

Approved with conditions. See email correspondence.

P.O. Box 1708 • Artesia, NM 88211 www.hrlcomp.com

1RP-4647

SUBJECT: SOIL REMEDIATION PLAN FOR THE INCIDENT AT THE Sanmal Queen Unit, LEA COUNTY, NEW MEXICO

On behalf of Smith and Marrs, HRL Compliance Solutions, Inc (HRL) has prepared this remediation plan that describes the assessment, characterization, and proposed remediation for a release associated with the Sanmal Queen Unit. The site is in Unit I, SECTION 1, TOWNSHIP 17S, RANGE 23E, NMPM, Lea County, New Mexico, on State land.

Site Assessment/Characterization

An assessment of surrounding water well information identifies 55 water wells thin a 3-mile buffer. Average depth to water is over 100 feet bgs. This information is illustrated in Attachment A.

There are no features of concern identified within proximity of the site. There is no flowing watercourse or significant watercourse within 300 feet of this location. There is no lakebed, sinkhole, or playa lake within 200 feet for this location. This location is not within 300 feet of an occupied permanent residence, school, hospital, institution, or church. This location is not with 500 feet for a spring or domestic freshwater well. This facility is not within incorporated municipal boundaries or within a defined municipal freshwater well field. This is illustrated in Attachment B.

An assessment of wetlands and springs was performed using USGS National Water Information System and re-verified utilizing a 7.5-minute topographical map There are no wetlands with 300 feet of this location. There are no springs within 1000 feet of this location. This map is in Attachment B.

This facility is not within a 100-year floodplain as per FEMA. A portion of the FEMA map is in Attachment B.

This location is an area identified as an unstable karst geology area. An area map generated with data from the USGS showing geologic units and structural features is in Attachment B.

Upon receiving clearance from the underground utility locate (811) on September 25, 2018, HRL field personnel assessed the impacted area. Samples were collected on 9/25/2018 to characterize the extent of impacts and calculate a volume of soil to be excavated for disposal with a backhoe. All samples were collected and analyzed at a National Environmental Laboratory Accreditation Program (NELAP) laboratory and in accordance with NMOCD soil sampling procedures. The samples were submitted to Cardinal Laboratory for analyses including chlorides by Method 4500, volatile organics (BTEX) by Method 8021B, and MRO, DRO, and GRO by EPA Method 8015B. Sample locations are depicted in Attachment C. All laboratory results are summarized in Table 1 with raw analytical reports included in Attachment D.



i	Table 1: Analytical Results Summary										
			Samma	l Lease							
	T		T								
		Chloride	Benzene	BTEX	GRO	DRO	MRO	ТРН			
Sample ID	Date	mg/Kg	mg/Kg	mg/Kg	mg/kg	mg/kg	mg/kg	mg/Kg			
S1- Surface	9/25/2018	80	ND	ND	ND	ND	ND	ND			
S1-1'	9/25/2018	1,440	ND	ND	ND	ND	ND	ND			
S1-2'	9/25/2018	1,100									
S2 Surface	9/25/2018	928			ND	51	48	99			
S2-1'	9/25/2018	9,600	ND	ND	ND	ND	ND	ND			
S2-2'	9/25/2018	8,530	ND	ND	ND	ND	ND	ND			
S3 Surface	9/25/2018	2,760				39	12	50			
S3-1'	9/25/2018	1,460				14		14			
\$3-1.5'	9/25/2018	6,080	ND	ND	ND	ND	ND	ND			
S4 Surface	9/25/2018	8,880				177	84	261			
S4-1'	9/25/2018	7,440				224	65	289			
S5 Surface	9/25/2018	4,960				543	243	786			
S5-1'	9/25/2018	8,400				262	124	386			
S6 Surface	9/25/2018	<mark>31,600</mark>				10		10			
S6-1'	9/25/2018	14,100	ND	ND	ND	ND	ND	ND			
S7 Surface	9/25/2018	160				348	251	599			
S7-1'	9/25/2018	80				77	65	142			
S7-2'	9/25/2018	176				194	123	317			
S8 Surface	9/25/2018	3,200				737	197	934			
S8-1'	9/25/2018	3,200				12		12			

Table 1: Analytical Results Summary



Closure Criteria Assessment

	Closu	re Criteria
Depth to Ground Water	Constituent	Limit
	Chloride	20,000 mg/kg
≤ 100 feet	TPH (GRO+DRO+MRO)	2,500 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

Remediation Plan

The area around Sample Point 6 will be excavated to an approximate depth of 1 foot. Per the direction of the State Land Office (see email in Attachment E), a liner is required at SP6 prior to backfill. In addition, the State Land Office is requiring an excavation around SP1 to a depth of 2 feet with a liner and appropriate top soil replaced. A total of 980 cubic yards is estimated to be removed. Confirmation samples will be taken from both excavation areas prior to backfill.

Remediation is scheduled to begin within 90 days of approval of this remediation plan.

Restoration, Reclamation, and Revegetation

SP6 is on an active pad and will be returned to use as such. The area around SP1 will be seeded as per SLO guidelines.

If there are any questions regarding this report, please contact Jennifer Knowlton at 505-238-3588.

Submitted by: HRL Compliance Solutions, Inc

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Jennifer Knowlton Regional Manager - Permian

Attachments:

 Attachment A: NMOSE Depth to Water Map and Report
 Attachment B: Site Location Map Wetlands Map Floodplain Map Karst Area Map
 Attachment C: Sample Location Map
 Attachment D: Laboratory Analytical Reports
 Attachment E: State Land Office Email

Smith&Marrs | Sanmal Queen Unit | 10/22/2018



Attachment A:

NMOSE Depth to Water Map and Report





New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced, O=orphaned, C=the file is closed)						2=NE 3	3=SW 4=SE gest) (N/) AD83 UTM in me	iters)	(1	n feet)	
POD Number	POD Sub- Code basin Co	ount	Q (y 64 1		Sec	Tws	Rng	x	Y	Distance	-	-	Water Column
L 09831	L	LE		42	01	17S	33E	630034	3637246* 🌍	481	200		
L 09832	L	LE	:	33	06	17S	34E	630449	3636447* 🌍	610	200		
L 03750	L	LE		41	01	17S	33E	629228	3637230* 🌍	839	180	150	30
L 14136 POD1	L	LE	3	32	12	17S	33E	629604	3635569 🌍	1249	245	141	104
L 01880 S3	L	LE	1	41	12	17S	33E	629148	3635720* 🌍	1315	268	155	113
L 03782	L	LE	4	44	02	17S	33E	628532	3636311* 🌍	1476	183	151	32
L 10212	L	LE		44	02	17S	33E	628433	3636412* 🌍	1543	273	168	105
L 06876	L	LE	4	42	06	17S	34E	631676	3637166* 🌍	1785	191	120	71
L 03527 S	L	LE	1	13	36	16S	33E	628715	3638131* 🌍	1823	250	160	90
L 07638	L	LE	2	24	07	17S	34E	631710	3635356* 🌍	2273	206	140	66
L 01880 S	L	LE	4	33	12	17S	33E	628955	3634708* 🌍	2286	259	115	144
L 04935	L	LE		21	02	17S	33E	627614	3637606* 🌍	2464	204	162	42
L 03527	L	LE	1	22	36	16S	33E	629907	3639359* 🌍	2584	278	125	153
<u>L 04333</u>	L	LE		11	13	17S	33E	628862	3634407* 🌍	2598	217	165	52
L 03527 S2	L	LE	3	43	35	16S	33E	627508	3637911* 🌍	2678	275	138	137
L 14139 POD1	L	LE	3	12	18	17S	34E	631180	3634389 🌍	2691	230	138	92
<u>L 09978</u>	L	LE	1	31	18	17S	34E	630476	3634015 🌍	2812	198	160	38
<u>L 06172</u>	L	LE		33	08	17S	34E	632019	3634860* 🌍	2831	202	140	62
L 03527 S3	L	LE	2	33	35	16S	33E	627305	3638104* 🌍	2945	240	155	85
L 09169	L	LE	3	11	32	16S	34E	631846	3639195* 🌍	3084	180	60	120
L_05298	L	LE		3	30	16S	34E	630606	3639870* 🌍	3167	145	94	51
<u>L 11044</u>	L	LE		42	18	17S	34E	631629	3634049* 🌍	3209	150		
L 01880 S2	L	LE	2	13	13	17S	33E	628972	3633702* 🌍	3219	235	151	84
L 05690	L	LE		44	32	16S	34E	633170	3638112* 🌍	3501	465	100	365
L 03576	L	LE		24	34	16S	33E	626799	3638401* 🌍	3531	212	160	52
<u>L 01884</u>	L	LE	1	43	13	17S	33E	629181	3633306* 🌍	3549	250		

*UTM location was derived from PLSS - see Help

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced, O=orphaned, C=the file is closed)						2=NE 3 st to lar	3=SW 4=SE gest) (NA) AD83 UTM in me	ters)	(1	n feet)	
	POD Sub-			QQ								Depth	
POD Number L 03529 S	Code basin Cor L L	unty E				Tws 16S	-	X 631030	Y 3640184* 😜	Distance 3581	Well 260	Water	Column 90
L 01883		.E	4	4 4		17S		630189	3633119*	3664	260	147	113
L 01882	LL	.E	4	34		17S		629785	3633112* 🥃	3665	245		
L 01880	LL	.E	3	4 3	13	17S	33E	629181	3633106* 🥌	3745	245		
L 03477	LL	.E	3	32	30	16S	34E	631024	3640386* 🥌	3772	150	115	35
L 03528 S3	LL	E	4	4 1	03	17S	33E	626111	3637078* 🌍	3834	271	155	116
L 03529	LL	.E	4	32	30	16S	34E	631224	3640386* 🌍	3834	260	120	140
L 03909	LL	.E		3 1	25	16S	33E	628785	3640445* 🌍	3845	180	120	60
L 01881	LL	E	3	33	13	17S	33E	628778	3633100* 🌍	3852	242		
L 06821	LL	.E	2	1 1	04	17S	34E	633680	3637800* 🌍	3884	180	65	115
L 03012	LL	E		4 1	03	17S	33E	626012	3637179* 🌍	3942	210	155	55
L 07696	LL	E	3	32	. 17	17S	34E	632735	3633968* 🌍	3965	200	160	40
L 06222	LL	E		23	26	16S	33E	627582	3640022* 🌍	4009	205	154	51
L 04768	LL	.E		2 2	17	17S	34E	633233	3634478* 🌍	4020	190	90	100
L 03789	LL	E			26	16S	33E	627788	3640216* 🌍	4055	223	145	78
L 04226	LL	E	4	4 4	18	17S	34E	631741	3633143* 🌍	4056	166		
L 03397	LL	E		2 2	25	16S	33E	629987	3640869* 🌍	4094	160	124	36
L 10289	LL	.E		2 2	25	16S	33E	629987	3640869* 🌍	4094	200		
L 03574	LL	E		2 1	25	16S	33E	629182	3640855* 🌍	4148	160	115	45
L 03476	LL	E		2 1	30	16S	34E	630717	3640882* 🌍	4181	166	115	51
L 12701 POD1	L							630011	3640983 🌍	4209	235		
L 03712	LL	E		2 2	26	16S	33E	628377	3640841* 🌍	4354	170	135	35
<u>L 03751</u>	LL	E		2 2	26	16S	33E	628377	3640841* 🌍	4354	175		
L 03306	LL	E		2 2	30	16S	34E	631521	3640897* 🌍	4417	190	125	65
L 06594	LL	E	1	12	34	16S	33E	626284	3639297* 🌍	4436	230	160	70
L 03427	LL	.E	1	1 1	29	16S	34E	631822	3641003* 🌍	4630	170	118	52
L 03529 S2	LL	E	4	4 4	19	16S	34E	631614	3641198* 🌍	4731	262	116	146
L 03599 S	LL	E	4	4 4	33	16S	33E	625293	3637871 🌍	4768	287	175	112
L 11049	LL	E		3 1	20	17S	34E	632056	3632445* 🌍	4821	250	140	110

*UTM location was derived from PLSS - see Help

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced, O=orphaned, C=the file is closed)	(quarters are 1=NW 2=NE 3=S\ (quarters are smallest to largest	,	UTM in m	neters)	(n feet)
POD Number	POD Sub- Code basin Cou	Q Q Q unty 64 16 4 Sec Tws Rng	x	Y	Distance		Depth Water Water Column
				Aver	age Depth to	Water:	135 feet
					Minimum	Depth:	60 feet
					Maximum	Depth:	175 feet
Record Count: 55							
UTMNAD83 Radius	Search (in meters)	<u>):</u>					
Easting (X): 6299	933.66	Northing (Y): 3636774.75		Radiu	IS: 4828		

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



Attachment B:

Site Location Map Wetlands Map Floodplain Map Karst Area Map





U.S. Fish and Wildlife Service **National Wetlands Inventory**

Sanmal Queen Unit



October 18, 2018

Wetlands

- Estuarine and Marine Wetland

Estuarine and Marine Deepwater

- **Freshwater Pond**

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Lake Other Riverine This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.









Attachment C:

Sample Location Map





Attachment D:

Laboratory Analytical Reports



October 01, 2018

LUPE CARRASCO HRL COMPLIANCE SOLUTIONS, INC. 2385 F 1/2 ROAD GRAND JUNCTION, CO 81505

RE: SAMNAL LEASE

Enclosed are the results of analyses for samples received by the laboratory on 09/27/18 9:54.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 1 - SURFACE (H802739-01)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 69.8-14	2						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/28/2018	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	82.1	% 41-142							
Surrogate: 1-Chlorooctadecane	77.7	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 1 - 1' (H802739-02)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 69.8-14	2						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	09/28/2018	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	88.2	% 41-142	2						
Surrogate: 1-Chlorooctadecane	82.9	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 1 - 2' (H802739-03)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.8-14	2						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	09/28/2018	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	84.8	% 41-142	,						
Surrogate: 1-Chlorooctadecane	78.5	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 2 - SURFACE (H802739-04)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.8-14	2						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	928	16.0	09/28/2018	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	50.7	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	48.4	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	77.0	% 41-142	2						
Surrogate: 1-Chlorooctadecane	73.8	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 2 - 1' (H802739-05)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	85.8	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9600	16.0	09/28/2018	ND	400	100	400	3.92	QM-07
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	87.3	% 41-142	,						
Surrogate: 1-Chlorooctadecane	82.6	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 2 - 2' (H802739-06)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.7	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8530	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	79.8	% 41-142	,						
Surrogate: 1-Chlorooctadecane	75.1	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 3 - SURFACE (H802739-07)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.1	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2760	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	38.7	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	11.6	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	72.1	% 41-142	,						
Surrogate: 1-Chlorooctadecane	70.3	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 3 - 1' (H802739-08)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.9	69.8-14	2						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1460	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	14.3	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	83.7	% 41-142							
Surrogate: 1-Chlorooctadecane	81.7	37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 3 - 1.5' (H802739-09)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.7	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6080	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	84.4	% 41-142	,						
Surrogate: 1-Chlorooctadecane	79.5	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 4 - SURFACE (H802739-10)

BTEX 8021B	mg/	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	85.4	% 69.8-14	2						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8880	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	177	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	84.3	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	82.4	% 41-142	,						
Surrogate: 1-Chlorooctadecane	88.1	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 4 - 1' (H802739-11)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.2	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7440	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	224	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	65.1	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	83.6	% 41-142	2						
Surrogate: 1-Chlorooctadecane	90.2	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 5 - SURFACE (H802739-12)

BTEX 8021B	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	83.6	% 69.8-14	2						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4960	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	543	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	243	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	77.7	% 41-142	2						
Surrogate: 1-Chlorooctadecane	<i>99.2</i>	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 5 - 1' (H802739-13)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	85.2	69.8-14	2						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	262	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	124	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	85.3	% 41-142							
Surrogate: 1-Chlorooctadecane	93.5	37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 6 - SURFACE (H802739-14)

BTEX 8021B	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.0	% 69.8-14	2						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	31600	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	10.3	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	72.6	% 41-142							
Surrogate: 1-Chlorooctadecane	69.5	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 6 - 1' (H802739-15)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.5	% 69.8-14	2						
Chloride, SM4500CI-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14100	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	81.5	% 41-142	,						
Surrogate: 1-Chlorooctadecane	76.9	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 7 - SURFACE (H802739-16)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.78	89.1	2.00	2.94	
Toluene*	<0.050	0.050	09/27/2018	ND	1.90	95.2	2.00	4.70	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.02	101	2.00	3.52	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.11	102	6.00	3.30	
Total BTEX	<0.300	0.300	09/27/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	87.2	% 69.8-14	2						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	348	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	251	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	83.6	% 41-142							
Surrogate: 1-Chlorooctadecane	93.3	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 7 - 1' (H802739-17)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.8	% 69.8-14	2						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	76.9	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	64.8	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	83.6	% 41-142	2						
Surrogate: 1-Chlorooctadecane	83.9	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 7 - 2' (H802739-18)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	85.2	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	194	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	123	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	85.3	% 41-142							
Surrogate: 1-Chlorooctadecane	95.8	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 8 - SURFACE (H802739-19)

BTEX 8021B	mg,	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	86.4	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/29/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	737	10.0	09/29/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	197	10.0	09/29/2018	ND					
Surrogate: 1-Chlorooctane	86.0	% 41-142	,						
Surrogate: 1-Chlorooctadecane	115 9	37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 8 - 1' (H802739-20)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	85.9	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	12.3	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	92.0	% 41-142	,						
Surrogate: 1-Chlorooctadecane	89.4	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 8 - 2' (H802739-21)

BTEX 8021B	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	87.3	% 69.8-14	2						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	54.3	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	10.7	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	89.2	% 41-142	2						
Surrogate: 1-Chlorooctadecane	89.8	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 9 - SURFACE (H802739-22)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	85.0	% 69.8-14	2						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	2220	50.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	722	50.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	82.5	% 41-142							
Surrogate: 1-Chlorooctadecane	161	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



HRL COMPLIANCE SOLUTIONS, INC. LUPE CARRASCO 2385 F 1/2 ROAD GRAND JUNCTION CO, 81505 Fax To:

Received:	09/27/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	SAMNAL LEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S 9 - 1' (H802739-23)

BTEX 8021B	mg/	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2018	ND	1.81	90.7	2.00	0.232	
Toluene*	<0.050	0.050	09/28/2018	ND	1.96	97.9	2.00	0.635	
Ethylbenzene*	<0.050	0.050	09/28/2018	ND	2.06	103	2.00	0.0700	
Total Xylenes*	<0.150	0.150	09/28/2018	ND	6.15	103	6.00	0.206	
Total BTEX	<0.300	0.300	09/28/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	85.8	% 69.8-14	2						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2640	16.0	09/28/2018	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	183	91.6	200	4.21	
DRO >C10-C28*	28.4	10.0	09/28/2018	ND	187	93.3	200	2.47	
EXT DRO >C28-C36	14.3	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane	80.4	% 41-142	2						
Surrogate: 1-Chlorooctadecane	80.6	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	Smith 7	White a	.,	BILL TO	и У. 1. 4 С.	ANDI ASIS		
Project Manager:	lupt (arrasco						
Address:	1	1 1		Company: HRC				
City:		State:	Zip:	Attn:				
Phone #:		Fax #:		Address:				
Project #:		Project Owner:	a	city: Hotosla				
Project Name:	Samual 2	ease		State: MJM2ip:				
Project Location:		•		Phone #:				
Sampler Name:				Fax #:		6		
FOR LAB USE ONLY			MATRIX	PRESERV. SAMPLING		25		
Lab I.D.	Sample I.D.	.º	RAB OR (C)OMP ONTAINERS DUNDWATER STEWATER L DGE	ier : D/Base: / Cool ier :	OTEX TP 14 Wor, 24	hlord		
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6	52-2'				4 9 Y			
2	53 - Surface	C			8 A 9			
~	53-1'				X X X			
9	53 -1.5				XXX			
PLEASE NOTE: Liability and analyses. All claims including	Damages, Cardinal's liability and client those for negligence and any other cau	's exclusive remedy for a use whatsoever shall be d	PLEASE NOTE: Llability and Damages. Cardina's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatseever shall be deemed waived unless made in writing and received by Cardinal within 30 days. and complexing the client for the	or tort, shall be limited to the amount paid in the amount paid in the amount paid in the amount paid in the start of the	by the client for the	-		_
service. In no event shall Carr affiliates or successors arising	service. In no event shall Cardinal be liable for incidental or consequental affiliates or successors arising out of or related to the performance of serv	ental damages, including services hereunder by C.	service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affliates or successors ansing out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	oss of use, or loss of profits incurred by clip based upon any of the above stated reas	ent, its subsidiaries. ons or otherwise.			
Relinquished By:	Kunuchu	Classed also	Defectived By:	Jelle Kyd	ult: □ Yes : □ Yes	□ No Add'I Phone #: □ No Add'I Fax #:	**	
Relinquished By:		Date:	Received By:	7	JAN ST	DI. la	いいで	
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Delivered By: (Circle One)	(Circle One)		Sample Condition	CH	1 Carrosco	& holcom	1. com	
Sampler - UPS -	Bus - Other:	8.4°		(Initials)				

+ Cardinal cannot accent verbal channee Blease fav written channes to (575) 202-2226



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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

## 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name: HILL		BILL TO	A	ANALYSIS REQUEST
lanager: Lupe Carl	VES CO	P.O. #:		
Address:		Company: HKC		
City: State:	Zip:	Attn:		
Phone #: Fax #:		Address:		
Project #: Proje	Project Owner:	city: Artesta	-	
Project Name: Samual La		MM		
Project Location:		Phone #:		
Sampler Name:		Fax #:		
FOR LAB USE ONLY	MATRIX	PRESERV. SAMPLING	1 7 4	
	RS TER ER		t El VI	
Lab I.D. Sample I.D.	(G)RAB OR (( # CONTAINE GROUNDWA WASTEWATE SOIL OIL SLUDGE	OTHER : ACID/BASE: ICE / COOL OTHER : DATE	TIME B	5
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23 58-11			R R R	
analyses. All dains including those and any anu urants exclusive tracking in any similar based in contract or fort, shall be initiated the amount paid by the client for the analyses. All dains including those and any other cause whatsoever shall be deemed waived in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors ansing out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or its benevies.	<ul> <li>insucy in any claim anising whener based in contract pever shall be deemed waived unless made in whing and ages, including without limitation, business interruptions, lo arounder by Cardinal, regardless of whether such claim is</li> </ul>	ror, shall be imited to the amount paid by the received by Cardinal within 30 days after com iss of use, or loss of profits incurred by client, i based upon any of the above stated reasons based upon any of the above stated reasons of the state of	aid by the dient for the far completion of the applicable y client, its subsidiaries, reasons or otherwise.	
Relinquished By:	THIS Received By:		ult: □ Yes □ No	Add'I Phone #: Add'I Fax #:
Relinquished By: Time:	Received By:	Willing ye		
Delivered By: (Circle One)	Sample Condition Cool Intact	сн		
Sampler - UPS - Bus - Other:	中			

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Attachment D:

**State Land Office Communication** 

### **Jennifer Knowlton**

From:	Mann, Ryan <rmann@slo.state.nm.us></rmann@slo.state.nm.us>
Sent:	Thursday, October 18, 2018 11:16 AM
То:	Jennifer Knowlton
Cc:	Rickey Smith; Henryetta Price; Martin, Ed; Strang, Dana V.; Barnes, Will; Antillon, Andrea
Subject:	RE: Sanmal Location

### Hello Jennifer,

NMSLO has conducted internal discussions regarding the site characterization. NMSLO will require the off pad areas to the south and east of the well pad be addressed as well. These appear to be the result of historic releases. It is acceptable to forego additional characterization of these areas if it is excavated to 2ft below ground level, have a liner installed, clean soil placed on top, and seeded at the appropriate time. Additionally NMSLO will require a liner in the area around sample point #6. The lateral extent of this excavation will require confirmation samples.

Please let me know if you have any questions or concerns.

Ryan Mann Remediation Specialist Field Operation Division (575) 392-3697 (505) 699-1989 New Mexico State Land Office 2827 N. Dal Paso Suite 117 Hobbs, NM 88240

From: Jennifer Knowlton [mailto:jknowlton@hrlcomp.com]
Sent: Friday, October 5, 2018 1:58 PM
To: Mann, Ryan <rmann@slo.state.nm.us>
Cc: Rickey Smith <rickeylynnsmith@gmail.com>; Henryetta Price <hprice@hrlcomp.com>
Subject: Sanmal Location

Ryan,

As I discussed on the phone, HRL is assisting Mr. Smith with this issue. We recently completed characterization sampling at the Sanmal location since it had been over a year since the previous sampling. A depth to water analysis shows that the water table is over 100' bgs at this location. Comparing the analytical summary table to Table 1 closure standards in NMAC19.15.29, we will need to remove about a foot of material around SP6.

I would like to request a deferral on cleaning up around SP1. I believe that this is an old drilling pit but it is starting to revegetate and it is better to not disturb the growth if possible.

I would like SLO concurrence and input on this plan before submitting the remediation plan to OCD.

If you have any questions, please do not hesitate to contact me.

Jennifer Knowlton, PE | Regional Manager-Permian

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