/2020	1635	S	S-11208903-032620-CN-V9	Various	none	-018	X	X	X	X	X	
3/26/2020	1610	S	S-11208903-032620-CN-T10	Various	none	-019	X	X	X	X	X	
3/26/2020	1615	S	S-11208903-032620-CN-V10	Various	none	-020	X	X	X	X	X	
3/26/2020	1535	S	S-11208903-032620-CN-T11	Various	none	-021	X	X	X	X	X	
3/26/2020	1540	S	S-11208903-032620-CN-V11	Various	none	-022	X	X	X	X	X	
3/26/2020	1525	S	S-11208903-032620-CN-T12	Various	none	-023	X	X	X	X	X	
3/26/2020	1525	S	S-11208903-032620-CN-V12	Various	none	-024	X	X	X	X	X	

Date: 3/30/20	Time: 0820	Relinquished by:	Received by:	Date	Time
			Fedex	3/31/20	0850
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Metals List: Sb, AS, Ba, Be, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Tl (thallium), Zn, Hg, U

2/3 coolers

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: CHD Services	Turn-Around Time: ☐ XStandard ☐ Rush
	Project Name: Jal Landfarm
Mailing Address: 6121 Indian School Rd NE #200 Albuquerque NM, 87110	Project #: 11208903
Phone #: 5058840672	
email or Fax#:	Project Manager: Christine Mathews
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other ☐ EDD (Type)	Sampler: CN On Ice: ☐ XYes ☐ No Sample Temperature: 0.1-0.1|CF|0.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	0.5-0.1|CF|0.4 HEAL No. 2003D30	8021 BTEX	8015 TPH GRO DRO ORO	300.0 Chloride	6010 Metals (see notes)	6020 Mercury	Air Bubbles (Y or N)
3/26/2020	1565	S	S-11208903-032620-CN-T13	Various	none	-025	X	X	X	X	X	
3/26/2020	1500	S	S-11208903-032620-CN-V13	Various	none	-026	X	X	X	X	X	
3/26/2020	1510	S	S-11208903-032620-CN-T14	Various	none	-027	X	X	X	X	X	
3/26/2020	1515	S	S-11208903-032620-CN-V14	Various	none	-028	X	X	X	X	X	
3/26/2020	1600	S	S-11208903-032620-CN-T15	Various	none	-029	X	X	X	X	X	
3/26/2020	1605	S	S-11208903-032620-CN-V15	Various	none	-030	X	X	X	X	X	

Date: 3.30.20	Time: 0930	Relinquished by:	Received by: FedEx	Date: 3/31/20	Time: 0850
Date:	Time:	Relinquished by:	Received by:	Date:	Time:

Remarks:
Metals List: Sb, AS, Ba, Be, Cd, Cr, Cu, Fe, Mn, Pb, Se, Ag, Tl (thallium), Zn, Hg, U

3/3 coolers. 0.2-0.1|CF|0.1°C

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 09, 2020

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX:

RE: Jal Landfarm OrderNo.: 2005A04

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 23 sample(s) on 5/22/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-001
Collection Date: 5/20/2020 9:45:00 AM
Client Sample ID: S-11208903-052020-CN-V1
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/2/2020 12:27:02 PM	52801
Iron	0.16	0.050		mg/L	1	6/2/2020 12:27:02 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/28/2020 1:13:40 AM	52680
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/28/2020 1:13:40 AM	52680
Surr: DNOP	92.2	55.1-146		%Rec	1	5/28/2020 1:13:40 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2020 12:18:49 AM	52672
Surr: BFB	90.7	66.6-105		%Rec	1	5/27/2020 12:18:49 AM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/27/2020 12:18:49 AM	52672
Toluene	ND	0.049		mg/Kg	1	5/27/2020 12:18:49 AM	52672
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2020 12:18:49 AM	52672
Xylenes, Total	ND	0.097		mg/Kg	1	5/27/2020 12:18:49 AM	52672
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/27/2020 12:18:49 AM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-002
Collection Date: 5/20/2020 9:55:00 AM
Client Sample ID: S-11208903-052020-CN-V2
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/2/2020 12:29:05 PM	52801
Iron	ND	0.050		mg/L	1	6/2/2020 12:29:05 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/28/2020 2:02:50 AM	52680
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/28/2020 2:02:50 AM	52680
Surr: DNOP	88.4	55.1-146		%Rec	1	5/28/2020 2:02:50 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2020 1:29:01 AM	52672
Surr: BFB	88.4	66.6-105		%Rec	1	5/27/2020 1:29:01 AM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 1:29:01 AM	52672
Toluene	ND	0.050		mg/Kg	1	5/27/2020 1:29:01 AM	52672
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2020 1:29:01 AM	52672
Xylenes, Total	ND	0.10		mg/Kg	1	5/27/2020 1:29:01 AM	52672
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/27/2020 1:29:01 AM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-003
Collection Date: 5/20/2020 10:05:00 AM
Client Sample ID: S-11208903-052020-CN-V3
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/2/2020 12:31:11 PM	52801
Iron	0.24	0.050		mg/L	1	6/2/2020 12:31:11 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	5/28/2020 2:27:22 AM	52680
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	5/28/2020 2:27:22 AM	52680
Surr: DNOP	90.4	55.1-146		%Rec	1	5/28/2020 2:27:22 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2020 2:39:08 AM	52672
Surr: BFB	88.3	66.6-105		%Rec	1	5/27/2020 2:39:08 AM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/27/2020 2:39:08 AM	52672
Toluene	ND	0.049		mg/Kg	1	5/27/2020 2:39:08 AM	52672
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2020 2:39:08 AM	52672
Xylenes, Total	ND	0.097		mg/Kg	1	5/27/2020 2:39:08 AM	52672
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/27/2020 2:39:08 AM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-004
Collection Date: 5/20/2020 10:25:00 AM
Client Sample ID: S-11208903-052020-CN-V4
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/2/2020 12:33:12 PM	52801
Iron	0.054	0.050		mg/L	1	6/2/2020 12:33:12 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/28/2020 2:51:54 AM	52680
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/28/2020 2:51:54 AM	52680
Surr: DNOP	89.7	55.1-146		%Rec	1	5/28/2020 2:51:54 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2020 3:02:41 AM	52672
Surr: BFB	88.6	66.6-105		%Rec	1	5/27/2020 3:02:41 AM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/27/2020 3:02:41 AM	52672
Toluene	ND	0.048		mg/Kg	1	5/27/2020 3:02:41 AM	52672
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2020 3:02:41 AM	52672
Xylenes, Total	ND	0.096		mg/Kg	1	5/27/2020 3:02:41 AM	52672
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	5/27/2020 3:02:41 AM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-005
Collection Date: 5/20/2020 10:40:00 AM
Client Sample ID: S-11208903-052020-CN-V5
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	0.10	0.050		mg/L	1	6/2/2020 12:35:18 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/28/2020 3:16:24 AM	52680
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/28/2020 3:16:24 AM	52680
Surr: DNOP	83.3	55.1-146		%Rec	1	5/28/2020 3:16:24 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2020 3:26:21 AM	52672
Surr: BFB	86.3	66.6-105		%Rec	1	5/27/2020 3:26:21 AM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/27/2020 3:26:21 AM	52672
Toluene	ND	0.048		mg/Kg	1	5/27/2020 3:26:21 AM	52672
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2020 3:26:21 AM	52672
Xylenes, Total	ND	0.096		mg/Kg	1	5/27/2020 3:26:21 AM	52672
Surr: 4-Bromofluorobenzene	98.5	80-120		%Rec	1	5/27/2020 3:26:21 AM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-006
Collection Date: 5/20/2020 11:05:00 AM
Client Sample ID: S-11208903-052020-CN-V6
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/2/2020 12:37:16 PM	52801
Iron	ND	0.050		mg/L	1	6/2/2020 12:37:16 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	5/28/2020 3:40:53 AM	52680
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	5/28/2020 3:40:53 AM	52680
Surr: DNOP	83.3	55.1-146		%Rec	1	5/28/2020 3:40:53 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2020 3:50:04 AM	52672
Surr: BFB	85.5	66.6-105		%Rec	1	5/27/2020 3:50:04 AM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 3:50:04 AM	52672
Toluene	ND	0.050		mg/Kg	1	5/27/2020 3:50:04 AM	52672
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2020 3:50:04 AM	52672
Xylenes, Total	ND	0.099		mg/Kg	1	5/27/2020 3:50:04 AM	52672
Surr: 4-Bromofluorobenzene	97.7	80-120		%Rec	1	5/27/2020 3:50:04 AM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2005A04
Project: Jal Landfarm

Lab ID: 2005A04-007 **Collection Date:** 5/20/2020 12:55:00 PM
Client Sample ID: S-11208903-052020-CN-V7 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	0.088	0.050		mg/L	1	6/2/2020 12:39:14 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/28/2020 4:05:23 AM	52680
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/28/2020 4:05:23 AM	52680
Surr: DNOP	85.4	55.1-146		%Rec	1	5/28/2020 4:05:23 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2020 4:13:45 AM	52672
Surr: BFB	87.2	66.6-105		%Rec	1	5/27/2020 4:13:45 AM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/27/2020 4:13:45 AM	52672
Toluene	ND	0.049		mg/Kg	1	5/27/2020 4:13:45 AM	52672
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2020 4:13:45 AM	52672
Xylenes, Total	ND	0.098		mg/Kg	1	5/27/2020 4:13:45 AM	52672
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	5/27/2020 4:13:45 AM	52672

Lab ID: 2005A04-008 **Collection Date:** 5/21/2020 9:00:00 AM
Client Sample ID: S-11208903-052120-CN-V8 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	0.23	0.050		mg/L	1	6/2/2020 12:41:20 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/28/2020 4:29:50 AM	52680
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/28/2020 4:29:50 AM	52680
Surr: DNOP	85.3	55.1-146		%Rec	1	5/28/2020 4:29:50 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2020 4:01:44 PM	52672
Surr: BFB	92.2	66.6-105		%Rec	1	5/27/2020 4:01:44 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 4:01:44 PM	52672
Toluene	ND	0.049		mg/Kg	1	5/27/2020 4:01:44 PM	52672
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2020 4:01:44 PM	52672
Xylenes, Total	ND	0.098		mg/Kg	1	5/27/2020 4:01:44 PM	52672
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/27/2020 4:01:44 PM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2005A04
Project: Jal Landfarm

Lab ID: 2005A04-009 **Collection Date:** 5/21/2020 12:30:00 PM
Client Sample ID: S-11208903-052120-CN-V9 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/28/2020 4:54:09 AM	52680
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/28/2020 4:54:09 AM	52680
Surr: DNOP	75.5	55.1-146		%Rec	1	5/28/2020 4:54:09 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2020 4:25:19 PM	52672
Surr: BFB	89.8	66.6-105		%Rec	1	5/27/2020 4:25:19 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/27/2020 4:25:19 PM	52672
Toluene	ND	0.048		mg/Kg	1	5/27/2020 4:25:19 PM	52672
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2020 4:25:19 PM	52672
Xylenes, Total	ND	0.097		mg/Kg	1	5/27/2020 4:25:19 PM	52672
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/27/2020 4:25:19 PM	52672

Lab ID: 2005A04-010 **Collection Date:** 5/21/2020 12:15:00 PM
Client Sample ID: S-11208903-052120-CN-V10 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	0.92	0.050		mg/L	1	6/2/2020 12:53:02 PM	52801
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	5/28/2020 5:18:08 AM	52680
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	5/28/2020 5:18:08 AM	52680
Surr: DNOP	77.0	55.1-146		%Rec	1	5/28/2020 5:18:08 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2020 4:48:55 PM	52672
Surr: BFB	93.9	66.6-105		%Rec	1	5/27/2020 4:48:55 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/27/2020 4:48:55 PM	52672
Toluene	ND	0.049		mg/Kg	1	5/27/2020 4:48:55 PM	52672
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2020 4:48:55 PM	52672
Xylenes, Total	ND	0.098		mg/Kg	1	5/27/2020 4:48:55 PM	52672
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	5/27/2020 4:48:55 PM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-011
Collection Date: 5/21/2020 1:05:00 PM
Client Sample ID: S-11208903-052120-CN-V11
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/3/2020 10:57:28 AM	52822
Iron	ND	0.050		mg/L	1	6/3/2020 8:30:17 AM	52822
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/28/2020 5:42:02 AM	52680
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/28/2020 5:42:02 AM	52680
Surr: DNOP	83.8	55.1-146		%Rec	1	5/28/2020 5:42:02 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2020 5:12:39 PM	52672
Surr: BFB	88.2	66.6-105		%Rec	1	5/27/2020 5:12:39 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 5:12:39 PM	52672
Toluene	ND	0.049		mg/Kg	1	5/27/2020 5:12:39 PM	52672
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2020 5:12:39 PM	52672
Xylenes, Total	ND	0.099		mg/Kg	1	5/27/2020 5:12:39 PM	52672
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	5/27/2020 5:12:39 PM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2005A04
Project: Jal Landfarm

Lab ID: 2005A04-012 **Collection Date:** 5/21/2020 1:25:00 PM
Client Sample ID: S-11208903-052120-CN-V12 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/3/2020 11:01:13 AM	52822
Iron	0.061	0.050		mg/L	1	6/3/2020 8:36:16 AM	52822
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/28/2020 6:05:58 AM	52680
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/28/2020 6:05:58 AM	52680
Surr: DNOP	80.6	55.1-146		%Rec	1	5/28/2020 6:05:58 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2020 5:36:17 PM	52672
Surr: BFB	89.3	66.6-105		%Rec	1	5/27/2020 5:36:17 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 5:36:17 PM	52672
Toluene	ND	0.050		mg/Kg	1	5/27/2020 5:36:17 PM	52672
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2020 5:36:17 PM	52672
Xylenes, Total	ND	0.099		mg/Kg	1	5/27/2020 5:36:17 PM	52672
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/27/2020 5:36:17 PM	52672

Lab ID: 2005A04-013 **Collection Date:** 5/21/2020 1:40:00 PM
Client Sample ID: S-11208903-052120-CN-V13 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/28/2020 6:29:52 AM	52680
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/28/2020 6:29:52 AM	52680
Surr: DNOP	82.7	55.1-146		%Rec	1	5/28/2020 6:29:52 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2020 5:59:48 PM	52672
Surr: BFB	89.2	66.6-105		%Rec	1	5/27/2020 5:59:48 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 5:59:48 PM	52672
Toluene	ND	0.050		mg/Kg	1	5/27/2020 5:59:48 PM	52672
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2020 5:59:48 PM	52672
Xylenes, Total	ND	0.10		mg/Kg	1	5/27/2020 5:59:48 PM	52672
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/27/2020 5:59:48 PM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-014
Collection Date: 5/21/2020 1:55:00 PM
Client Sample ID: S-11208903-052120-CN-V14
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Arsenic	ND	5.0		mg/L	1	6/8/2020 9:24:47 AM	52936
Iron	0.078	0.050		mg/L	1	6/8/2020 9:24:47 AM	52936
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/28/2020 6:53:51 AM	52680
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	5/28/2020 6:53:51 AM	52680
Surr: DNOP	77.6	55.1-146		%Rec	1	5/28/2020 6:53:51 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2020 6:23:20 PM	52672
Surr: BFB	89.4	66.6-105		%Rec	1	5/27/2020 6:23:20 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 6:23:20 PM	52672
Toluene	ND	0.049		mg/Kg	1	5/27/2020 6:23:20 PM	52672
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2020 6:23:20 PM	52672
Xylenes, Total	ND	0.098		mg/Kg	1	5/27/2020 6:23:20 PM	52672
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/27/2020 6:23:20 PM	52672

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2005A04
Project: Jal Landfarm

Lab ID: 2005A04-015 **Collection Date:** 5/21/2020 12:50:00 PM
Client Sample ID: S-11208903-052120-CN-V15 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	0.095	0.050		mg/L	1	6/3/2020 8:38:13 AM	52822
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/28/2020 7:17:49 AM	52680
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/28/2020 7:17:49 AM	52680
Surr: DNOP	76.1	55.1-146		%Rec	1	5/28/2020 7:17:49 AM	52680
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2020 6:46:51 PM	52672
Surr: BFB	88.7	66.6-105		%Rec	1	5/27/2020 6:46:51 PM	52672
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/27/2020 6:46:51 PM	52672
Toluene	ND	0.050		mg/Kg	1	5/27/2020 6:46:51 PM	52672
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2020 6:46:51 PM	52672
Xylenes, Total	ND	0.099		mg/Kg	1	5/27/2020 6:46:51 PM	52672
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	5/27/2020 6:46:51 PM	52672

Lab ID: 2005A04-016 **Collection Date:** 5/20/2020 8:55:00 AM
Client Sample ID: S-11208903-052120-CN-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	6/3/2020 8:40:10 AM	52822

Lab ID: 2005A04-017 **Collection Date:** 5/20/2020 9:00:00 AM
Client Sample ID: S-11208903-052120-CN-T2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	0.064	0.050		mg/L	1	6/3/2020 8:42:06 AM	52822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2005A04
Project: Jal Landfarm

Lab ID: 2005A04-018 **Collection Date:** 5/20/2020 9:05:00 AM
Client Sample ID: S-11208903-052120-CN-T3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	6/3/2020 8:50:11 AM	52822

Lab ID: 2005A04-019 **Collection Date:** 5/20/2020 9:10:00 AM
Client Sample ID: S-11208903-052120-CN-T4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	6/3/2020 8:52:10 AM	52822

Lab ID: 2005A04-020 **Collection Date:** 5/20/2020 9:35:00 AM
Client Sample ID: S-11208903-052120-CN-T7 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Selenium	ND	1.0		mg/L	1	6/3/2020 8:54:07 AM	52822

Lab ID: 2005A04-021 **Collection Date:** 5/20/2020 9:25:00 AM
Client Sample ID: S-11208903-052120-CN-T11 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	6/3/2020 8:56:04 AM	52822

Lab ID: 2005A04-022 **Collection Date:** 5/20/2020 9:18:00 AM
Client Sample ID: S-11208903-052120-CN-T12 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	0.11	0.050		mg/L	1	6/3/2020 8:58:01 AM	52822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Jal Landfarm
Lab Order: 2005A04

Lab ID: 2005A04-023
Collection Date: 5/20/2020 9:30:00 AM
Client Sample ID: S-11208903-052120-CN-T15
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**	
Iron	ND	0.050		mg/L	1	6/3/2020 8:59:58 AM	52822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2005A04**
09-Jun-20

Client: GHD
Project: Jal Landfarm

Sample ID: **MB-52680**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **52680**	RunNo: **69134**
Prep Date: **5/26/2020**	Analysis Date: **5/27/2020**	SeqNo: **2398629** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.7	55.1	146			

Sample ID: **LCS-52680**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **52680**	RunNo: **69134**
Prep Date: **5/26/2020**	Analysis Date: **5/27/2020**	SeqNo: **2398630** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.8	70	130			
Surr: DNOP	4.1		5.000		81.1	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2005A04**

09-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **mb-52672**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/27/2020**	SeqNo: **2396253** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.9	66.6	105			

Sample ID: **lcs-52672**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/26/2020**	SeqNo: **2396254** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.0	80	120			
Surr: BFB	970		1000		97.3	66.6	105			

Sample ID: **2005a04-002ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-11208903-052020-**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/27/2020**	SeqNo: **2396257** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.61	0	85.2	80	120			
Surr: BFB	990		984.3		101	66.6	105			

Sample ID: **2005a04-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-11208903-052020-**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/27/2020**	SeqNo: **2396258** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.9	24.73	0	81.8	80	120	3.63	20	
Surr: BFB	960		989.1		96.6	66.6	105	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2005A04**

09-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **mb-52672**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/27/2020**	SeqNo: **2396306** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	80	120			

Sample ID: **LCS-52672**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/26/2020**	SeqNo: **2396307** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.9	80	120			
Toluene	0.98	0.050	1.000	0	97.7	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **2005a04-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-11208903-052020-**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/27/2020**	SeqNo: **2396309** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9804	0.01583	94.5	78.5	119			
Toluene	1.0	0.049	0.9804	0.01291	101	75.7	123			
Ethylbenzene	1.0	0.049	0.9804	0	106	74.3	126			
Xylenes, Total	3.1	0.098	2.941	0	105	72.9	130			
Surr: 4-Bromofluorobenzene	1.0		0.9804		105	80	120			

Sample ID: **2005a04-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-11208903-052020-**	Batch ID: **52672**	RunNo: **69139**
Prep Date: **5/24/2020**	Analysis Date: **5/27/2020**	SeqNo: **2396310** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	0.9872	0.01583	95.2	78.5	119	1.41	20	
Toluene	1.0	0.049	0.9872	0.01291	101	75.7	123	0.894	20	
Ethylbenzene	1.0	0.049	0.9872	0	106	74.3	126	0.141	20	
Xylenes, Total	3.1	0.099	2.962	0	105	72.9	130	0.711	20	
Surr: 4-Bromofluorobenzene	1.0		0.9872		106	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2005A04**

09-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-52801**	SampType: **MBLK**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW**	Batch ID: **52801**	RunNo: **69318**
Prep Date: **6/1/2020**	Analysis Date: **6/2/2020**	SeqNo: **2403946** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Iron	ND	0.050								

Sample ID: **LCS-52801**	SampType: **LCS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW**	Batch ID: **52801**	RunNo: **69318**
Prep Date: **6/1/2020**	Analysis Date: **6/2/2020**	SeqNo: **2403947** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	100	80	120			
Iron	0.51	0.050	0.5000	0	102	80	120			

Sample ID: **MB-52822**	SampType: **MBLK**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405373** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.050								
Selenium	ND	1.0								

Sample ID: **LCS-52822**	SampType: **LCS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405374** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.51	0.050	0.5000	0	102	80	120			
Selenium	ND	1.0	0.5000	0	110	80	120			

Sample ID: **2005A04-011AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **S-11208903-052120-**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405377** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.51	0.050	0.5000	0	101	75	125			

Sample ID: **2005A04-011AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **S-11208903-052120-**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405378** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.53	0.050	0.5000	0	105	75	125	3.51	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2005A04**

09-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-52822**	SampType: **MBLK**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405401** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								

Sample ID: **LCS-52822**	SampType: **LCS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405402** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	100	80	120			

Sample ID: **2005A04-011AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **S-11208903-052120-**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405405** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	101	75	125			

Sample ID: **2005A04-011AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **S-11208903-052120-**	Batch ID: **52822**	RunNo: **69355**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405406** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	101	75	125	0	20	

Sample ID: **MB-52936**	SampType: **MBLK**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW**	Batch ID: **52936**	RunNo: **69468**
Prep Date: **6/7/2020**	Analysis Date: **6/8/2020**	SeqNo: **2410252** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Iron	ND	0.050								

Sample ID: **LCS-52936**	SampType: **LCS**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW**	Batch ID: **52936**	RunNo: **69468**
Prep Date: **6/7/2020**	Analysis Date: **6/8/2020**	SeqNo: **2410253** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	98.9	80	120			
Iron	0.53	0.050	0.5000	0	106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2005A04**

09-Jun-20

Client: GHD

Project: Jal Landfarm

Sample ID: **2005A04-014AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **S-11208903-052120-** Batch ID: **52936** RunNo: **69468**

Prep Date: **6/7/2020** Analysis Date: **6/8/2020** SeqNo: **2410256** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.03305	107	75	125			
Iron	0.53	0.050	0.5000	0.07792	91.0	75	125			

Sample ID: **2005A04-014AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **S-11208903-052120-** Batch ID: **52936** RunNo: **69468**

Prep Date: **6/7/2020** Analysis Date: **6/8/2020** SeqNo: **2410257** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.03305	102	75	125	0	20	
Iron	0.53	0.050	0.5000	0.07792	90.7	75	125	0.249	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD | Work Order Number: 2005A04 | RcptNo: 1

Received By: **Isaiah Ortiz** 5/22/2020 11:11:00 AM I-OK

Completed By: **John Caldwell** 5/22/2020 2:01:29 PM John Caldwell

Reviewed By: JO 5/22/20

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: EM 5/22/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good				

Chain-of-Custody Record

Client: GHD

Mailing Address: On File

Phone #: 505 269 0086

email or Fax#: Christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 1120890 3

Project Manager: Christine Mathews

Sampler: CN

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 3.4-0(c) 3.4 °C (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2005404	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	BTEX 8015B	Full Range TPH 902113	TCLP Fe & As	TCLP Fe		
5-20-20	0945	S	S-11208903-052020-CN-V1	2 4oz		-001											X	X	X			
5-20-20	0955		S-11208903-052020-CN-V2			-002											X	X	X			
5-20-20	1005		S-11208903-052020-CN-V3			-003											X	X	X			
5-20-20	1025		S-11208903-052020-CN-V4			-004											X	X	X			
5-20-20	1040		S-11208903-052020-CN-V5			-005											X	X		X		
5-20-20	1105		S-11208903-052020-CN-V6			-006											X	X	X			
5-20-20	1255		S-11208903-052020-CN-V7			-007											X	X		X		
5-21-20	0900		S-11208903-052120-CN-V8			-008											X	X		X		
5-21-20	1730		S-11208903-052120-CN-V9			-009											X	X				
5-21-20	1715		S-11208903-052120-CN-V10			-010											X	X		X		
5-21-20	1305		S-11208903-052120-CN-V11			-011											X	X	X			
5-21-20	1325		S-11208903-052120-CN-V12			-012											X	X	X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/21/20	1530				5/21/20	1530
5/22/20	1900		I On cooler		5/22/20	11:11

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address: On File

Phone #: 505 264 0088

email or Fax#: Christine.Matthews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 1120B903

Project Manager: Christine Matthews

Sampler: CN

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 3.4-0(F) | 3.4°C (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2005A04
5-21-20	1340	S	S-1120B903-052120-CN-V13	2 4oz Jar		-013
5-21-20	1355		S-1120B903-052120-CN-V14	↓		-014
5-21-20	1250		S-1120B903-052120-CN-V15	↓		-015
5-20-20	0855		S-1120B903-052120-CN-T1	1 4oz Jar		-016
5-20-20	0900		S-1120B903-052120-CN-T2			-017
5-20-20	0905		S-1120B903-052120-CN-T3			-018
5-20-20	0910		S-1120B903-052120-CN-T4			-019
5-20-20	0935		S-1120B903-052120-CN-T7			-020
5-20-20	0926		S-1120B903-052120-CN-T11			-021
5-20-20	0918		S-1120B903-052120-CN-T12			-022
5-20-20	0930		S-1120B903-052120-CN-T15	↓		-023

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	BTEX 8015B	Full Range TPH 8021B	TCLP Pb & As	TCLP Pb	TCLP Se
										X	X			
										X	X	X		
										X	X		X	
													X	
													X	
													X	
													X	
													X	X
													X	
													X	
													X	

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/21/20	1530				5/21/20	1530
5/21/20	1900		I-Q courier		5/22/20	11:11

Remarks: T7 TCLP Se only.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

September 10, 2020

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Jal Landfarm OrderNo.: 2008G23

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 30 sample(s) on 8/28/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-001 **Collection Date:** 8/27/2020 9:25:00 AM
Client Sample ID: S-11208903-082720-CN-T1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	21	7.5		mg/Kg	5	9/2/2020 9:15:05 PM	54886
Sulfate	110	7.5		mg/Kg	5	9/2/2020 9:15:05 PM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/31/2020 4:40:00 PM	54769
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/31/2020 4:40:00 PM	54769
Surr: DNOP	104	30.4-154		%Rec	1	8/31/2020 4:40:00 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2020 9:28:45 AM	54783
Surr: BFB	100	75.3-105		%Rec	1	8/31/2020 9:28:45 AM	54783

Lab ID: 2008G23-002 **Collection Date:** 8/27/2020 9:35:00 AM
Client Sample ID: S-11208903-082720-CN-V1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/2/2020 9:39:54 PM	54886
Sulfate	60	7.5		mg/Kg	5	9/2/2020 9:39:54 PM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/31/2020 4:59:24 PM	54769
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2020 4:59:24 PM	54769
Surr: DNOP	72.3	30.4-154		%Rec	1	8/31/2020 4:59:24 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2020 10:48:31 AM	54783
Surr: BFB	93.9	75.3-105		%Rec	1	8/31/2020 10:48:31 AM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/31/2020 10:48:31 AM	54783
Toluene	ND	0.050		mg/Kg	1	8/31/2020 10:48:31 AM	54783
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2020 10:48:31 AM	54783
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2020 10:48:31 AM	54783
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	8/31/2020 10:48:31 AM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-003 **Collection Date:** 8/27/2020 9:45:00 AM
Client Sample ID: S-11208903-082720-CN-T2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	12	7.5		mg/Kg	5	9/2/2020 10:29:33 PM	54886
Sulfate	350	7.5		mg/Kg	5	9/2/2020 10:29:33 PM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	45	9.6		mg/Kg	1	9/1/2020 9:39:35 AM	54769
Motor Oil Range Organics (MRO)	200	48		mg/Kg	1	9/1/2020 9:39:35 AM	54769
Surr: DNOP	104	30.4-154		%Rec	1	9/1/2020 9:39:35 AM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2020 11:58:51 AM	54783
Surr: BFB	97.7	75.3-105		%Rec	1	8/31/2020 11:58:51 AM	54783

Lab ID: 2008G23-004 **Collection Date:** 8/27/2020 9:55:00 AM
Client Sample ID: S-11208903-082720-CN-V2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/2/2020 10:54:23 PM	54886
Sulfate	53	7.5		mg/Kg	5	9/2/2020 10:54:23 PM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/31/2020 5:19:01 PM	54769
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2020 5:19:01 PM	54769
Surr: DNOP	68.0	30.4-154		%Rec	1	8/31/2020 5:19:01 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2020 12:22:15 PM	54783
Surr: BFB	97.9	75.3-105		%Rec	1	8/31/2020 12:22:15 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/31/2020 12:22:15 PM	54783
Toluene	ND	0.049		mg/Kg	1	8/31/2020 12:22:15 PM	54783
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2020 12:22:15 PM	54783
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2020 12:22:15 PM	54783
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	8/31/2020 12:22:15 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-005 **Collection Date:** 8/27/2020 10:00:00 AM
Client Sample ID: S-11208903-082720-CN-T3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/2/2020 11:19:12 PM	54886
Sulfate	32	7.5		mg/Kg	5	9/2/2020 11:19:12 PM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	290	97		mg/Kg	10	8/31/2020 5:28:58 PM	54769
Motor Oil Range Organics (MRO)	750	480		mg/Kg	10	8/31/2020 5:28:58 PM	54769
Surr: DNOP	0	30.4-154	S	%Rec	10	8/31/2020 5:28:58 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2020 12:45:41 PM	54783
Surr: BFB	97.1	75.3-105		%Rec	1	8/31/2020 12:45:41 PM	54783

Lab ID: 2008G23-006 **Collection Date:** 8/27/2020 10:15:00 AM
Client Sample ID: S-11208903-082720-CN-V3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/2/2020 11:44:01 PM	54886
Sulfate	28	7.5		mg/Kg	5	9/2/2020 11:44:01 PM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2020 5:38:57 PM	54769
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2020 5:38:57 PM	54769
Surr: DNOP	68.6	30.4-154		%Rec	1	8/31/2020 5:38:57 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2020 1:09:09 PM	54783
Surr: BFB	95.3	75.3-105		%Rec	1	8/31/2020 1:09:09 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/31/2020 1:09:09 PM	54783
Toluene	ND	0.050		mg/Kg	1	8/31/2020 1:09:09 PM	54783
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2020 1:09:09 PM	54783
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2020 1:09:09 PM	54783
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	8/31/2020 1:09:09 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-007 **Collection Date:** 8/27/2020 10:20:00 AM
Client Sample ID: S-11208903-082720-CN-T4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 12:08:49 AM	54886
Sulfate	31	7.5		mg/Kg	5	9/3/2020 12:08:49 AM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	43	19		mg/Kg	2	8/31/2020 5:48:56 PM	54769
Motor Oil Range Organics (MRO)	150	96		mg/Kg	2	8/31/2020 5:48:56 PM	54769
Surr: DNOP	73.1	30.4-154		%Rec	2	8/31/2020 5:48:56 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2020 1:32:44 PM	54783
Surr: BFB	93.4	75.3-105		%Rec	1	8/31/2020 1:32:44 PM	54783

Lab ID: 2008G23-008 **Collection Date:** 8/27/2020 10:25:00 AM
Client Sample ID: S-11208903-082720-CN-V4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 12:58:29 AM	54886
Sulfate	79	7.5		mg/Kg	5	9/3/2020 12:58:29 AM	54886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	11	9.2		mg/Kg	1	8/31/2020 5:58:57 PM	54769
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/31/2020 5:58:57 PM	54769
Surr: DNOP	75.8	30.4-154		%Rec	1	8/31/2020 5:58:57 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2020 1:56:10 PM	54783
Surr: BFB	98.6	75.3-105		%Rec	1	8/31/2020 1:56:10 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/31/2020 1:56:10 PM	54783
Toluene	ND	0.049		mg/Kg	1	8/31/2020 1:56:10 PM	54783
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2020 1:56:10 PM	54783
Xylenes, Total	ND	0.098		mg/Kg	1	8/31/2020 1:56:10 PM	54783
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	8/31/2020 1:56:10 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-009 **Collection Date:** 8/27/2020 10:30:00 AM
Client Sample ID: S-11208903-082720-CN-T5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 1:48:07 AM	54888
Sulfate	ND	7.5		mg/Kg	5	9/3/2020 1:48:07 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/31/2020 6:08:58 PM	54769
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2020 6:08:58 PM	54769
Surr: DNOP	70.9	30.4-154		%Rec	1	8/31/2020 6:08:58 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2020 2:19:45 PM	54783
Surr: BFB	98.5	75.3-105		%Rec	1	8/31/2020 2:19:45 PM	54783

Lab ID: 2008G23-010 **Collection Date:** 8/27/2020 10:40:00 AM
Client Sample ID: S-11208903-082720-CN-V5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 2:37:45 AM	54888
Sulfate	20	7.5		mg/Kg	5	9/3/2020 2:37:45 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/31/2020 6:19:00 PM	54769
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/31/2020 6:19:00 PM	54769
Surr: DNOP	72.8	30.4-154		%Rec	1	8/31/2020 6:19:00 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2020 2:43:09 PM	54783
Surr: BFB	95.3	75.3-105		%Rec	1	8/31/2020 2:43:09 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/31/2020 2:43:09 PM	54783
Toluene	ND	0.049		mg/Kg	1	8/31/2020 2:43:09 PM	54783
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2020 2:43:09 PM	54783
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2020 2:43:09 PM	54783
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	8/31/2020 2:43:09 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-011 **Collection Date:** 8/27/2020 10:45:00 AM
Client Sample ID: S-11208903-082720-CN-T6 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 3:27:23 AM	54888
Sulfate	51	7.5		mg/Kg	5	9/3/2020 3:27:23 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/1/2020 10:27:21 AM	54769
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 10:27:21 AM	54769
Surr: DNOP	97.7	30.4-154		%Rec	1	9/1/2020 10:27:21 AM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 8:36:45 PM	54783
Surr: BFB	95.0	75.3-105		%Rec	1	9/1/2020 8:36:45 PM	54783

Lab ID: 2008G23-012 **Collection Date:** 8/27/2020 10:50:00 AM
Client Sample ID: S-11208903-082720-CN-V6 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 4:17:01 AM	54888
Sulfate	13	7.5		mg/Kg	5	9/3/2020 4:17:01 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	8/31/2020 6:39:06 PM	54769
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/31/2020 6:39:06 PM	54769
Surr: DNOP	67.5	30.4-154		%Rec	1	8/31/2020 6:39:06 PM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/1/2020 9:00:13 PM	54783
Surr: BFB	96.3	75.3-105		%Rec	1	9/1/2020 9:00:13 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/1/2020 9:00:13 PM	54783
Toluene	ND	0.050		mg/Kg	1	9/1/2020 9:00:13 PM	54783
Ethylbenzene	ND	0.050		mg/Kg	1	9/1/2020 9:00:13 PM	54783
Xylenes, Total	ND	0.099		mg/Kg	1	9/1/2020 9:00:13 PM	54783
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	9/1/2020 9:00:13 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-013 **Collection Date:** 8/27/2020 11:00:00 AM
Client Sample ID: S-11208903-082720-CN-T7 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 4:41:50 AM	54888
Sulfate	17	7.5		mg/Kg	5	9/3/2020 4:41:50 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	21	9.7		mg/Kg	1	9/1/2020 10:51:12 AM	54769
Motor Oil Range Organics (MRO)	130	49		mg/Kg	1	9/1/2020 10:51:12 AM	54769
Surr: DNOP	92.2	30.4-154		%Rec	1	9/1/2020 10:51:12 AM	54769
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/1/2020 9:23:34 PM	54783
Surr: BFB	95.1	75.3-105		%Rec	1	9/1/2020 9:23:34 PM	54783

Lab ID: 2008G23-014 **Collection Date:** 8/27/2020 11:05:00 AM
Client Sample ID: S-11208903-082720-CN-V7 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 5:06:40 AM	54888
Sulfate	17	7.5		mg/Kg	5	9/3/2020 5:06:40 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2020 12:34:49 PM	54770
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2020 12:34:49 PM	54770
Surr: DNOP	103	30.4-154		%Rec	1	8/31/2020 12:34:49 PM	54770
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 9:47:00 PM	54783
Surr: BFB	95.1	75.3-105		%Rec	1	9/1/2020 9:47:00 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/1/2020 9:47:00 PM	54783
Toluene	ND	0.049		mg/Kg	1	9/1/2020 9:47:00 PM	54783
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 9:47:00 PM	54783
Xylenes, Total	ND	0.097		mg/Kg	1	9/1/2020 9:47:00 PM	54783
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	9/1/2020 9:47:00 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-015 **Collection Date:** 8/27/2020 11:15:00 AM
Client Sample ID: S-11208903-082720-CN-T8 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	13	7.5		mg/Kg	5	9/3/2020 9:02:35 AM	54888
Sulfate	390	7.5		mg/Kg	5	9/3/2020 9:02:35 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	16	9.6		mg/Kg	1	9/1/2020 2:26:00 PM	54770
Motor Oil Range Organics (MRO)	79	48		mg/Kg	1	9/1/2020 2:26:00 PM	54770
Surr: DNOP	87.7	30.4-154		%Rec	1	9/1/2020 2:26:00 PM	54770
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 10:10:28 PM	54783
Surr: BFB	93.9	75.3-105		%Rec	1	9/1/2020 10:10:28 PM	54783

Lab ID: 2008G23-016 **Collection Date:** 8/27/2020 11:20:00 AM
Client Sample ID: S-11208903-082720-CN-V8 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 9:27:24 AM	54888
Sulfate	89	7.5		mg/Kg	5	9/3/2020 9:27:24 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/31/2020 2:11:59 PM	54770
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/31/2020 2:11:59 PM	54770
Surr: DNOP	93.5	30.4-154		%Rec	1	8/31/2020 2:11:59 PM	54770
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 10:34:00 PM	54783
Surr: BFB	95.4	75.3-105		%Rec	1	9/1/2020 10:34:00 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/1/2020 10:34:00 PM	54783
Toluene	ND	0.049		mg/Kg	1	9/1/2020 10:34:00 PM	54783
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 10:34:00 PM	54783
Xylenes, Total	ND	0.097		mg/Kg	1	9/1/2020 10:34:00 PM	54783
Surr: 4-Bromofluorobenzene	96.7	80-120		%Rec	1	9/1/2020 10:34:00 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-017 **Collection Date:** 8/27/2020 11:40:00 AM
Client Sample ID: S-11208903-082720-CN-T9 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 9:52:13 AM	54888
Sulfate	170	7.5		mg/Kg	5	9/3/2020 9:52:13 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2020 3:13:47 PM	54770
Motor Oil Range Organics (MRO)	48	47		mg/Kg	1	9/1/2020 3:13:47 PM	54770
Surr: DNOP	95.6	30.4-154		%Rec	1	9/1/2020 3:13:47 PM	54770
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 10:57:32 PM	54783
Surr: BFB	93.8	75.3-105		%Rec	1	9/1/2020 10:57:32 PM	54783

Lab ID: 2008G23-018 **Collection Date:** 8/27/2020 11:45:00 AM
Client Sample ID: S-11208903-082720-CN-V9 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 10:17:02 AM	54888
Sulfate	180	7.5		mg/Kg	5	9/3/2020 10:17:02 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2020 3:00:34 PM	54770
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2020 3:00:34 PM	54770
Surr: DNOP	82.9	30.4-154		%Rec	1	8/31/2020 3:00:34 PM	54770
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 11:20:55 PM	54783
Surr: BFB	95.4	75.3-105		%Rec	1	9/1/2020 11:20:55 PM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/1/2020 11:20:55 PM	54783
Toluene	ND	0.049		mg/Kg	1	9/1/2020 11:20:55 PM	54783
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 11:20:55 PM	54783
Xylenes, Total	ND	0.099		mg/Kg	1	9/1/2020 11:20:55 PM	54783
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/1/2020 11:20:55 PM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-019 **Collection Date:** 8/27/2020 11:30:00 AM
Client Sample ID: S-11208903-082720-CN-T10 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/3/2020 10:41:51 AM	54888
Sulfate	ND	7.5		mg/Kg	5	9/3/2020 10:41:51 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	14	9.0		mg/Kg	1	9/1/2020 3:37:44 PM	54770
Motor Oil Range Organics (MRO)	68	45		mg/Kg	1	9/1/2020 3:37:44 PM	54770
Surr: DNOP	96.7	30.4-154		%Rec	1	9/1/2020 3:37:44 PM	54770
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/1/2020 11:44:17 PM	54783
Surr: BFB	96.4	75.3-105		%Rec	1	9/1/2020 11:44:17 PM	54783

Lab ID: 2008G23-020 **Collection Date:** 8/27/2020 11:35:00 AM
Client Sample ID: S-11208903-082720-CN-V10 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/4/2020 6:57:52 AM	54888
Sulfate	ND	7.5		mg/Kg	5	9/4/2020 6:57:52 AM	54888
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/31/2020 3:49:12 PM	54770
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/31/2020 3:49:12 PM	54770
Surr: DNOP	54.7	30.4-154		%Rec	1	8/31/2020 3:49:12 PM	54770
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/2/2020 12:07:40 AM	54783
Surr: BFB	97.4	75.3-105		%Rec	1	9/2/2020 12:07:40 AM	54783
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/2/2020 12:07:40 AM	54783
Toluene	ND	0.049		mg/Kg	1	9/2/2020 12:07:40 AM	54783
Ethylbenzene	ND	0.049		mg/Kg	1	9/2/2020 12:07:40 AM	54783
Xylenes, Total	ND	0.099		mg/Kg	1	9/2/2020 12:07:40 AM	54783
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	9/2/2020 12:07:40 AM	54783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-021 **Collection Date:** 8/27/2020 12:00:00 PM
Client Sample ID: S-11208903-082720-CN-T11 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/4/2020 7:22:41 AM	54888
Sulfate	28	7.5		mg/Kg	5	9/4/2020 7:22:41 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 2:22:48 PM	54788
Surr: BFB	104	70-130		%Rec	1	9/1/2020 2:22:48 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	8/31/2020 4:13:32 PM	54770
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	8/31/2020 4:13:32 PM	54770
Surr: DNOP	56.4	30.4-154		%Rec	1	8/31/2020 4:13:32 PM	54770

Lab ID: 2008G23-022 **Collection Date:** 8/27/2020 12:05:00 PM
Client Sample ID: S-11208903-082720-CN-V11 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/4/2020 7:47:29 AM	54888
Sulfate	200	7.5		mg/Kg	5	9/4/2020 7:47:29 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 3:48:32 PM	54788
Surr: BFB	104	70-130		%Rec	1	9/1/2020 3:48:32 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/31/2020 4:37:55 PM	54770
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2020 4:37:55 PM	54770
Surr: DNOP	52.2	30.4-154		%Rec	1	8/31/2020 4:37:55 PM	54770
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	9/1/2020 3:48:32 PM	54788
Toluene	ND	0.049		mg/Kg	1	9/1/2020 3:48:32 PM	54788
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 3:48:32 PM	54788
Xylenes, Total	ND	0.098		mg/Kg	1	9/1/2020 3:48:32 PM	54788
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%Rec	1	9/1/2020 3:48:32 PM	54788
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	9/1/2020 3:48:32 PM	54788
Surr: Dibromofluoromethane	114	70-130		%Rec	1	9/1/2020 3:48:32 PM	54788
Surr: Toluene-d8	99.6	70-130		%Rec	1	9/1/2020 3:48:32 PM	54788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-023 **Collection Date:** 8/27/2020 12:15:00 PM
Client Sample ID: S-11208903-082720-CN-T12 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/4/2020 8:12:18 AM	54888
Sulfate	980	30		mg/Kg	20	9/4/2020 8:24:43 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 5:14:09 PM	54788
Surr: BFB	99.4	70-130		%Rec	1	9/1/2020 5:14:09 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/31/2020 5:02:36 PM	54770
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2020 5:02:36 PM	54770
Surr: DNOP	43.5	30.4-154		%Rec	1	8/31/2020 5:02:36 PM	54770

Lab ID: 2008G23-024 **Collection Date:** 8/27/2020 12:20:00 PM
Client Sample ID: S-11208903-082720-CN-V12 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/4/2020 8:37:07 AM	54888
Sulfate	630	7.5		mg/Kg	5	9/4/2020 8:37:07 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/1/2020 5:42:39 PM	54788
Surr: BFB	103	70-130		%Rec	1	9/1/2020 5:42:39 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2020 5:26:58 PM	54770
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2020 5:26:58 PM	54770
Surr: DNOP	30.5	30.4-154		%Rec	1	8/31/2020 5:26:58 PM	54770
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	9/1/2020 5:42:39 PM	54788
Toluene	ND	0.050		mg/Kg	1	9/1/2020 5:42:39 PM	54788
Ethylbenzene	ND	0.050		mg/Kg	1	9/1/2020 5:42:39 PM	54788
Xylenes, Total	ND	0.099		mg/Kg	1	9/1/2020 5:42:39 PM	54788
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	9/1/2020 5:42:39 PM	54788
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/1/2020 5:42:39 PM	54788
Surr: Dibromofluoromethane	114	70-130		%Rec	1	9/1/2020 5:42:39 PM	54788
Surr: Toluene-d8	101	70-130		%Rec	1	9/1/2020 5:42:39 PM	54788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-025 **Collection Date:** 8/27/2020 12:25:00 PM
Client Sample ID: S-11208903-082720-CN-T13 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	110	7.5		mg/Kg	5	9/4/2020 9:26:45 AM	54888
Sulfate	1600	30		mg/Kg	20	9/4/2020 9:39:09 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/1/2020 6:11:13 PM	54788
Surr: BFB	102	70-130		%Rec	1	9/1/2020 6:11:13 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	35	9.7		mg/Kg	1	9/1/2020 4:01:36 PM	54770
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	9/1/2020 4:01:36 PM	54770
Surr: DNOP	83.6	30.4-154		%Rec	1	9/1/2020 4:01:36 PM	54770

Lab ID: 2008G23-026 **Collection Date:** 8/27/2020 12:30:00 PM
Client Sample ID: S-11208903-082720-CN-V13 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	30	7.5		mg/Kg	5	9/4/2020 9:51:34 AM	54888
Sulfate	180	7.5		mg/Kg	5	9/4/2020 9:51:34 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 6:39:48 PM	54788
Surr: BFB	103	70-130		%Rec	1	9/1/2020 6:39:48 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	8/31/2020 6:15:51 PM	54770
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/31/2020 6:15:51 PM	54770
Surr: DNOP	45.4	30.4-154		%Rec	1	8/31/2020 6:15:51 PM	54770
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	9/1/2020 6:39:48 PM	54788
Toluene	ND	0.049		mg/Kg	1	9/1/2020 6:39:48 PM	54788
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 6:39:48 PM	54788
Xylenes, Total	ND	0.099		mg/Kg	1	9/1/2020 6:39:48 PM	54788
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%Rec	1	9/1/2020 6:39:48 PM	54788
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	9/1/2020 6:39:48 PM	54788
Surr: Dibromofluoromethane	112	70-130		%Rec	1	9/1/2020 6:39:48 PM	54788
Surr: Toluene-d8	101	70-130		%Rec	1	9/1/2020 6:39:48 PM	54788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-027 **Collection Date:** 8/27/2020 12:35:00 PM
Client Sample ID: S-11208903-082720-CN-T14 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	10	7.5		mg/Kg	5	9/4/2020 10:16:24 AM	54888
Sulfate	43	7.5		mg/Kg	5	9/4/2020 10:16:24 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 7:08:18 PM	54788
Surr: BFB	104	70-130		%Rec	1	9/1/2020 7:08:18 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/1/2020 4:25:31 PM	54770
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2020 4:25:31 PM	54770
Surr: DNOP	86.9	30.4-154		%Rec	1	9/1/2020 4:25:31 PM	54770

Lab ID: 2008G23-028 **Collection Date:** 8/27/2020 12:40:00 PM
Client Sample ID: S-11208903-082720-CN-V14 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	7.5		mg/Kg	5	9/4/2020 10:41:12 AM	54888
Sulfate	39	7.5		mg/Kg	5	9/4/2020 10:41:12 AM	54888
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 7:36:49 PM	54788
Surr: BFB	106	70-130		%Rec	1	9/1/2020 7:36:49 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2020 7:05:06 PM	54770
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2020 7:05:06 PM	54770
Surr: DNOP	31.6	30.4-154		%Rec	1	8/31/2020 7:05:06 PM	54770
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	9/1/2020 7:36:49 PM	54788
Toluene	ND	0.049		mg/Kg	1	9/1/2020 7:36:49 PM	54788
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 7:36:49 PM	54788
Xylenes, Total	ND	0.099		mg/Kg	1	9/1/2020 7:36:49 PM	54788
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	9/1/2020 7:36:49 PM	54788
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	9/1/2020 7:36:49 PM	54788
Surr: Dibromofluoromethane	114	70-130		%Rec	1	9/1/2020 7:36:49 PM	54788
Surr: Toluene-d8	98.4	70-130		%Rec	1	9/1/2020 7:36:49 PM	54788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD **Lab Order:** 2008G23
Project: Jal Landfarm

Lab ID: 2008G23-029 **Collection Date:** 8/27/2020 11:50:00 AM
Client Sample ID: S-11208903-082720-CN-T15 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	7.5		mg/Kg	5	9/8/2020 9:10:00 PM	55006
Sulfate	4800	300		mg/Kg	200	9/9/2020 1:35:13 PM	55006
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 8:05:22 PM	54788
Surr: BFB	103	70-130		%Rec	1	9/1/2020 8:05:22 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	110	46		mg/Kg	5	9/1/2020 1:38:15 PM	54770
Motor Oil Range Organics (MRO)	580	230		mg/Kg	5	9/1/2020 1:38:15 PM	54770
Surr: DNOP	84.7	30.4-154		%Rec	5	9/1/2020 1:38:15 PM	54770

Lab ID: 2008G23-030 **Collection Date:** 8/27/2020 11:55:00 AM
Client Sample ID: S-11208903-082720-CN-V15 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	7.5		mg/Kg	5	9/8/2020 9:34:42 PM	55006
Sulfate	690	30		mg/Kg	20	9/8/2020 9:47:02 PM	55006
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 8:33:55 PM	54788
Surr: BFB	104	70-130		%Rec	1	9/1/2020 8:33:55 PM	54788
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2020 7:54:07 PM	54770
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2020 7:54:07 PM	54770
Surr: DNOP	60.4	30.4-154		%Rec	1	8/31/2020 7:54:07 PM	54770
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	9/1/2020 8:33:55 PM	54788
Toluene	ND	0.049		mg/Kg	1	9/1/2020 8:33:55 PM	54788
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 8:33:55 PM	54788
Xylenes, Total	ND	0.098		mg/Kg	1	9/1/2020 8:33:55 PM	54788
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%Rec	1	9/1/2020 8:33:55 PM	54788
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/1/2020 8:33:55 PM	54788
Surr: Dibromofluoromethane	112	70-130		%Rec	1	9/1/2020 8:33:55 PM	54788
Surr: Toluene-d8	95.6	70-130		%Rec	1	9/1/2020 8:33:55 PM	54788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**

10-Sep-20

Client: GHD

Project: Jal Landfarm

Sample ID: **MB-54886**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **54886**	RunNo: **71554**
Prep Date: **9/2/2020**	Analysis Date: **9/2/2020**	SeqNo: **2501564** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-54886**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **54886**	RunNo: **71554**
Prep Date: **9/2/2020**	Analysis Date: **9/2/2020**	SeqNo: **2501565** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.9	90	110			
Sulfate	29	1.5	30.00	0	96.0	90	110			

Sample ID: **MB-54888**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **54888**	RunNo: **71554**
Prep Date: **9/2/2020**	Analysis Date: **9/3/2020**	SeqNo: **2501606** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-54888**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **54888**	RunNo: **71554**
Prep Date: **9/2/2020**	Analysis Date: **9/3/2020**	SeqNo: **2501607** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			
Sulfate	29	1.5	30.00	0	95.3	90	110			

Sample ID: **2008G23-009AMS**	SampType: **ms**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-11208903-082720-**	Batch ID: **54888**	RunNo: **71554**
Prep Date: **9/2/2020**	Analysis Date: **9/3/2020**	SeqNo: **2501609** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	7.5	15.00	0	95.8	47.2	156			
Sulfate	29	7.5	30.00	0	97.6	54.5	144			

Sample ID: **2008G23-009AMSD**	SampType: **msd**	TestCode: **EPA Method 300.0: Anions**
Client ID: **S-11208903-082720-**	Batch ID: **54888**	RunNo: **71554**
Prep Date: **9/2/2020**	Analysis Date: **9/3/2020**	SeqNo: **2501610** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**
10-Sep-20

Client: GHD
Project: Jal Landfarm

Sample ID: **2008G23-009AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**
Client ID: **S-11208903-082720-** Batch ID: **54888** RunNo: **71554**
Prep Date: **9/2/2020** Analysis Date: **9/3/2020** SeqNo: **2501610** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	7.5	15.00	0	95.1	47.2	156	0.675	20	
Sulfate	29	7.5	30.00	0	98.0	54.5	144	0.399	20	

Sample ID: **2008G23-011AMS** SampType: **ms** TestCode: **EPA Method 300.0: Anions**
Client ID: **S-11208903-082720-** Batch ID: **54888** RunNo: **71554**
Prep Date: **9/2/2020** Analysis Date: **9/3/2020** SeqNo: **2501617** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	19	7.5	15.00	0	126	47.2	156			
Sulfate	69	7.5	30.00	50.75	61.6	54.5	144			

Sample ID: **2008G23-011AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**
Client ID: **S-11208903-082720-** Batch ID: **54888** RunNo: **71554**
Prep Date: **9/2/2020** Analysis Date: **9/3/2020** SeqNo: **2501618** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	7.5	15.00	0	105	47.2	156	17.7	20	
Sulfate	72	7.5	30.00	50.75	69.9	54.5	144	3.51	20	

Sample ID: **MB-55006** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **55006** RunNo: **71685**
Prep Date: **9/8/2020** Analysis Date: **9/8/2020** SeqNo: **2506856** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-55006** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **55006** RunNo: **71685**
Prep Date: **9/8/2020** Analysis Date: **9/8/2020** SeqNo: **2506857** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			
Sulfate	29	1.5	30.00	0	98.1	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**
10-Sep-20

Client: GHD
Project: Jal Landfarm

Sample ID: **MB-54770**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **54770**	RunNo: **71494**
Prep Date: **8/28/2020**	Analysis Date: **8/31/2020**	SeqNo: **2496848** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		105	30.4	154			

Sample ID: **LCS-54770**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **54770**	RunNo: **71494**
Prep Date: **8/28/2020**	Analysis Date: **8/31/2020**	SeqNo: **2496851** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	70	130			
Surr: DNOP	4.9		5.000		98.3	30.4	154			

Sample ID: **2008G23-014AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-11208903-082720-**	Batch ID: **54770**	RunNo: **71496**
Prep Date: **8/28/2020**	Analysis Date: **8/31/2020**	SeqNo: **2496901** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.6	48.17	0	100	47.4	136			
Surr: DNOP	4.3		4.817		88.5	30.4	154			

Sample ID: **2008G23-014AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-11208903-082720-**	Batch ID: **54770**	RunNo: **71496**
Prep Date: **8/28/2020**	Analysis Date: **8/31/2020**	SeqNo: **2496902** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.7	48.50	0	103	47.4	136	3.38	43.4	
Surr: DNOP	4.4		4.850		90.8	30.4	154	0	0	

Sample ID: **MB-54769**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **54769**	RunNo: **71495**
Prep Date: **8/28/2020**	Analysis Date: **8/31/2020**	SeqNo: **2496912** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	30.4	154			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**
10-Sep-20

Client: GHD
Project: Jal Landfarm

Sample ID: **LCS-54769** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **54769** RunNo: **71495**
Prep Date: **8/28/2020** Analysis Date: **8/31/2020** SeqNo: **2496916** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	77.6	70	130			
Surr: DNOP	5.0		5.000		100	30.4	154			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**

10-Sep-20

Client: GHD

Project: Jal Landfarm

Sample ID: **mb-54783**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497421** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.1	75.3	105			

Sample ID: **lcs-54783**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497422** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.0	72.5	106			
Surr: BFB	1100		1000		114	75.3	105			S

Sample ID: **2008g23-002ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-11208903-082720-**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497425** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.51	0	91.8	61.3	114			
Surr: BFB	1000		980.4		105	75.3	105			S

Sample ID: **2008g23-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-11208903-082720-**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	24.98	0	84.3	61.3	114	6.66	20	
Surr: BFB	1000		999.0		105	75.3	105	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**

10-Sep-20

Client: GHD

Project: Jal Landfarm

Sample ID: **mb-54783**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497437** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: **LCS-54783**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497438** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.0	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: **2008g23-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-11208903-082720-**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497440** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.96	0.099	0.9881	0	97.5	78.1	153			
Benzene	0.85	0.025	0.9881	0	85.6	76.3	120			
Toluene	0.88	0.049	0.9881	0	89.1	78.5	120			
Ethylbenzene	0.90	0.049	0.9881	0	91.2	78.1	124			
Xylenes, Total	2.7	0.099	2.964	0	91.5	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9881		106	80	120			

Sample ID: **2008g23-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-11208903-082720-**	Batch ID: **54783**	RunNo: **71512**
Prep Date: **8/29/2020**	Analysis Date: **8/31/2020**	SeqNo: **2497441** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	0.9960	0	88.1	76.3	120	3.59	20	
Toluene	0.90	0.050	0.9960	0	90.6	78.5	120	2.55	20	
Ethylbenzene	0.91	0.050	0.9960	0	91.6	78.1	124	1.33	20	
Xylenes, Total	2.8	0.10	2.988	0	92.1	79.3	125	1.50	20	
Surr: 4-Bromofluorobenzene	1.0		0.9960		99.9	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**

10-Sep-20

Client: GHD

Project: Jal Landfarm

Sample ID: **lcs-54788** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **54788** RunNo: **71550**

Prep Date: **8/30/2020** Analysis Date: **9/1/2020** SeqNo: **2499255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.0	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.1	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		109	70	130			
Surr: Toluene-d8	0.49		0.5000		97.7	70	130			

Sample ID: **mb-54788** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **54788** RunNo: **71550**

Prep Date: **8/30/2020** Analysis Date: **9/1/2020** SeqNo: **2499256** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.0	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.49		0.5000		97.4	70	130			

Sample ID: **2008g23-021ams** SampType: **MS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **S-11208903-082720-** Batch ID: **54788** RunNo: **71550**

Prep Date: **8/30/2020** Analysis Date: **9/1/2020** SeqNo: **2499258** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9990	0	102	71.1	115			
Toluene	1.0	0.050	0.9990	0	105	79.6	132			
Ethylbenzene	1.0	0.050	0.9990	0	104	83.8	134			
Xylenes, Total	3.3	0.10	2.997	0	111	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.46		0.4995		93.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.4995		99.5	70	130			
Surr: Dibromofluoromethane	0.56		0.4995		111	70	130			
Surr: Toluene-d8	0.49		0.4995		97.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**
10-Sep-20

Client: GHD
Project: Jal Landfarm

Sample ID: **2008g23-021amsd** SampType: **MSD4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **S-11208903-082720-** Batch ID: **54788** RunNo: **71550**
Prep Date: **8/30/2020** Analysis Date: **9/1/2020** SeqNo: **2499259** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9891	0	95.1	71.1	115	8.32	20	
Toluene	0.98	0.049	0.9891	0	99.2	79.6	132	6.31	20	
Ethylbenzene	0.96	0.049	0.9891	0	97.0	83.8	134	8.07	20	
Xylenes, Total	3.0	0.099	2.967	0	99.8	82.4	132	11.6	20	
Surr: 1,2-Dichloroethane-d4	0.47		0.4946		94.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.51		0.4946		103	70	130	0	0	
Surr: Dibromofluoromethane	0.53		0.4946		107	70	130	0	0	
Surr: Toluene-d8	0.48		0.4946		96.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008G23**

10-Sep-20

Client: GHD

Project: Jal Landfarm

Sample ID: **lcs-54788**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **54788**	RunNo: **71550**
Prep Date: **8/30/2020**	Analysis Date: **9/1/2020**	SeqNo: **2499281** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.8	70	130			
Surr: BFB	520		500.0		104	70	130			

Sample ID: **mb-54788**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **54788**	RunNo: **71550**
Prep Date: **8/30/2020**	Analysis Date: **9/1/2020**	SeqNo: **2499282** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	530		500.0		107	70	130			

Sample ID: **2008g23-022ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-082720-**	Batch ID: **54788**	RunNo: **71550**
Prep Date: **8/30/2020**	Analysis Date: **9/1/2020**	SeqNo: **2499285** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.61	0	85.3	49.2	122			
Surr: BFB	520		492.1		106	70	130			

Sample ID: **2008g23-022amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-11208903-082720-**	Batch ID: **54788**	RunNo: **71550**
Prep Date: **8/30/2020**	Analysis Date: **9/1/2020**	SeqNo: **2499286** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.73	0	104	49.2	122	20.2	20	R
Surr: BFB	530		494.6		107	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **GHD** Work Order Number: **2008G23** RcptNo: **1**

Received By: **Juan Rojas** **8/28/2020 8:00:00 AM**

Completed By: **Leah Baca** **8/28/2020 11:07:13 AM**

Reviewed By: DAD 8/28/20

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: SPA 8.28.20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good				
2	4.9	Good				
3	1.3	Good				

Chain-of-Custody Record

Client: GHD

Mailing Address:

Phone #: 505 269 0088

email or Fax#: Christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 11208903

Project Manager: Christine Mathews.

Sampler: CN

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2008G23	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Full Range TPH GRO, DRO, MRO	BTEX	Chloride and Sulfate			
8-27-20	0915	S	S-11208903-082720-CN-T1	2 4oz Jar		-001											X		X			
	0935		S-11208903-082720-CN-V1			-002											X	X	X			
	0946		S-11208903-082720-CN-T2			-003											X		X			
	0955		S-11208903-082720-CN-V2			-004											X	X	X			
	1000		S-11208903-082720-CN-T3			-005											X		X			
	1015		S-11208903-082720-CN-V3			-006											X	X	X			
	1020		S-11208903-082720-CN-T4			-007											X		X			
	1025		S-11208903-082720-CN-V4			-008											X	X	X			
	1030		S-11208903-082720-CN-T5			-009											X		X			
	1040		S-11208903-082720-CN-V5			-010											X	X	X			
	1046		S-11208903-082720-CN-T6			-011											X		X			
↓	1050	↓	S-11208903-082720-CN-V6	↓		-012											X	X	X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8-27-20	1515				8/27/20	1515
8/27/20	1900			Cooler	8/28/20	8:00

Remarks:
0.6 - 0 = 0.6
4.9 - 0 = 4.9
1.3 - 0 = 1.3

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: GHD

Mailing Address:

Phone #: 505 269 0086

email or Fax#: Christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 11208903

Project Manager: Christine Mathews.

Sampler: CN

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2008G23	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Analysis Request: full range TPH, 8021B, 8260	Chloride and Sulfate	BTEX			
8.27.20	1100	S	S-11208903-082720-CN-T7	2 4oz Jar		-013											X	X				
	1105		S-11208903-082720-CN-V7			-014											X	X	X			
	1115		S-11208903-082720-CN-T8			-015											X	X				
	1120		S-11208903-082720-CN-V8			-016											X	X	X			
	1140		S-11208903-082720-CN-T9			-017											X	X				
	1145		S-11208903-082720-CN-V9			-018											X	X	X			
	1130		S-11208903-082720-CN-T10			-019											X	X				
	1135		S-11208903-082720-CN-V10			-020											X	X	X			
	1200		S-11208903-082720-CN-T11			-021											X	X				
	1205		S-11208903-082720-CN-V11			-022											X	X	X			
	1215		S-11208903-082720-CN-T12			-023											X	X				
	1220		S-11208903-082720-CN-V12			-024											X	X	X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8.27.20	1515				8/27/20	1515
8/27/20	1910			courier	8/28/20	8:00

Remarks:
0.6 - 0 = 0.6
4.9 - 0 = 4.9
1.3 - 0 = 1.3

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Chain-of-Custody Record

Client: GHD

Mailing Address:

Phone #: 505 269 0088

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Jal Landfarm

Project #: 11208903

Project Manager: Christine Mathews

Sampler: CN

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2008G23	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Full Range TPH, GRO, DRO, ORO	Chloride and Sulfate	BTEX			
8-27-20	1225	S	S-11208903-082720-CN-T13	2 4oz Jar		-025											X	X				
	1230		S-11208903-082720-CN-V13			-026											X	X	X			
	1235		S-11208903-082720-CN-T14			-027											X	X				
	1240		S-11208903-082720-CN-V14			-028											X	X	X			
	1150		S-11208903-082720-CN-T15			-029											X	X				
	1155		S-11208903-082720-CN-V15			-030											X	X	X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8-27-20	1515				8/27/20	1515
8/27/20	1710			courier	8/28/20	8:00

Remarks:
0.6 - 0 = 0.6
4.9 - 0 = 4.9
1.3 - 0 = 1.3

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.