

SITE INFORMATION

Report Type: Closure Report

General Site Information:

Site:	Slyhawk State #5 (Water line)					
Company:	COG Operating LLC					
Section, Township and Range	Unit A	Section 3	T 25S	R 28E		
Lease Number:	API-30-015-35013					
County:	Eddy County					
GPS:	32 09.982° N			104 04.068° W		
Surface Owner:	State					
Mineral Owner:						
Directions:	In Malaga, from the intersection of Hwy 285 and 720, travel south on 285 for 4.17 miles, turn east onto lease road for 0.28 miles. Turn right and head south 45 feet into pasture to release point.					

Release Data:

Date Released:	9/22/2013
Type Release:	Produced Water
Source of Contamination:	Main Water Line fuse failed
Fluid Released:	70 bbls
Fluids Recovered:	0 bbls

Official Communication:

Name:	Robert McNeill	Ike Tavaréz
Company:	COG Operating, LLC	Tetra Tech
Address:	One Concho Center	4000 N. Big Spring
	600 W. Illinois Ave.	Suite 401
City:	Midland Texas, 79701	Midland, Texas
Phone number:	(432) 686-3023	(432) 682-4559
Fax:	(432) 684-7137	
Email:	rmcneill@conchoresources.com	ike.tavarez@tetrattech.com

Ranking Criteria

Depth to Groundwater:	Ranking Score	Site Data
<50 ft	20	
50-99 ft	10	
>100 ft.	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:	20	

Acceptable Soil RRAL (mg/kg)		
Benzene	Total BTEX	TPH
10	50	100

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 04 2014

RECEIVED



TETRA TECH

May 22, 2014

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

Re: Closure Report for the COG Operating LLC, Sly Hawk State #5 Mainline, Unit A, Section 3, Township 25 South, Range 28 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 Sly Hawk State #5 Mainline located in Unit A, Section 3, Township 25 South, Range 28 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32 09.982°, W 104 04.068°. 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 September 22, 2013, and released approximately seventy (70) barrels of produced fluid from a faulty fuse on a main water line. To alleviate the problem, COG personnel fused the line back together. Zero (0) barrels of standing fluids were recovered. The spill initiated west of the pad affecting an area 35' X 375' and 30' X 150' in the pasture. The initial C-141 form is enclosed in Appendix A.

Groundwater

According to the Geology and Ground-Water Resources of Eddy County, New Mexico Report No. 3, a water well was listed within Section 3 having groundwater at 32.0' below surface. The NMOCD groundwater map shows a depth to groundwater of <50.0' below surface. The groundwater data is shown in Appendix B.

Tetra Tech

4000 North Big Spring, Suite 401, Midland, TX 79705

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



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 100 mg/kg.

Soil Assessment and Analytical Results

On October 22, 2013, Tetra Tech personnel inspected and sampled the spill area. Twelve (12) auger holes (AH-1 through AH-12) were installed using a stainless steel hand auger to assess the impacted soils. 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 laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, none of the samples exceeded the TPH, BTEX, and benzene RRAL. However, elevated chloride concentrations were detected in all of the auger holes. Auger holes (AH-1, AH-3, AH-6, AH-11, and AH-12) showed a shallow chloride impact in the soil at 1.0' to 2.0' below surface ranging from approximately 1,000 mg/kg to 10,000 mg/kg. In addition, the areas of auger holes (AH-7, AH-9 and AH-10) also showed significant declining chlorides with depth at 3.0' to 5.0' below surface.

The areas of auger holes (AH-2, AH-4, AH-5, and AH-8) were not vertically defined due to a dense layer encountered in the subsurface soils. The bottom auger samples showed concentrations of 5,870 mg/kg at 5.0', 2,190 mg/kg at 8.0', 1,400 mg/kg at 5.0' and 1,880 mg/kg at 9.0', respectively. A background auger hole was installed in the areas to evaluate the background chloride concentration for the area. The sampling results did not show any significant chloride concentrations for the area.

Remediation Activities

On February 24, 2014, Tetra Tech supervised the removal impacted material as highlighted (green) in Table 1 and shown on Figure 4.

Prior to excavation of the soils, Tetra Tech installed backhoe trenches (T-1 through T-4) in the areas of AH-2, AH-4, AH-5, and AH-8 to define extents and confirm the detected chloride concentrations in the soils. The areas of T-1 (AH-8) and T-2 (AH-5) showed chlorides declining with depth of 800 mg/kg at 12.0' and 192



mg/kg at 8.0', respectively. The areas of T-3 (AH-4) and T-4 (AH-2) also showed elevated chloride bottom samples of 1,170 mg/kg and 5,200 mg/kg at 10' below surface and were not vertically defined. In addition, a background trench was also installed in the area. The background trench showed a chloride high of 720 mg/kg at 8.0' below surface.

Auger holes (AH-1, AH-3, AH-11, and AH-12) were excavated to depths of approximately 1.0' below surface, auger holes (AH-7 and AH-9) were excavated to approximately 3.0' below surface, and the area of auger hole (AH-10) was excavated to approximately 5.0' below surface. Based on the field data, the areas of auger holes (AH-2, AH-4, AH-5 and AH-8) were excavated 4.0' below surface and placed a clay material to cap area and prevent further migration of contaminants left in place. Once the areas were excavated to the appropriate depths, the excavations were backfilled with clean soil to grade, and approximately 2,080 cubic yards of excavated material was hauled to proper disposal.

On May 13, 2014, Tetra Tech installed two (2) boreholes (BH-1 and BH-2) in order to vertically define the chloride impact in the areas of AH-2 and AH-4. Borehole (BH-1, AH-2) showed elevated chloride concentrations of 2,500 mg/kg at 4'-5' below surface, which significantly declined with depth at 9'-10' to 537 mg/kg. Compared to the auger hole and trench, BH-2 (AH-4) did not show a significant chloride impact to the soils, with a chloride high of 976 mg/kg at 6'-7' below surface and remaining chlorides declined with depth. Both of the areas were vertically defined.

Conclusion

Based on the assessment and remediation work performed at this site, COG requests closure of this spill issue. A final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or the remediation activities for this site, please call me at (432) 682-4559.

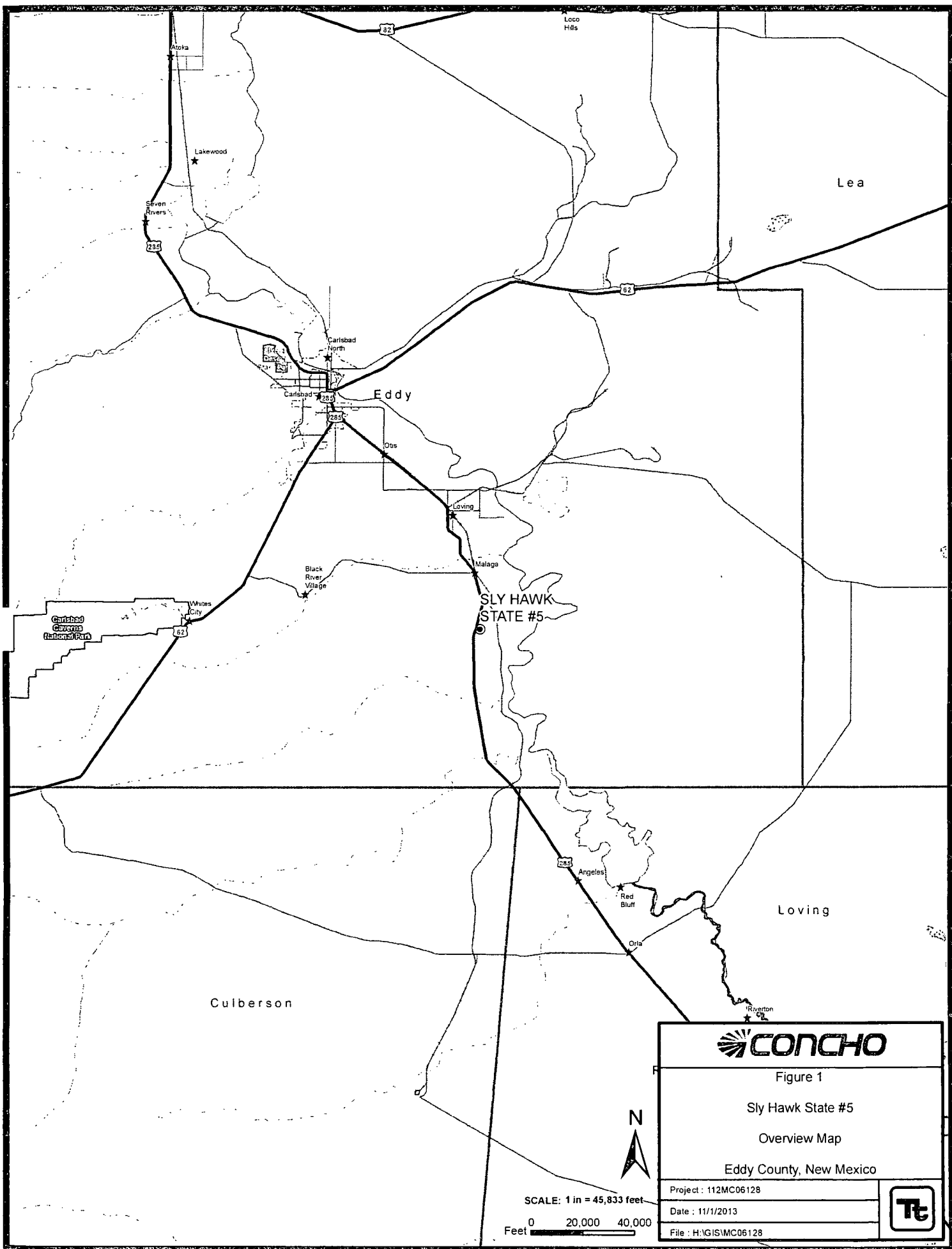
Respectfully submitted,
TETRA TECH

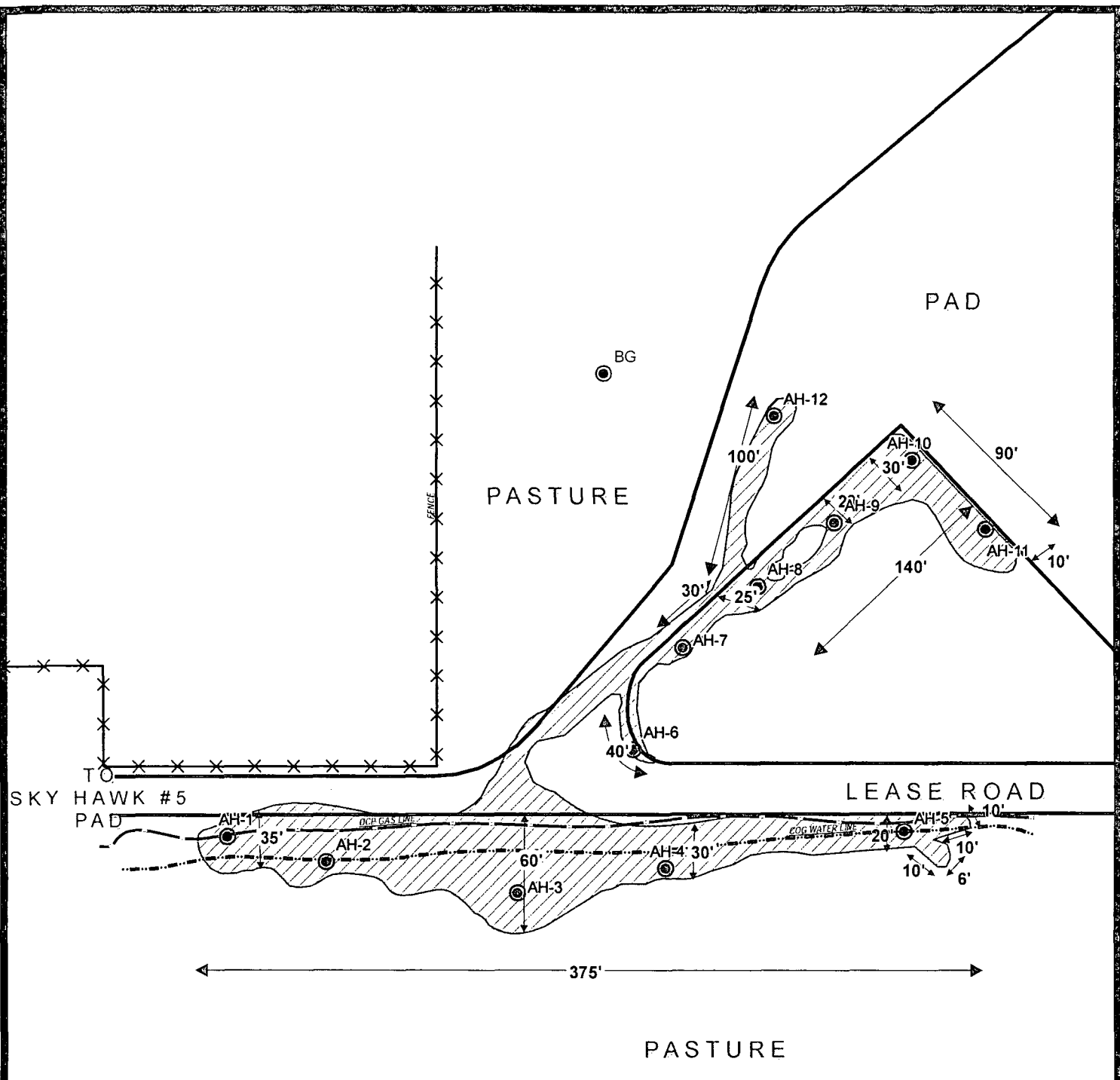


Ike Tavarez, PG
Senior Project Manager

cc: Robert McNeill – COG

Figures





EXPLANATION

- AUGER HOLE SAMPLE LOCATIONS
- BACKGROUND SAMPLE LOCATION
- ▨ SPILL AREA

SCALE: 1 IN = 83 FEET

Feet 0 20 40



Figure 3

Sly Hawk State #5

Spill Assessment Map

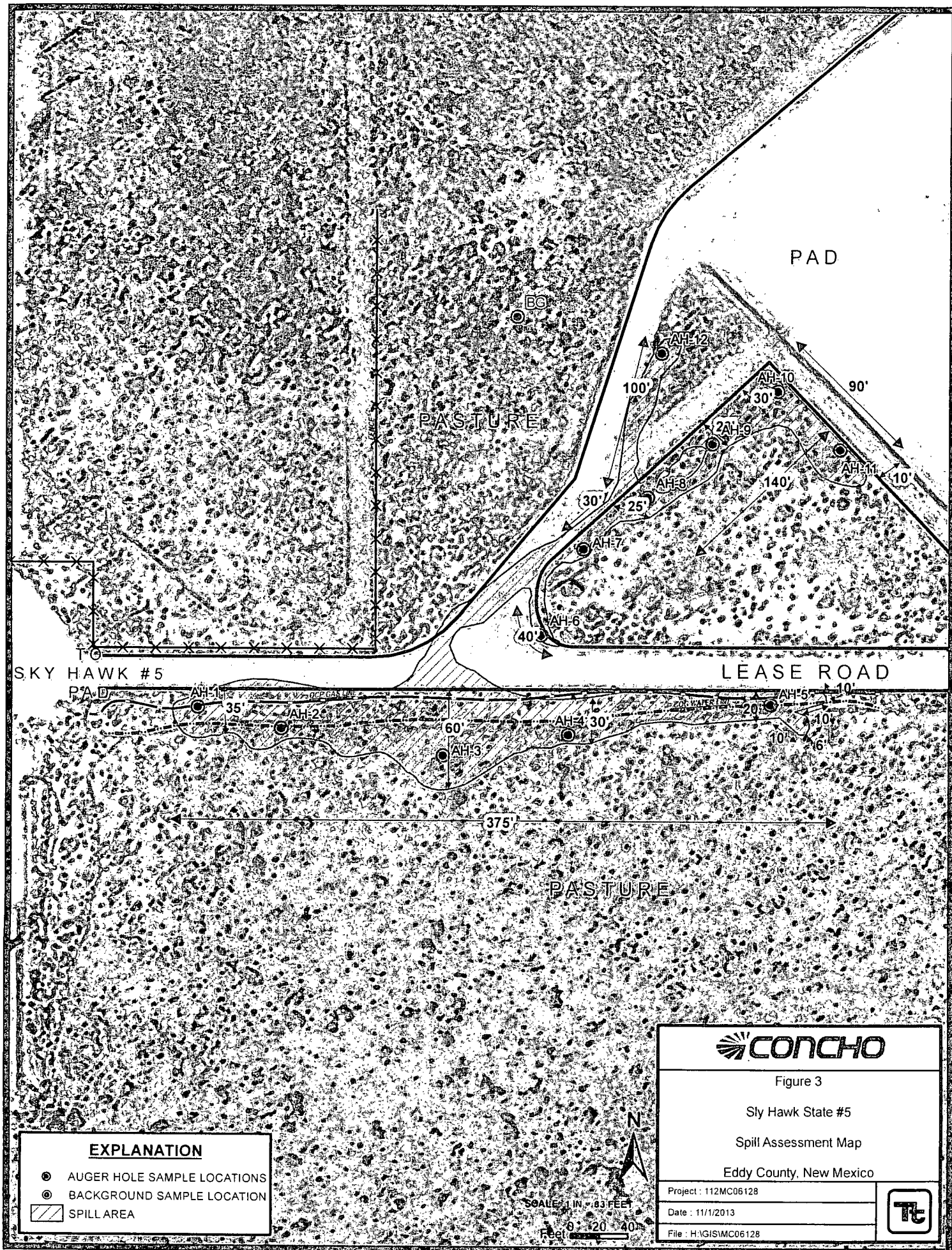
Eddy County, New Mexico

Project : 112MC06128

Date : 11/1/2013

File : H:\GIS\MC06128





EXPLANATION

- AUGER HOLE SAMPLE LOCATIONS
- BACKGROUND SAMPLE LOCATION
- ▨ SPILL AREA



Figure 3

Sly Hawk State #5

Spill Assessment Map

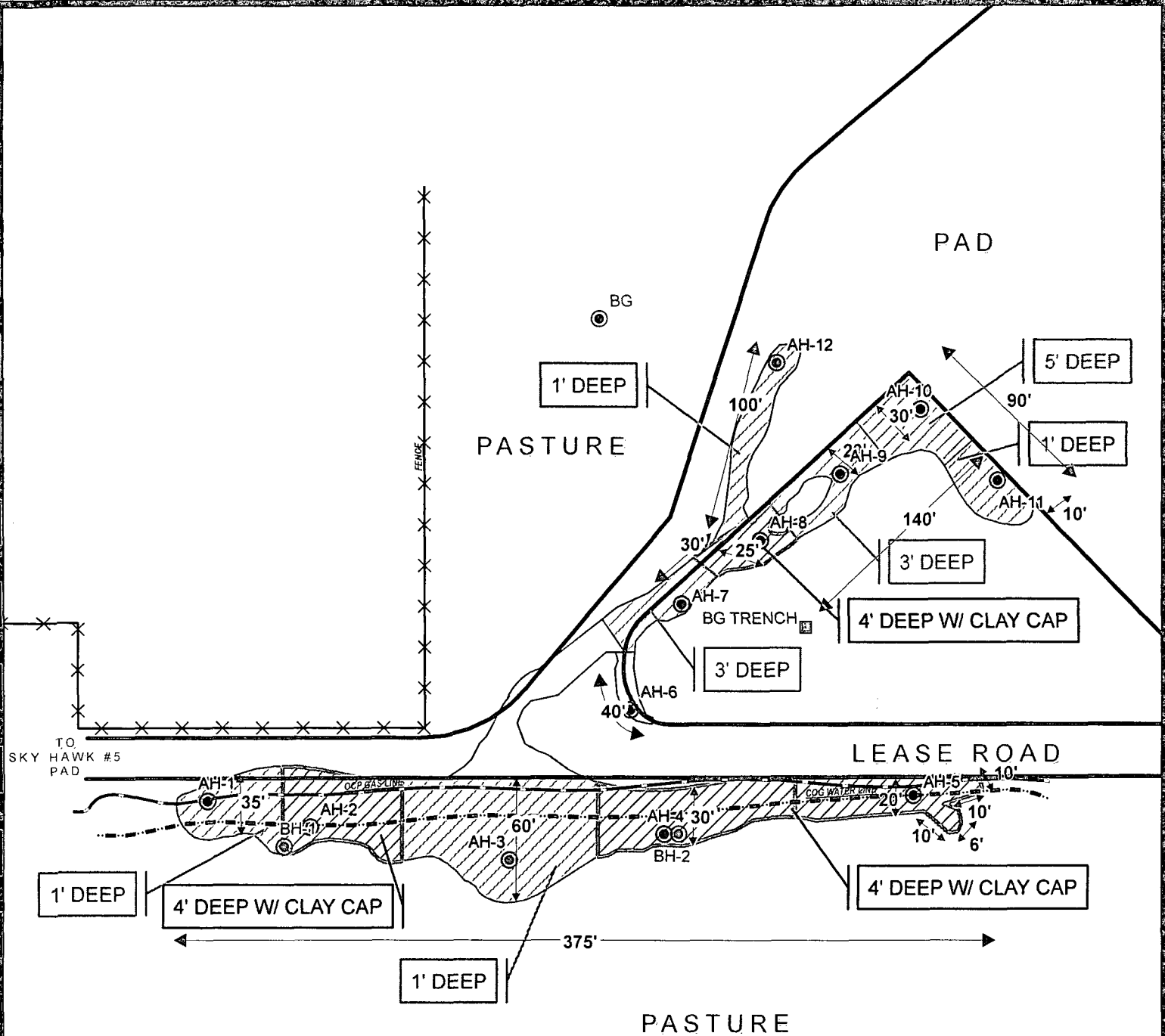
Eddy County, New Mexico

Project : 112MC06128

Date : 11/1/2013

File : H:\GIS\MC06128





EXPLANATION

- AUGER HOLE SAMPLE LOCATIONS
- BACKGROUND TRENCH LOCATION
- BACKGROUND SAMPLE LOCATION
- GAS LINE
- CAPPED/CLAY AREA
- ▨ EXCAVATED AREAS

SCALE: 1 IN = 83 FEET

Feet 0 20 40



Figure 4

Sly Hawk State #5

Excavation Areas & Depths Map

Eddy County, New Mexico

Project : 112MC06128

Date : 12/11/2013

File : H:\GIS\MC06128



Tables

Table 1
COG Operating LLC.

[illegible]

Table 1
COG Operating LLC.

[illegible]

Eddy County, New Mexico

[illegible]

Table 1
COG Operating LLC.
Slyhawk St. #5
Eddy County, New Mexico

[illegible]

Table 1
COG Operating LLC.
Slyhawk St. #5
Eddy County, New Mexico

[illegible]

Table 1
COG Operating LLC.
Slyhawk St. #5
Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Excavation Bottom 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						
Background	10/22/2013	0-1	-	X		-	-	-	-	-	-	-	-	<20.0
	"	1-1.5	-	X		-	-	-	-	-	-	-	-	<20.0
	"	2-2.5	-	X		-	-	-	-	-	-	-	-	<20.0
	"	3-3.5	-	X		-	-	-	-	-	-	-	-	97.8
	"	4-4.5	-	X		-	-	-	-	-	-	-	-	<20.0
	"	5-5.5	-	X		-	-	-	-	-	-	-	-	<20.0
	"	6-6.5	-	X		-	-	-	-	-	-	-	-	138
	"	7-7.5	-	X		-	-	-	-	-	-	-	-	167
	"	8-8.5	-	X		-	-	-	-	-	-	-	-	291
Background Trench	2/25/2014	0	-	X		-	-	-	-	-	-	-	-	<16.0
	"	2	-	X		-	-	-	-	-	-	-	-	64.0
	"	4	-	X		-	-	-	-	-	-	-	-	96.0
	"	6	-	X		-	-	-	-	-	-	-	-	672
	"	8	-	X		-	-	-	-	-	-	-	-	720
	"	10	-	X		-	-	-	-	-	-	-	-	672

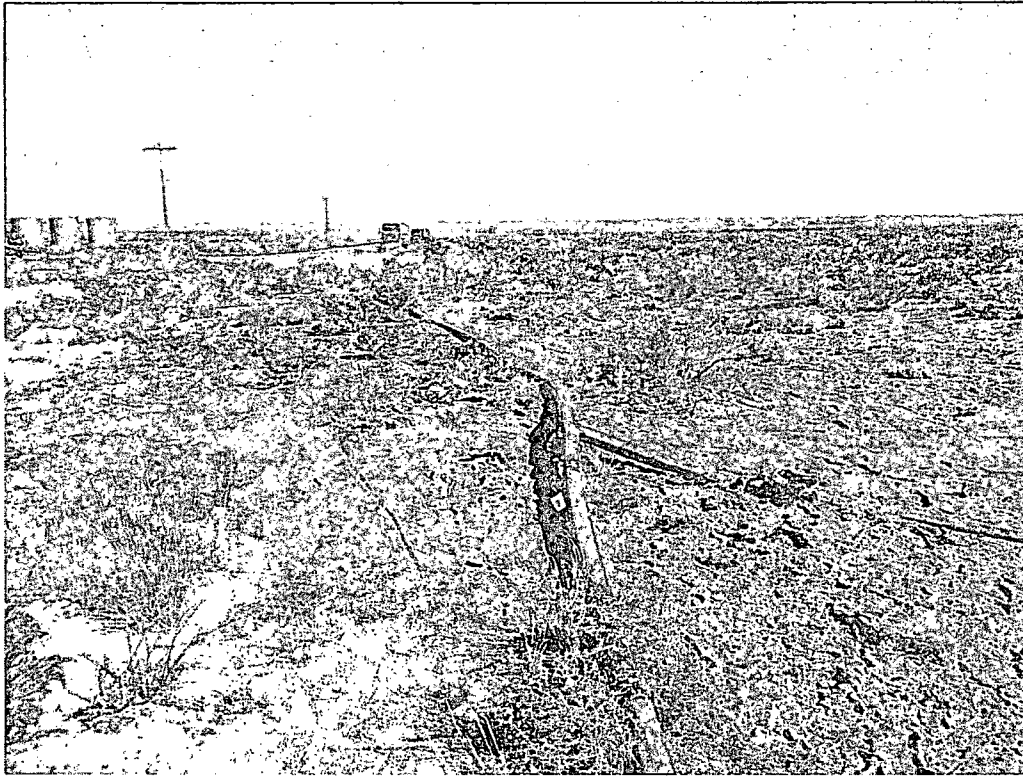
(-) Not Analyzed
(BEB) Below Excavation Bottom

Photos

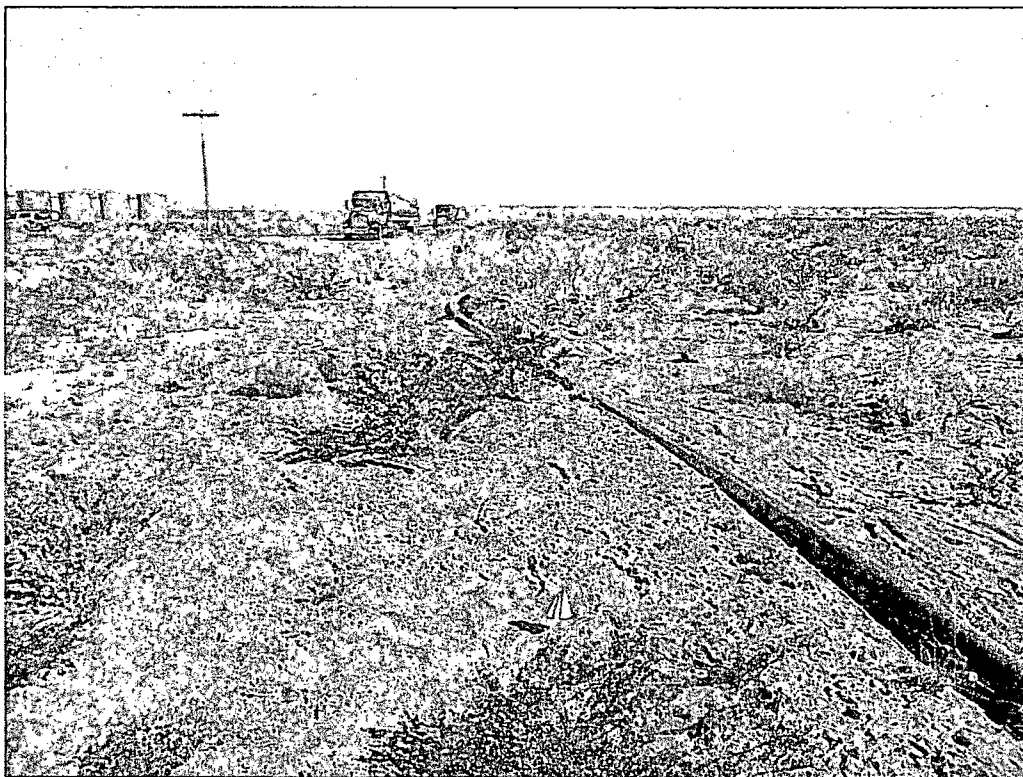
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View East – AH-1

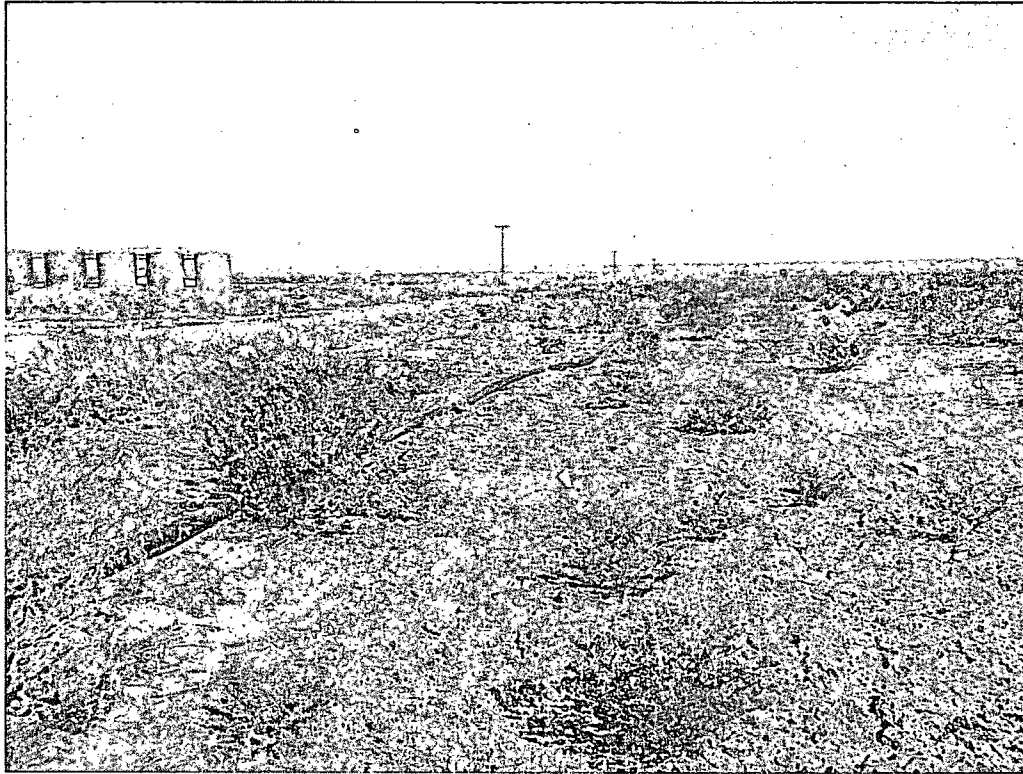


View East – AH-2

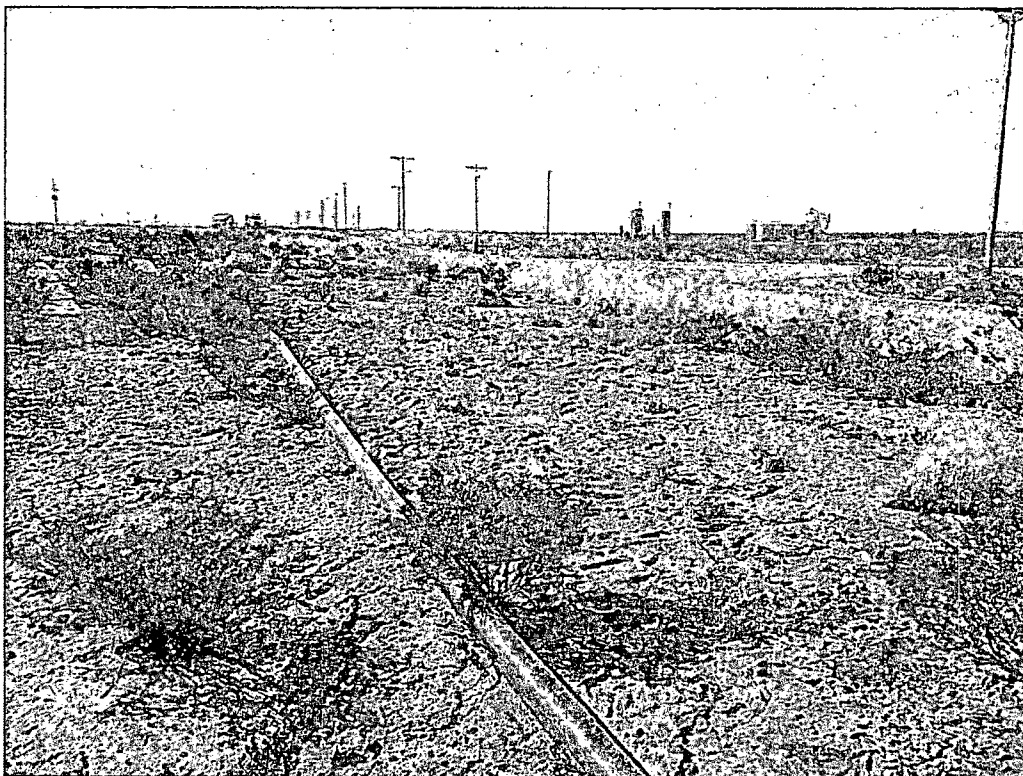
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View East – AH-3

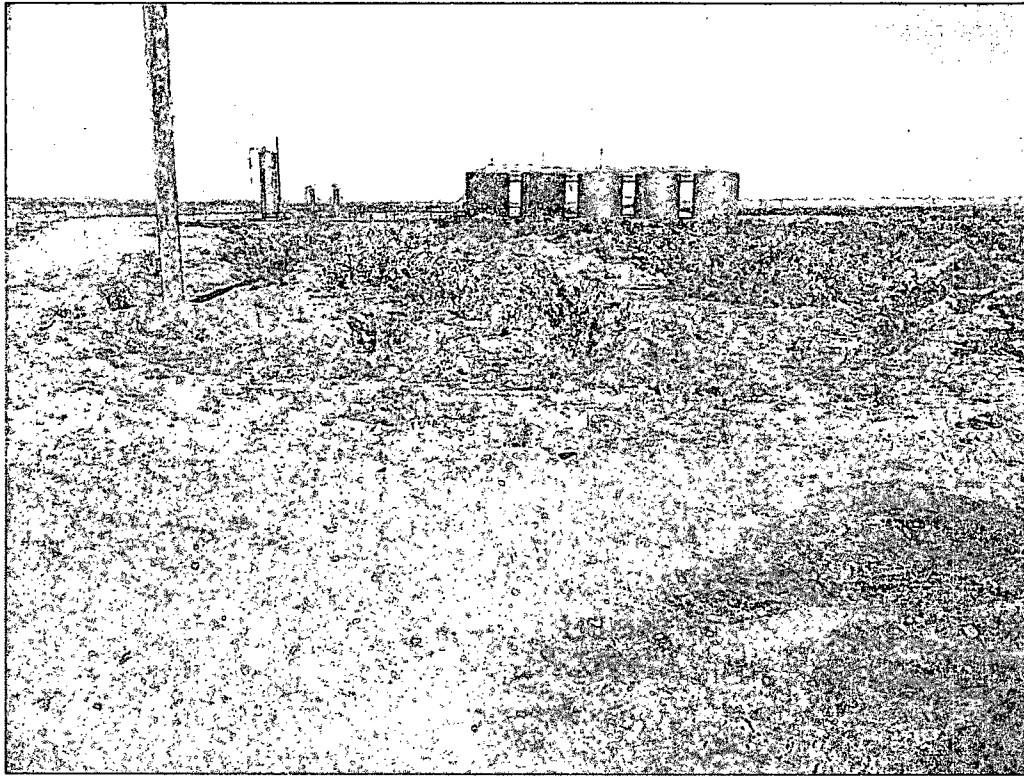


View West – AH-5

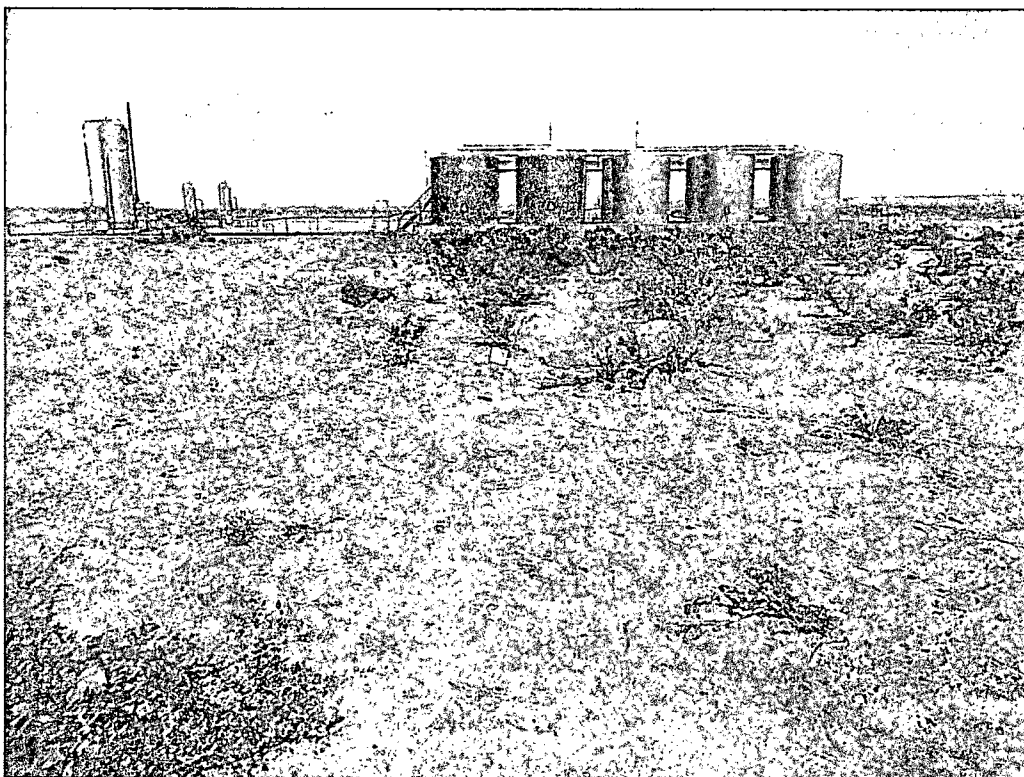
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View North – AH-6 and AH-7

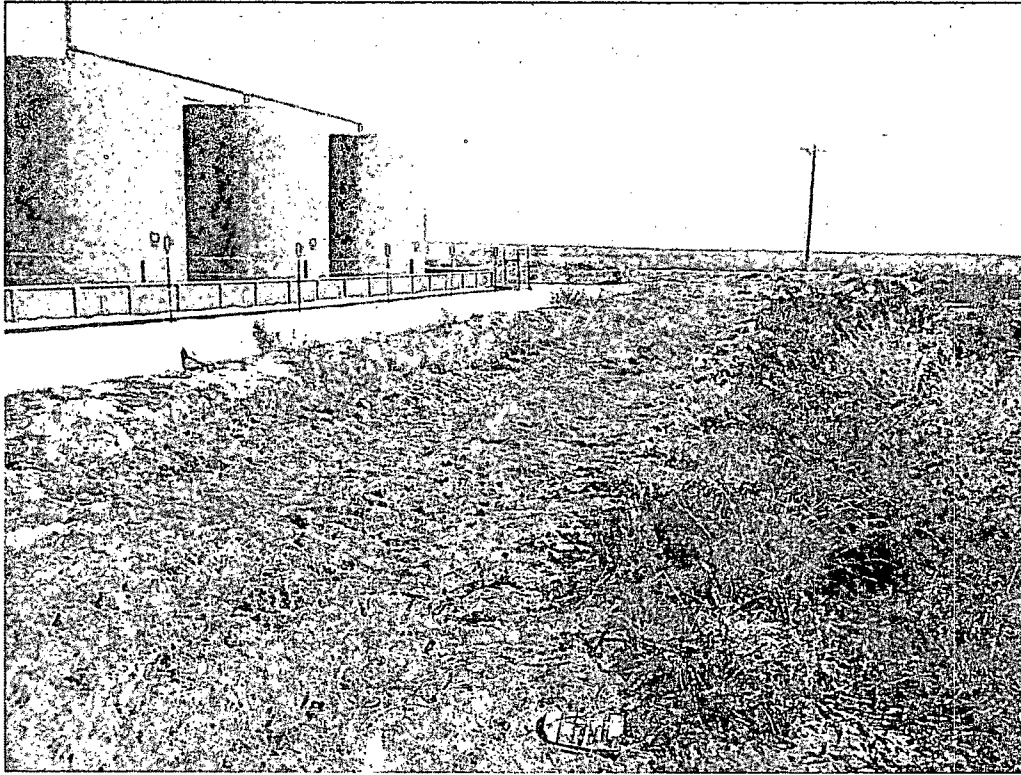


View North – AH-8

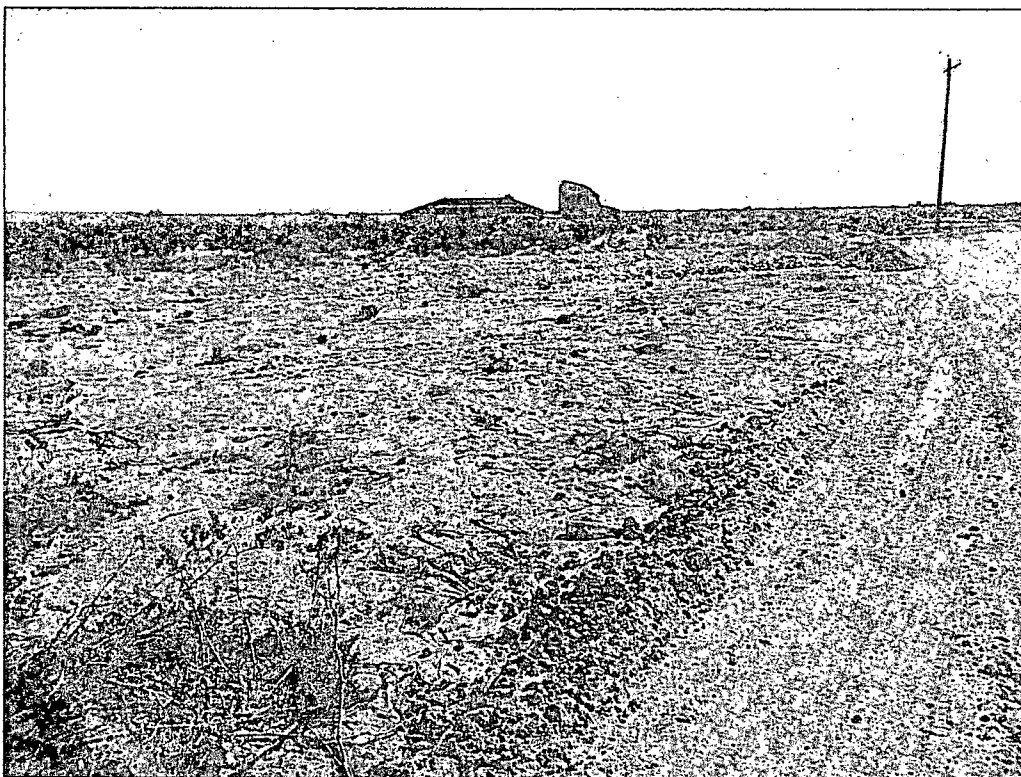
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View West – AH-10 and AH-11

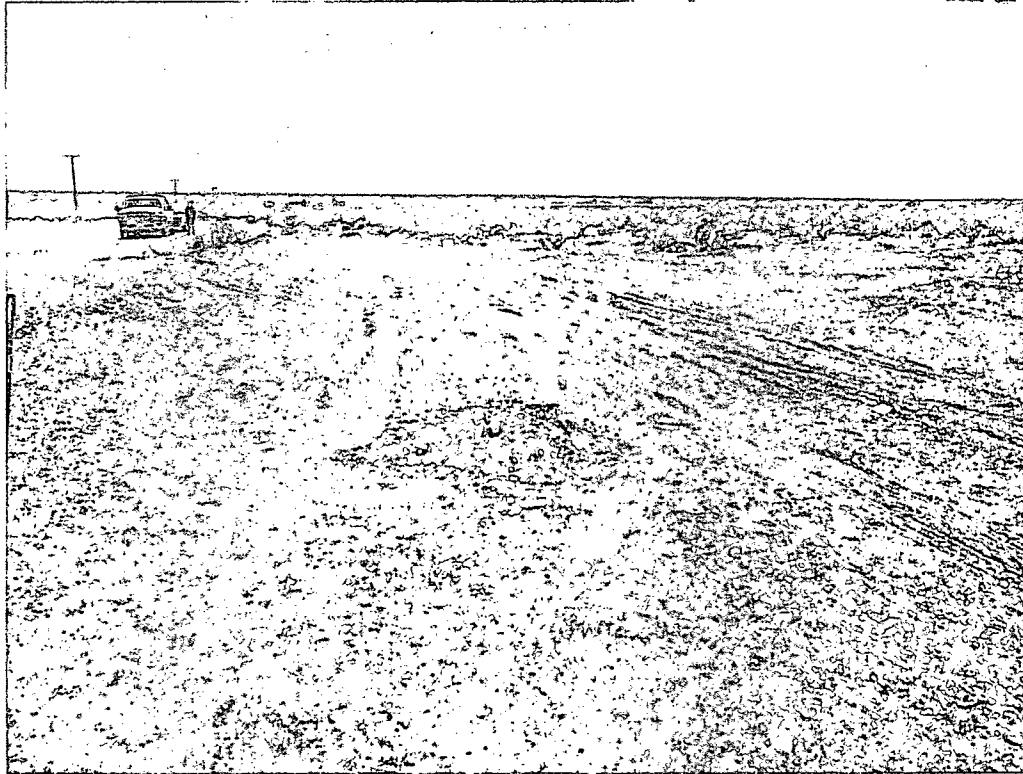


View South – AH-12

COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View East – Area of BH-1

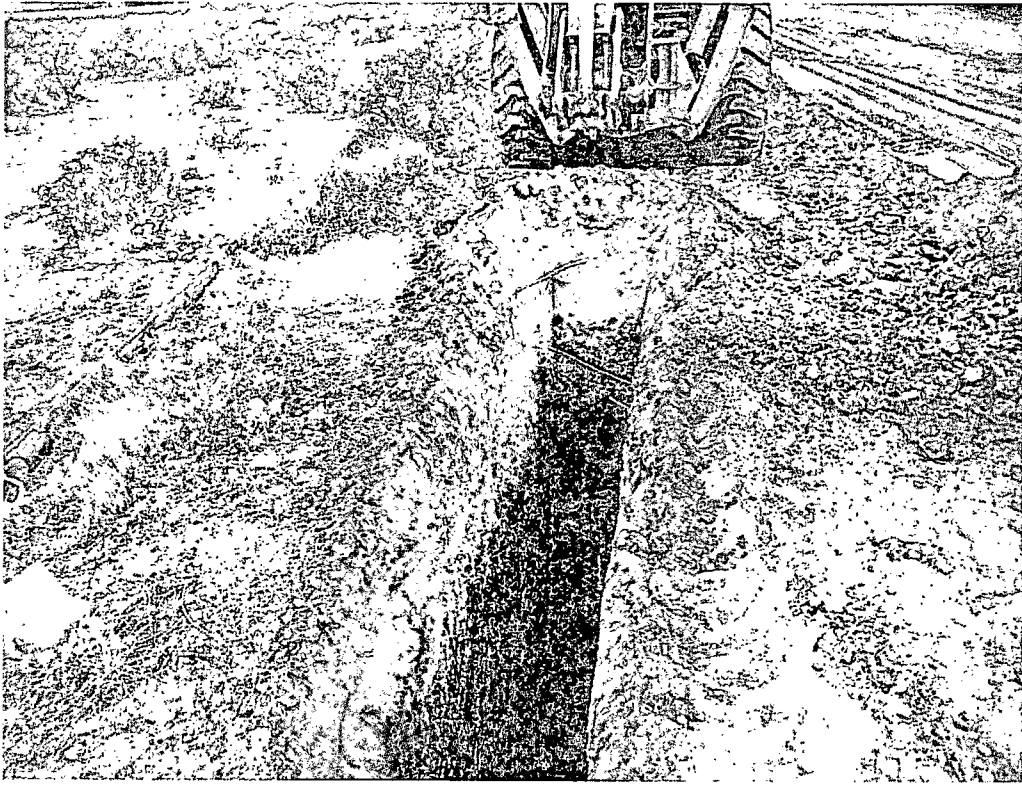


View East – Area of BH-2

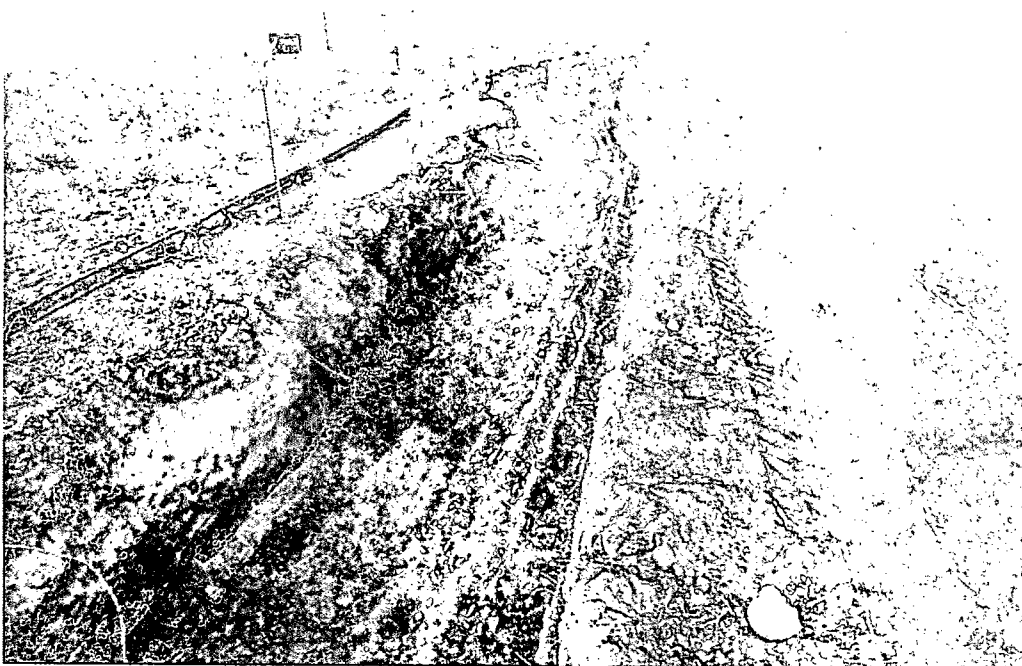
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



Typical Trench

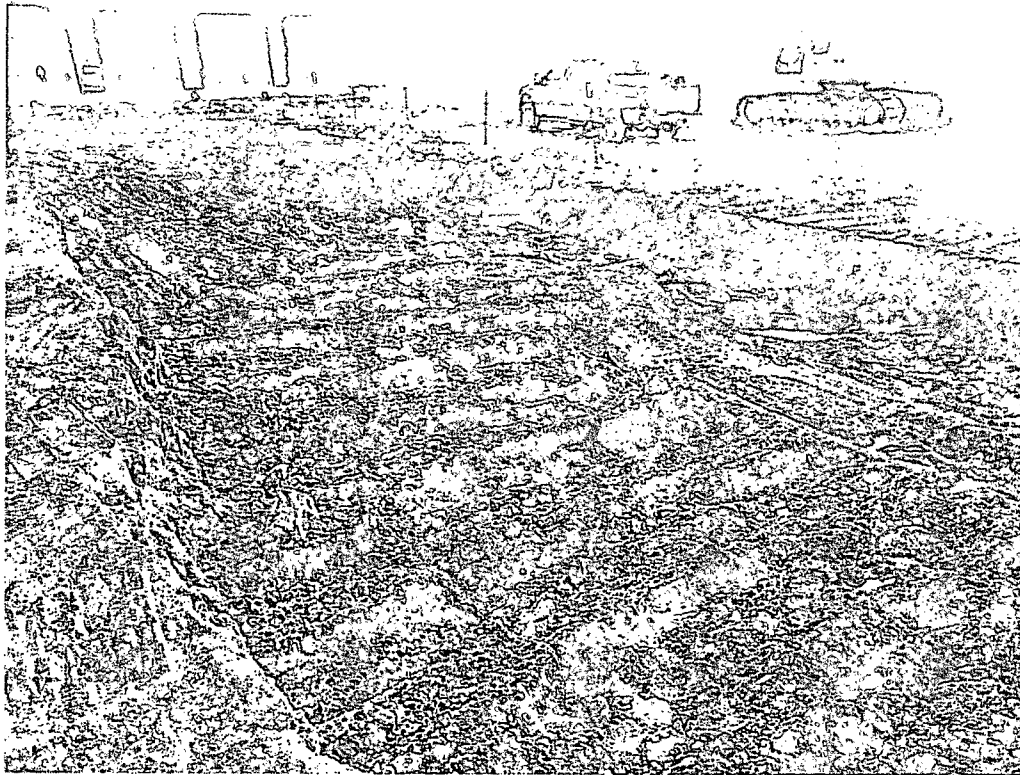


View West – Excavated area of AH-1 through AH-5

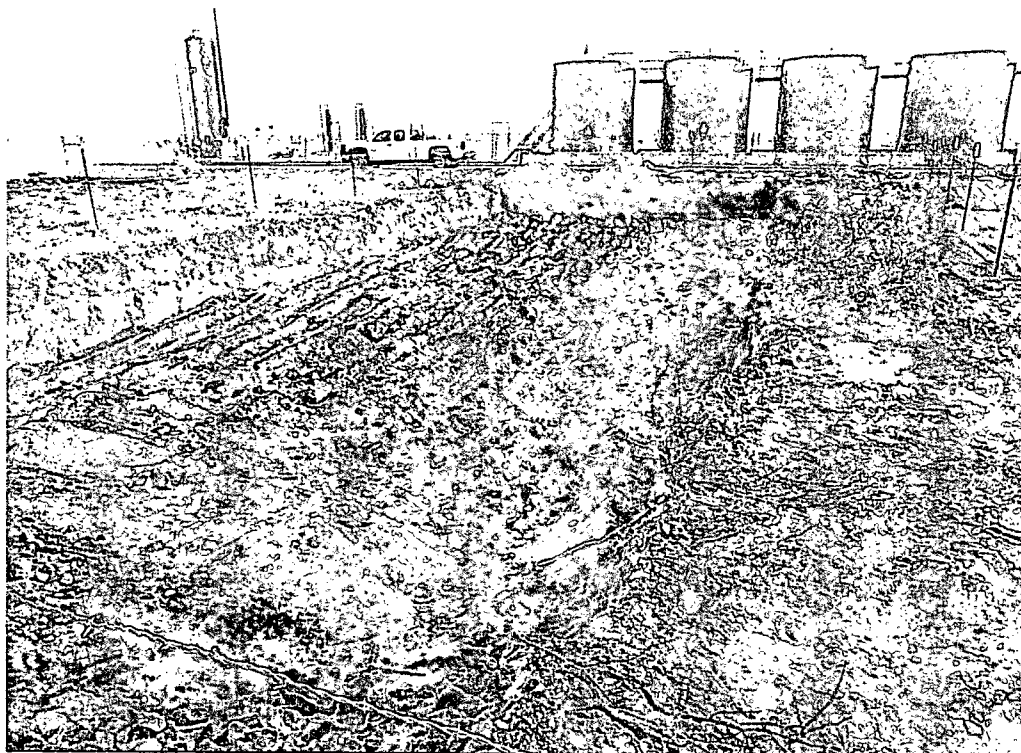
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View North – Excavated Area of AH-8

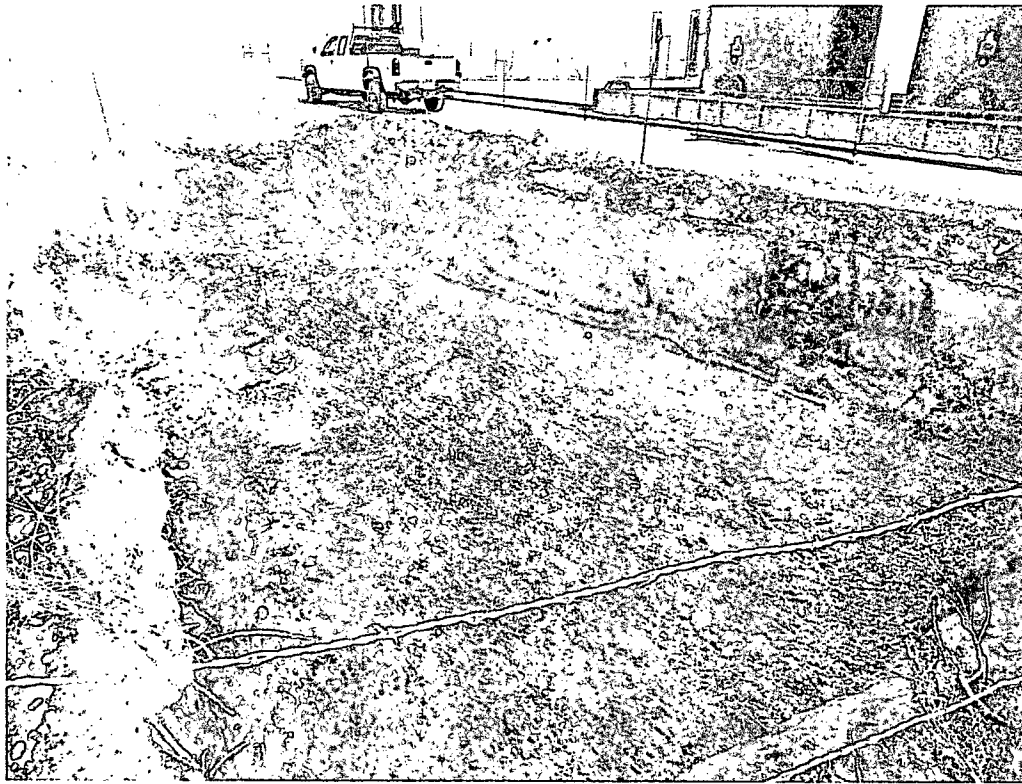


View North – Excavated Area of AH-9

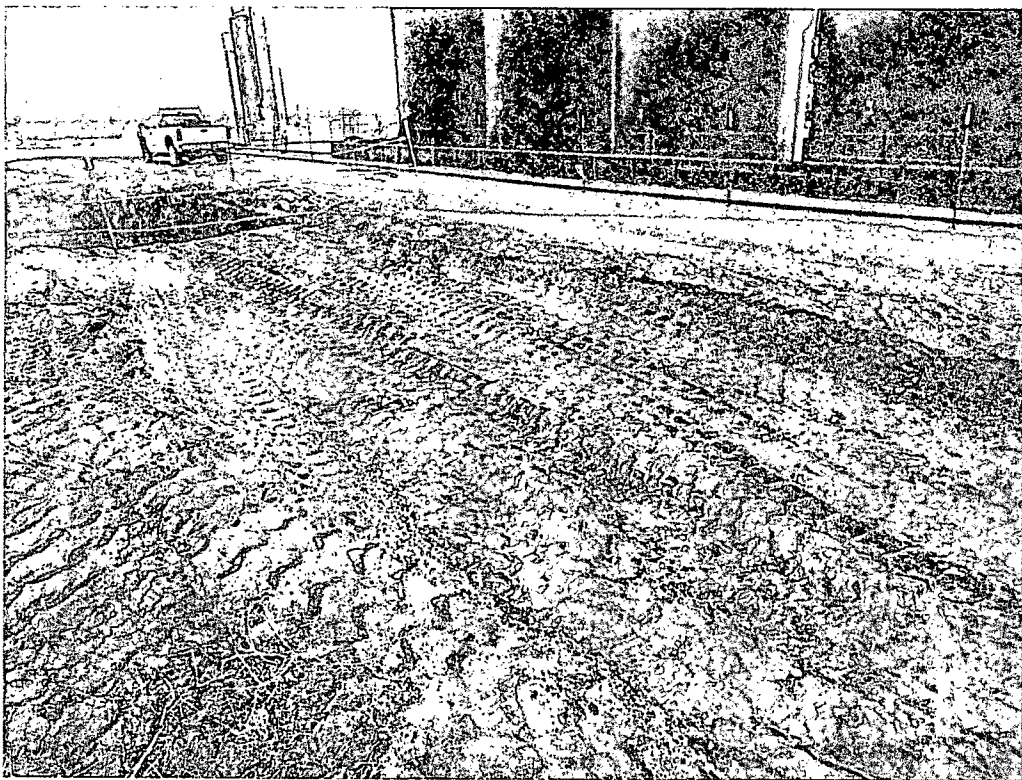
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View North – Excavated Area of AH-10

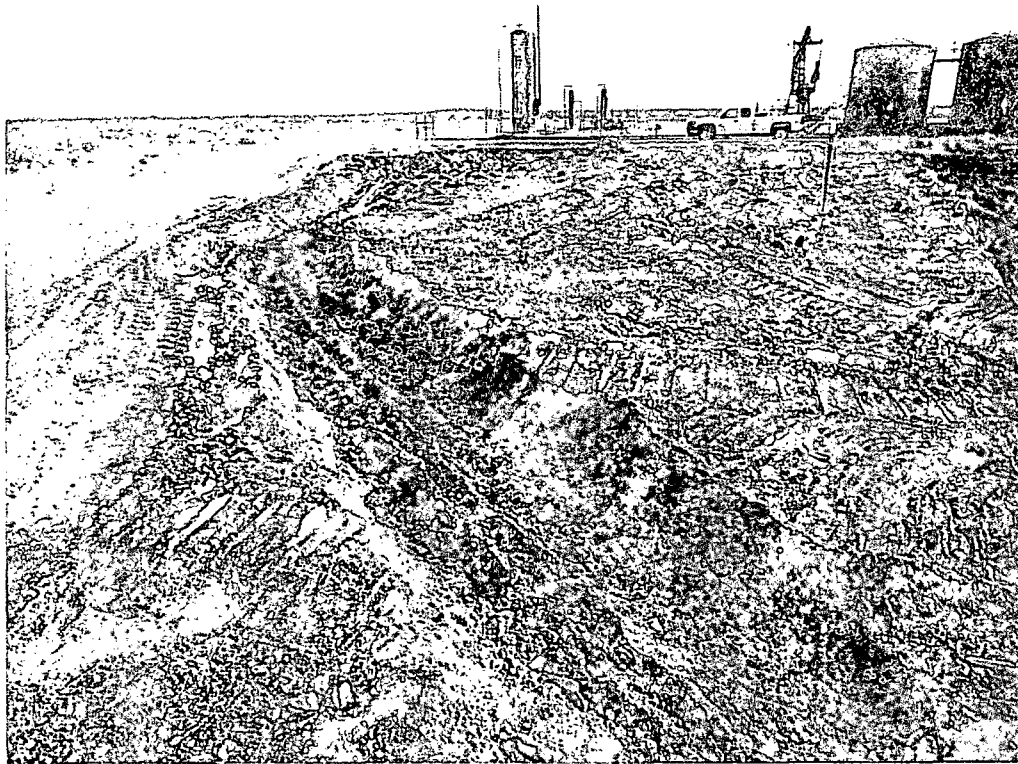


View North – Excavated Area of AH-11

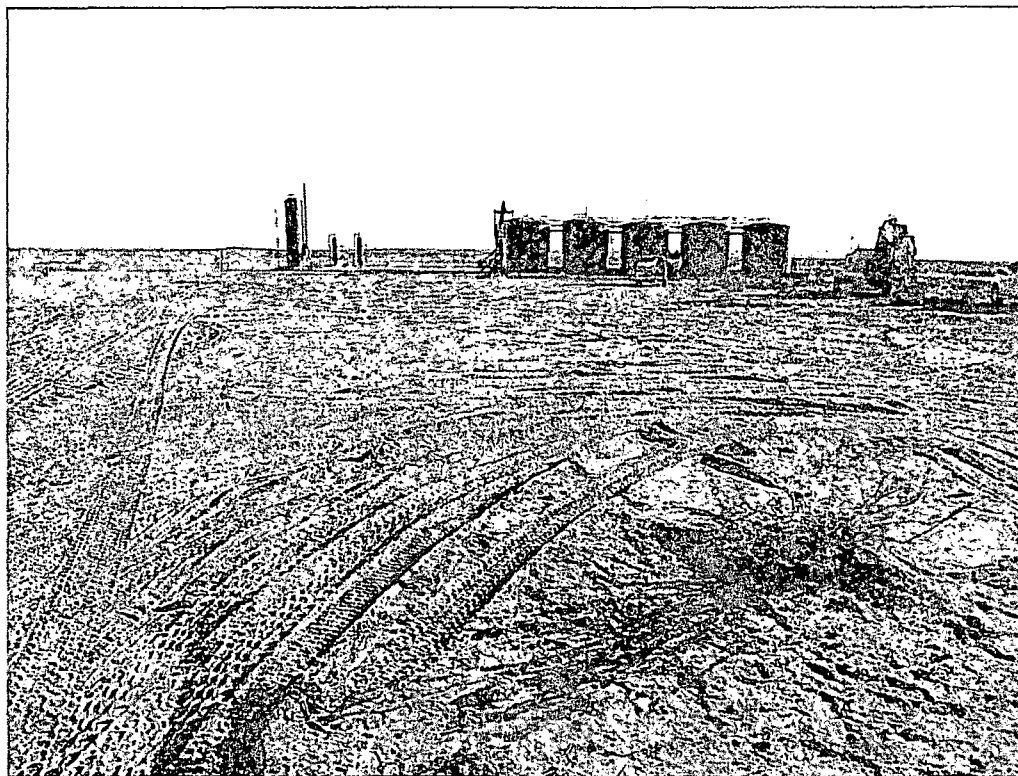
COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View West – AH-10 and AH-11

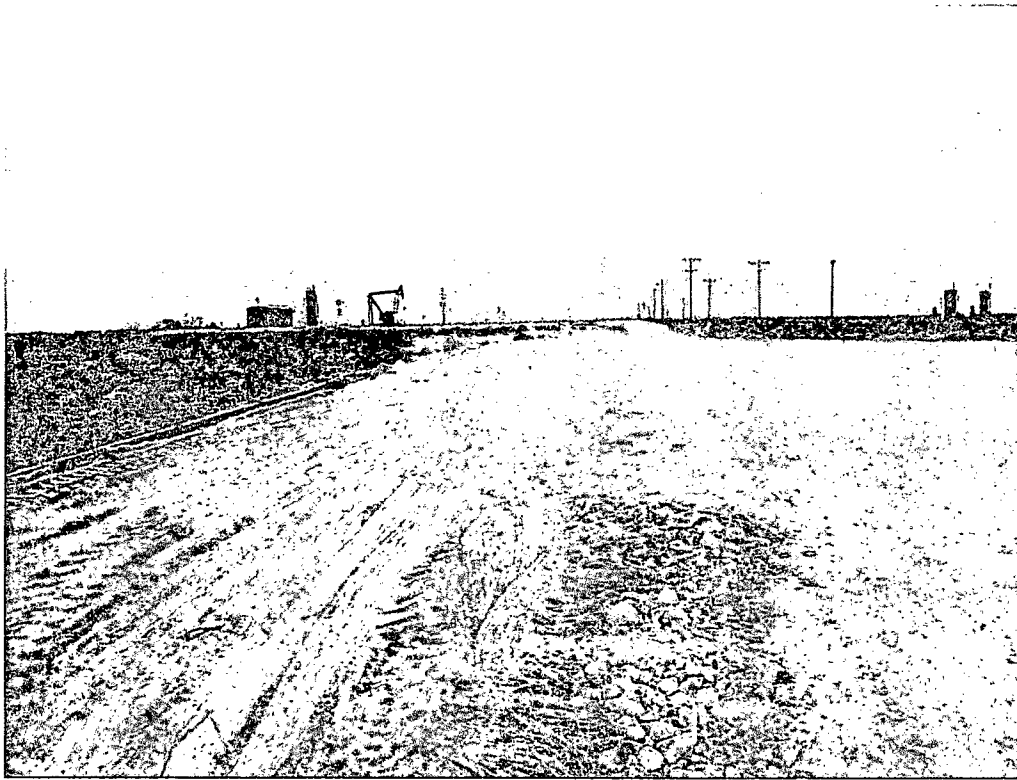


View North – Backfilled Areas of AH-7 through AH-12

COG Operating LLC
Slyhawk St. #5 Tank
Battery
Eddy County, New Mexico



TETRA TECH



View East – Backfilled Areas of AH-1 through AH-5

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

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

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 McNeil
Address	600 West Illinois Avenue, Midland, Texas 79701	Telephone No.	(432) 230-0077
Facility Name	Sly Hawk State #005	Facility Type	Main Line

Surface Owner: State	Mineral Owner	Lease No. (API#) 30-015-35103
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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
A	03	25S	28E					

Latitude 32 09.982 Longitude 104 04.068

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 70 bbls	Volume Recovered 0 bbls
Source of Release: Main Water Line	Date and Hour of Occurrence 09-22-2013	Date and Hour of Discovery 09-22-2013 12:30 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher - NMOCD	
By Whom? Michelle Mullins	Date and Hour 09-25-2013 3:43 p.m.	
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.*

N/A

NM OIL CONSERVATION
ARTESIA DISTRICT

Describe Cause of Problem and Remedial Action Taken.*

JUN 04 2014

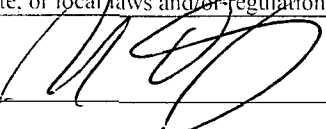
Fuse failed on polyline. Fused line back together

RECEIVED

Describe Area Affected and Cleanup Action Taken.*

Initially an estimated 70 bbls of produced water were released due to a fuse failure on a polyline. None of the fluids were recovered. The spill was on the north and south side of the road. Tetra Tech inspected site and collected samples to define spills extent. Soil that exceeded RRAL was removed and hauled away for proper disposal. Site was then brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to NMOCD for review.

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: Ike Tavarez (agent for COG)	Approved by District Supervisor:		
Title: Project Manager	Approval Date:	Expiration Date:	
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval:	Attached <input type="checkbox"/>	
Date: 5-28-14 Phone: (432) 682-4559			

Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
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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	Sly Hawk State #005	Facility Type	Main line
Surface Owner State	Mineral Owner	Lease No. (API#) 30-015-35103	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	03	25S	28E					Eddy

Latitude 32 09.982

Longitude 104 04.068

NATURE OF RELEASE

Type of Release	Produced water	Volume of Release	70bbls	Volume Recovered	0bbls
Source of Release	Main water line	Date and Hour of Occurrence	09-22-2013	Date and Hour of Discovery	09-22-2013 12:30pm
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher - NMOCD		
By Whom?	Michelle Mullins	Date and Hour	09-25-2013 3:43pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

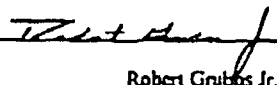
Fuse failed on polyline. Fuse line back together.

Describe Area Affected and Cleanup Action Taken.*

Initially an estimated 70bbls were released due to a fuse came apart on a polyline. We were unable to recover any fluids. The spill was on the North and South side of the road. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a 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.	Approval Date:	Expiration Date:	
Title: Senior Environmental Coordinator	Conditions of Approval		Attached <input type="checkbox"/>
E-mail Address: rgrubbs@concho.com			
Date: 09-30-2013	Phone: 432-661-6601		

* Attach Additional Sheets If Necessary



Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - Sly Hawk St. #5
Eddy County, New Mexico

24 South 27 East					
6	5	4	3	2	1
7	8 17	9	10	11	12
18	26	43			27
30	17	16	15	14	13 30
34					31
19	20	21	22	23	24
30	29	28	70	26	25
31	32	33	34	35	36

24 South 28 East					
6 70	5 30	4 30	3	2 55	1 60
7	8 50	9	10	11	12
18	17	16	17	20	73
42	29	18	52	34	
48					
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South 29 East					
6	5	4	3	2	1
7	8	9	10	11	12
160	17 4	16	15	14	13
		18			
19	20	21	22	23	24
30	29	98	27	26	25
31	32	33	34	35	36

25 South 27 East					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	92
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
		19			







25 South 28 East					
6	5	4 35	3 32	2	1
59	8	9	10	11	12
18	17	16	15 48	14	13
67			49		
96	20	21	22	23	24
30	29	28	27	26 40	25
15	90				
31	32	33	34	35	36
					40

25 South 29 East					
6	5	4	3	2	1
40	8	9	10	11	12
18	17	16	40	14	13
			60		
19	20	21	22	23	24
30	29	28	27	26	25
30					
31	32 115	33	34	35	36

26 South 27 East					
6	5	4	3	2	1
12	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	35
			60		
30	29	28	27	26	25
31	32	33	34	35	36

26 South 28 East					
6	5	4	3	2 120	1
7	8	9	10	11	12
18	17	16	15	14	100
19	20	21	22	120	56
			120		
30	29	28	27	26	25
31	32	33	34	35	36

26 South 29 East					
6	5 78	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	125	23	24
			67		
30	29	28	27	26	25
			69		
31	32	33	34	35	36

-  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

March 04, 2014

IKE TAVAREZ

TETRA TECH

1910 N. BIG SPRING STREET

MIDLAND, TX 79705

RE: SLYHAWK STATE #5

Enclosed are the results of analyses for samples received by the laboratory on 02/26/14 13:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

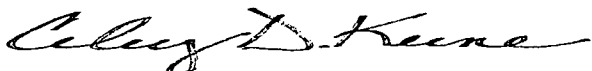
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 02/26/2014
 Reported: 03/04/2014
 Project Name: SLYHAWK STATE #5
 Project Number: 112MC06128
 Project Location: COG

 Sampling Date: 02/25/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: T-1 (AH-8) 0' (H400581-01)

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7680	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: T-1 (AH-8) 2' (H400581-02)

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1660	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: T-1 (AH-8) 4' (H400581-03)

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	03/04/2014	ND	416	104	400	7.41	


Sample ID: T-1 (AH-8) 6' (H400581-04)

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	03/04/2014	ND	416	104	400	7.41	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 02/26/2014
 Reported: 03/04/2014
 Project Name: SLYHAWK STATE #5
 Project Number: 112MC06128
 Project Location: COG

 Sampling Date: 02/25/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: T-1 (AH-8) 8' (H400581-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: T-1 (AH-8) 10' (H400581-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1520	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: T-1 (AH-8) 12' (H400581-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: BACKGROUND 0' (H400581-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/04/2014	ND	416	104	400	7.41	


Sample ID: BACKGROUND 2' (H400581-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	03/04/2014	ND	416	104	400	7.41	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TETRA TECH
IKE TAVAREZ
1910 N. BIG SPRING STREET
MIDLAND TX, 79705
Fax To: (432) 682-3946

Received: 02/26/2014
Reported: 03/04/2014
Project Name: SLYHAWK STATE #5
Project Number: 112MC06128
Project Location: COG

Sampling Date: 02/25/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BACKGROUND 4' (H400581-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: BACKGROUND 6' (H400581-11)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: BACKGROUND 8' (H400581-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: BACKGROUND 10' (H400581-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: T-2 (AH-5) 0' (H400581-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6530	16.0	03/04/2014	ND	416	104	400	7.41	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TETRA TECH
IKE TAVAREZ
1910 N. BIG SPRING STREET
MIDLAND TX, 79705
Fax To: (432) 682-3946

Received: 02/26/2014
Reported: 03/04/2014
Project Name: SLYHAWK STATE #5
Project Number: 112MC06128
Project Location: COG

Sampling Date: 02/25/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: T-2 (AH-5) 2' (H400581-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5920	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: T-2 (AH-5) 4' (H400581-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2960	16.0	03/04/2014	ND	416	104	400	7.41		

Sample ID: T-2 (AH-5) 6' (H400581-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	03/04/2014	ND	416	104	400	7.41	

Sample ID: T-2 (AH-5) 8' (H400581-18)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	03/04/2014	ND	416	104	400	7.41	

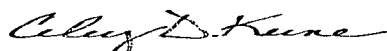
Sample ID: T-2 (AH-5) 10' (H400581-19)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	03/04/2014	ND	416	104	400	7.41	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TETRA TECH
IKE TAVAREZ
1910 N. BIG SPRING STREET
MIDLAND TX, 79705
Fax To: (432) 682-3946

Received: 02/26/2014
Reported: 03/04/2014
Project Name: SLYHAWK STATE #5
Project Number: 112MC06128
Project Location: COG

Sampling Date: 02/25/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: T-3 (AH-4) 0' (H400581-20)

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	16600	16.0	03/04/2014	ND	416	104	400	7.41			

Sample ID: T-3 (AH-4) 2' (H400581-21)

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	6800	16.0	03/04/2014	ND	416	104	400	0.00			

Sample ID: T-3 (AH-4) 4' (H400581-22)

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	4240	16.0	03/04/2014	ND	416	104	400	0.00			

Sample ID: T-3 (AH-4) 6' (H400581-23)

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	2480	16.0	03/04/2014	ND	416	104	400	0.00			

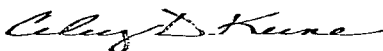
Sample ID: T-3 (AH-4) 8' (H400581-24)

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	1120	16.0	03/04/2014	ND	416	104	400	0.00			

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 IKE TAVAREZ
 1910 N. BIG SPRING STREET
 MIDLAND TX, 79705
 Fax To: (432) 682-3946

 Received: 02/26/2014
 Reported: 03/04/2014
 Project Name: SLYHAWK STATE #5
 Project Number: 112MC06128
 Project Location: COG

 Sampling Date: 02/25/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: T-3 (AH-4) 10' (H400581-25)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1170	16.0	03/04/2014	ND	416	104	400	0.00	

Sample ID: T-4 (AH-2) 0' (H400581-26)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16000	16.0	03/04/2014	ND	416	104	400	0.00	

Sample ID: T-4 (AH-2) 2' (H400581-27)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	03/04/2014	ND	416	104	400	0.00	

Sample ID: T-4 (AH-2) 4' (H400581-28)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12200	16.0	03/04/2014	ND	416	104	400	0.00	

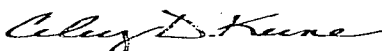
Sample ID: T-4 (AH-2) 6' (H400581-29)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4480	16.0	03/04/2014	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TETRA TECH
IKE TAVAREZ
1910 N. BIG SPRING STREET
MIDLAND TX, 79705
Fax To: (432) 682-3946

Received: 02/26/2014
Reported: 03/04/2014
Project Name: SLYHAWK STATE #5
Project Number: 112MC06128
Project Location: COG

Sampling Date: 02/25/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: T-4 (AH-2) 8' (H400581-30)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6160	16.0	03/04/2014	ND	416	104	400	0.00	

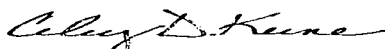
Sample ID: T-4 (AH-2) 10' (H400581-31)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5200	16.0	03/04/2014	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

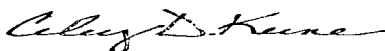
Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

PAGE:

ANALYSIS REQUEST
(Circle or Specify Method No.)

Page 11 of 13

H400581

CLIENT NAME:

COG

SITE MANAGER:

TKC Taveraz

PROJECT NO.:

112 MC06128

PROJECT NAME:

Sly hawk state #5

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER	FILTERED	HCL	HNO3	ICE	NONE		BTEX 8020	TPH 801	PAH 8270	RCRA Met	TCLP Met	TCLP Vol	TCLP Sem	RCI	GC/MS Vol	GC/MS Sem	PCB's 808	Pest. 808	Chloride	Gamma S	Alpha Bet	PLM (Asb	Major Anio	
8						Back ground 0'																				/					
9						Back ground 2'																				/					
10						Back ground 4'																				/					
11						Back ground 6'																				/					
12						Back ground 8'																				/					
13						Back ground 10'																				/					
14						T-2 (AH-5) 0'																				/					
15						T-2 (AH-5) 2'																				/					
16						T-2 (AH-5) 4'																				/					
17	/	7				T-2 (AH-5) 6'																				/					

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

ADDRESS:

CITY:

STATE:

ZIP:

CONTACT:

PHONE:

DATE:

TIME:

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

PAGE:

ANALYSIS REQUEST
(Circle or Specify Method No.)

H400581

CLIENT NAME:

LOG

SITE MANAGER:

Joe Vazquez

PROJECT NO.:

112MC06128

PROJECT NAME:

Slyhawk state #5

LAB I.D.
NUMBER

DATE

TIME

MATRIX

COMP

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

BTEX 8021B

TPH 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vr Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC-MS Vol. 8240/8260/624

GC-MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

18
19
20
21
22
23
24
25
26
27

T-2 (AH-5) 8'
T-2 (AH-5) 10'
T-3 (AH-4) 0'
T-3 (AH-4) 2'
T-3 (AH-4) 4'
T-3 (AH-4) 6'
T-3 (AH-4) 8'
T-3 (AH-4) 10'
T-4 (AH-2) 0'
T-4 (AH-2) 2'

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

AIRBILL #:

FEDEX

BUS

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

RECEIVED BY: (Signature)

ADDRESS:

CITY:

STATE:

ZIP:

CONTACT:

PHONE:

DATE:

TIME:

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

RUSH Charges
Authorized:

Yes No

Summary Report

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

Report Date: May 21, 2014

Work Order: 14051611



Project Location: Eddy Co, NM
Project Name: COG/Slyhawk St #5
Project Number: 112MC06128

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
363225	BH-1 4-5'	soil	2014-05-13	00:00	2014-05-16
363226	BH-1 6-7'	soil	2014-05-13	00:00	2014-05-16
363227	BH-1 9-10'	soil	2014-05-13	00:00	2014-05-16
363228	BH-1 14-15'	soil	2014-05-13	00:00	2014-05-16
363229	BH-1 19-20'	soil	2014-05-13	00:00	2014-05-16
363230	BH-1 24-25'	soil	2014-05-13	00:00	2014-05-16
363231	BH-2 4-5'	soil	2014-05-13	00:00	2014-05-16
363232	BH-2 6-7'	soil	2014-05-13	00:00	2014-05-16
363233	BH-2 9-10'	soil	2014-05-13	00:00	2014-05-16
363234	BH-2 14-15'	soil	2014-05-13	00:00	2014-05-16
363235	BH-2 19-20'	soil	2014-05-13	00:00	2014-05-16
363236	BH-2 24-25'	soil	2014-05-13	00:00	2014-05-16
363237	BH-2 29-30'	soil	2014-05-13	00:00	2014-05-16

Sample: 363225 - BH-1 4-5'

Param	Flag	Result	Units	RL
Chloride	Qs	2500	mg/Kg	4

Sample: 363226 - BH-1 6-7'

Param	Flag	Result	Units	RL
Chloride		1420	mg/Kg	4

Sample: 363227 - BH-1 9-10'

Param	Flag	Result	Units	RL
Chloride		537	mg/Kg	4

Sample: 363228 - BH-1 14-15'

Param	Flag	Result	Units	RL
Chloride		390	mg/Kg	4

Sample: 363229 - BH-1 19-20'

Param	Flag	Result	Units	RL
Chloride		341	mg/Kg	4

Sample: 363230 - BH-1 24-25'

Param	Flag	Result	Units	RL
Chloride		244	mg/Kg	4

Sample: 363231 - BH-2 4-5'

Param	Flag	Result	Units	RL
Chloride		439	mg/Kg	4

Sample: 363232 - BH-2 6-7'

Param	Flag	Result	Units	RL
Chloride		976	mg/Kg	4

Sample: 363233 - BH-2 9-10'

Param	Flag	Result	Units	RL
Chloride		878	mg/Kg	4

Sample: 363234 - BH-2 14-15'

Param	Flag	Result	Units	RL
Chloride		829	mg/Kg	4

Sample: 363235 - BH-2 19-20'

Param	Flag	Result	Units	RL
Chloride		439	mg/Kg	4

Sample: 363236 - BH-2 24-25'

Param	Flag	Result	Units	RL
Chloride		195	mg/Kg	4

Sample: 363237 - BH-2 29-30'

Param	Flag	Result	Units	RL
Chloride		390	mg/Kg	4

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: November 5, 2013

Work Order: 13102422



Project Location: Eddy Co, NM
Project Name: COG/Slyhawk St #5
Project Number: TBD

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
344557	AH-1 0-1'	soil	2013-10-22	00:00	2013-10-24
344558	AH-1 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344559	AH-1 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344560	AH-1 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344561	AH-1 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344562	AH-1 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344563	AH-2 0-1'	soil	2013-10-22	00:00	2013-10-24
344564	AH-2 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344565	AH-2 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344566	AH-2 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344567	AH-2 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344568	AH-2 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344569	AH-3 0-1'	soil	2013-10-22	00:00	2013-10-24
344570	AH-3 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344571	AH-3 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344572	AH-3 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344573	AH-3 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344574	AH-3 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344575	AH-4 0-1'	soil	2013-10-22	00:00	2013-10-24
344576	AH-4 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344577	AH-4 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344578	AH-4 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344579	AH-4 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344580	AH-4 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344581	AH-4 6-6.5'	soil	2013-10-22	00:00	2013-10-24
344582	AH-4 7-7.5'	soil	2013-10-22	00:00	2013-10-24
344583	AH-4 8-8.5'	soil	2013-10-22	00:00	2013-10-24
344584	AH-5 0-1'	soil	2013-10-22	00:00	2013-10-24
344585	AH-5 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344586	AH-5 2-2.5'	soil	2013-10-22	00:00	2013-10-24

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
344587	AH-5 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344588	AH-5 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344589	AH-5 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344590	AH-6 0-1'	soil	2013-10-22	00:00	2013-10-24
344591	AH-6 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344592	AH-6 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344593	AH-6 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344594	AH-6 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344595	AH-7 0-1'	soil	2013-10-22	00:00	2013-10-24
344596	AH-7 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344597	AH-7 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344598	AH-7 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344599	AH-7 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344600	AH-7 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344601	AH-8 0-1'	soil	2013-10-22	00:00	2013-10-24
344602	AH-8 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344603	AH-8 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344604	AH-8 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344605	AH-8 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344606	AH-8 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344607	AH-8 6-6.5'	soil	2013-10-22	00:00	2013-10-24
344608	AH-8 7-7.5'	soil	2013-10-22	00:00	2013-10-24
344609	AH-8 8-8.5'	soil	2013-10-22	00:00	2013-10-24
344610	AH-8 9-9.5'	soil	2013-10-22	00:00	2013-10-24
344611	AH-9 0-1'	soil	2013-10-22	00:00	2013-10-24
344612	AH-9 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344613	AH-9 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344614	AH-9 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344615	AH-10 0-1'	soil	2013-10-22	00:00	2013-10-24
344616	AH-10 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344617	AH-10 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344618	AH-10 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344619	AH-10 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344620	AH-10 5-5.5'	soil	2013-10-22	00:00	2013-10-24
344621	AH-10 6-6.5'	soil	2013-10-22	00:00	2013-10-24
344622	AH-11 0-1'	soil	2013-10-22	00:00	2013-10-24
344623	AH-11 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344624	AH-11 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344625	AH-11 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344626	AH-12 0-1'	soil	2013-10-22	00:00	2013-10-24
344627	AH-12 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344628	AH-12 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344629	AH-12 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344630	Background-1 0-1'	soil	2013-10-22	00:00	2013-10-24
344631	Background-1 1-1.5'	soil	2013-10-22	00:00	2013-10-24
344632	Background-1 2-2.5'	soil	2013-10-22	00:00	2013-10-24
344633	Background-1 3-3.5'	soil	2013-10-22	00:00	2013-10-24
344634	Background-1 4-4.5'	soil	2013-10-22	00:00	2013-10-24
344635	Background-1 5-5.5'	soil	2013-10-22	00:00	2013-10-24

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
344636	Background-1 6-6.5'	soil	2013-10-22	00:00	2013-10-24
344637	Background-1 7-7.5'	soil	2013-10-22	00:00	2013-10-24
344638	Background-1 8-8.5'	soil	2013-10-22	00:00	2013-10-24
344639	Background-1 9-9.5'	soil	2013-10-22	00:00	2013-10-24

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)
344557 - AH-1 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344563 - AH-2 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344569 - AH-3 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344575 - AH-4 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344584 - AH-5 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344590 - AH-6 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344595 - AH-7 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344601 - AH-8 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344611 - AH-9 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344615 - AH-10 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344622 - AH-11 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
344626 - AH-12 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00

Sample: 344557 - AH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		1270	mg/Kg	4

Sample: 344558 - AH-1 1-1.5'

Param	Flag	Result	Units	RL
Chloride		1570	mg/Kg	4

Sample: 344559 - AH-1 2-2.5'

Param	Flag	Result	Units	RL
Chloride		162	mg/Kg	4

Sample: 344560 - AH-1 3-3.5'

Param	Flag	Result	Units	RL
Chloride		192	mg/Kg	4

Sample: 344561 - AH-1 4-4.5'

Param	Flag	Result	Units	RL
Chloride		88.6	mg/Kg	4

Sample: 344562 - AH-1 5-5.5'

Param	Flag	Result	Units	RL
Chloride		118	mg/Kg	4

Sample: 344563 - AH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		22600	mg/Kg	4

Sample: 344564 - AH-2 1-1.5'

Param	Flag	Result	Units	RL
Chloride		12800	mg/Kg	4

Sample: 344565 - AH-2 2-2.5'

Param	Flag	Result	Units	RL
Chloride		10700	mg/Kg	4

Sample: 344566 - AH-2 3-3.5'

Param	Flag	Result	Units	RL
Chloride		14600	mg/Kg	4

Sample: 344567 - AH-2 4-4.5'

Param	Flag	Result	Units	RL
Chloride		9090	mg/Kg	4

Sample: 344568 - AH-2 5-5.5'

Param	Flag	Result	Units	RL
Chloride		5870	mg/Kg	4

Sample: 344569 - AH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		15100	mg/Kg	4

Sample: 344570 - AH-3 1-1.5'

Param	Flag	Result	Units	RL
Chloride		8750	mg/Kg	4

Sample: 344571 - AH-3 2-2.5'

Param	Flag	Result	Units	RL
Chloride		488	mg/Kg	4

Sample: 344572 - AH-3 3-3.5'

Param	Flag	Result	Units	RL
Chloride		804	mg/Kg	4

Sample: 344573 - AH-3 4-4.5'

Param	Flag	Result	Units	RL
Chloride		646	mg/Kg	4

Sample: 344574 - AH-3 5-5.5'

Param	Flag	Result	Units	RL
Chloride		421	mg/Kg	4

Sample: 344575 - AH-4 0-1'

Param	Flag	Result	Units	RL
Chloride		19000	mg/Kg	4

Sample: 344576 - AH-4 1-1.5'

Param	Flag	Result	Units	RL
Chloride		13800	mg/Kg	4

Sample: 344577 - AH-4 2-2.5'

Param	Flag	Result	Units	RL
Chloride		10800	mg/Kg	4

Sample: 344578 - AH-4 3-3.5'

Param	Flag	Result	Units	RL
Chloride		5730	mg/Kg	4

Sample: 344579 - AH-4 4-4.5'

Param	Flag	Result	Units	RL
Chloride		3010	mg/Kg	4

Sample: 344580 - AH-4 5-5.5'

Param	Flag	Result	Units	RL
Chloride		6010	mg/Kg	4

Sample: 344581 - AH-4 6-6.5'

Param	Flag	Result	Units	RL
Chloride		3580	mg/Kg	4

Sample: 344582 - AH-4 7-7.5'

Param	Flag	Result	Units	RL
Chloride		4380	mg/Kg	4

Sample: 344583 - AH-4 8-8.5'

Param	Flag	Result	Units	RL
Chloride		2190	mg/Kg	4

Sample: 344584 - AH-5 0-1'

Param	Flag	Result	Units	RL
Chloride		2280	mg/Kg	4

Sample: 344585 - AH-5 1-1.5'

Param	Flag	Result	Units	RL
Chloride		13800	mg/Kg	4

Sample: 344586 - AH-5 2-2.5'

Param	Flag	Result	Units	RL
Chloride		10500	mg/Kg	4

Sample: 344587 - AH-5 3-3.5'

Param	Flag	Result	Units	RL
Chloride		2680	mg/Kg	4

Sample: 344588 - AH-5 4-4.5'

Param	Flag	Result	Units	RL
Chloride		1150	mg/Kg	4

Sample: 344589 - AH-5 5-5.5'

Param	Flag	Result	Units	RL
Chloride		1400	mg/Kg	4

Sample: 344590 - AH-6 0-1'

Param	Flag	Result	Units	RL
Chloride		7380	mg/Kg	4

Sample: 344591 - AH-6 1-1.5'

Param	Flag	Result	Units	RL
Chloride		792	mg/Kg	4

Sample: 344592 - AH-6 2-2.5'

Param	Flag	Result	Units	RL
Chloride		982	mg/Kg	4

Sample: 344593 - AH-6 3-3.5'

Param	Flag	Result	Units	RL
Chloride		321	mg/Kg	4

Sample: 344594 - AH-6 4-4.5'

Param	Flag	Result	Units	RL
Chloride		484	mg/Kg	4

Sample: 344595 - AH-7 0-1'

Param	Flag	Result	Units	RL
Chloride		16100	mg/Kg	4

Sample: 344596 - AH-7 1-1.5'

Param	Flag	Result	Units	RL
Chloride		1170	mg/Kg	4

Sample: 344597 - AH-7 2-2.5'

Param	Flag	Result	Units	RL
Chloride		1790	mg/Kg	4

Sample: 344598 - AH-7 3-3.5'

Param	Flag	Result	Units	RL
Chloride		1380	mg/Kg	4

Sample: 344599 - AH-7 4-4.5'

Param	Flag	Result	Units	RL
Chloride		972	mg/Kg	4

Sample: 344600 - AH-7 5-5.5'

Param	Flag	Result	Units	RL
Chloride		879	mg/Kg	4

Sample: 344601 - AH-8 0-1'

Param	Flag	Result	Units	RL
Chloride		13800	mg/Kg	4

Sample: 344602 - AH-8 1-1.5'

Param	Flag	Result	Units	RL
Chloride		2410	mg/Kg	4

Sample: 344603 - AH-8 2-2.5'

Param	Flag	Result	Units	RL
Chloride		2040	mg/Kg	4

Sample: 344604 - AH-8 3-3.5'

Param	Flag	Result	Units	RL
Chloride		1560	mg/Kg	4

Sample: 344605 - AH-8 4-4.5'

Param	Flag	Result	Units	RL
Chloride		620	mg/Kg	4

Sample: 344606 - AH-8 5-5.5'

Param	Flag	Result	Units	RL
Chloride		1350	mg/Kg	4

Sample: 344607 - AH-8 6-6.5'

Param	Flag	Result	Units	RL
Chloride		1550	mg/Kg	4

Sample: 344608 - AH-8 7-7.5'

Param	Flag	Result	Units	RL
Chloride		1160	mg/Kg	4

Sample: 344609 - AH-8 8-8.5'

Param	Flag	Result	Units	RL
Chloride		1510	mg/Kg	4

Sample: 344610 - AH-8 9-9.5'

Param	Flag	Result	Units	RL
Chloride		1880	mg/Kg	4

Sample: 344611 - AH-9 0-1'

Param	Flag	Result	Units	RL
Chloride		14800	mg/Kg	4

Sample: 344612 - AH-9 1-1.5'

Param	Flag	Result	Units	RL
Chloride		13000	mg/Kg	4

Sample: 344613 - AH-9 2-2.5'

Param	Flag	Result	Units	RL
Chloride		10200	mg/Kg	4

Sample: 344614 - AH-9 3-3.5'

Param	Flag	Result	Units	RL
Chloride		866	mg/Kg	4

Sample: 344615 - AH-10 0-1'

Param	Flag	Result	Units	RL
Chloride		12900	mg/Kg	4

Sample: 344616 - AH-10 1-1.5'

Param	Flag	Result	Units	RL
Chloride		6350	mg/Kg	4

Sample: 344617 - AH-10 2-2.5'

Param	Flag	Result	Units	RL
Chloride		4300	mg/Kg	4

Sample: 344618 - AH-10 3-3.5'

Param	Flag	Result	Units	RL
Chloride		3310	mg/Kg	4

Sample: 344619 - AH-10 4-4.5'

Param	Flag	Result	Units	RL
Chloride		6420	mg/Kg	4

Sample: 344620 - AH-10 5-5.5'

Param	Flag	Result	Units	RL
Chloride		577	mg/Kg	4

Sample: 344621 - AH-10 6-6.5'

Param	Flag	Result	Units	RL
Chloride		84.6	mg/Kg	4

Sample: 344622 - AH-11 0-1'

Param	Flag	Result	Units	RL
Chloride		1750	mg/Kg	4

Sample: 344623 - AH-11 1-1.5'

Param	Flag	Result	Units	RL
Chloride		89.6	mg/Kg	4

Sample: 344624 - AH-11 2-2.5'

Param	Flag	Result	Units	RL
Chloride		68.5	mg/Kg	4

Sample: 344625 - AH-11 3-3.5'

Param	Flag	Result	Units	RL
Chloride		73.4	mg/Kg	4

Sample: 344626 - AH-12 0-1'

Param	Flag	Result	Units	RL
Chloride		10500	mg/Kg	4

Sample: 344627 - AH-12 1-1.5'

Param	Flag	Result	Units	RL
Chloride		53.8	mg/Kg	4

Sample: 344628 - AH-12 2-2.5'

Param	Flag	Result	Units	RL
Chloride		249	mg/Kg	4

Sample: 344629 - AH-12 3-3.5'

Param	Flag	Result	Units	RL
Chloride		166	mg/Kg	4

Sample: 344630 - Background-1 0-1'

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

Sample: 344631 - Background-1 1-1.5'

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

Sample: 344632 - Background-1 2-2.5'

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

Sample: 344633 - Background-1 3-3.5'

Param	Flag	Result	Units	RL
Chloride		97.8	mg/Kg	4

Sample: 344634 - Background-1 4-4.5'

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

Sample: 344635 - Background-1 5-5.5'

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

Sample: 344636 - Background-1 6-6.5'

Param	Flag	Result	Units	RL
Chloride		138	mg/Kg	4

Sample: 344637 - Background-1 7-7.5'

Param	Flag	Result	Units	RL
Chloride		167	mg/Kg	4

Sample: 344638 - Background-1 8-8.5'

Param	Flag	Result	Units	RL
Chloride		291	mg/Kg	4

Sample: 344639 - Background-1 9-9.5'

Param	Flag	Result	Units	RL
Chloride		281	mg/Kg	4