

SITE INFORMATION

Report Type: Work Plan

General Site Information:

Site:	Loco Hills SWD 35 #001					
Company:	COG Operating LLC					
Section, Township and Range	Unit P	Sec 36	T17S	R30E		
Lease Number:	API-30-015-31635					
County:	Eddy County					
GPS:	32.78561° N			103.91967° W		
Surface Owner:	State					
Mineral Owner:						
Directions:	From Loco Hills travel 5.75 miles east to CR 222 (Shugart Rd). Turn south on CR 222 and travel 2.36 miles turning right traveling west on the caliche lease road. Stay on the main lease road traveling west for approx. 2.29 miles and turn right traveling north for 0.26 miles to the location.					

Release Data:

Date Released:	3/14/2014
Type Release:	Produced water
Source of Contamination:	Main Water Line Rupture
Fluid Released:	3050 bbls
Fluids Recovered:	1820 bbls

Official Communication:

Name:	Robert McNeill	Ike Tavaréz
Company:	COG Operating, LLC	Tetra Tech
Address:	One Concho Center 600 W. Illinois Ave.	1910 N. Big Spring
City:	Midland Texas, 79701	Midland, Texas
Phone number:	(432) 686-3023	(432) 682-4559
Fax:	(432) 684-7137	(432) 682-3946
Email:	rmcneill@concho.com	ike.tavarez@tetrattech.com

Ranking Criteria

Depth to Groundwater:	Ranking Score	Site Data
<50 ft	20	
50-99 ft	10	
>100 ft.	0	0
WellHead Protection:	Ranking Score	Site Data
Water Source <1,000 ft., Private <200 ft.	20	
Water Source >1,000 ft., Private >200 ft.	0	0
Surface Body of Water:	Ranking Score	Site Data
<200 ft.	20	
200 ft - 1,000 ft.	10	
>1,000 ft.	0	0
Total Ranking Score:		0

Acceptable Soil RRAL (mg/kg)		
Benzene	Total BTEX	TPH
10	50	5,000

June 5, 2014

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Work Plan for the COG Operating LLC., Loco Hills SWD 35 #1, Unit P, Section 36, Township 17 South, Range 30 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the Loco Hills SWD 35 #1 located in Unit P, Section 36, Township 17 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.78561°, W 103.91967°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on March 14, 2014, and released approximately 3,050 barrels of produced fluid from a failed main line flowing into the facility. A total of 1,820 barrels of produced fluids were recovered. The spill initiated at the western edge of the pad into the pasture affecting an area approximately 70' x 325', 80' x 130' and 96' x 340'. The initial C-141 form is enclosed in Appendix A. This is a second release that has occurred at the site, which encompassed the first spill's footprint. The initial release was assessed, remediated and a closure report was submitted for the site.

Groundwater

No water wells were listed within Section 36. According to the NMOCD groundwater map, the average depth to groundwater in this area is approximately 325' below surface. The groundwater data is shown in Appendix B.



Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On April 1 through 3, 2014, Tetra Tech supervised the installation of eleven (11) boreholes (BH-1 through BH-11) using an air rotary drilling rig to assess the impacted soils. The boreholes were installed in the spill area in the pasture to define the vertical extents. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of the laboratory analysis chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The borehole locations are shown on Figure 3.

Referring to Table 1, none of the samples exceeded the RRAL for TPH or BTEX. The boreholes (BH-3, BH-4, BH-7, BH-8 and BH-10) showed a shallow chloride impact to the soils and were vertically defined at approximately at 4.0' to 10.0' below surface. The areas of BH-4 and BH-7 did show a chloride spike of 6-7' of 1,460 mg/kg and 1,800 mg/kg at 14-15', which appears to be cross-contaminated with the upper soils. The areas of boreholes (BH-1, BH-2, BH-5, BH-6, BH-9, and BH-11) did show a deeper impact to the soils and defined at approximately 20.0' to 30.0' below surface. In the area of BH-5, a previous liner was installed at a depth of approximately 3-4' below surface.

Work Plan

COG proposes to remove the impacted material as highlighted (green) in Table 1 and shown on Figure 4. The proposed excavation depth will range from 2-3' to 9-10' below surface. A shallow excavation will be performed to a depth of approximately 2-3' in the areas of BH-3 and BH-4 and 4-5' in the area of BH-7. In the areas of BH-2, BH-5, BH-6, BH-8 and BH-11 will be excavated to approximately 6-7' and capped the excavation bottom with a 40 mil liner at approximately 4.0' below surface. The deepest excavation (9-10') will be performed in the area of BH-1 to remove majority of the chlorides. In addition, the impacted soil located north of BH-5 will be excavated to an approximate depth of 3.0' to 4.0' to the top of the previously installed liner. All of the excavated soil will be transported to proper



disposal. Once excavated to the appropriate depth, the excavations will be backfilled with clean soil.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns. As such, Tetra Tech will excavate the soils to the maximum extent practicable. Any remaining impact not accessible will be deferred until abandonment or capped with a 40 mil liner at 4.0' below surface.

Upon completion, a final report will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

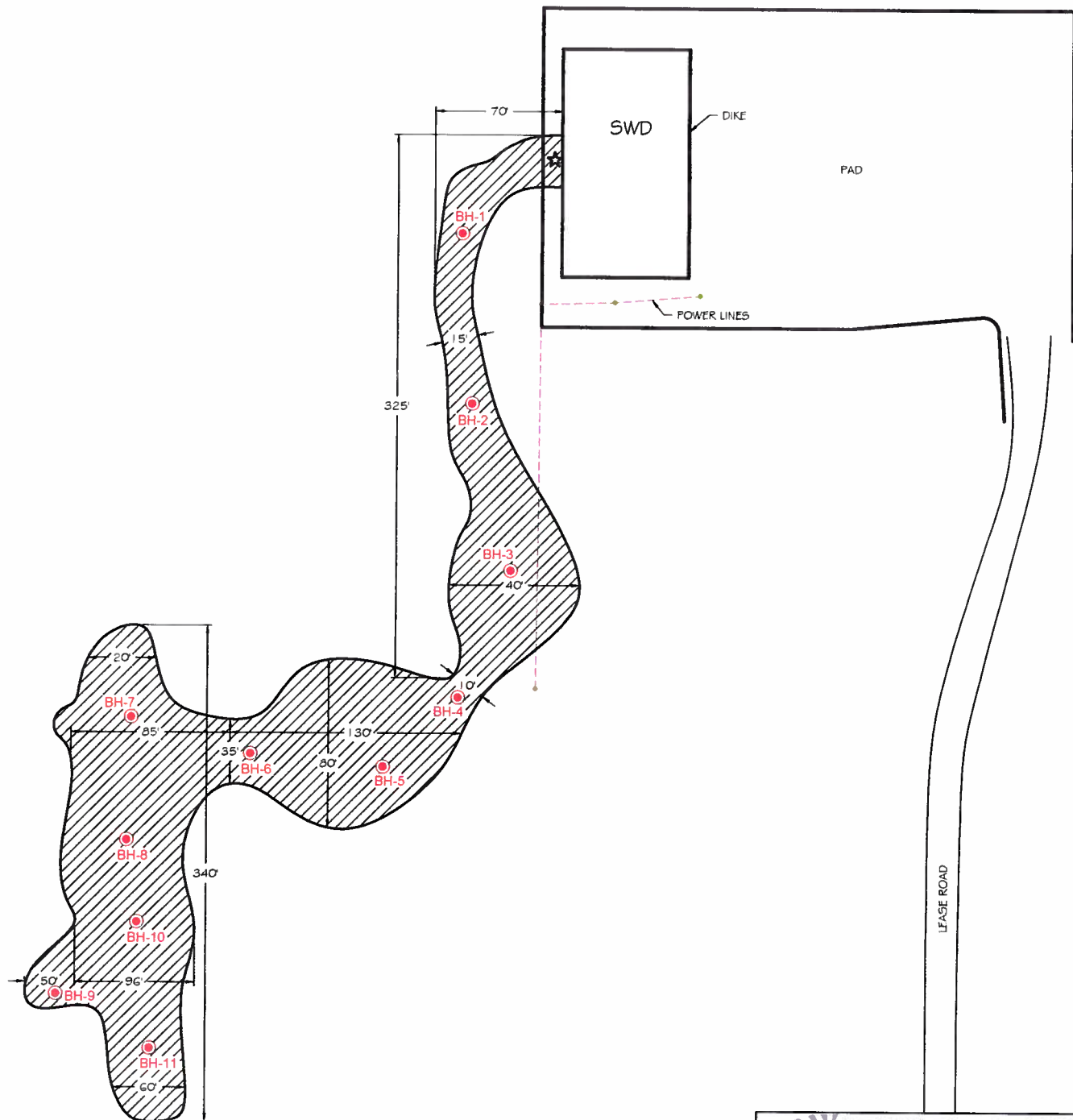
A handwritten signature in blue ink, appearing to read 'Ike Tavares', written over the printed name.

Ike Tavares, PG
Senior Project Manager

cc: Robert McNeil – COG

Figures





LEGEND

- ★ SPILL SOURCE
- BORE HOLE SAMPLE LOCATIONS
- ▨ SPILL AREA

0 40 85
SCALE: 1" = 85'-0"



Figure 3

Loco Hills SWD 35 #1

Spill Assessment Map

Eddy County, New Mexico

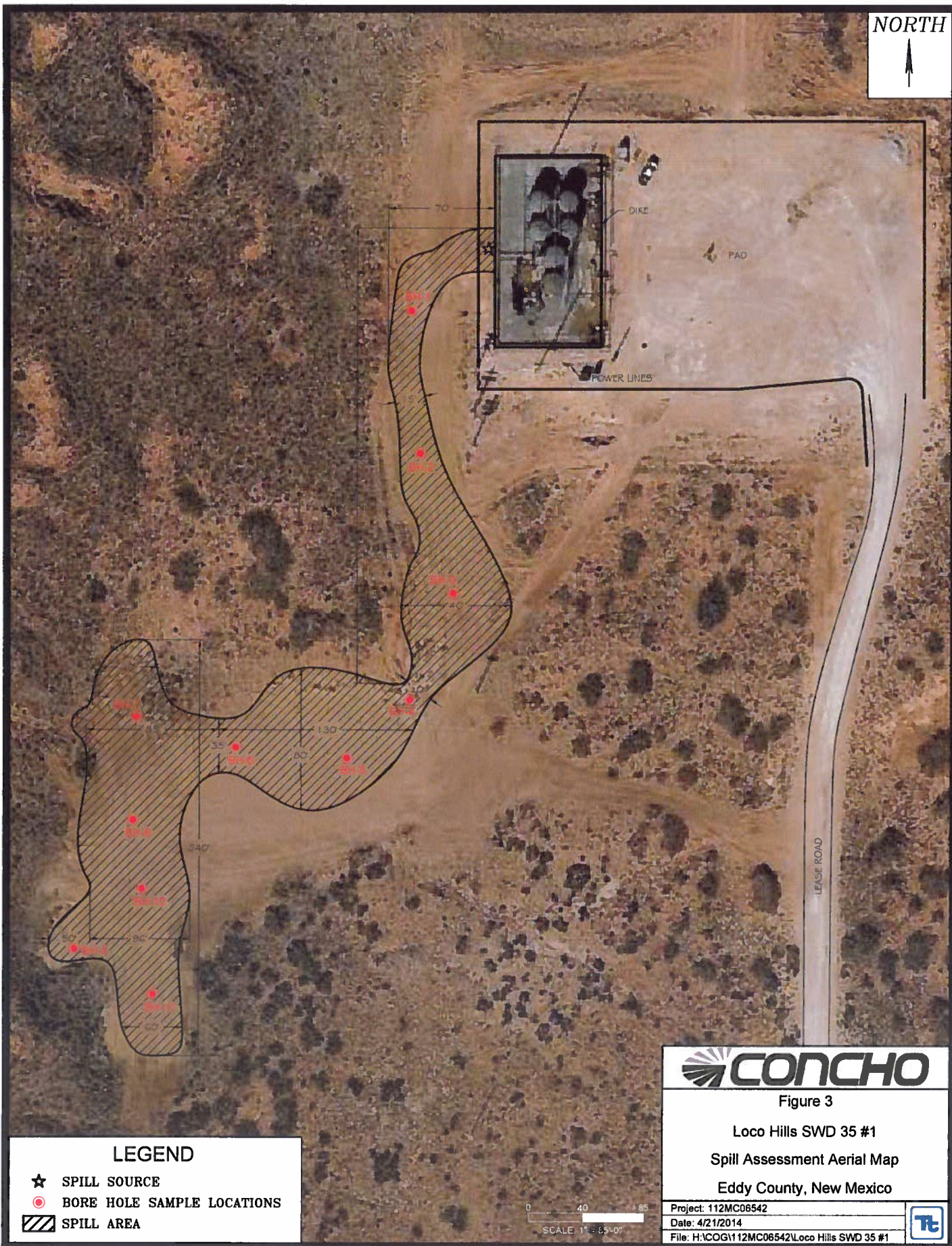
Project: 112MC08542

Date: 4/21/2014

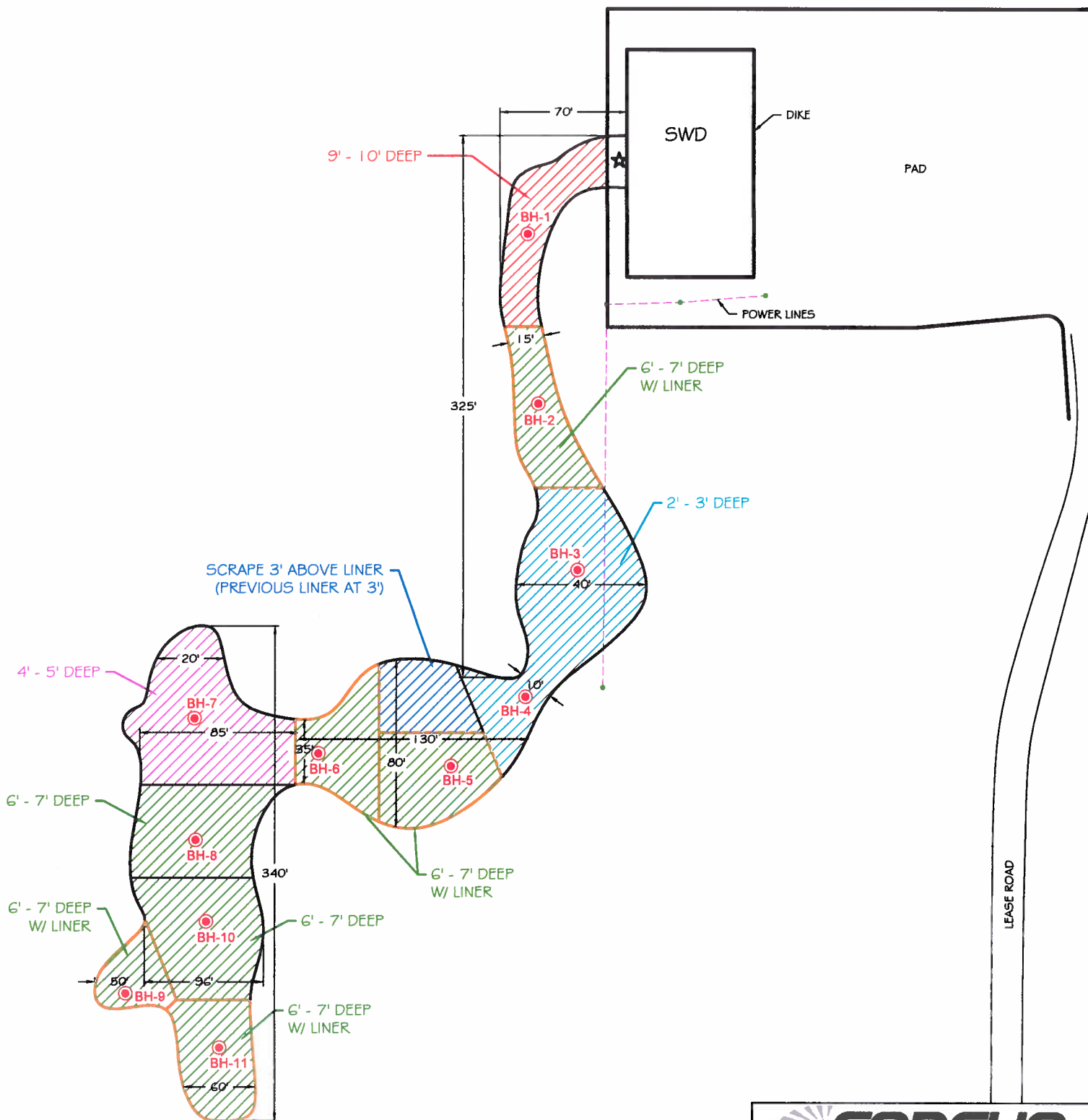
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NORTH



NORTH



LEGEND

- ★ SPILL SOURCE
- BORE HOLE SAMPLE LOCATIONS
- PROPOSED LINER
- PROPOSED EXCAVATION AREAS

0 40 85
SCALE: 1" = 85'-0"



Figure 4

Loco Hills SWD 35 #1

Proposed Excavation Areas & Depths Map

Eddy County, New Mexico

Project: 112MC08542

Date: 06/05/2014

File: H:\COG\112MC08542\Loco Hills SWD 35 #1



Tables

Table 1
COG Operating LLC.
Loco Hills SWD 35 #1 Spill 2
Eddy County, New Mexico

[illegible]

Table 1

COG Operating LLC.

Loco Hills SWD 35 #1 Spill 2

Eddy County, New Mexico

[illegible]

Table 1

[illegible]

Table 1

COG Operating LLC.

Loco Hills SWD 35 #1 Spill 2

Eddy County, New Mexico

[illegible]

Table 1

COG Operating LLC.

Loco Hills SWD 35 #1 Spill 2

Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
BH-11	4/1/2014	0-1	-	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	8,700
	"	2-3	-	X		-	-	-	-	-	-	-	-	20,000
	"	4-5	-	X		-	-	-	-	-	-	-	-	9,700
	"	6-7	-	X		-	-	-	-	-	-	-	-	8,750
	"	9-10	-	X		-	-	-	-	-	-	-	-	6,000
	"	14-15	-	X		-	-	-	-	-	-	-	-	12,000
	"	19-20	-	X		-	-	-	-	-	-	-	-	3,150
	"	24-25	-	X		-	-	-	-	-	-	-	-	250
	"	29-30	-	X		-	-	-	-	-	-	-	-	250
	"	39-40	-	X		-	-	-	-	-	-	-	-	150
	"	49-50	-	X		-	-	-	-	-	-	-	-	150
	"	59-60	-	X		-	-	-	-	-	-	-	-	100

(-) Not Analyzed

(BEB) Below Excavation Bottom

Proposed Liner

Proposed Excavation Depth

Photos

COG Operating LLC
Loco Hills SWD 35 #1
Eddy County, New Mexico



TETRA TECH



View North – Area of BH-1



View South – Area of BH-2



View South – Area of BH-3



View West – Area of BH-4 and BH-5

COG Operating LLC
Loco Hills SWD 35 #1
Eddy County, New Mexico



TETRA TECH



View East – Area of BH -6 and BH-7



View South – Area of BH-8 and BH-9



View Southeast –Area of BH-9



View South – Area of BH-10



View South – Area of BH-11



View North – Area of BH-11

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
700 Rio Brazos Road, Aztec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

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

GW-35

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC	Contact	Robert McNeill
Address	600 West Illinois Avenue, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	Loco Hills SWD 35 #001	Facility Type	Tank Battery

Surface Owner	State	Mineral Owner		Lease No. (API#)	30-015-31635
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	36	17S	30E					Eddy

Latitude 32.78561

Longitude 103.91967

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 3050bbls	Volume Recovered 1820bbls
Source of Release Main produced water line	Date and Hour of Occurrence 03-14-2014	Date and Hour of Discovery 03-14-2014 11:40am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher - NMOCD	
By Whom? Michelle Mullins	Date and Hour 03-15-2014 10:58am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A fused 90 failed going into the lined facility. Repaired and replaced the failed 90.

Describe Area Affected and Cleanup Action Taken.*

Initially 3050bbls of produced water were released. We were able to recover 1820bbls with vacuum trucks. All free fluids have been recovered Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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.

OIL CONSERVATION DIVISION

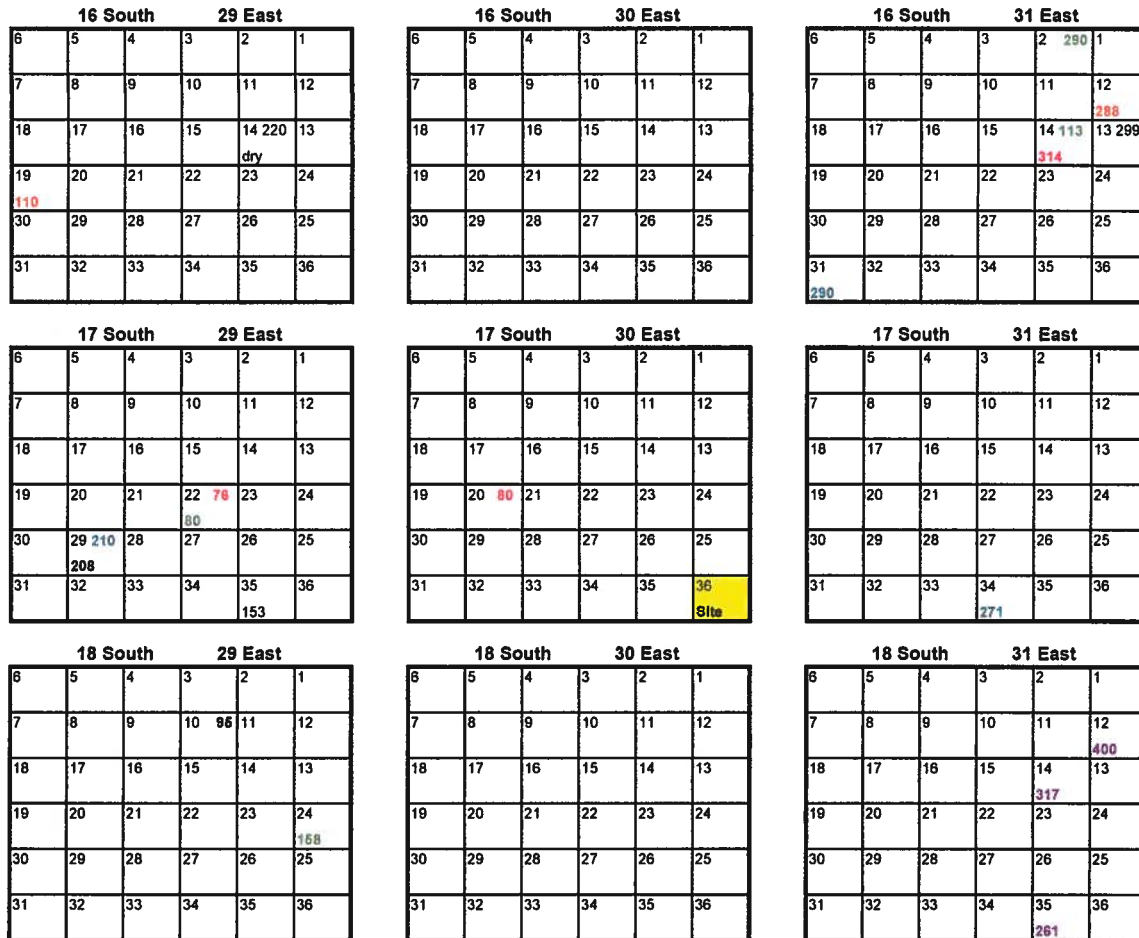
Signature: 	Approved by District Supervisor:		
Printed Name: Robert Grubbs Jr.			
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:	
E-mail Address: rgrubbs@concho.com	Conditions of Approval:		Attached ☐
Date: 03-27-2014	Phone: 432-661-6601		

* Attach Additional Sheets If Necessary

06542

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - Loco Hills SWD #1
Eddy County, New Mexico



- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data
- Field water level
- New Mexico Water and Infrastructure Data System

Appendix C

Summary Report

Ike Tavaréz
Tetra Tech
1901 N. Big Spring St.
Midland, TX 79705

Report Date: April 10, 2014

Work Order: 14040353



Project Location: Eddy Co, NM
Project Name: COG/LoCo Hills SWD 35 #1 Spill 2
Project Number: 112MC06542

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
359582	BH-1 0-1'	soil	2014-04-01	00:00	2014-04-03
359583	BH-1 2-3'	soil	2014-04-01	00:00	2014-04-03
359584	BH-1 4-5'	soil	2014-04-01	00:00	2014-04-03
359585	BH-1 6-7'	soil	2014-04-01	00:00	2014-04-03
359586	BH-1 9-10'	soil	2014-04-01	00:00	2014-04-03
359587	BH-1 14-15'	soil	2014-04-01	00:00	2014-04-03
359588	BH-1 19-20'	soil	2014-04-01	00:00	2014-04-03
359589	BH-1 24-25'	soil	2014-04-01	00:00	2014-04-03
359590	BH-1 29-30'	soil	2014-04-01	00:00	2014-04-03
359591	BH-1 34-35'	soil	2014-04-01	00:00	2014-04-03
359592	BH-2 0-1'	soil	2014-04-01	00:00	2014-04-03
359593	BH-2 2-3'	soil	2014-04-01	00:00	2014-04-03
359594	BH-2 4-5'	soil	2014-04-01	00:00	2014-04-03
359595	BH-2 6-7'	soil	2014-04-01	00:00	2014-04-03
359596	BH-2 9-10'	soil	2014-04-01	00:00	2014-04-03
359597	BH-2 14-15'	soil	2014-04-01	00:00	2014-04-03
359598	BH-2 19-20'	soil	2014-04-01	00:00	2014-04-03
359599	BH-2 24-25'	soil	2014-04-01	00:00	2014-04-03
359600	BH-2 29-30'	soil	2014-04-01	00:00	2014-04-03
359601	BH-2 34-35'	soil	2014-04-01	00:00	2014-04-03
359602	BH-2 39-40'	soil	2014-04-01	00:00	2014-04-03
359603	BH-2 44-45'	soil	2014-04-01	00:00	2014-04-03
359604	BH-3 0-1'	soil	2014-04-01	00:00	2014-04-03
359605	BH-3 2-3'	soil	2014-04-01	00:00	2014-04-03
359606	BH-3 4-5'	soil	2014-04-01	00:00	2014-04-03
359607	BH-3 6-7'	soil	2014-04-01	00:00	2014-04-03
359608	BH-3 9-10'	soil	2014-04-01	00:00	2014-04-03
359609	BH-3 14-15'	soil	2014-04-01	00:00	2014-04-03
359610	BH-3 19-20'	soil	2014-04-01	00:00	2014-04-03
359611	BH-3 24-25'	soil	2014-04-01	00:00	2014-04-03

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296

This is only a summary. Please, refer to the complete report package for quality control data.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
359612	BH-3 29-30'	soil	2014-04-01	00:00	2014-04-03
359613	BH-3 34-35'	soil	2014-04-01	00:00	2014-04-03
359614	BH-3 39-40'	soil	2014-04-01	00:00	2014-04-03
359615	BH-4 0-1'	soil	2014-04-01	00:00	2014-04-03
359616	BH-4 2-3'	soil	2014-04-01	00:00	2014-04-03
359617	BH-4 4-5'	soil	2014-04-01	00:00	2014-04-03
359618	BH-4 6-7'	soil	2014-04-01	00:00	2014-04-03
359619	BH-4 9-10'	soil	2014-04-01	00:00	2014-04-03
359620	BH-4 14-15'	soil	2014-04-01	00:00	2014-04-03
359621	BH-4 19-20'	soil	2014-04-01	00:00	2014-04-03
359622	BH-4 24-25'	soil	2014-04-01	00:00	2014-04-03
359623	BH-4 29-30'	soil	2014-04-01	00:00	2014-04-03
359624	BH-4 34-35'	soil	2014-04-01	00:00	2014-04-03
359625	BH-4 39-40'	soil	2014-04-01	00:00	2014-04-03
359626	BH-4 44-45'	soil	2014-04-01	00:00	2014-04-03
359627	BH-5 0-1'	soil	2014-04-02	00:00	2014-04-03
359628	BH-5 2-3'	soil	2014-04-02	00:00	2014-04-03
359629	BH-5 4-5'	soil	2014-04-01	00:00	2014-04-03
359630	BH-5 6-7'	soil	2014-04-02	00:00	2014-04-03
359631	BH-5 9-10'	soil	2014-04-02	00:00	2014-04-03
359632	BH-5 14-15'	soil	2014-04-02	00:00	2014-04-03
359633	BH-5 19-20'	soil	2014-04-02	00:00	2014-04-03
359634	BH-5 24-25'	soil	2014-04-02	00:00	2014-04-03
359635	BH-5 29-30'	soil	2014-04-02	00:00	2014-04-03
359636	BH-5 39-40'	soil	2014-04-02	00:00	2014-04-03
359637	BH-6 0-1'	soil	2014-04-02	00:00	2014-04-03
359638	BH-6 2-3'	soil	2014-04-02	00:00	2014-04-03
359639	BH-6 4-5'	soil	2014-04-02	00:00	2014-04-03
359640	BH-6 6-7'	soil	2014-04-02	00:00	2014-04-03
359641	BH-6 9-10'	soil	2014-04-02	00:00	2014-04-03
359642	BH-6 14-15'	soil	2014-04-02	00:00	2014-04-03
359643	BH-6 19-20'	soil	2014-04-02	00:00	2014-04-03
359644	BH-6 24-25'	soil	2014-04-02	00:00	2014-04-03
359645	BH-6 29-30'	soil	2014-04-02	00:00	2014-04-03
359646	BH-6 39-40'	soil	2014-04-02	00:00	2014-04-03
359647	BH-6 49-50'	soil	2014-04-02	00:00	2014-04-03
359648	BH-7 0-1'	soil	2014-04-02	00:00	2014-04-03
359649	BH-7 2-3'	soil	2014-04-02	00:00	2014-04-03
359650	BH-7 4-5'	soil	2014-04-02	00:00	2014-04-03
359651	BH-7 9-10'	soil	2014-04-02	00:00	2014-04-03
359652	BH-7 14-15'	soil	2014-04-02	00:00	2014-04-03
359653	BH-7 19-20'	soil	2014-04-02	00:00	2014-04-03
359654	BH-7 24-25'	soil	2014-04-02	00:00	2014-04-03
359655	BH-7 29-30'	soil	2014-04-02	00:00	2014-04-03
359656	BH-7 39-40'	soil	2014-04-02	00:00	2014-04-03
359657	BH-9 0-1'	soil	2014-04-02	00:00	2014-04-03
359658	BH-9 2-3'	soil	2014-04-02	00:00	2014-04-03
359659	BH-9 4-5'	soil	2014-04-02	00:00	2014-04-03
359660	BH-9 6-7'	soil	2014-04-02	00:00	2014-04-03

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
359661	BH-9 9-10'	soil	2014-04-02	00:00	2014-04-03
359662	BH-9 14-15'	soil	2014-04-02	00:00	2014-04-03
359663	BH-9 19-20'	soil	2014-04-02	00:00	2014-04-03
359664	BH-9 24-25'	soil	2014-04-02	00:00	2014-04-03
359665	BH-9 29-30'	soil	2014-04-02	00:00	2014-04-03
359666	BH-9 39-40'	soil	2014-04-02	00:00	2014-04-03
359667	BH-9 49-50'	soil	2014-04-02	00:00	2014-04-03
359668	BH-9 59-60'	soil	2014-04-02	00:00	2014-04-03
359669	BH-9 64-65'	soil	2014-04-02	00:00	2014-04-03
359670	BH-10 0-1'	soil	2014-04-02	00:00	2014-04-03
359671	BH-10 2-3'	soil	2014-04-02	00:00	2014-04-03
359672	BH-10 4-5'	soil	2014-04-02	00:00	2014-04-03
359673	BH-10 6-7'	soil	2014-04-02	00:00	2014-04-03
359674	BH-10 9-10'	soil	2014-04-02	00:00	2014-04-03
359675	BH-10 14-15'	soil	2014-04-02	00:00	2014-04-03
359676	BH-10 19-20'	soil	2014-04-02	00:00	2014-04-03
359677	BH-10 24-25'	soil	2014-04-02	00:00	2014-04-03
359678	BH-11 0-1'	soil	2014-04-02	00:00	2014-04-03
359679	BH-11 2-3'	soil	2014-04-02	00:00	2014-04-03
359680	BH-11 4-5'	soil	2014-04-02	00:00	2014-04-03
359681	BH-11 6-7'	soil	2014-04-02	00:00	2014-04-03
359682	BH-11 9-10'	soil	2014-04-02	00:00	2014-04-03
359683	BH-11 14-15'	soil	2014-04-02	00:00	2014-04-03
359684	BH-11 19-20'	soil	2014-04-02	00:00	2014-04-03
359685	BH-11 24-25'	soil	2014-04-02	00:00	2014-04-03
359686	BH-11 29-30'	soil	2014-04-02	00:00	2014-04-03
359687	BH-11 39-40'	soil	2014-04-02	00:00	2014-04-03
359688	BH-11 49-50'	soil	2014-04-02	00:00	2014-04-03
359689	BH-11 59-60'	soil	2014-04-02	00:00	2014-04-03
359690	BH-8 0-1'	soil	2014-04-03	00:00	2014-04-03
359691	BH-8 2-3'	soil	2014-04-03	00:00	2014-04-03
359692	BH-8 4-5'	soil	2014-04-03	00:00	2014-04-03
359693	BH-8 6-7'	soil	2014-04-03	00:00	2014-04-03
359694	BH-8 9-10'	soil	2014-04-03	00:00	2014-04-03
359695	BH-8 14-15'	soil	2014-04-03	00:00	2014-04-03
359696	BH-8 19-20'	soil	2014-04-03	00:00	2014-04-03
359697	BH-8 24-25'	soil	2014-04-03	00:00	2014-04-03
359698	BH-8 29-30'	soil	2014-04-03	00:00	2014-04-03
359699	BH-7 6-7'	soil	2014-04-03	00:00	2014-04-03

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
359582 - BH-1 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
359592 - BH-2 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
359604 - BH-3 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
359615 - BH-4 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
359627 - BH-5 0-1'	<0.0200	<0.0200	0.245	0.299	58.9	21.8

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Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
359637 - BH-6 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
359648 - BH-7 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	50.2	<4.00
359657 - BH-9 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	74.4	<4.00
359670 - BH-10 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
359678 - BH-11 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
359690 - BH-8 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	50.5	<4.00

Sample: 359582 - BH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		11400	mg/Kg	4

Sample: 359583 - BH-1 2-3'

Param	Flag	Result	Units	RL
Chloride		2540	mg/Kg	4

Sample: 359584 - BH-1 4-5'

Param	Flag	Result	Units	RL
Chloride		2700	mg/Kg	4

Sample: 359585 - BH-1 6-7'

Param	Flag	Result	Units	RL
Chloride		13800	mg/Kg	4

Sample: 359586 - BH-1 9-10'

Param	Flag	Result	Units	RL
Chloride		2120	mg/Kg	4

Sample: 359587 - BH-1 14-15'

Param	Flag	Result	Units	RL
Chloride		847	mg/Kg	4

Sample: 359588 - BH-1 19-20'

Param	Flag	Result	Units	RL
Chloride		265	mg/Kg	4

Sample: 359589 - BH-1 24-25'

Param	Flag	Result	Units	RL
Chloride		423	mg/Kg	4

Sample: 359590 - BH-1 29-30'

Param	Flag	Result	Units	RL
Chloride		317	mg/Kg	4

Sample: 359591 - BH-1 34-35'

Param	Flag	Result	Units	RL
Chloride		106	mg/Kg	4

Sample: 359592 - BH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		4970	mg/Kg	4

Sample: 359593 - BH-2 2-3'

Param	Flag	Result	Units	RL
Chloride		8110	mg/Kg	4

Sample: 359594 - BH-2 4-5'

Param	Flag	Result	Units	RL
Chloride		3190	mg/Kg	4

Sample: 359595 - BH-2 6-7'

Param	Flag	Result	Units	RL
Chloride		4700	mg/Kg	4

Sample: 359596 - BH-2 9-10'

Param	Flag	Result	Units	RL
Chloride		6380	mg/Kg	4

Sample: 359597 - BH-2 14-15'

Param	Flag	Result	Units	RL
Chloride		5030	mg/Kg	4

Sample: 359598 - BH-2 19-20'

Param	Flag	Result	Units	RL
Chloride		541	mg/Kg	4

Sample: 359599 - BH-2 24-25'

Param	Flag	Result	Units	RL
Chloride		216	mg/Kg	4

Sample: 359600 - BH-2 29-30'

Param	Flag	Result	Units	RL
Chloride		324	mg/Kg	4

Sample: 359601 - BH-2 34-35'

Param	Flag	Result	Units	RL
Chloride		108	mg/Kg	4

Sample: 359602 - BH-2 39-40'

Param	Flag	Result	Units	RL
Chloride		54.0	mg/Kg	4

Sample: 359603 - BH-2 44-45'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 359604 - BH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		272	mg/Kg	4

Sample: 359605 - BH-3 2-3'

Param	Flag	Result	Units	RL
Chloride		2940	mg/Kg	4

Sample: 359606 - BH-3 4-5'

Param	Flag	Result	Units	RL
Chloride		217	mg/Kg	4

Sample: 359607 - BH-3 6-7'

Param	Flag	Result	Units	RL
Chloride		109	mg/Kg	4

Sample: 359608 - BH-3 9-10'

Param	Flag	Result	Units	RL
Chloride		163	mg/Kg	4

Sample: 359609 - BH-3 14-15'

Param	Flag	Result	Units	RL
Chloride		163	mg/Kg	4

Sample: 359610 - BH-3 19-20'

Param	Flag	Result	Units	RL
Chloride		109	mg/Kg	4

Sample: 359611 - BH-3 24-25'

Param	Flag	Result	Units	RL
Chloride		54.0	mg/Kg	4

Sample: 359612 - BH-3 29-30'

Param	Flag	Result	Units	RL
Chloride		251	mg/Kg	4

Sample: 359613 - BH-3 34-35'

Param	Flag	Result	Units	RL
Chloride		201	mg/Kg	4

Sample: 359614 - BH-3 39-40'

Param	Flag	Result	Units	RL
Chloride		251	mg/Kg	4

Sample: 359615 - BH-4 0-1'

Param	Flag	Result	Units	RL
Chloride		3120	mg/Kg	4

Sample: 359616 - BH-4 2-3'

Param	Flag	Result	Units	RL
Chloride		3820	mg/Kg	4

Sample: 359617 - BH-4 4-5'

Param	Flag	Result	Units	RL
Chloride		804	mg/Kg	4

Sample: 359618 - BH-4 6-7'

Param	Flag	Result	Units	RL
Chloride		1460	mg/Kg	4

Sample: 359619 - BH-4 9-10'

Param	Flag	Result	Units	RL
Chloride		402	mg/Kg	4

Sample: 359620 - BH-4 14-15'

Param	Flag	Result	Units	RL
Chloride		251	mg/Kg	4

Sample: 359621 - BH-4 19-20'

Param	Flag	Result	Units	RL
Chloride		201	mg/Kg	4

Sample: 359622 - BH-4 24-25'

Param	Flag	Result	Units	RL
Chloride		308	mg/Kg	4

Sample: 359623 - BH-4 29-30'

Param	Flag	Result	Units	RL
Chloride		205	mg/Kg	4

Sample: 359624 - BH-4 34-35'

Param	Flag	Result	Units	RL
Chloride		205	mg/Kg	4

Sample: 359625 - BH-4 39-40'

Param	Flag	Result	Units	RL
Chloride		205	mg/Kg	4

Sample: 359626 - BH-4 44-45'

Param	Flag	Result	Units	RL
Chloride		154	mg/Kg	4

Sample: 359627 - BH-5 0-1'

Param	Flag	Result	Units	RL
Chloride		667	mg/Kg	4

Sample: 359628 - BH-5 2-3'

Param	Flag	Result	Units	RL
Chloride		7690	mg/Kg	4

Sample: 359629 - BH-5 4-5'

Param	Flag	Result	Units	RL
Chloride		15900	mg/Kg	4

Sample: 359630 - BH-5 6-7'

Param	Flag	Result	Units	RL
Chloride		20500	mg/Kg	4

Sample: 359631 - BH-5 9-10'

Param	Flag	Result	Units	RL
Chloride		13900	mg/Kg	4

Sample: 359632 - BH-5 14-15'

Param	Flag	Result	Units	RL
Chloride		6250	mg/Kg	4

Sample: 359633 - BH-5 19-20'

Param	Flag	Result	Units	RL
Chloride		4320	mg/Kg	4

Sample: 359634 - BH-5 24-25'

Param	Flag	Result	Units	RL
Chloride		573	mg/Kg	4

Sample: 359635 - BH-5 29-30'

Param	Flag	Result	Units	RL
Chloride		313	mg/Kg	4

Sample: 359636 - BH-5 39-40'

Param	Flag	Result	Units	RL
Chloride		469	mg/Kg	4

Sample: 359637 - BH-6 0-1'

Param	Flag	Result	Units	RL
Chloride		6200	mg/Kg	4

Sample: 359638 - BH-6 2-3'

Param	Flag	Result	Units	RL
Chloride		13900	mg/Kg	4

Sample: 359639 - BH-6 4-5'

Param	Flag	Result	Units	RL
Chloride		2340	mg/Kg	4

Sample: 359640 - BH-6 6-7'

Param	Flag	Result	Units	RL
Chloride		3590	mg/Kg	4

Sample: 359641 - BH-6 9-10'

Param	Flag	Result	Units	RL
Chloride		2550	mg/Kg	4

Sample: 359642 - BH-6 14-15'

Param	Flag	Result	Units	RL
Chloride		525	mg/Kg	4

Sample: 359643 - BH-6 19-20'

Param	Flag	Result	Units	RL
Chloride		1310	mg/Kg	4

Sample: 359644 - BH-6 24-25'

Param	Flag	Result	Units	RL
Chloride		154	mg/Kg	4

Sample: 359645 - BH-6 29-30'

Param	Flag	Result	Units	RL
Chloride		256	mg/Kg	4

Sample: 359646 - BH-6 39-40'

Param	Flag	Result	Units	RL
Chloride		103	mg/Kg	4

Sample: 359647 - BH-6 49-50'

Param	Flag	Result	Units	RL
Chloride		103	mg/Kg	4

Sample: 359648 - BH-7 0-1'

Param	Flag	Result	Units	RL
Chloride		12000	mg/Kg	4

Sample: 359649 - BH-7 2-3'

Param	Flag	Result	Units	RL
Chloride		18300	mg/Kg	4

Sample: 359650 - BH-7 4-5'

Param	Flag	Result	Units	RL
Chloride		2770	mg/Kg	4

Sample: 359651 - BH-7 9-10'

Param	Flag	Result	Units	RL
Chloride		821	mg/Kg	4

Sample: 359652 - BH-7 14-15'

Param	Flag	Result	Units	RL
Chloride		1800	mg/Kg	4

Sample: 359653 - BH-7 19-20'

Param	Flag	Result	Units	RL
Chloride		154	mg/Kg	4

Sample: 359654 - BH-7 24-25'

Param	Flag	Result	Units	RL
Chloride		101	mg/Kg	4

Sample: 359655 - BH-7 29-30'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 359656 - BH-7 39-40'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 359657 - BH-9 0-1'

Param	Flag	Result	Units	RL
Chloride		5380	mg/Kg	4

Sample: 359658 - BH-9 2-3'

Param	Flag	Result	Units	RL
Chloride		16100	mg/Kg	4

Sample: 359659 - BH-9 4-5'

Param	Flag	Result	Units	RL
Chloride		17200	mg/Kg	4

Sample: 359660 - BH-9 6-7'

Param	Flag	Result	Units	RL
Chloride		9750	mg/Kg	4

Sample: 359661 - BH-9 9-10'

Param	Flag	Result	Units	RL
Chloride		12600	mg/Kg	4

Sample: 359662 - BH-9 14-15'

Param	Flag	Result	Units	RL
Chloride		8590	mg/Kg	4

Sample: 359663 - BH-9 19-20'

Param	Flag	Result	Units	RL
Chloride		13700	mg/Kg	4

Sample: 359664 - BH-9 24-25'

Param	Flag	Result	Units	RL
Chloride		2200	mg/Kg	4

Sample: 359665 - BH-9 29-30'

Param	Flag	Result	Units	RL
Chloride		103	mg/Kg	4

Sample: 359666 - BH-9 39-40'

Param	Flag	Result	Units	RL
Chloride		410	mg/Kg	4

Sample: 359667 - BH-9 49-50'

Param	Flag	Result	Units	RL
Chloride		51.0	mg/Kg	4

Sample: 359668 - BH-9 59-60'

Param	Flag	Result	Units	RL
Chloride		51.0	mg/Kg	4

Sample: 359669 - BH-9 64-65'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 359670 - BH-10 0-1'

Param	Flag	Result	Units	RL
Chloride		7230	mg/Kg	4

Sample: 359671 - BH-10 2-3'

Param	Flag	Result	Units	RL
Chloride		10300	mg/Kg	4

Sample: 359672 - BH-10 4-5'

Param	Flag	Result	Units	RL
Chloride		2050	mg/Kg	4

Sample: 359673 - BH-10 6-7'

Param	Flag	Result	Units	RL
Chloride		2360	mg/Kg	4

Sample: 359674 - BH-10 9-10'

Param	Flag	Result	Units	RL
Chloride		350	mg/Kg	4

Sample: 359675 - BH-10 14-15'

Param	Flag	Result	Units	RL
Chloride		350	mg/Kg	4

Sample: 359676 - BH-10 19-20'

Param	Flag	Result	Units	RL
Chloride		50.0	mg/Kg	4

Sample: 359677 - BH-10 24-25'

Param	Flag	Result	Units	RL
Chloride		150	mg/Kg	4

Sample: 359678 - BH-11 0-1'

Param	Flag	Result	Units	RL
Chloride		8700	mg/Kg	4

Sample: 359679 - BH-11 2-3'

Param	Flag	Result	Units	RL
Chloride		20000	mg/Kg	4

Sample: 359680 - BH-11 4-5'

Param	Flag	Result	Units	RL
Chloride		9700	mg/Kg	4

Sample: 359681 - BH-11 6-7'

Param	Flag	Result	Units	RL
Chloride		8750	mg/Kg	4

Sample: 359682 - BH-11 9-10'

Param	Flag	Result	Units	RL
Chloride		6000	mg/Kg	4

Sample: 359683 - BH-11 14-15'

Param	Flag	Result	Units	RL
Chloride		12000	mg/Kg	4

Sample: 359684 - BH-11 19-20'

Param	Flag	Result	Units	RL
Chloride		3150	mg/Kg	4

Sample: 359685 - BH-11 24-25'

Param	Flag	Result	Units	RL
Chloride		250	mg/Kg	4

Sample: 359686 - BH-11 29-30'

Param	Flag	Result	Units	RL
Chloride		250	mg/Kg	4

Sample: 359687 - BH-11 39-40'

Param	Flag	Result	Units	RL
Chloride		150	mg/Kg	4

Sample: 359688 - BH-11 49-50'

Param	Flag	Result	Units	RL
Chloride		150	mg/Kg	4

Sample: 359689 - BH-11 59-60'

Param	Flag	Result	Units	RL
Chloride		100	mg/Kg	4

Sample: 359690 - BH-8 0-1'

Param	Flag	Result	Units	RL
Chloride		15000	mg/Kg	4

Sample: 359691 - BH-8 2-3'

Param	Flag	Result	Units	RL
Chloride		13700	mg/Kg	4

Sample: 359692 - BH-8 4-5'

Param	Flag	Result	Units	RL
Chloride		4100	mg/Kg	4

Sample: 359693 - BH-8 6-7'

Param	Flag	Result	Units	RL
Chloride		2400	mg/Kg	4

Sample: 359694 - BH-8 9-10'

Param	Flag	Result	Units	RL
Chloride		52.0	mg/Kg	4

Sample: 359695 - BH-8 14-15'

Param	Flag	Result	Units	RL
Chloride		103	mg/Kg	4

Sample: 359696 - BH-8 19-20'

Param	Flag	Result	Units	RL
Chloride		876	mg/Kg	4

Sample: 359697 - BH-8 24-25'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 359698 - BH-8 29-30'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 359699 - BH-7 6-7'

Param	Flag	Result	Units	RL
Chloride		103	mg/Kg	4