

NM1 - 39

**APPROVED
FACILITY
BACKGROUND**

2015

PITCHFORK LANDFARM

BERT MADERA
524 ANTELOPE ROAD
JAL, NEW MEXICO 88252
575-390-5618

RECEIVED OCD

2015 JUN -8 A 11: 02

June 4, 2015

Mr. Brad Jones
Environmental Engineer
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

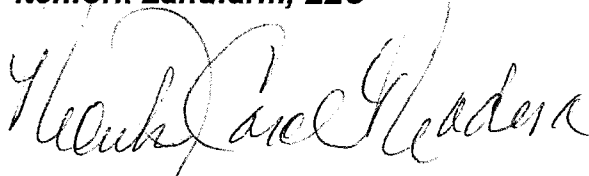
**Re: Background Demonstration Sampling Report
Pitchfork Landfarm, LLC
Lea County, New Mexico
Permit Number: NM1-039**

Dear Mr. Jones:

Please find enclosed one (1) copy of the ***Background Demonstration Sampling Report*** (Report) for the Pitchfork Landfarm, LLC (Pitchfork) site located in the NE/4, NW/4, NE/4 of Section 5, Township 24 South, Range 34 East NMPM in Lea County, New Mexico. Pitchfork has read the Report and concurs with the information provided.

Sincerely,

Pitchfork Landfarm, LLC



Monte Carol Madera
Agent

Enclosure: Background Demonstration Sampling Report (1 copy)



June 5, 2015

Mr. Brad Jones
Environmental Engineer
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Background Demonstration Sampling Report
Pitchfork Landfarm, LLC
Lea County, New Mexico
Permit Number: NM1-039**

Dear Mr. Jones:

Enviro Clean Cardinal, LLC (EC²), formerly Enviro Clean Services, LLC, on behalf of our client Pitchfork Landfarm, LLC (Pitchfork), is pleased to submit to the New Mexico Oil Conservation Division (NMOCD) the following report summarizing the Background Demonstration Sampling and Analysis at the Pitchfork landfarm site (Site) located in the NE/4, NW/4, NE/4 of Section 5, Township 24 South, Range 34 East NMPM in Lea County, New Mexico. The Site location and topographic features are shown on attached **Figure 1**. The background sampling and analysis was conducted in accordance with the **Background Demonstration Sampling and Analysis Plan** (Work Plan), approved by the NMOCD on March 3, 2015.

Prior to arriving at the Site to conduct the field soil sampling activities, EC² completed the utility locate process through the New Mexico 811 System. No utility lines were noted within the sampling area. On March 24, 2015, EC² arrived at the Site to collect the required background soil samples. Two locations were identified upgradient of the Site that did not appear to have been previously disturbed. The background soil sample locations, BG-1 and BG-2, are shown on attached **Figure 2**. At each of these locations EC² installed one soil boring to a depth of approximately 3 feet below the native ground surface utilizing a decontaminated hand-auger. A soil sample was collected from each of these soil borings from the depth interval of 2.0 to 3.0 feet bgl. The soil samples collected from the background soil borings were placed directly into laboratory prepared sample containers, labeled as to source and contents, placed on ice for preservation, placed under chain-of-custody control and shipped via overnight courier to the analytical laboratory (ALS Environmental Laboratory, Houston, Texas). The background soil samples were analyzed for total petroleum hydrocarbons (TPH) (Method 8015 B); benzene, toluene, ethylbenzene and total xylenes (BTEX) (Method 8260); chlorides (EPA Method 300)

and constituents listed in Subsections A and B of 20.6.2.3103 NMAC. Upon completion of soil boring/sampling activities the soil borings were plugged with hydrated bentonite chips.

A summary of the laboratory analytical data for the background soil samples is presented in **Table 1**, and a complete copy of the laboratory analytical report is provided in **Attachment A**. A review of **Table 1** indicates the laboratory Practical Quantitation Limits (PQL) for the metal analytes are slightly different for the two background samples. These slight differences in the PQLs are due to laboratory sample preparation variability and do not diminish the usability of these analytical data.

EC² utilized USEPA guidance found in Section 3.2 of the document titled *Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites*, OSWER 9285.6-10, December 2002, to develop the Mean Background Concentration (MBC) for each analyte in the background samples. Analyte concentrations greater than the PQL were averaged. Analyte concentrations less than the PQL were utilized as half of the PQL and then averaged. The MBC column presented in **Table 1** provides an average of the background analytical results from the two background soil samples. The MBC levels presented in this column will be utilized to screen future vadose zone monitoring samples pursuant to 19.15.36.15.E to determine if a potential release has occurred at the Site.

If you have any questions regarding the data presented herein, please do not hesitate to contact me at (918) 906-6780.

Sincerely,
Enviro Clean Cardinal, LLC



Bruce E. McKenzie, P.G.
Senior Project Manager

Attachments: Figure 1 - Site Location and Topographic Features
Figure 2 - Background Soil Sample Locations
Table 1 - Summary of Laboratory Analyses of Soil Samples
Attachment A - Laboratory Analytical Reports and Chain-of-custody Documentation

Table 1 : Summary of Background Soil Analytical Results
Pitchfork Landfarm, LLC
Lea County, New Mexico
NM1-039

Parameter	Sample ID:	BG-1 (2-3)FT	ALS PQL for BG-1 (2-3)FT	BG-2 (2-3)FT	ALS PQL for BG-2 (2-3)FT	Mean Background Concentration
	Sample Date:	24-Mar-15		24-Mar-15		
Volatile Organic Compounds (VOCs)						
	Units					
Benzene	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
Toluene	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
Carbon Tetrachloride	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,2-Dichloroethane	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,1-Dichloroethene	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,1,2,2-tetrachloroethene	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,1,2-trichloroethene	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
Ethylbenzene	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
Xylenes (total)	mg/kg	<0.011	0.011	<0.011	0.011	0.00550
Methylene chloride	mg/kg	<0.011	0.011	<0.011	0.011	0.00550
Chloroform	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,1-Dichloroethane	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
Ethylene dibromide	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,1,1-trichloroethane	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,1,2-trichloroethane	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
1,1,2,2-tetrachloroethane	mg/kg	<0.0055	0.0055	<0.0055	0.0055	0.00275
Vinyl chloride	mg/kg	<0.0022	0.0022	<0.0022	0.0022	0.00110
Polynuclear Aromatic Hydrocarbons (PAHs)						
	Units					
Benzo(a)pyrene	mg/kg	<0.0036	0.0036	<0.0036	0.0036	0.00180
1-Methylnaphthalene	mg/kg	<0.0036	0.0036	<0.0036	0.0036	0.00180
2-Methylnaphthalene	mg/kg	<0.0036	0.0036	<0.0036	0.0036	0.00180
Naphthalene	mg/kg	<0.0036	0.0036	<0.0036	0.0036	0.00180
Total Petroleum Hydrocarbons						
	Units					
C6 - C10	mg/kg	<0.055	0.055	<0.055	0.055	0.0275
C10 - C28	mg/kg	<1.9	1.9	<1.9	1.9	0.950
C24 - C40	mg/kg	5.6	3.7	4.5	3.7	5.1
Metals						
	Units					
Arsenic	mg/kg	2.97	0.533	3.00	0.507	2.99
Barium	mg/kg	76.3	0.533	70.3	0.507	73.3
Cadmium	mg/kg	<0.533	0.533	<0.507	0.507	0.260
Chromium	mg/kg	6.16	0.533	5.01	0.507	5.59
Lead	mg/kg	5.18	0.533	4.08	0.507	4.63
Mercury (total)	mg/kg	0.00402	0.00378	<0.00378	0.00378	0.00296
Selenium	mg/kg	<0.533	0.533	<0.507	0.507	0.260
Silver	mg/kg	<0.533	0.533	<0.507	0.507	0.260
Copper	mg/kg	3.78	0.533	3.01	0.507	3.40
Iron	mg/kg	5850	53.3	4540	50.7	5,195
Manganese	mg/kg	72.1	0.533	58.8	0.507	65.5
Zinc	mg/kg	13.1	0.533	11.0	0.507	12.1
Uranium	mg/kg	<0.533	0.533	<0.507	0.507	0.260

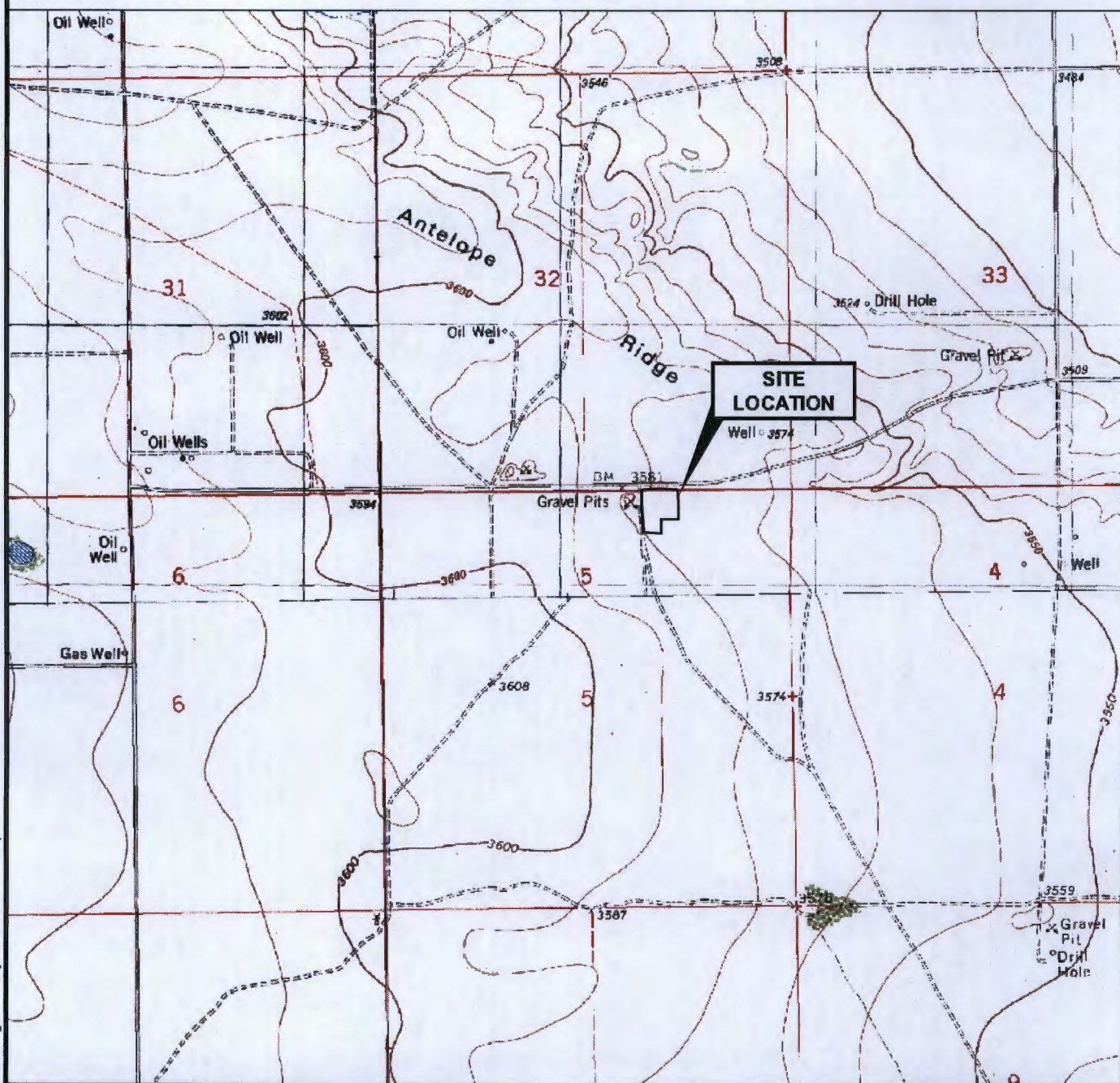
Table 1 : Summary of Background Soil Analytical Results
Pitchfork Landfarm, LLC
Lea County, New Mexico
NM1-039

Parameter	Sample ID:	BG-1 (2-3)FT	ALS PQL for BG-1 (2-3)FT	BG-2 (2-3)FT	ALS PQL for BG-2 (2-3)FT	Mean Background Concentration
	Sample Date:	24-Mar-15		24-Mar-15		
Polychlorinated Biphenyls (PCBs)						
	Units					
Aroclor 1016	mg/kg	<0.018	0.018	<0.018	0.018	0.0090
Aroclor 1221	mg/kg	<0.018	0.018	<0.018	0.018	0.0090
Aroclor 1232	mg/kg	<0.018	0.018	<0.018	0.018	0.0090
Aroclor 1242	mg/kg	<0.018	0.018	<0.018	0.018	0.0090
Aroclor 1248	mg/kg	<0.018	0.018	<0.018	0.018	0.0090
Aroclor 1254	mg/kg	<0.018	0.018	<0.018	0.018	0.0090
Aroclor 1260	mg/kg	<0.018	0.018	<0.018	0.018	0.0090
General Chemistry and Radionuclides						
	Units					
Chloride	mg/kg	<5.50	5.50	<5.43	5.43	2.73
Cyanide, total	mg/kg	<2.18	2.18	<2.19	2.19	1.09
Fluoride	mg/kg	3.96	1.10	2.75	1.09	3.36
Nitrate as N	mg/kg	<1.10	1.10	<1.09	1.09	0.55
Ra-226	pCi/g	0.39 (+/- 0.18)	N/A	0.38 (+/- 0.19)	N/A	N/A
Ra-228	pCi/g	<0.8 (+/- 0.36)	N/A	<0.81 (+/- 0.36)	N/A	N/A
Phenols	mg/kg	<2.76	2.76	<2.74	2.74	1.38
Sulfate	mg/kg	5.68	5.50	5.81	5.43	5.75

Notes:

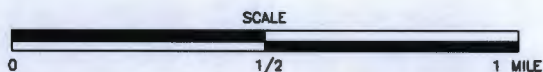
1. µg/kg : micrograms per kilogram.
2. mg/kg : milligrams per kilogram.
3. pCi/g : picoCuries per gram.
4. < : Analyte not detected at the laboratory practical quantitation limit (PQL).
5. All analyses performed by ALS Laboratory Group in Houston, Texas with the exception of Ra-226 and Ra-228 which were subcontracted to ALS Laboratory Group in Fort Collins, Colorado.
6. Cells shaded in blue indicate results that are above the laboratory PQL.
7. N/A : Not Applicable

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24
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SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLES
 BELL LAKE, NEW MEXICO 1973
 SAN SIMON SINK, NEW MEXICO 1984
 TIP TOP WELLS, NEW MEXICO 1984 AND
 WOODLEY FLAT, NEW MEXICO 1973

NEW MEXICO



CLIENT
 PITCHFORK LANDFARM, LLC

FIGURE TITLE
**SITE LOCATION AND
 TOPOGRAPHIC FEATURES**

LOCATION
 NE/4 NW/4 NE/4, SECTION 5, T24S, R34E
 LEA COUNTY, NEW MEXICO

DOCUMENT TITLE
 BACKGROUND DEMONSTRATION
 SAMPLING REPORT

ENVIRO CLEAN
 SERVICES, LLC

Enviro Clean Services, LLC

7060 South Yale Avenue, Suite 603
 Tulsa, Oklahoma 74136
 918.794.7828

www.EnviroCleanPS.com

DATE	5/19/2015	DESIGNED BY	BEM
SCALE	AS SHOWN	APPROVED BY	BEM
PROJECT NUMBER		DRAWN BY	SKG
PITHLAND01		FIGURE NUMBER	1

Y:\Projects\Pitchfork\PITHLAND01\04_CAD\20150324_PitchforkLandfarm_SITE.dwg on May 19, 2015 - 1:32pm



SOURCE: AERIAL PHOTOGRAPH DATED FEBRUARY 13, 2014 -
GOOGLE EARTH PRO SCREEN CAPTURE

LEGEND

● LOCATION OF BACKGROUND SAMPLE WITH CONCENTRATION OF
CHLORIDE, mg/kg, MARCH 24, 2015

□ LANDFARM BOUNDARY



CLIENT PITCHFORK LANDFARM, LLC		FIGURE TITLE BACKGROUND SOIL SAMPLE LOCATIONS	
LOCATION NW/4 NE/4 SECTION 5, NM T24S R34E LEA COUNTY, NEW MEXICO		DOCUMENT TITLE BACKGROUND DEMONSTRATION SAMPLING REPORT	
		DATE	5/19/2015
		SCALE	1"=200'
		PROJECT NUMBER	PITHLAND01
		FIGURE NUMBER	2
Enviro Clean Services, LLC		DESIGNED BY	BEM
7060 South Yale Ave, Suite 603		APPROVED BY	BEM
Tulsa, Oklahoma 74136		DRAWN BY	SKG
918.794.7828			
www.EnviroCleanPS.com			

ATTACHMENT A

**LABORATORY ANALYTICAL REPORTS
AND CHAIN-OF-CUSTODY DOCUMENTATION**



10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

April 28, 2015

Julie Czech
Enviro Clean Services, LLC
7060 S. Yale Avenue, Suite 603
Tulsa, OK 74136

Work Order: **HS15030885**

Revision: **1**

Laboratory Results for: **Pitchforkland Farm, LLC**

Dear Julie,

ALS Environmental received 3 sample(s) on Mar 25, 2015 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

A handwritten signature in cursive script that reads "Sonia West".

Generated By: Sonia.West
Sonia West
Project Manager

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
Work Order: HS15030885

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS15030885-01	BG-1 (2-3)Ft	Soil		24-Mar-2015 11:00	25-Mar-2015 09:20	☐
HS15030885-02	BG-2 (2-3) Ft	Soil		24-Mar-2015 11:50	25-Mar-2015 09:20	☐
HS15030885-03	TRIP BLANK 030215-99	Water		24-Mar-2015 00:00	25-Mar-2015 09:20	☐

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
Work Order: HS15030885

CASE NARRATIVE

Work Order Comments

- Results are reported to the PQL (Reporting Limit).
- Revision I:
As per the clients request via email on April 28, 2015, this report has been revised to remove various metals.
- The analyses for Radium-226 and Radium-228 were subcontracted to ALS Environmental in Fort Collins, CO.

ECD Organics by Method SW8082**Batch ID: 91821a**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GC Semivolatiles by Method SW8015M**Batch ID: 91779**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GC Volatiles by Method SW8015**Batch ID: R251832**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GCMS Semivolatiles by Method SW8270**Batch ID: 91778**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GCMS Volatiles by Method SW8260**Batch ID: R251741,R251744**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW7471A**Batch ID: 91818**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW6020**Batch ID: 91763**Sample ID: **HS15030887-01**

- MS/MSD and DUPs are for an unrelated sample

WetChemistry by Method SW3550**Batch ID: R251675**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
Work Order: HS15030885

CASE NARRATIVE

WetChemistry by Method SW9014

Batch ID: 92137

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW9065

Batch ID: 91812

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW9056

Batch ID: 91760

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

Client: Enviro Clean Services, LLC
 Project: Pitchforkland Farm, LLC
 Sample ID: BG-1 (2-3)Ft
 Collection Date: 24-Mar-2015 11:00

ANALYTICAL REPORT

WorkOrder:HS15030885
 Lab ID:HS15030885-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
1,1,2,2-Tetrachloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
1,1,2-Trichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
1,1-Dichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
1,1-Dichloroethene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
1,2-Dibromoethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
1,2-Dichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
Benzene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
Carbon tetrachloride	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
Chloroform	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
Ethylbenzene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
Methylene chloride	ND		0.011	mg/Kg-dry	1	27-Mar-2015 12:55
Toluene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 12:55
Vinyl chloride	ND		0.0022	mg/Kg-dry	1	27-Mar-2015 12:55
Xylenes, Total	ND		0.011	mg/Kg-dry	1	27-Mar-2015 12:55
<i>Surr: 1,2-Dichloroethane-d4</i>	96.8		70-128	%REC	1	27-Mar-2015 12:55
<i>Surr: 4-Bromofluorobenzene</i>	95.8		73-126	%REC	1	27-Mar-2015 12:55
<i>Surr: Dibromofluoromethane</i>	100		71-128	%REC	1	27-Mar-2015 12:55
<i>Surr: Toluene-d8</i>	99.6		73-127	%REC	1	27-Mar-2015 12:55
LOW-LEVEL SEMIVOLATILES		Method:SW8270		Prep:SW3541 / 26-Mar-2015		Analyst: LG
1-Methylnaphthalene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 17:45
2-Methylnaphthalene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 17:45
Benzo(a)pyrene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 17:45
Naphthalene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 17:45
<i>Surr: 2-Fluorobiphenyl</i>	92.5		43-125	%REC	1	26-Mar-2015 17:45
<i>Surr: 4-Terphenyl-d14</i>	100		32-125	%REC	1	26-Mar-2015 17:45
<i>Surr: Nitrobenzene-d5</i>	91.1		37-125	%REC	1	26-Mar-2015 17:45
PCBS BY SW8082A		Method:SW8082		Prep:SW3546/3665A / 27-Mar-2015		Analyst: STH
Aroclor 1016	ND		18	ug/Kg-dry	1	27-Mar-2015 20:11
Aroclor 1221	ND		18	ug/Kg-dry	1	27-Mar-2015 20:11
Aroclor 1232	ND		18	ug/Kg-dry	1	27-Mar-2015 20:11
Aroclor 1242	ND		18	ug/Kg-dry	1	27-Mar-2015 20:11
Aroclor 1248	ND		18	ug/Kg-dry	1	27-Mar-2015 20:11
Aroclor 1254	ND		18	ug/Kg-dry	1	27-Mar-2015 20:11
Aroclor 1260	ND		18	ug/Kg-dry	1	27-Mar-2015 20:11
<i>Surr: Decachlorobiphenyl</i>	102		54-143	%REC	1	27-Mar-2015 20:11
<i>Surr: Tetrachloro-m-xylene</i>	98.4		55-137	%REC	1	27-Mar-2015 20:11

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
 Project: Pitchforkland Farm, LLC
 Sample ID: BG-1 (2-3)Ft
 Collection Date: 24-Mar-2015 11:00

ANALYTICAL REPORT

WorkOrder:HS15030885
 Lab ID:HS15030885-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 26-Mar-2015		Analyst: JCJ
Arsenic	2.97		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Barium	76.3		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Cadmium	ND		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Chromium	6.16		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Copper	3.78		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Iron	5,850		53.3	mg/Kg-dry	1	26-Mar-2015 17:09
Lead	5.18		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Manganese	72.1		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Selenium	ND		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Silver	ND		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Uranium	ND		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
Zinc	13.1		0.533	mg/Kg-dry	1	26-Mar-2015 17:09
ANIONS BY SW9056A		Method:SW9056		Prep:SW9056 / 26-Mar-2015		Analyst: JBA
Chloride	ND		5.50	mg/Kg-dry	1	26-Mar-2015 12:05
Fluoride	3.96		1.10	mg/Kg-dry	1	26-Mar-2015 12:05
Nitrogen, Nitrate (As N)	ND		1.10	mg/Kg-dry	1	26-Mar-2015 12:05
Sulfate	5.68		5.50	mg/Kg-dry	1	26-Mar-2015 12:05
CYANIDE		Method:SW9014		Prep:SW9010C / 07-Apr-2015		Analyst: KHT
Cyanide	ND		2.18	mg/Kg-dry	1	08-Apr-2015 09:09
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015				Analyst: SFE
Gasoline Range Organics	ND		0.055	mg/Kg-dry	1	26-Mar-2015 21:15
Surr: 4-Bromofluorobenzene	82.3		70-130	%REC	1	26-Mar-2015 21:15
MERCURY BY SW7471B		Method:SW7471A		Prep:SW7471A / 27-Mar-2015		Analyst: OFO
Mercury	4.02		3.78	ug/Kg-dry	1	27-Mar-2015 15:47
SUBCONTRACT ANALYSIS		Method:NA				Analyst: SUB
Miscellaneous Analysis	See Attached				1	18-Apr-2015 13:48
MOISTURE		Method:SW3550				Analyst: JHD
Percent Moisture	9.43		0.0100	wt%	1	26-Mar-2015 12:06
PHENOLICS		Method:SW9065		Prep:SW9065 / 27-Mar-2015		Analyst: JHD
Phenolics, Total Recoverable	ND		2.76	mg/kg-dry	1	27-Mar-2015 17:16
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3541 / 26-Mar-2015		Analyst: KMB
TPH (Diesel Range)	ND		1.9	mg/Kg-dry	1	27-Mar-2015 18:30
TPH (Motor Oil Range)	5.6		3.7	mg/Kg-dry	1	27-Mar-2015 18:30
Surr: 2-Fluorobiphenyl	85.7		60-135	%REC	1	27-Mar-2015 18:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
 Project: Pitchforkland Farm, LLC
 Sample ID: BG-2 (2-3) Ft
 Collection Date: 24-Mar-2015 11:50

ANALYTICAL REPORT

WorkOrder:HS15030885
 Lab ID:HS15030885-02
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
1,1,2,2-Tetrachloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
1,1,2-Trichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
1,1-Dichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
1,1-Dichloroethene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
1,2-Dibromoethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
1,2-Dichloroethane	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
Benzene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
Carbon tetrachloride	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
Chloroform	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
Ethylbenzene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
Methylene chloride	ND		0.011	mg/Kg-dry	1	27-Mar-2015 13:18
Toluene	ND		0.0055	mg/Kg-dry	1	27-Mar-2015 13:18
Vinyl chloride	ND		0.0022	mg/Kg-dry	1	27-Mar-2015 13:18
Xylenes, Total	ND		0.011	mg/Kg-dry	1	27-Mar-2015 13:18
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>101</i>		<i>70-128</i>	<i>%REC</i>	<i>1</i>	<i>27-Mar-2015 13:18</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>98.1</i>		<i>73-126</i>	<i>%REC</i>	<i>1</i>	<i>27-Mar-2015 13:18</i>
<i>Surr: Dibromofluoromethane</i>	<i>103</i>		<i>71-128</i>	<i>%REC</i>	<i>1</i>	<i>27-Mar-2015 13:18</i>
<i>Surr: Toluene-d8</i>	<i>101</i>		<i>73-127</i>	<i>%REC</i>	<i>1</i>	<i>27-Mar-2015 13:18</i>
LOW-LEVEL SEMIVOLATILES		Method:SW8270		Prep:SW3541 / 26-Mar-2015		Analyst: LG
1-Methylnaphthalene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 19:01
2-Methylnaphthalene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 19:01
Benzo(a)pyrene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 19:01
Naphthalene	ND		0.0036	mg/Kg-dry	1	26-Mar-2015 19:01
<i>Surr: 2-Fluorobiphenyl</i>	<i>87.3</i>		<i>43-125</i>	<i>%REC</i>	<i>1</i>	<i>26-Mar-2015 19:01</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>94.9</i>		<i>32-125</i>	<i>%REC</i>	<i>1</i>	<i>26-Mar-2015 19:01</i>
<i>Surr: Nitrobenzene-d5</i>	<i>89.2</i>		<i>37-125</i>	<i>%REC</i>	<i>1</i>	<i>26-Mar-2015 19:01</i>
PCBS BY SW8082A		Method:SW8082		Prep:SW3546/3665A / 27-Mar-2015		Analyst: STH
Aroclor 1016	ND		18	ug/Kg-dry	1	27-Mar-2015 20:26
Aroclor 1221	ND		18	ug/Kg-dry	1	27-Mar-2015 20:26
Aroclor 1232	ND		18	ug/Kg-dry	1	27-Mar-2015 20:26
Aroclor 1242	ND		18	ug/Kg-dry	1	27-Mar-2015 20:26
Aroclor 1248	ND		18	ug/Kg-dry	1	27-Mar-2015 20:26
Aroclor 1254	ND		18	ug/Kg-dry	1	27-Mar-2015 20:26
Aroclor 1260	ND		18	ug/Kg-dry	1	27-Mar-2015 20:26
<i>Surr: Decachlorobiphenyl</i>	<i>104</i>		<i>54-143</i>	<i>%REC</i>	<i>1</i>	<i>27-Mar-2015 20:26</i>
<i>Surr: Tetrachloro-m-xylene</i>	<i>101</i>		<i>55-137</i>	<i>%REC</i>	<i>1</i>	<i>27-Mar-2015 20:26</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
 Project: Pitchforkland Farm, LLC
 Sample ID: BG-2 (2-3) Ft
 Collection Date: 24-Mar-2015 11:50

ANALYTICAL REPORT

WorkOrder:HS15030885
 Lab ID:HS15030885-02
 Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY SW6020A		Method:SW6020		Prep:SW3050A / 26-Mar-2015		Analyst: JCJ
Arsenic	3.00		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Barium	70.3		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Cadmium	ND		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Chromium	5.01		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Copper	3.01		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Iron	4,540		50.7	mg/Kg-dry	1	26-Mar-2015 17:13
Lead	4.08		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Manganese	58.8		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Selenium	ND		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Silver	ND		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Uranium	ND		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
Zinc	11.0		0.507	mg/Kg-dry	1	26-Mar-2015 17:13
ANIONS BY SW9056A		Method:SW9056		Prep:SW9056 / 26-Mar-2015		Analyst: JBA
Chloride	ND		5.43	mg/Kg-dry	1	26-Mar-2015 12:48
Fluoride	2.75		1.09	mg/Kg-dry	1	26-Mar-2015 12:48
Nitrogen, Nitrate (As N)	ND		1.09	mg/Kg-dry	1	26-Mar-2015 12:48
Sulfate	5.81		5.43	mg/Kg-dry	1	26-Mar-2015 12:48
CYANIDE		Method:SW9014		Prep:SW9010C / 07-Apr-2015		Analyst: KHT
Cyanide	ND		2.19	mg/Kg-dry	1	08-Apr-2015 09:09
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015				Analyst: SFE
Gasoline Range Organics	ND		0.055	mg/Kg-dry	1	26-Mar-2015 21:31
Surr: 4-Bromofluorobenzene	89.4		70-130	%REC	1	26-Mar-2015 21:31
MERCURY BY SW7471B		Method:SW7471A		Prep:SW7471A / 27-Mar-2015		Analyst: OFO
Mercury	ND		3.78	ug/Kg-dry	1	27-Mar-2015 15:49
SUBCONTRACT ANALYSIS		Method:NA				Analyst: SUB
Miscellaneous Analysis	See Attached				1	18-Apr-2015 13:48
MOISTURE		Method:SW3550				Analyst: JHD
Percent Moisture	8.87		0.0100	wt%	1	26-Mar-2015 12:06
PHENOLICS		Method:SW9065		Prep:SW9065 / 27-Mar-2015		Analyst: JHD
Phenolics, Total Recoverable	ND		2.74	mg/kg-dry	1	27-Mar-2015 17:16
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3541 / 26-Mar-2015		Analyst: KMB
TPH (Diesel Range)	ND		1.9	mg/Kg-dry	1	27-Mar-2015 18:53
TPH (Motor Oil Range)	4.5		3.7	mg/Kg-dry	1	27-Mar-2015 18:53
Surr: 2-Fluorobiphenyl	76.2		60-135	%REC	1	27-Mar-2015 18:53

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
 Project: Pitchforkland Farm, LLC
 Sample ID: TRIP BLANK 030215-99
 Collection Date: 24-Mar-2015 00:00

ANALYTICAL REPORT

WorkOrder:HS15030885
 Lab ID:HS15030885-03
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: AKP		
1,1,1-Trichloroethane	ND		1.0	ug/L	1	27-Mar-2015 01:47
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L	1	27-Mar-2015 01:47
1,1,2-Trichloroethane	ND		1.0	ug/L	1	27-Mar-2015 01:47
1,1-Dichloroethane	ND		1.0	ug/L	1	27-Mar-2015 01:47
1,1-Dichloroethene	ND		1.0	ug/L	1	27-Mar-2015 01:47
1,2-Dibromoethane	ND		1.0	ug/L	1	27-Mar-2015 01:47
1,2-Dichloroethane	ND		1.0	ug/L	1	27-Mar-2015 01:47
Benzene	ND		1.0	ug/L	1	27-Mar-2015 01:47
Carbon tetrachloride	ND		1.0	ug/L	1	27-Mar-2015 01:47
Chloroform	ND		1.0	ug/L	1	27-Mar-2015 01:47
Ethylbenzene	ND		1.0	ug/L	1	27-Mar-2015 01:47
Methylene chloride	ND		2.0	ug/L	1	27-Mar-2015 01:47
Toluene	ND		1.0	ug/L	1	27-Mar-2015 01:47
Vinyl chloride	ND		1.0	ug/L	1	27-Mar-2015 01:47
Xylenes, Total	ND		3.0	ug/L	1	27-Mar-2015 01:47
<i>Surr: 1,2-Dichloroethane-d4</i>	99.9		71-125	%REC	1	27-Mar-2015 01:47
<i>Surr: 4-Bromofluorobenzene</i>	95.3		70-125	%REC	1	27-Mar-2015 01:47
<i>Surr: Dibromofluoromethane</i>	99.2		74-125	%REC	1	27-Mar-2015 01:47
<i>Surr: Toluene-d8</i>	110		75-125	%REC	1	27-Mar-2015 01:47

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 91760 Test Name : ANIONS BY SW9056A Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		26 Mar 2015 08:44	26 Mar 2015 12:05	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		26 Mar 2015 08:44	26 Mar 2015 12:48	1
Batch ID 91763 Test Name : METALS BY SW6020A Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		26 Mar 2015 12:03	27 Mar 2015 14:03	100
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		26 Mar 2015 12:03	26 Mar 2015 17:09	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		26 Mar 2015 12:03	27 Mar 2015 14:07	100
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		26 Mar 2015 12:03	26 Mar 2015 17:13	1
Batch ID 91778 Test Name : LOW-LEVEL SEMIVOLATILES Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		26 Mar 2015 11:16	26 Mar 2015 17:45	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		26 Mar 2015 11:16	26 Mar 2015 19:01	1
Batch ID 91779 Test Name : TPH DRO/ORO BY SW8015C Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		26 Mar 2015 11:21	27 Mar 2015 18:30	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		26 Mar 2015 11:21	27 Mar 2015 18:53	1
Batch ID 91812 Test Name : PHENOLICS Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		27 Mar 2015 10:45	27 Mar 2015 17:16	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		27 Mar 2015 10:45	27 Mar 2015 17:16	1
Batch ID 91818 Test Name : MERCURY BY SW7471B Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		27 Mar 2015 10:04	27 Mar 2015 15:47	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		27 Mar 2015 10:04	27 Mar 2015 15:49	1
Batch ID 91821a Test Name : PCBs BY SW8082A Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		27 Mar 2015 11:56	27 Mar 2015 20:11	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		27 Mar 2015 11:56	27 Mar 2015 20:26	1
Batch ID 92137 Test Name : CYANIDE Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00		07 Apr 2015 10:47	08 Apr 2015 09:09	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50		07 Apr 2015 10:47	08 Apr 2015 09:09	1
Batch ID R251675 Test Name : MOISTURE Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00			26 Mar 2015 12:06	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50			26 Mar 2015 12:06	1
Batch ID R251741 Test Name : LOW LEVEL VOLATILES BY SW8260C Matrix: Water						
HS15030885-03	TRIP BLANK 030215-99	24 Mar 2015 00:00			27 Mar 2015 01:47	1
Batch ID R251744 Test Name : VOLATILES BY SW8260C Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00			27 Mar 2015 12:55	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50			27 Mar 2015 13:18	1
Batch ID R251832 Test Name : GASOLINE RANGE ORGANICS BY SW8015C Matrix: Soil						
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00			26 Mar 2015 21:15	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50			26 Mar 2015 21:31	1

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID	R253055	Test Name : SUBCONTRACT ANALYSIS			Matrix: Soil	
HS15030885-01	BG-1 (2-3)Ft	24 Mar 2015 11:00			18 Apr 2015 13:48	1
HS15030885-02	BG-2 (2-3) Ft	24 Mar 2015 11:50			18 Apr 2015 13:48	1

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91821a		Instrument: ECD_7		Method: SW8082					
MBLK	Sample ID: MBLK-91821	Units: ug/Kg		Analysis Date: 27-Mar-2015 17:18					
Client ID:	Run ID: ECD_7_251873	SeqNo: 3227900		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Aroclor 1016	ND	17							
Aroclor 1221	ND	17							
Aroclor 1232	ND	17							
Aroclor 1242	ND	17							
Aroclor 1248	ND	17							
Aroclor 1254	ND	17							
Aroclor 1260	ND	17							
Surr: Decachlorobiphenyl	7.459	1.6	6.667	0	112	54 - 143			
Surr: Tetrachloro-m-xylene	7.439	1.6	6.667	0	112	55 - 137			

LCS	Sample ID: LCS-91821	Units: ug/Kg		Analysis Date: 27-Mar-2015 17:34					
Client ID:	Run ID: ECD_7_251873	SeqNo: 3227901		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Aroclor 1016	166	17	166.7	0	99.6	53 - 135			
Aroclor 1260	187.9	17	166.7	0	113	54 - 137			
Surr: Decachlorobiphenyl	7.756	1.6	6.667	0	116	54 - 143			
Surr: Tetrachloro-m-xylene	7.217	1.6	6.667	0	108	55 - 137			

MS	Sample ID: HS15030977-01MS	Units: ug/Kg		Analysis Date: 27-Mar-2015 18:05					
Client ID:	Run ID: ECD_7_251873	SeqNo: 3227903		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Aroclor 1016	146.5	17	166.3	0	88.1	53 - 135			
Aroclor 1260	167.2	17	166.3	0	101	54 - 137			
Surr: Decachlorobiphenyl	8.535	1.6	6.649	0	128	54 - 143			
Surr: Tetrachloro-m-xylene	6.067	1.6	6.649	0	91.2	55 - 137			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91821a		Instrument: ECD_7		Method: SW8082						
MSD		Sample ID: HS15030977-01MSD		Units: ug/Kg		Analysis Date: 27-Mar-2015 18:21				
Client ID:		Run ID: ECD_7_251873		SeqNo: 3227904		PrepDate: 27-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	149.8	17	166.4	0	90.1	53 - 135	146.5	2.23	30	
Aroclor 1260	171.3	17	166.4	0	103	54 - 137	167.2	2.46	30	
Surr: Decachlorobiphenyl	9.206	1.6	6.654	0	138	54 - 143	8.535	7.56	30	
Surr: Tetrachloro-m-xylene	6.289	1.6	6.654	0	94.5	55 - 137	6.067	3.59	30	
The following samples were analyzed in this batch:										
			HS15030885-01 HS15030885-02							

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91779		Instrument: FID-7		Method: SW8015M					
MBLK	Sample ID: MBLK-91779	Units: mg/Kg		Analysis Date: 27-Mar-2015 17:46					
Client ID:	Run ID: FID-7_251848	SeqNo: 3227118		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
TPH (Diesel Range)	ND	1.7							
TPH (Motor Oil Range)	ND	3.4							
Surr: 2-Fluorobiphenyl	2.447	0.10	3.33	0	73.5	60 - 135			
LCS	Sample ID: LCS-91779	Units: mg/Kg		Analysis Date: 27-Mar-2015 18:08					
Client ID:	Run ID: FID-7_251848	SeqNo: 3227119		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
TPH (Diesel Range)	28.03	1.7	33.33	0	84.1	70 - 130			
TPH (Motor Oil Range)	24.04	3.4	33.33	0	72.1	70 - 130			
Surr: 2-Fluorobiphenyl	2.391	0.10	3.33	0	71.8	60 - 135			
MS	Sample ID: HS15030907-03MS	Units: mg/Kg		Analysis Date: 27-Mar-2015 20:23					
Client ID:	Run ID: FID-7_251848	SeqNo: 3227125		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
TPH (Diesel Range)	30.62	1.7	33.31	0.57	90.2	70 - 130			
TPH (Motor Oil Range)	28.09	3.4	33.31	3.588	73.5	70 - 130			
Surr: 2-Fluorobiphenyl	3.081	0.10	3.328	0	92.6	60 - 135			
MSD	Sample ID: HS15030907-03MSD	Units: mg/Kg		Analysis Date: 27-Mar-2015 20:45					
Client ID:	Run ID: FID-7_251848	SeqNo: 3227126		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
TPH (Diesel Range)	29.58	1.7	33.26	0.57	87.2	70 - 130	30.62	3.44	30
TPH (Motor Oil Range)	27.01	3.4	33.26	3.588	70.4	70 - 130	28.09	3.9	30
Surr: 2-Fluorobiphenyl	2.527	0.10	3.323	0	76.0	60 - 135	3.081	19.8	30
The following samples were analyzed in this batch:									
			HS15030885-01	HS15030885-02					

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251832		Instrument: FID-14		Method: SW8015						
MBLK	Sample ID: BLK-150326	Units: mg/Kg		Analysis Date: 26-Mar-2015 18:22						
Client ID:	Run ID: FID-14_251832	SeqNo: 3226799		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	ND	0.050								
Surr: 4-Bromofluorobenzene	0.0844	0.0050	0.1	0	84.4	70 - 130				
LCS	Sample ID: LCS-150326	Units: mg/Kg		Analysis Date: 26-Mar-2015 17:50						
Client ID:	Run ID: FID-14_251832	SeqNo: 3226798		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.108	0.050	1	0	111	70 - 130				
Surr: 4-Bromofluorobenzene	0.09899	0.0050	0.1	0	99.0	70 - 130				
MS	Sample ID: HS15030627-19MS	Units: mg/Kg		Analysis Date: 26-Mar-2015 19:08						
Client ID:	Run ID: FID-14_251832	SeqNo: 3226801		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.002	0.050	1	0	100	70 - 130				
Surr: 4-Bromofluorobenzene	0.0943	0.0050	0.1	0	94.3	70 - 130				
MSD	Sample ID: HS15030627-19MSD	Units: mg/Kg		Analysis Date: 26-Mar-2015 19:24						
Client ID:	Run ID: FID-14_251832	SeqNo: 3226802		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9025	0.050	1	0	90.2	70 - 130	1.002	10.5	30	
Surr: 4-Bromofluorobenzene	0.07193	0.0050	0.1	0	71.9	70 - 130	0.0943	26.9	30	
The following samples were analyzed in this batch:										
			HS15030885-01	HS15030885-02						

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91763			Instrument: ICPMS04		Method: SW6020					
MBLK	Sample ID:	MBLK-91763		Units: mg/Kg		Analysis Date: 26-Mar-2015 16:43				
Client ID:	Run ID:		ICPMS04_251680		SeqNo: 3224692		PrepDate: 26-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	ND	0.500							
Barium	ND	0.500							
Cadmium	ND	0.500							
Chromium	ND	0.500							
Copper	ND	0.500							
Iron	ND	50.0							
Lead	ND	0.500							
Manganese	ND	0.500							
Selenium	ND	0.500							
Silver	ND	0.500							
Uranium	ND	0.500							
Zinc	ND	0.500							

LCS	Sample ID: MLCS-91763	Units: mg/Kg			Analysis Date: 26-Mar-2015 16:48				
Client ID:	Run ID: ICPMS04_251680		SeqNo: 3224693		PrepDate: 26-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	9.65	0.500	10	0	96.5	80 - 120			
Barium	10.1	0.500	10	0	101	80 - 120			
Cadmium	10.09	0.500	10	0	101	80 - 120			
Chromium	9.758	0.500	10	0	97.6	80 - 120			
Copper	10.31	0.500	10	0	103	80 - 120			
Iron	1019	50.0	1000	0	102	80 - 120			
Lead	9.883	0.500	10	0	98.8	80 - 120			
Manganese	10.14	0.500	10	0	101	80 - 120			
Selenium	9.481	0.500	10	0	94.8	80 - 120			
Silver	10.18	0.500	10	0	102	80 - 120			
Uranium	10.58	0.500	10	0	106	80 - 120			
Zinc	11.27	0.500	10	0	113	80 - 120			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91763		Instrument: ICPMS04		Method: SW6020						
MS		Sample ID: HS15030887-01MS		Units: mg/Kg		Analysis Date: 26-Mar-2015 17:48				
Client ID:		Run ID: ICPMS04_251680		SeqNo: 3224892		PrepDate: 26-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.92	0.488	9.766	1.654	94.9	75 - 125				
Barium	70.73	0.488	9.766	35.09	365	75 - 125				S
Cadmium	9.481	0.488	9.766	0.01939	96.9	75 - 125				
Chromium	24.65	0.488	9.766	20.3	44.5	75 - 125				S
Copper	20.51	0.488	9.766	6.538	143	75 - 125				S
Iron	12080	48.8	976.6	12390	-32.3	75 - 125				SO
Lead	73.5	0.488	9.766	47.65	265	75 - 125				SO
Manganese	124.8	0.488	9.766	78.82	471	75 - 125				SO
Selenium	7.876	0.488	9.766	0.2794	77.8	75 - 125				
Silver	9.386	0.488	9.766	0.02913	95.8	75 - 125				
Uranium	10.45	0.488	9.766	0.2007	105	75 - 125				
Zinc	21.57	0.488	9.766	9.248	126	75 - 125				S

MSD		Sample ID: HS15030887-01MSD		Units: mg/Kg		Analysis Date: 26-Mar-2015 17:52				
Client ID:		Run ID: ICPMS04_251680		SeqNo: 3224893		PrepDate: 26-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.79	0.494	9.885	1.654	103	75 - 125	10.92	7.63	20	
Barium	66.19	0.494	9.885	35.09	315	75 - 125	70.73	6.64	20	S
Cadmium	9.527	0.494	9.885	0.01939	96.2	75 - 125	9.481	0.485	20	
Chromium	26.23	0.494	9.885	20.3	60.0	75 - 125	24.65	6.21	20	S
Copper	21.6	0.494	9.885	6.538	152	75 - 125	20.51	5.17	20	S
Iron	14880	49.4	988.5	12390	252	75 - 125	12080	20.8	20	SRO
Lead	91.5	0.494	9.885	47.65	444	75 - 125	73.5	21.8	20	SRO
Manganese	142.2	0.494	9.885	78.82	641	75 - 125	124.8	13	20	SO
Selenium	7.284	0.494	9.885	0.2794	70.9	75 - 125	7.876	7.81	20	S
Silver	9.309	0.494	9.885	0.02913	93.9	75 - 125	9.386	0.817	20	
Uranium	10.36	0.494	9.885	0.2007	103	75 - 125	10.45	0.939	20	
Zinc	22.4	0.494	9.885	9.248	133	75 - 125	21.57	3.79	20	S

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91763		Instrument: ICPMS04		Method: SW6020					
DUP		Sample ID: HS15030887-01DUP		Units: mg/Kg		Analysis Date: 30-Mar-2015 13:27			
Client ID:		Run ID: ICPMS04_251862		SeqNo: 3227347		PrepDate: 26-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	1.462	0.470					1.654	12.3	20
Barium	32.19	0.470					35.09	8.61	20
Cadmium	ND	0.470					0	0	20
Chromium	19.74	0.470					20.3	2.76	20
Copper	6.121	0.470					6.538	6.59	20
Iron	12020	47.0					12390	3.07	20
Lead	43.58	0.470					47.65	8.92	20
Manganese	75.79	0.470					78.82	3.93	20
Selenium	ND	0.470					0.2794	0	20
Silver	ND	0.470					0	0	20
Uranium	ND	0.470					0	0	20
Zinc	8.309	0.470					9.248	10.7	20

PDS		Sample ID: HS15030887-01BS		Units: mg/Kg		Analysis Date: 26-Mar-2015 17:57			
Client ID:		Run ID: ICPMS04_251680		SeqNo: 3224894		PrepDate: 26-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	10.64	0.492	9.841	1.654	91.3	75 - 125			
Barium	43.36	0.492	9.841	35.09	84.0	75 - 125			
Cadmium	9.33	0.492	9.841	0.01939	94.6	75 - 125			
Chromium	28.49	0.492	9.841	20.3	83.2	75 - 125			
Copper	15.66	0.492	9.841	6.538	92.7	75 - 125			
Iron	12570	49.2	984.1	12390	17.8	75 - 125			SO
Lead	54.6	0.492	9.841	47.65	70.6	75 - 125			SO
Manganese	83.3	0.492	9.841	78.82	45.5	75 - 125			SO
Selenium	9.265	0.492	9.841	0.2794	91.3	75 - 125			
Silver	8.67	0.492	9.841	0.02913	87.8	75 - 125			
Uranium	9.425	0.492	9.841	0.2007	93.7	75 - 125			
Zinc	17.56	0.492	9.841	9.248	84.4	75 - 125			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91763		Instrument: ICPMS04		Method: SW6020						
SD	Sample ID: HS15030887-01 DIL SX	Units: mg/Kg		Analysis Date: 26-Mar-2015 17:44						
Client ID:	Run ID: ICPMS04_251680	SeqNo: 3224891		PrepDate: 26-Mar-2015		DF: 5				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	1.683	2.46					1.654	0	10	J
Barium	35.64	2.46					35.09	1.59	10	
Cadmium	ND	2.46					0.01939	0	10	
Chromium	19.95	2.46					20.3	1.72	10	
Copper	6.846	2.46					6.538	4.71	10	
Iron	12750	246					12390	2.85	10	
Lead	45.92	2.46					47.65	3.63	10	
Manganese	76.74	2.46					78.82	2.65	10	
Selenium	ND	2.46					0.2794	0	10	
Silver	ND	2.46					0.02913	0	10	
Uranium	ND	2.46					0.2007	0	10	
Zinc	9.023	2.46					9.248	2.43	10	
The following samples were analyzed in this batch:		HS15030885-01		HS15030885-02						

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91818		Instrument: HG02		Method: SW7471A					
MBLK	Sample ID: GBLKS1-032715	Units: ug/Kg		Analysis Date: 27-Mar-2015 15:29					
Client ID:	Run ID: HG02_251795	SeqNo: 3225815		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Mercury	ND	3.32							
LCS	Sample ID: GLCSS1-032715	Units: ug/Kg		Analysis Date: 27-Mar-2015 15:31					
Client ID:	Run ID: HG02_251795	SeqNo: 3225816		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Mercury	336	3.32	333.3	0	101	85 - 115			
MS	Sample ID: HS15030937-01MS	Units: ug/Kg		Analysis Date: 27-Mar-2015 15:37					
Client ID:	Run ID: HG02_251795	SeqNo: 3225819		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Mercury	372.5	3.37	337.4	8.603	108	85 - 115			
MSD	Sample ID: HS15030937-01MSD	Units: ug/Kg		Analysis Date: 27-Mar-2015 15:41					
Client ID:	Run ID: HG02_251795	SeqNo: 3225820		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Mercury	349.9	3.36	337.1	8.603	101	85 - 115	372.5	6.25	20
DUP	Sample ID: HS15030937-01DUP	Units: ug/Kg		Analysis Date: 27-Mar-2015 15:35					
Client ID:	Run ID: HG02_251795	SeqNo: 3225818		PrepDate: 27-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Mercury	9.331	3.37					8.603	8.12	20
The following samples were analyzed in this batch: HS15030885-01 HS15030885-02									

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91778		Instrument: SV-6		Method: SW8270					
MBLK	Sample ID: MBLK-91778	Units: ug/Kg		Analysis Date: 26-Mar-2015 15:09					
Client ID:	Run ID: SV-6_251763	SeqNo: 3225526		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
1-Methylnaphthalene	ND	3.3							
2-Methylnaphthalene	ND	3.3							
Benzo(a)pyrene	ND	3.3							
Naphthalene	ND	3.3							
Surr: 2-Fluorobiphenyl	134.4	6.6	167	0	80.5	43 - 125			
Surr: 4-Terphenyl-d14	144.9	6.6	167	0	86.8	32 - 125			
Surr: Nitrobenzene-d5	135.2	6.6	167	0	81.0	37 - 125			

LCS	Sample ID: LCS-91778	Units: ug/Kg		Analysis Date: 26-Mar-2015 15:28					
Client ID:	Run ID: SV-6_251763	SeqNo: 3225527		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
1-Methylnaphthalene	125.4	3.3	167	0	75.1	50 - 120			
2-Methylnaphthalene	122.1	3.3	167	0	73.1	50 - 120			
Benzo(a)pyrene	131.9	3.3	167	0	79.0	50 - 130			
Naphthalene	126.7	3.3	167	0	75.9	50 - 125			
Surr: 2-Fluorobiphenyl	134.5	6.6	167	0	80.5	43 - 125			
Surr: 4-Terphenyl-d14	150.2	6.6	167	0	90.0	32 - 125			
Surr: Nitrobenzene-d5	131.8	6.6	167	0	78.9	37 - 125			

MS	Sample ID: HS15030885-01MS	Units: ug/Kg		Analysis Date: 26-Mar-2015 18:42					
Client ID: BG-1 (2-3)Ft	Run ID: SV-6_251763	SeqNo: 3225532		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
1-Methylnaphthalene	132.5	3.3	166.8	0	79.5	50 - 120			
2-Methylnaphthalene	129.4	3.3	166.8	0	77.6	50 - 120			
Benzo(a)pyrene	146.6	3.3	166.8	0	87.9	50 - 130			
Naphthalene	134.5	3.3	166.8	0	80.6	50 - 125			
Surr: 2-Fluorobiphenyl	147.1	6.6	166.8	0	88.2	43 - 125			
Surr: 4-Terphenyl-d14	158.8	6.6	166.8	0	95.2	32 - 125			
Surr: Nitrobenzene-d5	145.6	6.6	166.8	0	87.3	37 - 125			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91778		Instrument: SV-6		Method: SW8270						
MSD		Sample ID: HS15030885-01MSD		Units: ug/Kg		Analysis Date: 26-Mar-2015 18:23				
Client ID: BG-1 (2-3)Ft		Run ID: SV-6_251763		SeqNo: 3225531		PrepDate: 26-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1-Methylnaphthalene	122.7	3.3	166.9	0	73.5	50 - 120	132.5	7.7	30	
2-Methylnaphthalene	118.2	3.3	166.9	0	70.8	50 - 120	129.4	9.08	30	
Benzo(a)pyrene	147.9	3.3	166.9	0	88.6	50 - 130	146.6	0.874	30	
Naphthalene	124.3	3.3	166.9	0	74.5	50 - 125	134.5	7.87	30	
Surr: 2-Fluorobiphenyl	138	6.6	166.9	0	82.7	43 - 125	147.1	6.34	30	
Surr: 4-Terphenyl-d14	158.5	6.6	166.9	0	95.0	32 - 125	158.8	0.202	30	
Surr: Nitrobenzene-d5	135.4	6.6	166.9	0	81.2	37 - 125	145.6	7.26	30	
The following samples were analyzed in this batch:										
		HS15030885-01		HS15030885-02						

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251741		Instrument: VOA4		Method: SW8260					
MBLK	Sample ID: VBLKW-150326	Units: ug/L		Analysis Date: 26-Mar-2015 23:42					
Client ID:	Run ID: VOA4_251741		SeqNo: 3225096		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	ND	1.0							
1,1,2,2-Tetrachloroethane	ND	1.0							
1,1,2-Trichloroethane	ND	1.0							
1,1-Dichloroethane	ND	1.0							
1,1-Dichloroethene	ND	1.0							
1,2-Dibromoethane	ND	1.0							
1,2-Dichloroethane	ND	1.0							
Benzene	ND	1.0							
Carbon tetrachloride	ND	1.0							
Chloroform	ND	1.0							
Ethylbenzene	ND	1.0							
Methylene chloride	ND	2.0							
Toluene	ND	1.0							
Vinyl chloride	ND	1.0							
Xylenes, Total	ND	3.0							
Surr: 1,2-Dichloroethane-d4	47.15	1.0	50	0	94.3	71 - 125			
Surr: 4-Bromofluorobenzene	46.46	1.0	50	0	92.9	70 - 125			
Surr: Dibromofluoromethane	51.97	1.0	50	0	104	74 - 125			
Surr: Toluene-d8	52.61	1.0	50	0	105	75 - 125			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251741		Instrument: VOA4		Method: SW8260						
LCS		Sample ID: VLCSW-150326		Units: ug/L		Analysis Date: 26-Mar-2015 22:52				
Client ID:		Run ID: VOA4_251741		SeqNo: 3225095		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	52.43	1.0	50	0	105	75 - 130				
1,1,2,2-Tetrachloroethane	52.14	1.0	50	0	104	74 - 123				
1,1,2-Trichloroethane	51.8	1.0	50	0	104	80 - 120				
1,1-Dichloroethane	53.62	1.0	50	0	107	76 - 120				
1,1-Dichloroethene	53.61	1.0	50	0	107	75 - 130				
1,2-Dibromoethane	56.92	1.0	50	0	114	80 - 121				
1,2-Dichloroethane	50.66	1.0	50	0	101	76 - 120				
Benzene	55.17	1.0	50	0	110	80 - 120				
Carbon tetrachloride	46.95	1.0	50	0	93.9	75 - 125				
Chloroform	52.04	1.0	50	0	104	70 - 130				
Ethylbenzene	52.56	1.0	50	0	105	80 - 120				
Methylene chloride	54.52	2.0	50	0	109	65 - 133				
Toluene	52.17	1.0	50	0	104	75 - 121				
Vinyl chloride	57.04	1.0	50	0	114	70 - 135				
Xylenes, Total	157	3.0	150	0	105	79 - 124				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>48.58</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>97.2</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>48.64</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>97.3</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>52.79</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>51.39</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251741		Instrument: VOA4		Method: SW8260						
MS		Sample ID: HS15030936-09MS		Units: ug/L		Analysis Date: 27-Mar-2015 03:02				
Client ID:		Run ID: VOA4_251741		SeqNo: 3225104		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	54.45	1.0	50	0	109	75 - 130				
1,1,2,2-Tetrachloroethane	47.53	1.0	50	0	95.1	74 - 123				
1,1,2-Trichloroethane	53.65	1.0	50	0	107	80 - 120				
1,1-Dichloroethane	61.82	1.0	50	6.302	111	76 - 120				
1,1-Dichloroethene	55.45	1.0	50	1	109	75 - 130				
1,2-Dibromoethane	55.95	1.0	50	0	112	80 - 121				
1,2-Dichloroethane	50.51	1.0	50	0	101	76 - 120				
Benzene	56.19	1.0	50	0	112	80 - 120				
Carbon tetrachloride	48.62	1.0	50	0	97.2	79 - 120				
Chloroform	53.85	1.0	50	0	108	70 - 130				
Ethylbenzene	56.61	1.0	50	0	113	80 - 120				
Methylene chloride	55.41	2.0	50	0	111	65 - 133				
Toluene	56.01	1.0	50	0	112	75 - 121				
Vinyl chloride	52.54	1.0	50	0	105	70 - 135				
Xylenes, Total	168.2	3.0	150	0	112	80 - 124				
Surr: 1,2-Dichloroethane-d4	49	1.0	50	0	98.0	71 - 125				
Surr: 4-Bromofluorobenzene	51.19	1.0	50	0	102	70 - 125				
Surr: Dibromofluoromethane	53.79	1.0	50	0	108	74 - 125				
Surr: Toluene-d8	55.31	1.0	50	0	111	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251741		Instrument: VOA4		Method: SW8260						
MSD		Sample ID: HS15030936-09MSD		Units: ug/L		Analysis Date: 27-Mar-2015 03:27				
Client ID:		Run ID: VOA4_251741		SeqNo: 3225105		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	53.73	1.0	50	0	107	75 - 130	54.45	1.32	20	
1,1,2,2-Tetrachloroethane	49.58	1.0	50	0	99.2	74 - 123	47.53	4.23	20	
1,1,2-Trichloroethane	51.02	1.0	50	0	102	80 - 120	53.65	5.02	20	
1,1-Dichloroethane	60.85	1.0	50	6.302	109	76 - 120	61.82	1.58	20	
1,1-Dichloroethene	56.33	1.0	50	1	111	75 - 130	55.45	1.58	20	
1,2-Dibromoethane	55.6	1.0	50	0	111	80 - 121	55.95	0.614	20	
1,2-Dichloroethane	50.13	1.0	50	0	100	76 - 120	50.51	0.748	20	
Benzene	56.97	1.0	50	0	114	80 - 120	56.19	1.38	20	
Carbon tetrachloride	47.89	1.0	50	0	95.8	75 - 125	48.62	1.5	20	
Chloroform	52.91	1.0	50	0	106	70 - 130	53.85	1.76	20	
Ethylbenzene	54.92	1.0	50	0	110	80 - 120	56.61	3.02	20	
Methylene chloride	54.01	2.0	50	0	108	65 - 133	55.41	2.55	20	
Toluene	53.38	1.0	50	0	107	75 - 121	56.01	4.81	20	
Vinyl chloride	52.18	1.0	50	0	104	70 - 135	52.54	0.684	20	
Xylenes, Total	162	3.0	150	0	108	80 - 124	168.2	3.76	20	
Surr: 1,2-Dichloroethane-d4	49	1.0	50	0	98.0	71 - 125	49	0	20	
Surr: 4-Bromofluorobenzene	49.63	1.0	50	0	99.3	70 - 125	51.19	3.09	20	
Surr: Dibromofluoromethane	53.3	1.0	50	0	107	74 - 125	53.79	0.903	20	
Surr: Toluene-d8	53.32	1.0	50	0	107	75 - 125	55.31	3.66	20	

The following samples were analyzed in this batch: HS15030885-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251744		Instrument: VOA5		Method: SW8260					
MBLK	Sample ID: VBLKS1-032715	Units: ug/Kg		Analysis Date: 27-Mar-2015 09:02					
Client ID:	Run ID: VOA5_251744	SeqNo: 3225129		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	ND	5.0							
1,1,2,2-Tetrachloroethane	ND	5.0							
1,1,2-Trichloroethane	ND	5.0							
1,1-Dichloroethane	ND	5.0							
1,1-Dichloroethene	ND	5.0							
1,2-Dibromoethane	ND	5.0							
1,2-Dichloroethane	ND	5.0							
Benzene	ND	5.0							
Carbon tetrachloride	ND	5.0							
Chloroform	ND	5.0							
Ethylbenzene	ND	5.0							
Methylene chloride	ND	10							
Toluene	ND	5.0							
Vinyl chloride	ND	2.0							
Xylenes, Total	ND	10							
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.3</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.6</i>	<i>70 - 128</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.22</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.4</i>	<i>73 - 126</i>			
<i>Surr: Dibromofluoromethane</i>	<i>51.38</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>71 - 128</i>			
<i>Surr: Toluene-d8</i>	<i>51.04</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>73 - 127</i>			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251744		Instrument: VOA5		Method: SW8260						
LCS		Sample ID: VLCSS1-032715		Units: ug/Kg		Analysis Date: 27-Mar-2015 08:15				
Client ID:		Run ID: VOA5_251744		SeqNo: 3225128		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	52.01	5.0	50	0	104	79 - 128				
1,1,2,2-Tetrachloroethane	48.65	5.0	50	0	97.3	75 - 123				
1,1,2-Trichloroethane	48.21	5.0	50	0	96.4	77 - 120				
1,1-Dichloroethane	50.72	5.0	50	0	101	75 - 124				
1,1-Dichloroethene	51.79	5.0	50	0	104	76 - 128				
1,2-Dibromoethane	47.65	5.0	50	0	95.3	70 - 120				
1,2-Dichloroethane	48.55	5.0	50	0	97.1	73 - 121				
Benzene	48.81	5.0	50	0	97.6	79 - 122				
Carbon tetrachloride	46.34	5.0	50	0	92.7	74 - 126				
Chloroform	50.69	5.0	50	0	101	78 - 122				
Ethylbenzene	47.13	5.0	50	0	94.3	80 - 122				
Methylene chloride	46.13	10	50	0	92.3	65 - 130				
Toluene	46.04	5.0	50	0	92.1	79 - 120				
Vinyl chloride	52.39	2.0	50	0	105	76 - 126				
Xylenes, Total	141.5	10	150	0	94.4	80 - 120				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>52.97</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>70 - 128</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.39</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>73 - 126</i>				
<i>Surr: Dibromofluoromethane</i>	<i>52.5</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>105</i>	<i>71 - 128</i>				
<i>Surr: Toluene-d8</i>	<i>50.03</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>100</i>	<i>73 - 127</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251744		Instrument: VOA5		Method: SW8260						
MS		Sample ID: HS15030958-04MS		Units: ug/Kg		Analysis Date: 27-Mar-2015 10:58				
Client ID:		Run ID: VOA5_251744		SeqNo: 3225274		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	50.08	5.0	50	0	100	79 - 128				
1,1,2,2-Tetrachloroethane	45.99	5.0	50	0	92.0	75 - 123				
1,1,2-Trichloroethane	46.01	5.0	50	0	92.0	77 - 120				
1,1-Dichloroethane	50.49	5.0	50	0	101	75 - 124				
1,1-Dichloroethene	52.41	5.0	50	0	105	76 - 128				
1,2-Dibromoethane	44.9	5.0	50	0	89.8	70 - 120				
1,2-Dichloroethane	47.66	5.0	50	0	95.3	73 - 121				
Benzene	48.94	5.0	50	0	97.9	79 - 122				
Carbon tetrachloride	45.75	5.0	50	0	91.5	74 - 126				
Chloroform	49.96	5.0	50	0	99.9	78 - 122				
Ethylbenzene	46.86	5.0	50	0	93.7	80 - 122				
Methylene chloride	45.11	10	50	0	90.2	65 - 130				
Toluene	46.18	5.0	50	0	92.4	79 - 120				
Vinyl chloride	52.43	2.0	50	0	105	76 - 126				
Xylenes, Total	141.1	10	150	0	94.1	80 - 120				
Surr: 1,2-Dichloroethane-d4	51.61	5.0	50	0	103	70 - 128				
Surr: 4-Bromofluorobenzene	50.38	5.0	50	0	101	73 - 126				
Surr: Dibromofluoromethane	52.11	5.0	50	0	104	71 - 128				
Surr: Toluene-d8	50.88	5.0	50	0	102	73 - 127				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251744		Instrument: VOA5		Method: SW8260					
MSD		Sample ID: HS15030958-04MSD		Units: ug/Kg		Analysis Date: 27-Mar-2015 11:21			
Client ID:		Run ID: VOA5_251744		SeqNo: 3225275		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	50.68	5.0	50	0	101	79 - 128	50.08	1.19	30
1,1,2,2-Tetrachloroethane	46.98	5.0	50	0	94.0	75 - 123	45.99	2.14	30
1,1,2-Trichloroethane	47.07	5.0	50	0	94.1	77 - 120	46.01	2.29	30
1,1-Dichloroethane	50.52	5.0	50	0	101	75 - 124	50.49	0.0757	30
1,1-Dichloroethene	51.31	5.0	50	0	103	76 - 128	52.41	2.13	30
1,2-Dibromoethane	45.86	5.0	50	0	91.7	70 - 120	44.9	2.13	30
1,2-Dichloroethane	47.74	5.0	50	0	95.5	73 - 121	47.66	0.154	30
Benzene	48.4	5.0	50	0	96.8	79 - 122	48.94	1.11	30
Carbon tetrachloride	44.98	5.0	50	0	90.0	74 - 126	45.75	1.7	30
Chloroform	50.06	5.0	50	0	100	78 - 122	49.96	0.211	30
Ethylbenzene	46.59	5.0	50	0	93.2	80 - 122	46.86	0.567	30
Methylene chloride	45.02	10	50	0	90.0	65 - 130	45.11	0.198	30
Toluene	45.47	5.0	50	0	90.9	79 - 120	46.18	1.55	30
Vinyl chloride	51.77	2.0	50	0	104	76 - 126	52.43	1.26	30
Xylenes, Total	139.1	10	150	0	92.7	80 - 120	141.1	1.44	30
Surr: 1,2-Dichloroethane-d4	53.15	5.0	50	0	106	70 - 128	51.61	2.96	30
Surr: 4-Bromofluorobenzene	50.79	5.0	50	0	102	73 - 126	50.38	0.808	30
Surr: Dibromofluoromethane	53.52	5.0	50	0	107	71 - 128	52.11	2.66	30
Surr: Toluene-d8	51.51	5.0	50	0	103	73 - 127	50.88	1.23	30
The following samples were analyzed in this batch:									
HS15030885-01		HS15030885-02							

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91760		Instrument: ICS2100		Method: SW9056					
MBLK	Sample ID: MBLK-91760	Units: mg/Kg		Analysis Date: 26-Mar-2015 09:42					
Client ID:	Run ID: ICS2100_251688	SeqNo: 3224198		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	ND	5.00							
Fluoride	ND	1.00							
Nitrogen, Nitrate (As N)	ND	1.00							
Sulfate	ND	5.00							

LCS	Sample ID: LCS-91760	Units: mg/Kg		Analysis Date: 26-Mar-2015 09:56					
Client ID:	Run ID: ICS2100_251688	SeqNo: 3224199		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	185.9	5.00	200	0	93.0	80 - 120			
Fluoride	37.14	1.00	40	0	92.8	80 - 120			
Nitrogen, Nitrate (As N)	36.86	1.00	40	0	92.2	80 - 120			
Sulfate	193.3	5.00	200	0	96.7	80 - 120			

LCSD	Sample ID: LCSD-91760	Units: mg/Kg		Analysis Date: 26-Mar-2015 10:11					
Client ID:	Run ID: ICS2100_251688	SeqNo: 3224200		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	194.2	5.00	200	0	97.1	80 - 120	185.9	4.33	20
Fluoride	38.91	1.00	40	0	97.3	80 - 120	37.14	4.65	20
Nitrogen, Nitrate (As N)	38.49	1.00	40	0	96.2	80 - 120	36.86	4.33	20
Sulfate	201.2	5.00	200	0	101	80 - 120	193.3	4.02	20

MS	Sample ID: HS15030885-01MS	Units: mg/Kg		Analysis Date: 26-Mar-2015 12:19					
Client ID: BG-1 (2-3)Ft	Run ID: ICS2100_251688	SeqNo: 3224202		PrepDate: 26-Mar-2015		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	90.73	4.97	99.46	1.334	89.9	80 - 120			
Fluoride	21.07	0.995	19.89	3.584	87.9	80 - 120			
Nitrogen, Nitrate (As N)	17.82	0.995	19.89	0.6371	86.4	80 - 120			
Sulfate	96.74	4.97	99.46	5.147	92.1	80 - 120			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91760		Instrument: ICS2100		Method: SW9056					
MSD		Sample ID: HS15030885-01MSD		Units: mg/Kg		Analysis Date: 26-Mar-2015 12:34			
Client ID: BG-1 (2-3)Ft		Run ID: ICS2100_251688		SeqNo: 3224203		PrepDate: 26-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	96.96	4.96	99.28	1.334	96.3	80 - 120	90.73	6.64	20
Fluoride	22.49	0.993	19.86	3.584	95.2	80 - 120	21.07	6.53	20
Nitrogen, Nitrate (As N)	19.04	0.993	19.86	0.6371	92.7	80 - 120	17.82	6.61	20
Sulfate	103	4.96	99.28	5.147	98.6	80 - 120	96.74	6.3	20
The following samples were analyzed in this batch:									
HS15030885-01 HS15030885-02									

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 91812		Instrument: UV-2450		Method: SW9065						
MBLK	Sample ID: MBLK-91812	Units: mg/kg		Analysis Date: 27-Mar-2015 17:16						
Client ID:		Run ID: UV-2450_251799		SeqNo: 3225924	PrepDate: 27-Mar-2015	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	ND	2.50								
LCS	Sample ID: LCS-91812	Units: mg/kg		Analysis Date: 27-Mar-2015 17:16						
Client ID:		Run ID: UV-2450_251799		SeqNo: 3225925	PrepDate: 27-Mar-2015	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	28.1	2.50	25	0	112	80 - 120				
MS	Sample ID: HS15030885-02MS	Units: mg/kg		Analysis Date: 27-Mar-2015 17:16						
Client ID: BG-2 (2-3) Ft		Run ID: UV-2450_251799		SeqNo: 3225927	PrepDate: 27-Mar-2015	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	26.88	2.48	24.84	0.4993	106	80 - 120				
MSD	Sample ID: HS15030885-02MSD	Units: mg/kg		Analysis Date: 27-Mar-2015 17:16						
Client ID: BG-2 (2-3) Ft		Run ID: UV-2450_251799		SeqNo: 3225926	PrepDate: 27-Mar-2015	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	26.65	2.48	24.77	0.4993	106	80 - 120	26.88	0.824	20	
The following samples were analyzed in this batch:										
			HS15030885-01	HS15030885-02						

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: 92137		Instrument: UV-2450		Method: SW9014						
MBLK	Sample ID: MBLK-92137	Units: mg/Kg		Analysis Date: 08-Apr-2015 09:09						
Client ID:	Run ID: UV-2450_252418	SeqNo: 3238976		PrepDate: 07-Apr-2015		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Cyanide	ND	2.00								

LCS	Sample ID: LCS-92137	Units: mg/Kg		Analysis Date: 08-Apr-2015 09:09						
Client ID:	Run ID: UV-2450_252418	SeqNo: 3238974		PrepDate: 07-Apr-2015		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Cyanide	8.95	2.00	10	0	89.5	80 - 120				

MS	Sample ID: HS15030975-03MS	Units: mg/Kg		Analysis Date: 08-Apr-2015 09:09						
Client ID:	Run ID: UV-2450_252418	SeqNo: 3238977		PrepDate: 07-Apr-2015		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Cyanide	8.634	1.96	9.812	0.1465	86.5	75 - 125				

MSD	Sample ID: HS15030975-03MSD	Units: mg/Kg		Analysis Date: 08-Apr-2015 09:09						
Client ID:	Run ID: UV-2450_252418	SeqNo: 3238975		PrepDate: 07-Apr-2015		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Cyanide	9.026	1.98	9.919	0.1465	89.5	75 - 125	8.634	4.44	30	

The following samples were analyzed in this batch:										
HS15030885-01			HS15030885-02							

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

QC BATCH REPORT

Batch ID: R251675		Instrument: Balance1		Method: SW3550	
DUP	Sample ID: HS15030903-02DUP	Units: wt%		Analysis Date: 26-Mar-2015 12:06	
Client ID:	Run ID: Balance1_251675	SeqNo: 3223986		PrepDate:	DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value %REC	Control Limit RPD Ref Value %RPD RPD Limit Qual
Percent Moisture	17.8	0.0100			18.3 2.77 20
The following samples were analyzed in this batch:					
HS15030885-01 HS15030885-02					

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
WorkOrder: HS15030885

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
µg/Kg-dry	Micrograms per Kilogram- Dry weight corrected
mg/Kg-dry	Milligrams per Kilogram- Dry weight corrected

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	15-024-0	27-Mar-2016
California	2919	31-Jul-2016
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003622	09-May-2016
Kansas	E-10352 2014-2015	31-Jul-2015
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2015	31-Dec-2015
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	T104704231-14-14	30-Apr-2015

Client: Enviro Clean Services, LLC
Project: Pitchforkland Farm, LLC
Work Order: HS15030885

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS15030885-01	BG-1 (2-3)Ft	Login	3/25/2015 12:12:39 PM	PMG	BTEX B1
HS15030885-01	BG-1 (2-3)Ft	Login	3/25/2015 12:12:39 PM	PMG	19A
HS15030885-01	BG-1 (2-3)Ft	Login	3/25/2015 12:12:39 PM	PMG	19A
HS15030885-01	BG-1 (2-3)Ft	Login	3/25/2015 12:12:39 PM	PMG	19A
HS15030885-01	BG-1 (2-3)Ft	Login	3/25/2015 12:12:39 PM	PMG	Sub
HS15030885-01	BG-1 (2-3)Ft	Login	3/25/2015 12:12:39 PM	PMG	19A
HS15030885-02	BG-2 (2-3) Ft	Login	3/25/2015 4:10:34 PM	RPG	BTEX B1
HS15030885-02	BG-2 (2-3) Ft	Login	3/25/2015 4:10:34 PM	RPG	19A
HS15030885-02	BG-2 (2-3) Ft	Login	3/25/2015 4:10:34 PM	RPG	19A
HS15030885-02	BG-2 (2-3) Ft	Login	3/25/2015 4:10:34 PM	RPG	19A
HS15030885-02	BG-2 (2-3) Ft	Login	3/25/2015 4:10:34 PM	RPG	Sub
HS15030885-02	BG-2 (2-3) Ft	Login	3/25/2015 4:10:34 PM	RPG	19A
HS15030885-03	TRIP BLANK 030215-99	Login	3/25/2015 4:12:20 PM	RPG	VW-3

Sample Receipt Checklist

Client Name: Enviro Clean Services-Tulsa
 Work Order: HS15030885

Date/Time Received: **25-Mar-2015 09:20**
 Received by: **PMG**

Checklist completed by: Raegen Giga 25-Mar-2015 Reviewed by: Sonia West 26-Mar-2015
 eSignature Date eSignature Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☐	No ☒	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	

Temperature(s)/Thermometer(s):	1.6c/1.6c c/u IR 1		
Cooler(s)/Kit(s):	R/W		
Date/Time sample(s) sent to storage:	03/25/2015 16:15		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:



Environmental

Cincinnati, OH
+1 513 733 5336

Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 125770

HS15030885

Enviro Clean Services, LLC

Pitchforkland Farm, LLC



ALS Project Manager:

Customer Information				Project Information				Parameter/Method Request for Analysis											
Purchase Order		Project Name	Pitchforkland Farm, LLC	A	Chloride (9056) 90% MOISTURE ←														
Work Order		Project Number		B	BTEX(8260), GRO(8015), DRO(8015), Chloride(9056) CORRECT ALL														
Company Name	Enviro Clean Services, LLC	Bill To Company	Enviro Clean Services, LLC	C	VOC (8260) Select List FOR DRY														
Send Report To	Julie Czech	Invoice Attn	Julie Czech	D	PAH (8270) Select List WEIGHT.														
Address	7060 S. Yale Avenue, Suite 603	Address	7060 S. Yale Avenue, Suite 603	E	GRO, DRO, ORO (8015)														
City/State/Zip	Tulsa	City/State/Zip	Tulsa	F	PCB(8082) ← ALL AROCLORS (INCL. 1232)														
Phone	(918) 794-7828	Phone	(918) 794-7828	G	Total Metals (6020/7471) 16 Metals+Uranium														
Fax		Fax		H	Chloride, Fluoride, Nitrate, Sulfate (9056) 90% MOISTURE														
e-Mail Address	jczech@envirocleanps.com	e-Mail Address		I	Phenolics														
				J	Radium 226 & Radium 228														
No.	Sample Description	Date	Time	Matrix	Pres.	#Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	BQ-1 (0-3) FT	3-24-15	1100	SOIL	#C	6			X	X	X	X	X	X	X	X			
2	BQ-2 (0-3) FT	3-24-15	1150	SOIL	#C	6			X	X	X	X	X	X	X	X			
3	TRIP BLANK	—	—	WT	#C	2			X										
4									X										
5																			
6																			
7																			
8																			
9																			
10																			

REVISED
 3-25-15 (2)

NO. 03/25/15
 RUN TRIP AND SAMPLES FOR
 SELECT VOCs.
 (ITEM "C").

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
<i>[Signature]</i>		FED-EX		☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour			
Relinquished by:	Date: 3-24-15	Time: 1100 CDT	Received by:	☒ Std 18 Wk days Notes: SHARP TIMES GDT			
Relinquished by:	Date:	Time:	Received by (Laboratory):	3-25-15 09:20			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)	
				R1W	1.60	☒ Level 2 Std QC ☐ Level 3 Std QC/Row da ☐ Level 4 SW846/CLP ☐ Other EDD	
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035				☐ TRRP ChkList ☐ TRRP Level 4			

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

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Chain of Custody Form

Page 1 of 1

COC ID: 125770

HS15030885

Enviro Clean Services, LLC

Pitchforkland Farm, LLC



Customer Information				ALS Project Manager:				Project Information											
Purchase Order		Project Name	Pitchforkland Farm, LLC	A	Chloride (9056) <i>90% MOISTURE</i>														
Work Order		Project Number		B	BTEX(8260), GRO(8015), DRO/ORO(8015), Chloride(9056)														
Company Name	Enviro Clean Services, LLC	Bill To Company	Enviro Clean Services, LLC	C	VOC (8260) Select List														
Send Report To	Julie Czech	Invoice Attn	Julie Czech	D	PAH (8270) Select List														
Address	7060 S. Yale Avenue, Suite 603	Address	7060 S. Yale Avenue, Suite 603	E	GRO, DRO, ORO (8015)														
City/State/Zip	Tulsa	City/State/Zip	Tulsa	F	PCB(8082)														
Phone	(918) 794-7828	Phone	(918) 794-7828	G	Total Metals (6020/7471) 16 Metals+Uranium														
Fax		Fax		H	Chloride, Fluoride, Nitrate, Sulfate (9056) <i>80% MOISTURE</i>														
e-Mail Address	jczech@envirocleanps.com	e-Mail Address		I	Phenolics														
				J	Radium 226 & Radium 228														

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	BQ-1 (2-3) FT	3-24	1100	SOIL	4°C	6				X	X	X	X	X	X	X	
2	BQ-2 (2-3) FT	3-24	1150	SOIL	4°C	6				X	X	X	X	X	X	X	
3	THIR BLANK	—	—	WT	4°C	2		B									
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
<i>[Signature]</i>		FED-EX		☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour			
Relinquished by:		Date:	Time:	Received by:		Notes:	
<i>[Signature]</i>		3-24-15	1100 CDT	<i>[Signature]</i>		SAMPLE TIMES CDT	
Relinquished by:		Date:	Time:	Received by (Laboratory):		QC Package: (Check One Box Below)	
<i>[Signature]</i>				3-25-15 09:20		☒ Level 2 Std QC ☐ Level 3 Std QC/Row da ☐ Level 4 SW846/CLP ☐ Other/EDD	
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):		Cooler ID: R1W Cooler Temp: 1.6° #1	
						☐ TRRP ChkList ☐ TRRP Level 4	

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C 9-5035

- ote: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed.

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887



Date: 3/24/15

CUSTODY SEAL

Seal Broken By:

Time:

Date:

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887



Date: 3/25/15

CUSTODY SEAL

Seal Broken By:

Time:

Name:

Company:

Date:

ORIGIN ID: H0BA (281) 530-5656
ALS ENVIRONMENTAL HOUSTON LAB
10450 STANCLIFF RD STE 210
HOUSTON, TX 770994338
UNITED STATES US

SHIP DATE: 24MAR15
ACTWT: 44.9 LB
CAD: /POS180:
DIMS: 25x18x14 IN
BILL SENDER

TO

ALS LABORATORY GROUP
10450 STANCLIFF RD
STE 210
HOUSTON TX 77099

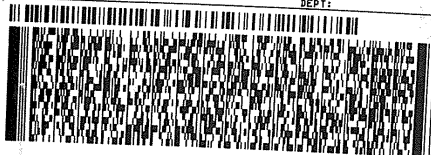
(000) 000-0000

INQ:

PO:

REF:

DEPT:



FedEx
Express



TRK# 8035 6168 6010
0215

WED - 25 MAR 10:30A
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US IAH



Friday, April 17, 2015

Sonia West
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

Re: ALS Workorder: 1503515
Project Name:
Project Number: 15030885

Dear Ms. West:

Two soil samples were received from ALS Environmental, on 3/26/2015. The samples were scheduled for the following analyses:

Radium-226

Radium-228

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,



ALS Environmental
Jeff R. Kujawa
Project Manager

JRK/clb
Enclosure(s):

ALS is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Laboratory Certifications	
Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri	175
Nebraska	NE-OS-24-13
Nevada (NV)	CO000782008A
New Jersey (NJ)	CO003
North Dakota (ND)	R-057
Oklahoma	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington	C1280



1503515

Radium-226:

The samples were prepared and analyzed according to EPA 903.1.

All acceptance criteria were met.

Radium-228:

The samples were analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac , which is the ingrown progeny of ^{228}Ra , according to EPA 904.0.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1503515

Client Name: ALS Environmental

Client Project Name:

Client Project Number: 15030885

Client PO Number: 10-15030885

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
BG-1 (2-3)Ft	1503515-1		SOIL	24-Mar-15	11:00
BG-2 (2-3)Ft	1503515-2		SOIL	24-Mar-15	11:50



CHAIN OF CUSTODY RECORD

Page 1 of 1

Date 25 Mar 2015

COC ID 2487

Due date 01 APR 15

Subcontractor

ALS Environmental, Fort Collins

225 Commerce Drive

Fort Collins, CO 80524

Phone

9704901511

Fax

Customer Information		Project Information	
PO		Project Name	HS15030885
Company Name	ALS Houston	Company Name	ALS Houston
		Inv Attn	Accounts Payable
Address	10450 Stancliff Rd, Ste 210	Address	10450 Stancliff Rd, Ste 210
	Houston, TX 77099		Houston, TX 77099
Phone	281-530-5656	Phone	281-530-5656
Email1	Sonia.West@alsglobal.com	Email2	jumoke.lawal@alsglobal.com

Lab ID Client Samp ID Collection Date Matrix Analysis Requested

① HS15030885-01	BG-1 (2-3)Ft	24-Mar-15 11:00 am	Soil	XXX SUB
② HS15030885-02	BG-2 (2-3) Ft	24-Mar-15 11:50 am	Soil	XXX SUB

Comments Please analyze for the above. send reports to e-mail 1 & 2 above

Relinquished by:	Date/Time:	Received by:	Date/Time:	Cooler IDs:	Report/QC Level
R Cuga	03/25/15 18:00	C Jumble	3-26-15 1000		



ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: ALS-TX
Project Manager: JK

Workorder No: 1503515
Initials: CDT Date: 3-26-15

1. Does this project require any special handling in addition to standard ALS procedures?		YES	☒ NO
2. Are custody seals on shipping containers intact?	NONE	☒ YES	NO
3. Are Custody seals on sample containers intact?	☒ NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		☒ YES	NO
5. Are the COC and bottle labels complete and legible?		☒ YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		☒ YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	☒ YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	☒ N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	☒ N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		☒ YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		☒ YES	NO
12. Are all samples within holding times for the requested analyses?		☒ YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		☒ YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	☒ N/A	YES	NO
15. Do any water samples contain sediment? Amount of sediment: ____ dusting ____ moderate ____ heavy	☒ N/A	YES	NO
16. Were the samples shipped on ice?		☒ YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: ☒ #2 #4	RAD ONLY	☒ YES	NO
Cooler #: <u>1</u>			
Temperature (°C): <u>0.6</u>			
No. of custody seals on cooler: <u>2</u>			
External µR/hr reading: <u>12</u>			
Background µR/hr reading: <u>12</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? ☒ YES / NO / NA (If no, see Form 008.)			

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO ☒ NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: [Signature] 3-26-15

1503515

ORIGIN ID:SGRA (281) 530-5656
SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF
SUITE 210
HOUSTON, TX 77099
UNITED STATES US

SHIP DATE: 25MAR15
ACTWGT: 19.0 LB
CAD: 300130/CAFE2807
DIMS: 19x16x13 IN
BILL SENDER

TO JEFF KUJAWA
ALS FORT COLLINS
225 COMMERCE DRIVE

FORT COLLINS CO 80524
(970) 490-1611
REF: HS15030885



TRK# 6355 5181 8021
0201

THU - 26 MAR 10:30A
PRIORITY OVERNIGHT

AG FTCA

80524
CO-US DEN



Part # 150148-434 R12 05/14

Client: ALS Environmental

Date: 17-Apr-15

Project: 15030885

Work Order: 1503515

Sample ID: BG-2 (2-3)Ft

Lab ID: 1503515-2

Legal Location:

Matrix: SOIL

Collection Date: 3/24/2015 11:50

Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1						
Ra-226	0.39 (+/- 0.18)	LT	0.12	pCi/g	NA	4/8/2015 15:11
Carr: BARIUM			40-110	%REC	DL = NA	4/8/2015 15:11
Radium-228 Analysis by GFPC						
Ra-228	ND (+/- 0.36)	U	0.8	pCi/g	NA	4/9/2015 10:56
Carr: BARIUM	96.5		40-110	%REC	DL = NA	4/9/2015 10:56

Client: ALS Environmental

Date: 17-Apr-15

Project: 15030885

Work Order: 1503515

Sample ID: BG-1 (2-3)Ft

Lab ID: 1503515-1

Legal Location:

Matrix: SOIL

Collection Date: 3/24/2015 11:00

Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1						
			PAI 783		Prep Date: 3/30/2015	PrepBy: PJW
Ra-226	0.38 (+/- 0.19)	LT	0.18	pCi/g	NA	4/8/2015 14:39
Carr: BARIUM			40-110	%REC	DL = NA	4/8/2015 14:39
Radium-228 Analysis by GFPC						
			PAI 724		Prep Date: 4/6/2015	PrepBy: DKL
Ra-228	ND (+/- 0.36)	U	0.81	pCi/g	NA	4/9/2015 10:56
Carr: BARIUM	96.9		40-110	%REC	DL = NA	4/9/2015 10:56

Client: ALS Environmental

Date: 17-Apr-15

Project: 15030885

Work Order: 1503515

Sample ID: BG-2 (2-3)Ft

Lab ID: 1503515-2

Legal Location:

Matrix: SOIL

Collection Date: 3/24/2015 11:50

Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
----------	--------	------	--------------	-------	-----------------	---------------

Explanation of Qualifiers**Radiochemistry:**

U or ND - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.

- Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.

G - Sample density differs by more than 15% of LCS density.

D - DER is greater than Control Limit

M - Requested MDC not met.

LT - Result is less than requested MDC but greater than achieved MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS, Matrix Spike Recovery within control limits.

N - Matrix Spike Recovery outside control limits

NC - Not Calculated for duplicate results less than 5 times MDC

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

U or ND - Indicates that the compound was analyzed for but not detected.

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

* - Duplicate analysis (relative percent difference) not within control limits.

S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.

B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.

E - Analyte concentration exceeds the upper level of the calibration range.

J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).

A - A tentatively identified compound is a suspected aldol-condensation product.

X - The analyte was diluted below an accurate quantitation level.

* - The spike recovery is equal to or outside the control criteria used.

+ - The relative percent difference (RPD) equals or exceeds the control criteria.

G - A pattern resembling gasoline was detected in this sample.

D - A pattern resembling diesel was detected in this sample.

M - A pattern resembling motor oil was detected in this sample.

C - A pattern resembling crude oil was detected in this sample.

4 - A pattern resembling JP-4 was detected in this sample.

5 - A pattern resembling JP-5 was detected in this sample.

H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.

L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.

Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:

- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS Environmental -- FC

Date: 4/17/2015 8:35:

Client: ALS Environmental

QC BATCH REPORT

Work Order: 1503515

Project: 15030885

Batch ID: RE150330-1-1

Instrument ID Alpha Scin

Method: Radium-226 by Radon Emanation

DUP	Sample ID: 1503515-1				Units: pCi/g		Analysis Date: 4/8/2015 14:39				
Client ID: BG-1 (2-3)Ft			Run ID: RE150330-1A			Prep Date: 3/30/2015			DF: NA		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	0.25 (+/- 0.15)	0.12						0.38	0.5	2.1	LT

LCS	Sample ID: RE150330-1				Units: pCi/g		Analysis Date: 4/8/2015 15:11				
Client ID:	Run ID: RE150330-1A				Prep Date: 3/30/2015			DF: NA			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	27.4 (+/- 5.1)	0.1	30.71		89.3	57-126					P

MB	Sample ID: RE150330-1				Units: pCi/g			Analysis Date: 4/8/2015 15:11			
Client ID:	Run ID: RE150330-1A				Prep Date: 3/30/2015			DF: NA			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.166									U

MS	Sample ID: 1503515-1				Units: pCi/g		Analysis Date: 4/8/2015 15:11				
Client ID: BG-1 (2-3)Ft			Run ID: RE150330-1A			Prep Date: 3/30/2015			DF: NA		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	25.7 (+/- 4.8)	0.2	29.29	0.38	86.5	57-126					P

The following samples were analyzed in this batch:

1503515-1 1503515-2

Client: ALS Environmental
Work Order: 1503515
Project: 15030885

QC BATCH REPORT

Batch ID: **RA150406-3-1** Instrument ID **LB4100-A** Method: **Radium-228 Analysis by GFPC**

DUP	Sample ID: 1503515-1				Units: pCi/g		Analysis Date: 4/9/2015 10:56				
Client ID: BG-1 (2-3)Ft			Run ID: RA150406-3A			Prep Date: 4/6/2015			DF: NA		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.82						0.11	0.2	2.1	U
Carr: BARIUM	32510		33630		96.7	40-110		32580			

LCS	Sample ID: RA150406-3				Units: pCi/g			Analysis Date: 4/9/2015 10:56			
Client ID:		Run ID: RA150406-3A				Prep Date: 4/6/2015			DF: NA		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	13.3 (+/- 3.1)	0.7	11.82		112	70-130					P
Carr: BARIUM	33160		33630		98.6	40-110					

MB	Sample ID: RA150406-3				Units: pCi/g			Analysis Date: 4/9/2015 10:56			
Client ID:		Run ID: RA150406-3A				Prep Date: 4/6/2015			DF: NA		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-228	ND	0.77									U
Carr: BARIUM	33170		34000		97.6	40-110					

The following samples were analyzed in this batch:

1503515-1 1503515-2