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APPROVED

By Olivia Yu at 3:37 pm, Apr 20, 2018

NMOCD approves of the delineation and remediation completed for 1RP-4964. Backfill request is granted.

April 9, 2017

Olivia Yu New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 1 1625 French Drive Hobbs, NM 88240

Re: Remediation Workplan and Backfill Request

Mewbourne Marathon 15 PA (1RP-4964)

GPS: N 32.56721° W 103.54050°

Unit Letter "P", Section 15, Township 20 South, Range 34 East

Lea County, New Mexico

Dear Ms. Yu,

TRC Environmental Corporation (TRC) has prepared the following "Remediation Workplan and Backfill Request" on behalf of Plains Pipeline, L.P. (Plains), in regard to the Mewbourne Marathon 15 PA crude oil release site (1RP-4964). The release site is located approximately sixteen (16) miles southeast of Monument in Lea County, New Mexico, in Unit Letter "P", Section 15, Township 20 South, Range 34 East. The GPS coordinates for the site are N 32.56721° and W 103.54050°. The affected property is located on private land. A "Site Location Map" is provided as Attachment #1

On February 1, 2018, a release was discovered on the LACT Unit at Mewbourne Oil Company's Marathon 15 PA production facility. The release was attributed to a one-half (1/2) inch (in.) valve which appeared to be tampered with and forced open, resulting in the release of approximately thirty-five (35) barrels (bbls) of crude oil. A majority of the release was confined to within the earthen containment and portions of the release affected the adjacent caliche well pad. During initial response activities, approximately two (2) bbls of crude oil were recovered and saturated soils were excavated and stockpiled on-site atop a polyurethane liner.

A reference map utilized by the New Mexico Oil Conservation Division (NMOCD) indicated groundwater should be encountered at approximately one hundred fifty (150) ft. below ground surface (bgs). No surface waters or water wells were observed within one thousand (1,000) ft. of the release site. Based on the NMOCD Site Classification criteria, the Recommended Remediation Action Levels (RRAL) are 10 mg/kg for benzene, 50 mg/kg for benzene, toluene, ethylbenzene and xylene (BTEX) and 5,000 mg/kg for total petroleum hydrocarbons (TPH).

Summary of Field Activities

On February 23, 2018, remediation activities resumed at the release site. Impacted soil within the release margins remaining in-situ was excavated and stockpiled on-site, atop an impermeable liner, pending final disposition. The floor and sidewalls of the excavation were advanced until field observations suggested hydrocarbon impacts had been mitigated.

On February 27, 2018, TRC collected seventeen (17) soil samples (LU FL 1, FL 2, FL 3, FL 4, NSW 1, NSW 2, NSW 3, ESW 1, ESW 2, ESW 3, ESW 4, WSW 1, WSW 2, WSW 3, SSW 1, SSW 2 and SSW 3) from the floor and sidewalls of the excavated area and submitted them to the laboratory for analysis of BTEX and TPH concentrations using EPA Methods SW-846 8021b and 8015 M Ext., respectively. Laboratory analytical results indicated benzene concentrations ranged from less than the applicable laboratory reporting limit (RL) in soil samples FL4, NSW1, NSW2, NSW3, ESW2, ESW3, ESW4, WSW2, WSW3 and SSW3 to 0.364 mg/kg in soil sample SSW1. Analytical results indicated BTEX concentrations ranged from less than the applicable laboratory RL in soil samples FL4, ESW2 and SSW3 to 70.564 mg/kg in soil sample SSW1. TPH concentrations ranged from less than the applicable laboratory RL in soil samples FL4 and WSW2 to 11,444 mg/kg in soil sample NSW1. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were below the NMOCD Recommended Remediation Action Levels in each of the submitted soil samples with the exception of the TPH concentrations in soil samples LU FL 1 (7,203 mg/kg), FL3 (7,075 mg/kg), NSW1 (11,444 mg/kg), ESW1 (5,786.5 mg/kg), WSW1 (10,324 mg/kg) and SSW1 (9,528 mg/kg) and the BTEX concentration in soil sample SSW1 (70.564 mg/kg). The excavation was advanced in the areas characterized by soil samples LU FL 1, FL3, NSW1, ESW1, WSW1 and SSW1. A "Site & Sample Location Map" is provided as Attachment #2. A "Soil Chemistry Table" is provided as Attachment #3.

On March 22, 2018, TRC collected six (6) excavation confirmation soil samples (FL-3b @ 4', LU FL-1b @ 2', NSW1b, ESW1b, SSW1b and WSW1b) from the floor and sidewalls of the excavated area and submitted them to the laboratory for analysis of TPH. Laboratory analytical results indicated TPH concentrations were less than the applicable laboratory RL in each of the submitted soil samples with the exception of soil sample LU FL-1b @ 2' (29.4 mg/kg) and SSW 1b (707.3 mg/kg). Soil samples FL-3b @ 4' and LU FL-1b @ 2' were also analyzed for concentration of chloride, which were determined to be 36.4 mg/kg and 52.2 mg/kg, respectively. Soil sample SSW1b was also analyzed for concentrations of BTEX, which were determined to be less than the applicable laboratory RL. Laboratory analytical results indicated BTEX, TPH and/or chloride concentrations were below the NMOCD Recommended Remediation Action Levels in each of the submitted soil samples.

In addition, two (2) confirmation soil samples (FL-3 @ 6' and LU FL-1 @ 4') were collected from deeper intervals beneath the confirmation floor samples in an effort to further characterize soil beneath the affected area. The collected soil samples were submitted to the laboratory for analysis of TPH concentration, which were determined to be less than the applicable laboratory RL.

On March 20 and 21, 2018, approximately 100 cubic yards (cy) of impacted soil was transported to Lazy Ace Landfarm, LLC (NMOCD Permit No. NM-01-0041) for disposal.

Backfill Request

Based on laboratory analytical results and field activities conducted to date, TRC requests permission to backfill the excavated area with locally-sourced, non-impacted material. Excavation backfill will be compacted and contoured to meet the needs of the facility.

Upon completion of remediation activities, a "Remediation Summary and Soil Closure Request" will be prepared summarizing field activities and laboratory analytical results from confirmation soil samples. If you have any questions or need any additional information, please feel free to contact Joel Lowry or Amber Groves by phone or email.

Respectfully,

Jael foung

Joel Lowry

TRC Environmental Corporation

Curt Stanley

TRC Environmental Corporation

Attachments:

Figure 1 – Site Location Map Figure 2 – Site & Sample Map

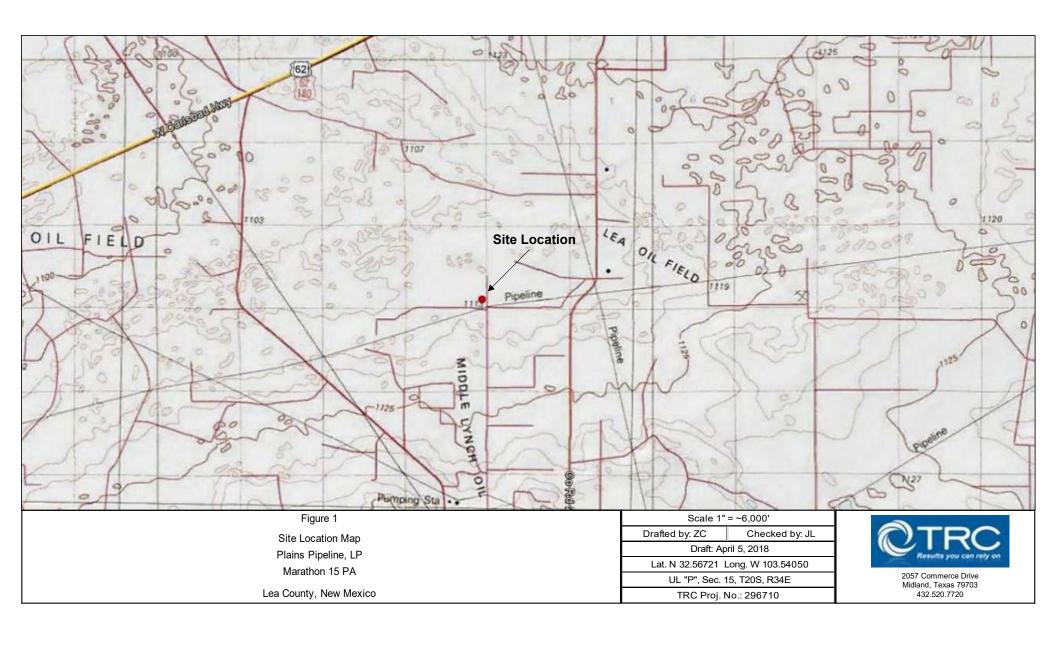
Table 1 – Concentrations of Benzene, BTEX, TPH and Chloride in Soil

Photographic Log

Release Notification and Corrective Action (Form C-141)

cc: Camille BryantPlains Pipeline, L.P.505 North Big Spring, Suite 600Midland, TX 79701

File



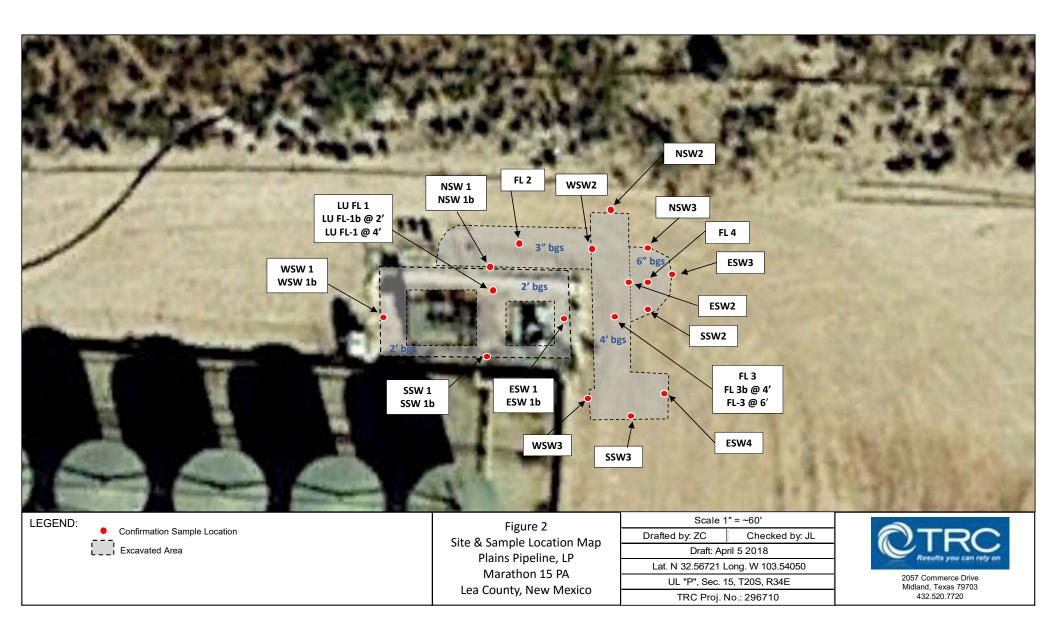




Figure 1 - View of surface staining from the initial release, facing Southwest.



Figure 2 - View of surface staining from the initial release, facing Southeast.



Figure 3 - View of portion of the excavated area, facing West.



Figure 4 - View of portion of the excavated area, facing Northeast.

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL

Marathon 15 PA PLAINS PIPELINE, L.P. LEA COUNTY, NM NMOCD REF. No. 1RP-4964

	SAMPLE DATE	SAMPLE DEPTH	STATUS	Methods: EPA SW 846-8021B, 5030						Methods:				
SAMPLE LOCATION				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	XYLENES, TOTAL (mg/Kg)	TOTAL BTEX (mg/Kg)	EPA SW 846-8015M				E300	
									GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	CHLORIDE (mg/Kg)	
FL 2	2/27/2018	6"	In-Situ	0.052	0.369	0.0592	0.19	0.6776	82.9	1,590	99.4	1,772.30	-	
FL 3	2/27/2018	3'	In-Situ	0.000468	0.0257	0.0666	0.3058	0.398568	373	6,230	472	7,075	-	
FL 4	2/27/2018	6"	In-Situ	< 0.000383	< 0.000454	< 0.000563	< 0.000343	< 0.000343	<7.99	<8.11	<8.11	< 7.99	-	
NSW1	2/27/2018	6"	In-Situ	< 0.000386	0.0623	0.0766	0.293	0.4319	395	10,600	449	11,444	-	
NSW2	2/27/2018	1.5'	In-Situ	< 0.000386	0.00151	< 0.000567	0.00573	0.00724	<7.97	13.8	<8.10	13.8	-	
NSW3	2/27/2018	3"	In-Situ	< 0.000383	0.00309	< 0.000563	0.0038	0.00689	<7.99	11.7	<8.12	11.7	-	
ESW1	2/27/2018	6"	In-Situ	0.0601	4.40	5.58	19.56	29.6001	1,090	4,630	66.5	5,786.5	-	
ESW2	2/27/2018	1.5'	In-Situ	< 0.000639	< 0.000757	< 0.000938	< 0.000572	< 0.000572	<7.98	90.0	<8.10	90.0	-	
ESW3	2/27/2018	3"	In-Situ	< 0.000388	0.00159	0.0034	0.02132	0.02631	15.5	245	13.0	273.5	-	
ESW4	2/27/2018	1.5'	In-Situ	< 0.000383	0.00549	0.0182	0.2633	0.28699	20.4	422	14.1	456.5	-	
WSW1	2/27/2018	6"	In-Situ	0.109	5.3500	6.18	23.85	35.489	1780	8,200	344	10,324	-	
WSW2	2/27/2018	1.5	In-Situ	< 0.000384	0.0029	0.00402	0.0305	0.03745	<7.99	<8.11	<8.11	<7.99	-	
WSW3	2/27/2018	1.5	In-Situ	< 0.000384	0.0023	0.000589	0.00189	0.004739	<7.98	257	11.6	268.6	-	
SSW1	2/27/2018	6"	In-Situ	0.364	12.4	13.1	44.7	70.564	1,660	7,590	278	9,528	-	
SSW2	2/27/2018	3"	In-Situ	0.000625	0.1300	0.114	0.494	0.738625	185	1,900	46.7	2,131.7	-	
SSW3	2/27/2018	6"	In-Situ	< 0.000383	< 0.000453	< 0.000561	< 0.000342	< 0.000342	8.33	< 8.13	<8.13	8.33	-	
LU FL 1	2/27/2018	8"	In-Situ	0.145	3.36	3.01	10.87	17.385	649	6,150	404	7,203	-	
FL-3b @ 4'	3/22/2018	4'	In-Situ	-	-	-	-	-	<3.87	<25.0	<25.0	<25.0	36.4	
LU FL-1b @ 2'	3/22/2018	2'	In-Situ	-	-	-	-	-	< 3.90	29.4	<25.0	29.4	52.2	
NSW 1b	3/22/2018	1'	In-Situ	-	-	-	-	-	<3.82	<25.0	<25.0	<25.0	-	
ESW 1b	3/22/2018	1'	In-Situ	-	-	-	-	-	<3.94	<25.2	<25.2	<25.2	-	
SSW 1b	3/22/2018	1'	In-Situ	< 0.000383	< 0.000454	< 0.000563	< 0.000343	< 0.000343	7.30	631	69.0	707.3	-	
WSW 1b	3/22/2018	1'	In-Situ	-	-	-	-	-	<7.99	<25.3	<25.3	<25.3	-	
FL-3 @ 6'	3/22/2018	6'	In-Situ	-	-	-	-	-	<3.57	<25.0	<25.0	<25.0	-	
LU FL-1 @ 4'	3/22/2018	4'	In-Situ	-	-	-	-	-	<3.97	<24.9	<24.9	<24.9	-	
NMOCD Regulatory Guideline				10	-	-	-	50	-	-	-	5,000	600	

<u>District I</u> 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

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

nOY1804333422

pOY1804333712

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Release Notification and Corrective Action

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

				OPERATOR											
		lains Pipeline		Contact Amber Groves											
Address 19		Telephone No. (575)200-5517													
Facility Nar		Facility Type Tank Battery													
Surface Ow	wner	Federal				API No.									
LOCATION OF RELEASE															
Unit Letter P									East/V	East/West Line County			Lea		
Latitude 32.56721 Longitude -103.540506 NAD83															
NATURE OF RELEASE															
Type of Relea	ase Crude	Volume of Release 30 bbls Volume Recovered 2 bbls													
Source of Rel		Date and Hour of Occurrence Date and Hour of Discovery 2/1/2018 @ 1:01 PM 2/1/2018 @ 1:01 PM													
Was Immedia	equired	If YES, To Whom?													
By Whom? A						Date and Hour 2/1/2018 @ 3:47 PM									
Was a Watero		If YES, Volume Impacting the Watercourse.													
If a Watercou	rse was Im	pacted, Descri	be Fully.*			REC By C			t 9:1	1 am, I	Feb 12,	201	8		
Describe Cause of Problem and Remedial Action Taken.* 1/2" valve on top of a tee with a test port with 3/8" tubing running to the sump box was tampered with and forced open.															
Describe Area Affected and Cleanup Action Taken.* The impacted area is contained to the pad and will be remediated per current NMOCD guidelines.															
regulations all public health should their o	operators or the envir perations had ment. In ac	are required to onment. The ave failed to a ddition, NMO	report and acceptance dequately i CD accepta	is true and complidor file certain records of a C-141 repositives tigate and reaches of a C-141 repositives of a C-141 repositives of a C-141 records and records are considered.	elease no ort by the emediate	otifications ar NMOCD ma contamination	nd perfo arked as on that p	rm correc Final Repose a three	tive acti eport" d eat to gr	ons for rele oes not reli ound water	eases which leve the oper systems, surface wa	may en ator of ter, hu	danger liability nan health		
1	0 1							OIL CONSERVATION DIVISION							
Signature:	ort														
Printed Name	Approved by Environmental Specialist:														
Title: Remedi	Title: Remediation Coordinator							Approval Date: 2/12/2018 Expiration Date:							
E-mail Addres							Conditions of Approval: Attached								
Date:	Phone;						see attached directive								
Attach Additi	ional Shee	ts If Necessa	ıry		F	1RP-4964	1		nOV	180433	3/122				

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