



September 12, 2017

Hobbs District I
Energy Minerals Natural Resource Dept.
Oil Conservation Division
1625 N. French Dr.
Hobbs, NM 88240

HOBBS OCD

SEP 15 2017

RECEIVED

Re: Submitted C-141 (Vitalizer State 1H Location Release)

To whom it may concern,

Please find the attached C-141 Release Notification for the following location:

- Vitalizer State 1H (30-025-43234)

This Release Notice is being submitted due to a release of rain water/fresh water that occurred on lease near the lease road on August 26, 2017.

Should you have any questions, please feel free to contact me.

Respectfully,

A handwritten signature in blue ink, appearing to read "Melissa Luke", is written over the typed name.

Melissa Luke
Sr. Regulatory Analyst
Melissa.Luke@cdevinc.com
720-499-1482

Enclosure

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD

SEP 15 2017

RECEIVED

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Centennial Resource Production, LLC	Contact	Melissa Luke
Address	1001 17th St, Ste 1800 Denver, CO 80202	Telephone No.	720-499-1482
Facility Name	Vitalizer State 1H	Facility Type	Oil well pad/Lease road
Surface Owner	State	Mineral Owner	State
		API No.	30-025-43234

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	29	21S	34E	200	N	350	W	Lea

Latitude 32.45427 Longitude -103.48746 NAD83

NATURE OF RELEASE

Type of Release	Fresh Water	Volume of Release	1910 bbls	Volume Recovered	none
Source of Release	Truck-dump	Date and Hour of Occurrence	8/26/17	Date and Hour of Discovery	08/26/2017
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	State Land Office, Field Ops Division		
By Whom?	State Grazing Land Lessee	Date and Hour	08/29/2017		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	n/a		

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

By Olivia Yu at 8:18 am, Oct 11, 2017



Describe Cause of Problem and Remedial Action Taken.*

Due to the amount of rain received over the weekend, there was about 4' of rain water standing in the road .6 of a miles from location. With this amount of water our oil hauler refused to drive through. Two pump trucks that came off a fresh water transfer job were used, their tanks were clean. They had 500' of 3" hoses laid to relocate the pumped rain water further away, but the rain water rolled back on them. So they pumped what they could out to pasture, and trucked the rest. The trucking company's drivers said they had backed off the road at this spill area and off loaded the rain water to pasture. This has been dealt with, never to have a transport off main road again.

Describe Area Affected and Cleanup Action Taken.*

The area affected was the lease road connected to the Vitalizer State 1H pad location. Non-detect chloride analysis is attached.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: Melissa Luke		Approved by Environmental Specialist: 	
Title: Sr. Regulatory Analyst		Approval Date: 10/11/2017	Expiration Date:
E-mail Address: melissa.luke@cdevinc.com		Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 09/12/2017	Phone: 720-499-1482		

* Attach Additional Sheets If Necessary

1RP-4839

nOY1728430267

pOY1728431635

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701**

PBELAB

Analytical Report

Prepared for:

Ronny Crawford
Reflow Energy Solutions
2816 Rankin Hwy
Midland, TX 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Location: Lea County

Lab Order Number: 7H30003



NELAP/TCEQ # T104704516-16-7

Report Date: 09/07/17

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N32.2715.387W103.2914.656	7H30003-01	Soil	08/29/17 14:30	08-30-2017 09:06
32.454143,-103.487577	7H30003-02	Soil	08/29/17 14:35	08-30-2017 09:06
32.454273,-103.487550	7H30003-03	Soil	08/29/17 14:19	08-30-2017 09:06
32.454310,-103.487591	7H30003-04	Soil	08/29/17 14:21	08-30-2017 09:06

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

N32.27'15.387W103.29'14.656

7H30003-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00115	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Toluene	ND	0.00230	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Ethylbenzene	ND	0.00115	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Xylenes (p/m)	ND	0.00230	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Xylene (o)	ND	0.00115	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		39.6 %	75-125		P710108	09/01/17	09/02/17	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		90.0 %	75-125		P710108	09/01/17	09/02/17	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	ND	1.15	mg/kg dry	1	P7H3105	08/31/17	09/01/17	EPA 300.0	
% Moisture	13.0	0.1	%	1	P710111	09/01/17	09/01/17	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.7	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: 1-Chlorooctane		91.4 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: o-Terphenyl		109 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	08/31/17	09/01/17	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

32.454143,-103.487577
7H30003-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00122	mg/kg dry	1	P710108	09/01/17	09/05/17	EPA 8021B	
Toluene	ND	0.00244	mg/kg dry	1	P710108	09/01/17	09/05/17	EPA 8021B	
Ethylbenzene	ND	0.00122	mg/kg dry	1	P710108	09/01/17	09/05/17	EPA 8021B	
Xylene (p/m)	ND	0.00244	mg/kg dry	1	P710108	09/01/17	09/05/17	EPA 8021B	
Xylene (o)	ND	0.00122	mg/kg dry	1	P710108	09/01/17	09/05/17	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.9 %	75-125		P710108	09/01/17	09/05/17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		57.5 %	75-125		P710108	09/01/17	09/05/17	EPA 8021B	S-GC

General Chemistry Parameters by EPA / Standard Methods

Chloride	ND	1.22	mg/kg dry	1	P7H3105	08/31/17	09/01/17	EPA 300.0	
% Moisture	18.0	0.1	%	1	P710111	09/01/17	09/01/17	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	30.5	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C12-C28	ND	30.5	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C28-C35	ND	30.5	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: 1-Chlorooctane		94.0 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: o-Terphenyl		112 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	30.5	mg/kg dry	1	[CALC]	08/31/17	09/01/17	calc	

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

32.454273,-103.487550
7H30003-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00127	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Toluene	ND	0.00253	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Ethylbenzene	ND	0.00127	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Xylene (p/m)	ND	0.00253	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Xylene (o)	ND	0.00127	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		39.3 %	75-125		P710108	09/01/17	09/02/17	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		101 %	75-125		P710108	09/01/17	09/02/17	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	ND	1.27	mg/kg dry	1	P7H3105	08/31/17	09/01/17	EPA 300.0	
% Moisture	21.0	0.1	%	1	P710111	09/01/17	09/01/17	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	31.6	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C12-C28	ND	31.6	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C28-C35	ND	31.6	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: 1-Chlorooctane		119 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: o-Terphenyl		144 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	31.6	mg/kg dry	1	[CALC]	08/31/17	09/01/17	calc	

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

32.454310.-103.487591
7H30003-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

Organics by GC

Benzene	ND	0.00120	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Toluene	ND	0.00241	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Ethylbenzene	ND	0.00120	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Xylene (p/m)	ND	0.00241	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Xylene (o)	ND	0.00120	mg/kg dry	1	P710108	09/01/17	09/02/17	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		104 %	75-125		P710108	09/01/17	09/02/17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		39.2 %	75-125		P710108	09/01/17	09/02/17	EPA 8021B	S-GC

General Chemistry Parameters by EPA / Standard Methods

Chloride	ND	1.20	mg/kg dry	1	P7H3105	08/31/17	09/01/17	EPA 300.0	
% Moisture	17.0	0.1	%	1	P710111	09/01/17	09/01/17	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	30.1	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C12-C28	ND	30.1	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
>C28-C35	ND	30.1	mg/kg dry	1	P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: 1-Chlorooctane		116 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	
Surrogate: o-Terphenyl		141 %	70-130		P710104	08/31/17	09/01/17	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	30.1	mg/kg dry	1	[CALC]	08/31/17	09/01/17	calc	

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizahzer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

Organics by GC - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P7I0108 - General Preparation (GC)										
Blank (P7I0108-BLK1)				Prepared & Analyzed: 09/01/17						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.0618		"	0.0600		103	75-125			
Surrogate: 4-Bromofluorobenzene	0.0284		"	0.0600		47.4	75-125			S-GC
LCS (P7I0108-BS1)				Prepared & Analyzed: 09/01/17						
Benzene	0.101	0.00100	mg/kg wet	0.100		101	70-130			
Toluene	0.102	0.00200	"	0.100		102	70-130			
Ethylbenzene	0.0938	0.00100	"	0.100		93.8	70-130			
Xylene (p/m)	0.182	0.00200	"				70-130			
Xylene (o)	0.0817	0.00100	"				70-130			
Surrogate: 4-Bromofluorobenzene	0.0264		"	0.0600		44.0	75-125			S-GC
Surrogate: 1,4-Difluorobenzene	0.0665		"	0.0600		111	75-125			
LCS Dup (P7I0108-BSD1)				Prepared & Analyzed: 09/01/17						
Benzene	0.115	0.00100	mg/kg wet	0.100		115	70-130	12.8	20	
Toluene	0.110	0.00200	"	0.100		110	70-130	7.29	20	
Ethylbenzene	0.100	0.00100	"	0.100		100	70-130	6.49	20	
Xylene (p/m)	0.180	0.00200	"				70-130		20	
Xylene (o)	0.0803	0.00100	"				70-130		20	
Surrogate: 1,4-Difluorobenzene	0.0726		"	0.0600		121	75-125			
Surrogate: 4-Bromofluorobenzene	0.0253		"	0.0600		42.2	75-125			S-GC
Matrix Spike (P7I0108-MS1)				Source: 7H31004-03	Prepared: 09/01/17	Analyzed: 09/02/17				
Benzene	0.124	0.00104	mg/kg dry	0.104	ND	119	80-120			
Toluene	0.123	0.00208	"	0.104	ND	118	80-120			
Ethylbenzene	0.107	0.00104	"	0.104	ND	103	80-120			
Xylene (p/m)	0.179	0.00208	"		ND		80-120			
Xylene (o)	0.0848	0.00104	"		ND		80-120			
Surrogate: 1,4-Difluorobenzene	0.0684		"	0.0625		109	75-125			
Surrogate: 4-Bromofluorobenzene	0.0215		"	0.0625		34.4	75-125			S-GC

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

Organics by GC - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P7I0108 - General Preparation (GC)										
Matrix Spike Dup (P7I0108-MSD1)		Source: 7H31004-03			Prepared: 09/01/17 Analyzed: 09/02/17					
Benzene	0.125	0.00104	mg/kg dry	0.104	ND	120	80-120	0.846	20	
Toluene	0.120	0.00208	"	0.104	ND	115	80-120	2.24	20	
Ethylbenzene	0.104	0.00104	"	0.104	ND	99.5	80-120	3.47	20	
Xylene (p/m)	0.123	0.00208	"		ND		80-120		20	
Xylene (o)	0.0845	0.00104	"		ND		80-120		20	
Surrogate: 1,4-Difluorobenzene	0.0594		"	0.0625		95.1	75-125			
Surrogate: 4-Bromofluorobenzene	0.0195		"	0.0625		31.2	75-125			S-GC

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P7H3105 - * DEFAULT PREP *****

Blank (P7H3105-BLK1)

Prepared: 08/31/17 Analyzed: 09/01/17

Chloride ND 1.00 mg/kg wet

LCS (P7H3105-BS1)

Prepared: 08/31/17 Analyzed: 09/01/17

Chloride 414 1.00 mg/kg wet 400 104 80-120

LCS Dup (P7H3105-BSD1)

Prepared: 08/31/17 Analyzed: 09/01/17

Chloride 415 1.00 mg/kg wet 400 104 80-120 0.0724 20

Duplicate (P7H3105-DUP1)

Source: 7H31012-01

Prepared: 08/31/17 Analyzed: 09/01/17

Chloride 11.0 1.02 mg/kg dry 11.0 0.0925 20

Duplicate (P7H3105-DUP2)

Source: 7H30002-04

Prepared: 08/31/17 Analyzed: 09/01/17

Chloride 144 1.01 mg/kg dry 132 8.81 20

Matrix Spike (P7H3105-MS1)

Source: 7H31012-01

Prepared: 08/31/17 Analyzed: 09/01/17

Chloride 1090 1.02 mg/kg dry 1020 11.0 105 80-120

Batch P7I0111 - * DEFAULT PREP *****

Blank (P7I0111-BLK1)

Prepared & Analyzed: 09/01/17

% Moisture ND 0.1 %

Duplicate (P7I0111-DUP1)

Source: 7H30003-04

Prepared & Analyzed: 09/01/17

% Moisture 17.0 0.1 % 17.0 0.00 20

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P7I0104 - General Preparation (GC)										
Blank (P7I0104-BLK1)										
					Prepared: 08/31/17 Analyzed: 09/01/17					
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	117		"	100		117	70-130			
Surrogate: o-Terphenyl	64.7		"	50.0		129	70-130			
LCS (P7I0104-BS1)										
					Prepared: 08/31/17 Analyzed: 09/01/17					
C6-C12	1240	25.0	mg/kg wet	1000		124	75-125			
>C12-C28	1220	25.0	"	1000		122	75-125			
Surrogate: 1-Chlorooctane	117		"	100		117	70-130			
Surrogate: o-Terphenyl	54.3		"	50.0		109	70-130			
LCS Dup (P7I0104-BSD1)										
					Prepared: 08/31/17 Analyzed: 09/01/17					
C6-C12	1130	25.0	mg/kg wet	1000		113	75-125	8.89	20	
>C12-C28	1230	25.0	"	1000		123	75-125	0.973	20	
Surrogate: 1-Chlorooctane	119		"	100		119	70-130			
Surrogate: o-Terphenyl	57.4		"	50.0		115	70-130			
Duplicate (P7I0104-DUP1)										
			Source: 7H31002-06		Prepared: 08/31/17 Analyzed: 09/01/17					
C6-C12	ND	31.6	mg/kg dry		ND					20
>C12-C28	14.8	31.6	"		16.1			8.76		20
Surrogate: 1-Chlorooctane	115		"	127		91.1	70-130			
Surrogate: o-Terphenyl	65.4		"	63.3		103	70-130			

Reflow Energy Solutions
2816 Rankin Hwy
Midland TX, 79706

Project: Vizalizer St. Lease Rd
Project Number: [none]
Project Manager: Ronny Crawford

Fax:

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

BULK Samples received in Bulk soil containers

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date: 9/7/2017

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Perrin Basin Environmental Lab, LP
1400 Rankin HWY
Midland, Texas 797061

Preliminary Samples
Phone: 432-686-7235

Project Manager: Ronny Crawford

Company Name: Reliance Energy Solutions

Company Address: 950 Andrews Ave

City/State/Zip: Midland Texas

Telephone No: 432-288-4131

Fax No: _____

Sampler Signature: [Signature]

e-mail: Ronny@RelianceEnergy.com

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Project Name: Vitaliger St. Lease

Project #:

Project Loc: Lea Courty

PO #:

ORDER #: PH30003

FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₈	None	Other (Specify)	DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B 5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
32.454143-103.487577			8/29/17	0830																											
32.454143-103.487550			8/29/17	0835																											
32.454143-103.487591			8/29/17	0821																											

Special Instructions:

Relinquished by: [Signature] Date: 8/30/17 Time: 9:05 AM

Relinquished by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Preservation & # of Containers

Matrix

Analyze For:

TCLP:

TOTAL

Laboratory Comments:

Sample Containers: 14

WOCs: 14

Labels on containers: 14

Shipping: 14

Received: 14

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 9/15/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1RP-4839 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 11/11/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief
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