Includes CD

AP-100

TETRA TECH

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November 20, 2009

Mr. Glenn von Gonten
Senior Hydrologist/Acting Environmental Bureau Chief
Environmental Bureau
Oil Conservation Division
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Assessment and Closure Report for the Pit Located at the Gourley Federal #3 Well, Unit H, Section 28, Township 22 South, Range 28 East, Eddy County, New Mexico, Operated by Unit Petroleum Company (NMOCD Case # AP-100) 30-015-34152

Mr. von Gonten:

Tetra Tech was contacted by Unit Petroleum Corporation (Unit) to assist in the closure of a pit at the Gourley Federal #3 well, located in Unit Letter H, Section 28, Township 22 South, Range 28 East, Eddy County, New Mexico (Site). The pit coordinates are N 32° 22' 0.48" W 104° 5' 12.91". Both the State of New Mexico C-141 and C-144 (Initial and Final) are included in Appendix C. The Site is shown on Figures 1 and 2.

Background

In June 2007, Sweatt excavated the drilling Pit for the Gourley Federal #3 well to a maximum depth of 6' below ground surface (bgs), with sample trenches to 20 feet bgs for chloride sampling. Sampling conducted on July 25, 2007, found that chloride concentrations within the Pit were generally below 10,000 mg/kg with the exception of 3 samples. One sample was collected at 15 feet below the Pit bottom (bpb). The third sample was from the Pit bottom in the northeast corner. Chloride concentrations in the samples collected from the center of the Pit at depths below 15 feet bpg were below 10,000 mg/kg. At the request of the NMOCD, a temporary monitor well was installed on the south edge of the Pit, in June 2007, to establish the depth to groundwater. The well was drilled to a depth of 50' bgs. Samples from that well showed chloride concentrations of 907 mg/L and TDS concentrations of 3,990 mg/L. (See Tetra Tech January 19, 2009 report to Mr. Mike Bratcher, NMOCD.)

Tetra Tech
1910 North Big Spring, Midland, TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

In January 2009, Tetra Tech was contracted to perform sampling of the Pit at the site. As requested by the NMOCD, samples were collected from the center and southwest corner of the Pit. Samples from a depth of 25 feet bgs were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) , total petroleum hydrocarbons (TPH), and chlorides. Confirmation samples were also collected for chlorides from a depth of 39 feet bgs in the center and 35 feet bgs in the southwest corner. During the confirmation sampling, the soils were field screened for chlorides. A one to two foot thick clay layer was encountered in both sample trenches at 37 feet bgs in the center and 34 feet bgs in the southwest corner. Sampling in the southwest corner of the pit showed elevated chlorides ranging from 5,800 mg/kg at the bottom of the Pit, declining to 700 mg/kg at 30 feet bgs, and increasing to 6,450 mg/kg at the clay layer. The concentration below the clay layer at 35 feet bgs was 761 mg/kg. The field screening at the center of the Pit showed chloride concentrations ranging from 13,520 mg/kg at the bottom of the pit, to 19,600 at 15 feet bgs, declining to 1,050 mg/kg at 35 feet bgs. At the clay layer at 37 feet bgs, the chloride concentration increased to 9,450 mg/kg. Below the clay layer at 39 feet bgs, the field chloride concentration was 1,600 mg/kg. The laboratory results for the 39 foot sample showed a concentration of 2,170 mg/kg chlorides.

Groundwater Gradient and Quality

At the request of Unit, Tetra Tech was onsite February 19, 2009 and June 25, 2009, to oversee the installation of three 2" monitor wells in the vicinity of the Pit. The three wells were installed to a depth of 60 feet bgs and completed with 30 feet of 0.02" slotted PVC (MW-1) and 20 feet of 0.02" slotted PVC (MW-2 and MW-3) installed at the bottom of the well borings. Following installation, the wells were gauged, developed and sampled for analysis of major anions/cations and TDS. Analytical results indicate chloride concentrations ranging from 1,110 mg/L in MW-2 to 4,140 mg/L in MW-1. The gauging and analytical data are presented in Tables 1 and 2. Laboratory analytical is presented in Appendix A. Based upon the data collected from MW-1, MW-2, and MW-3, the groundwater gradient in the vicinity of the Pit appears to be towards the west/northwest. MW-1 appears to be located essentially cross-gradient of the Pit.

Neither the New Mexico State Engineer's Office database nor the USGS database show any wells in Section 28, Township 22 South, Range 31 East. However, monitor wells installed at the site indicate groundwater depths ranging from approximately 46 to 49 feet below ground surface (bgs).

Assessment and Results

On October 26, 2009, Tetra Tech supervised the installation of five (5) soil borings (SB-1 through SB-5) in the center horseshoe section of the Pit in order to delineate chloride concentrations. See attached Figure 3. The area of the entire Pit measured approximately 120 feet by 120 feet, while the horseshoe section of the Pit measured 60 feet by 60 feet. Two sets of soil borings were placed on the west and east side of the horseshoe section, while one soil boring was placed in the center of the Pit. The soil boring logs are included in Appendix B.

The borings were installed using an air-rotary type drilling rig. The soil borings were extended to a maximum depth of 30 feet bgs and sampled in five foot intervals to a depth of 30 feet bgs. Each of the samples were collected and preserved in laboratory prepared sample containers with standard QA/QC procedures and were analyzed for chloride by method 4500 Cl-B. All samples were shipped under proper chain-of-custody control. The results of the sampling are shown in Table 1. The laboratory reports and chain-of-custody are included in Appendix A.

All down hole equipment was washed between boreholes or sampling events using a potable water and laboratory grade detergent. All down hole equipment (i.e., drill rods, drill bits, etc.) were thoroughly decontaminated between each use with a high-pressure hot water wash and rinse. Soil cuttings from drilling were stockpiled adjacent to the borehole. Following the completion of the drilling activities, all boreholes were grouted to the surface.

Referring to Table 1, chloride impacts were found throughout each of the five soil borings. The chloride sample concentrations ranged from 529 milligrams per kilogram (mg/kg) in soil boring SB-4 at 24-25 feet bgs to 12,800 mg/kg in soil boring SB-4 at 29-30 feet bgs.

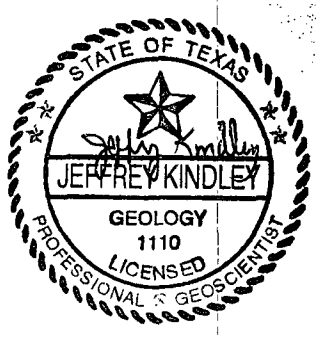
Soil Capping and Conclusions

With the approval of Mr. Mike Bratcher of the NMOCD, Sweat Construction, Inc (Sweatt) was onsite from November 3 to November 9, 2009, to excavate and remove soils in the Pit. The excavation with the Pit, measured approximately 30 feet by 20 feet by 5 feet deep between soil borings SB-2 and SB-3 and approximately 30 feet by 30 feet by 15 feet deep in the vicinity of soil boring SB-4 (See attached Figure 3 for site dimensions and Appendix D for site photographs). Upon completion of the excavation, the entire Pit measuring 120 feet by 120 feet was leveled and brought to within 5 feet below grade with overburden soils from the original pit excavation. The Pit area was then further extended out by 5 feet in each direction and a 40 mil polyethylene liner installed

TETRA TECH

at 5 feet bgs. Upon completion of the liner, the site was brought up to surface grade with clean fill soil. The fill soil was leveled, winnowed, and reseeded with BLM # 3 seed mixture. Approximately 670 cubic yards of chloride impacted soils from the excavated pit were transported offsite for disposal at Lea Land, Inc. of Carlsbad, New Mexico.

Based upon the pit closure work performed at the site, Unit Petroleum Company requests consideration of this pit for closure. If you require any additional information or have any questions or comments concerning the assessment/closure report, please call at (432) 682-4559.



Respectfully submitted,
Tetra Tech

Jeffrey Kindley, P.G.
Senior Environmental Geologist

cc: Mike Bratcher – NMOCD – Carlsbad, NM

FIGURES

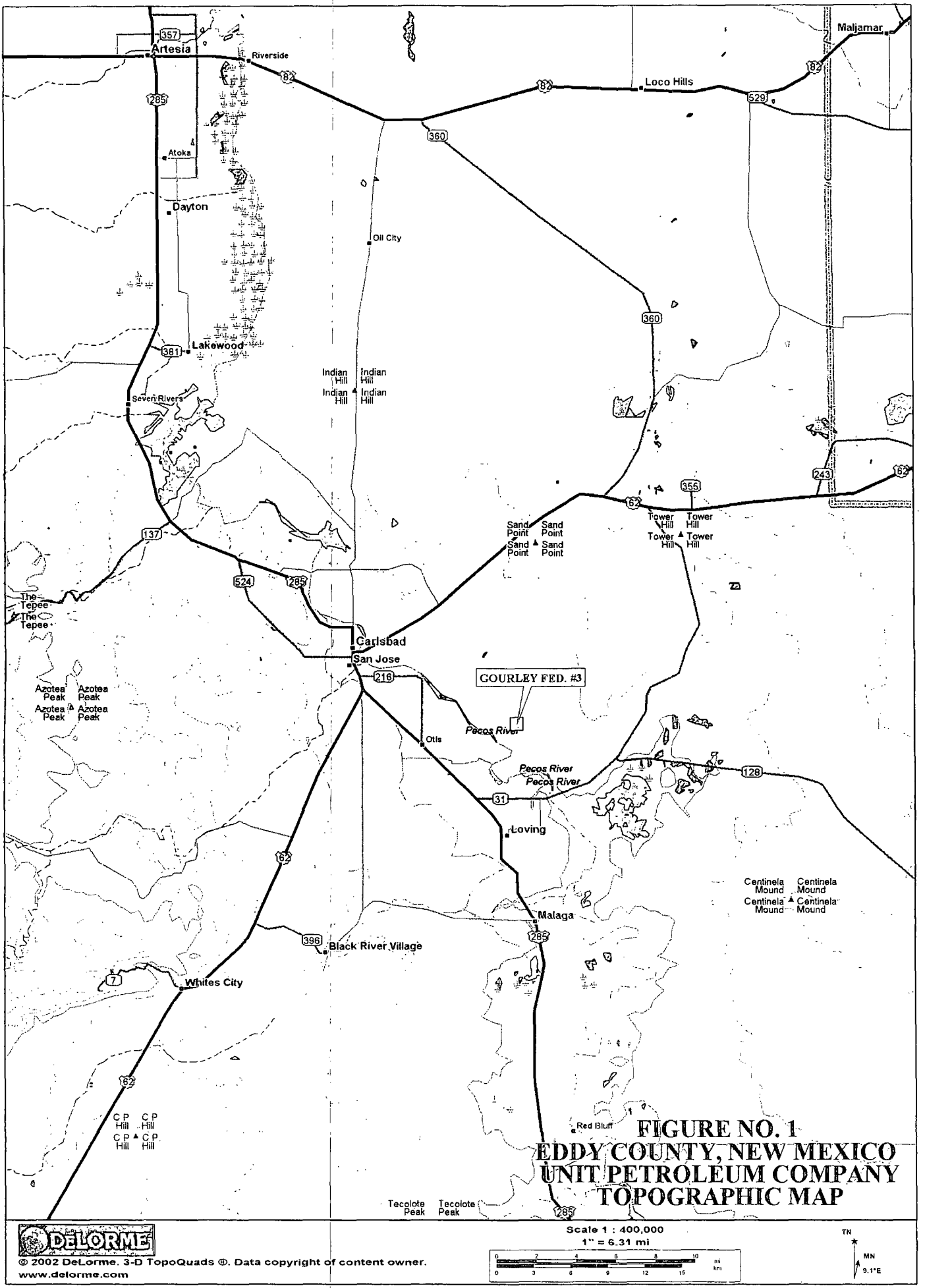


FIGURE NO. 1
EDDY COUNTY, NEW MEXICO
UNIT PETROLEUM COMPANY
TOPOGRAPHIC MAP

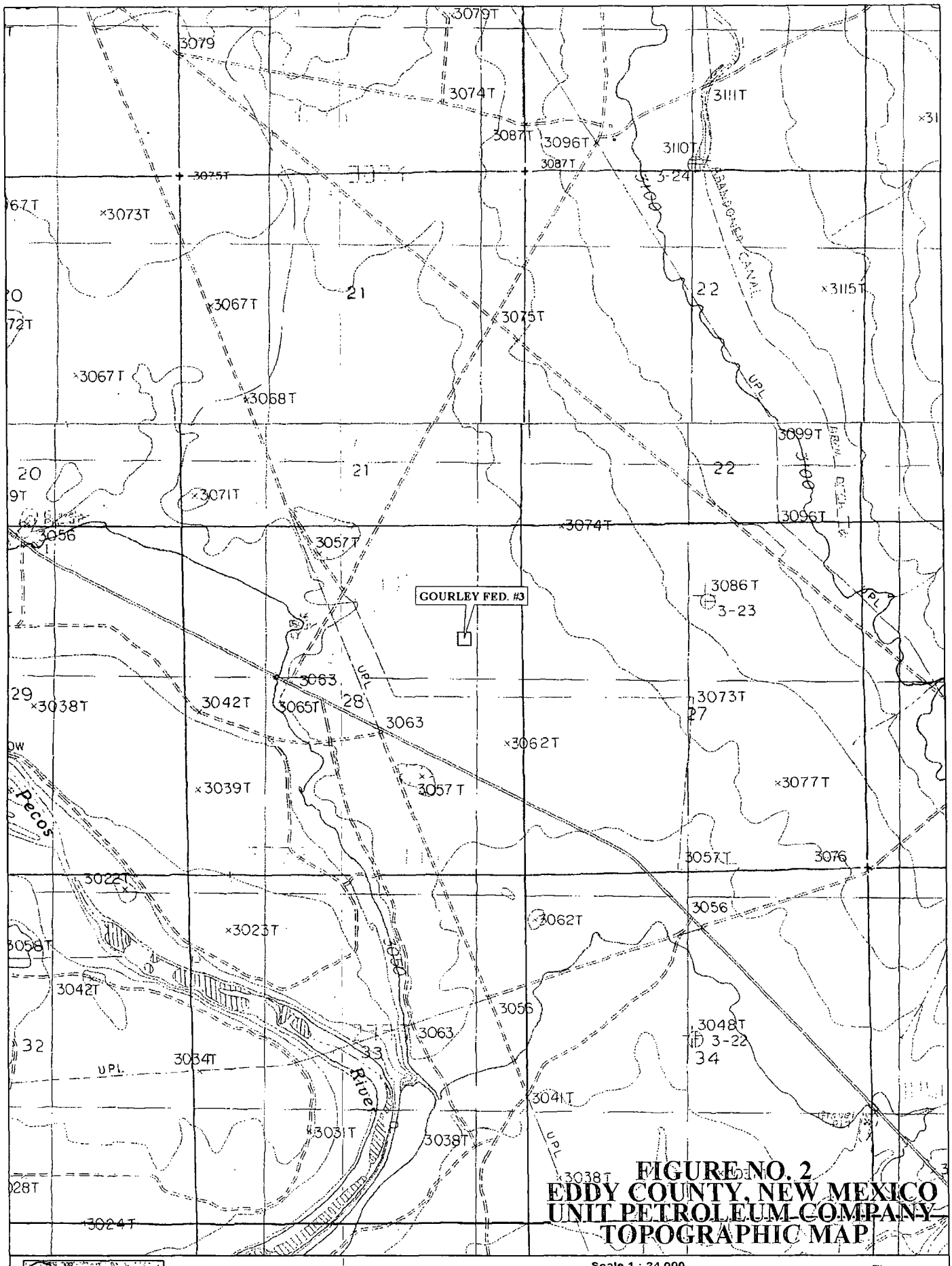
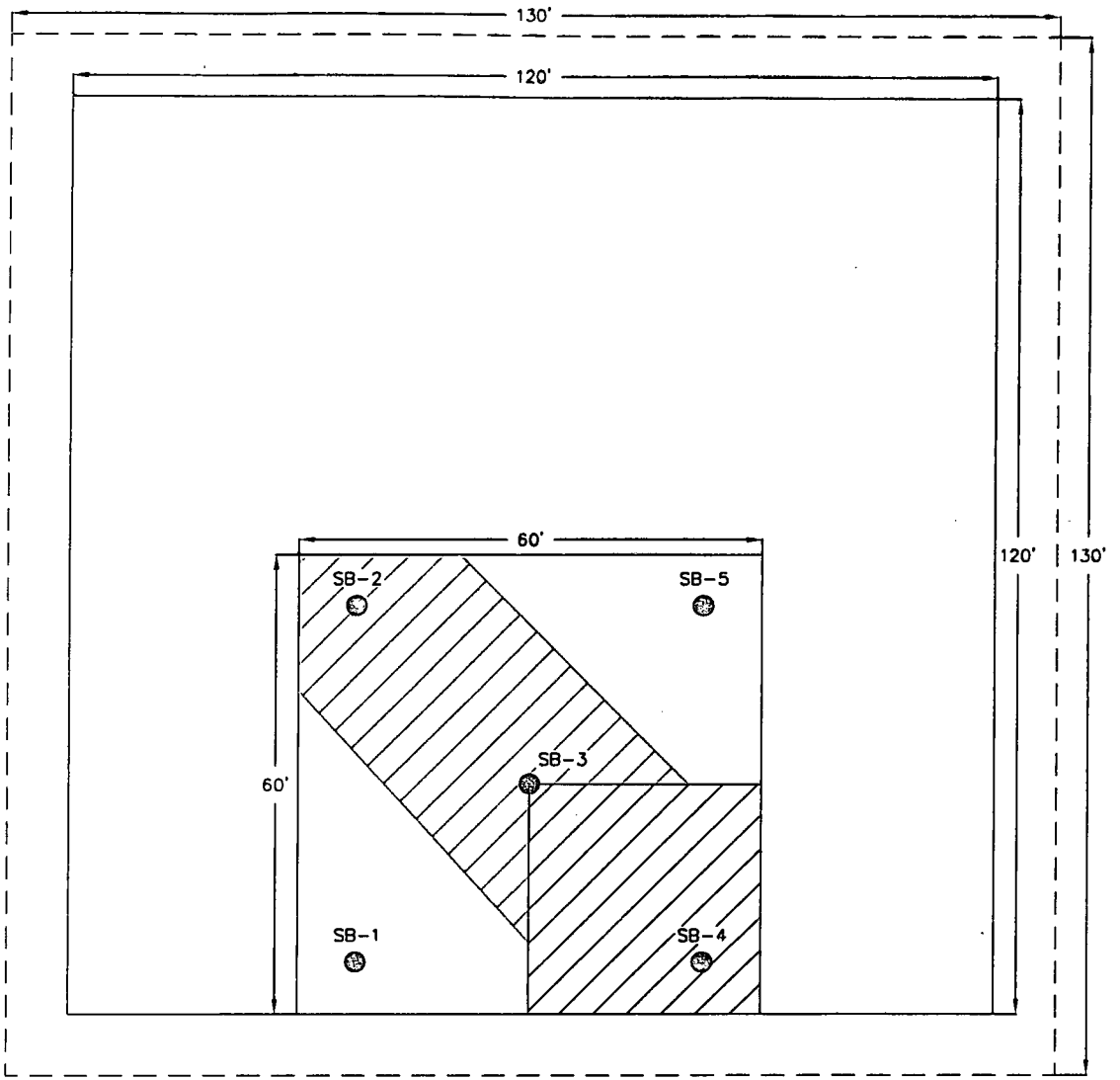


FIGURE NO. 2
EDDY COUNTY, NEW MEXICO
UNIT PETROLEUM COMPANY
TOPOGRAPHIC MAP

Scale 1 : 24,000
1" = 2000 ft

TN
MN
9.1°E



AREA EXCAVATED TO 5'

AREA EXCAVATED TO 15'

SOIL BORING LOCATIONS

EXTENT OF PIT (120' X 120')

EXTENT OF LINER (130' X 130')

NOT TO SCALE

FIGURE NO. 3

EDDY COUNTY, NEW MEXICO

UNIT PETROLEUM COMPANY

GOURLEY FEDERAL #3

TETRA TECH, INC.
MIDLAND, TEXAS

DATE: 6/16/09

DWN. BY: JJ

FILE: H:\UNIT\3654 GOURLEY FED #3 PDH

TABLE

Table 1
Unit Petroleum Corporation
Gourley Federal #3
Eddy County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft)	Soil Status		Chloride (mg/kg)
			In-Situ	Removed	
SB-1	10/26/09	4-5	X		4,570
	10/26/09	9-10	X		2,340
	10/26/09	14-15	X		2,360
	10/26/09	19-20	X		2,280
	10/26/09	24-25	X		584
	10/26/09	29-30	X		1,450
SB-2	10/26/09	4-5		X	5,030
	10/26/09	9-10	X		1,650
	10/26/09	14-15	X		3,570
	10/26/09	19-20	X		5,650
	10/26/09	24-25	X		4,570
	10/26/09	29-30	X		8,860
SB-3	10/26/09	4-5		X	5,230
	10/26/09	9-10		X	3,340
	06/12/09	14-15		X	2,530
	06/12/09	19-20	X		2,170
	06/12/09	24-25	X		4,580
	06/12/09	29-30	X		6,940
SB-4	10/26/09	4-5		X	4,020
	10/26/09	9-10		X	5,450
	10/26/09	14-15		X	5,610
	10/26/09	19-20	X		1,860
	10/26/09	24-25	X		866
	10/26/09	29-30	X		12,800
SB-5	10/26/09	4-5	X		2,180
	10/26/09	9-10	X		1,090
	10/26/09	14-15	X		945
	10/26/09	19-20	X		1,130
	10/26/09	24-25	X		529
	10/26/09	29-30	X		945

(-) Not Analyzed

APPENDIX A
LABORATORY ANALYTICAL

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
7801 East Bender Road, Suite F El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
8015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: October 29, 2009

Work Order: 9102801

Project Location: Eddy Co., NM
Project Name: Gourley Fed. #3
Project Number: 115-6403654

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
213181	SB-1 (5')	soil	2009-10-26	00:00	2009-10-27
213182	SB-1 (10')	soil	2009-10-26	00:00	2009-10-27
213183	SB-1 (15')	soil	2009-10-26	00:00	2009-10-27
213184	SB-1 (20')	soil	2009-10-26	00:00	2009-10-27
213185	SB-1 (25')	soil	2009-10-26	00:00	2009-10-27
213186	SB-1 (30')	soil	2009-10-26	00:00	2009-10-27
213187	SB-2 (5')	soil	2009-10-26	00:00	2009-10-27
213188	SB-2 (10')	soil	2009-10-26	00:00	2009-10-27
213189	SB-2 (15')	soil	2009-10-26	00:00	2009-10-27
213190	SB-2 (20')	soil	2009-10-26	00:00	2009-10-27

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
213191	SB-2 (25')	soil	2009-10-26	00:00	2009-10-27
213192	SB-2 (30')	soil	2009-10-26	00:00	2009-10-27
213193	SB-3 (5')	soil	2009-10-26	00:00	2009-10-27
213194	SB-3 (10')	soil	2009-10-26	00:00	2009-10-27
213195	SB-3 (15')	soil	2009-10-26	00:00	2009-10-27
213196	SB-3 (20')	soil	2009-10-26	00:00	2009-10-27
213197	SB-3 (25')	soil	2009-10-26	00:00	2009-10-27
213198	SB-3 (30')	soil	2009-10-26	00:00	2009-10-27
213199	SB-4 (5')	soil	2009-10-27	00:00	2009-10-27
213200	SB-4 (10')	soil	2009-10-27	00:00	2009-10-27
213201	SB-4 (15')	soil	2009-10-27	00:00	2009-10-27
213202	SB-4 (20')	soil	2009-10-27	00:00	2009-10-27
213203	SB-4 (25')	soil	2009-10-27	00:00	2009-10-27
213204	SB-4 (30')	soil	2009-10-27	00:00	2009-10-27
213205	SB-5 (5')	soil	2009-10-27	00:00	2009-10-27
213206	SB-5 (10')	soil	2009-10-27	00:00	2009-10-27
213207	SB-5 (15')	soil	2009-10-27	00:00	2009-10-27
213208	SB-5 (20')	soil	2009-10-27	00:00	2009-10-27
213209	SB-5 (25')	soil	2009-10-27	00:00	2009-10-27
213210	SB-5 (30')	soil	2009-10-27	00:00	2009-10-27

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Gourley Fed. #3 were received by TraceAnalysis, Inc. on 2009-10-27 and assigned to work order 9102801. Samples for work order 9102801 were received intact at a temperature of 19.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	55329	2009-10-28 at 10:41	64786	2009-10-28 at 14:33
Chloride (Titration)	SM 4500-Cl B	55330	2009-10-28 at 10:42	64787	2009-10-28 at 14:34
Chloride (Titration)	SM 4500-Cl B	55331	2009-10-28 at 10:42	64788	2009-10-28 at 14:35

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9102801 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 213181 - SB-1 (5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4570**	mg/Kg	100	4.00

Sample: 213182 - SB-1 (10')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2340**	mg/Kg	100	4.00

Sample: 213183 - SB-1 (15')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2360**	mg/Kg	100	4.00

Sample: 213184 - SB-1 (20')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2280**	mg/Kg	100	4.00

Sample: 213185 - SB-1 (25')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**584**	mg/Kg	50	4.00

Sample: 213186 - SB-1 (30')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1450**	mg/Kg	50	4.00

Sample: 213187 - SB-2 (5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5030**	mg/Kg	100	4.00

Sample: 213188 - SB-2 (10')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1650**	mg/Kg	50	4.00

Sample: 213189 - SB-2 (15')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3570**	mg/Kg	100	4.00

Sample: 213190 - SB-2 (20')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5650**	mg/Kg	100	4.00

Sample: 213191 - SB-2 (25')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4570**	mg/Kg	100	4.00

Sample: 213192 - SB-2 (30')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**8860**		mg/Kg	100	4.00

Sample: 213193 - SB-3 (5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**5230**		mg/Kg	100	4.00

Sample: 213194 - SB-3 (10')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**3340**		mg/Kg	100	4.00

Sample: 213195 - SB-3 (15')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2530**		mg/Kg	100	4.00

Sample: 213196 - SB-3 (20')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2170**	mg/Kg	100	4.00

Sample: 213197 - SB-3 (25')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4580**	mg/Kg	100	4.00

Sample: 213198 - SB-3 (30')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6940**	mg/Kg	100	4.00

Sample: 213199 - SB-4 (5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4020**	mg/Kg	100	4.00

Sample: 213200 - SB-4 (10')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5450**	mg/Kg	100	4.00

Sample: 213201 - SB-4 (15')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5610**	mg/Kg	100	4.00

Sample: 213202 - SB-4 (20')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1860**	mg/Kg	50	4.00

Sample: 213203 - SB-4 (25')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**866**	mg/Kg	50	4.00

Sample: 213204 - SB-4 (30')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**12800**	mg/Kg	100	4.00

Sample: 213205 - SB-5 (5')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2180**	mg/Kg	100	4.00

Sample: 213206 - SB-5 (10')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1090**	mg/Kg	50	4.00

Sample: 213207 - SB-5 (15')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**945**	mg/Kg	50	4.00

Sample: 213208 - SB-5 (20')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1130**	mg/Kg	50	4.00

Sample: 213209 - SB-5 (25')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**529**	mg/Kg	50	4.00

Sample: 213210 - SB-5 (30')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	64788	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55331	Sample Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**945**	mg/Kg	50	4.00

Method Blank (1) QC Batch: 64786

QC Batch:	64786	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55329	QC Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 64787

QC Batch:	64787	Date Analyzed:	2009-10-28	Analyzed By:	AR
Prep Batch:	55330	QC Preparation:	2009-10-28	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 64788

QC Batch: 64788 Date Analyzed: 2009-10-28 Analyzed By: AR
Prep Batch: 55331 QC Preparation: 2009-10-28 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 64786 Date Analyzed: 2009-10-28 Analyzed By: AR
Prep Batch: 55329 QC Preparation: 2009-10-28 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	98.8	mg/Kg	1	100	<2.18	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 64787 Date Analyzed: 2009-10-28 Analyzed By: AR
Prep Batch: 55330 QC Preparation: 2009-10-28 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.3	mg/Kg	1	100	<2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.1	mg/Kg	1	100	<2.18	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 64788 | Date Analyzed: 2009-10-28 | Analyzed By: AR
Prep Batch: 55331 | QC Preparation: 2009-10-28 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.7	mg/Kg	1	100	<2.18	100	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 213190

QC Batch: 64786 | Date Analyzed: 2009-10-28 | Analyzed By: AR
Prep Batch: 55329 | QC Preparation: 2009-10-28 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15700	mg/Kg	100	10000	5650	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	15800	mg/Kg	100	10000	5650	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 213200

QC Batch: 64787 | Date Analyzed: 2009-10-28 | Analyzed By: AR
Prep Batch: 55330 | QC Preparation: 2009-10-28 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15600	mg/Kg	100	10000	5450	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	15700	mg/Kg	100	10000	5450	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 213210

QC Batch: 64788 | Date Analyzed: 2009-10-28 | Analyzed By: AR
Prep Batch: 55331 | QC Preparation: 2009-10-28 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11200	mg/Kg	100	10000	945	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11300	mg/Kg	100	10000	945	104	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 64786 | Date Analyzed: 2009-10-28 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.7	100	85 - 115	2009-10-28

Standard (CCV-1)

QC Batch: 64786 | Date Analyzed: 2009-10-28 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-10-28

Standard (ICV-1)

QC Batch: 64787 | Date Analyzed: 2009-10-28 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-10-28

Standard (CCV-1)

QC Batch: 64787 | Date Analyzed: 2009-10-28 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-10-28

Standard (ICV-1)

QC Batch: 64788 Date Analyzed: 2009-10-28 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-10-28

Standard (CCV-1)

QC Batch: 64788 Date Analyzed: 2009-10-28 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.8	100	85 - 115	2009-10-28

Order #: 9102801

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: 1 OF: 3

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: Unit Petroleum

SITE MANAGER: Jeffrey Kindley

PROJECT NO.: 115-640 3654

PROJECT NAME: Gourley Federal #3

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
213181	10/26/09		S		✓	SB-1 (5')	1					✓												✓				
182	10/26/09		S		✓	SB-1 (10')	1					✓												✓				
183	10/26/09		S		✓	SB-1 (15')	1					✓												✓				
184	10/26/09		S		✓	SB-1 (20')	1					✓												✓				
185	10/26/09		S		✓	SB-1 (25')	1					✓												✓				
186	10/26/09		S		✓	SB-1 (30')	1					✓												✓				
187	10/26/09		S		✓	SB-2 (5')	1					✓												✓				
188	10/26/09		S		✓	SB-2 (10')	1					✓												✓				
189	10/26/09		S		✓	SB-2 (15')	1					✓												✓				
190	10/26/09		S		✓	SB-2 (20')	1					✓												✓				

RELINQUISHED BY: (Signature) Jeffrey Kindley — Date: 10/27/09 Time: 1700

RECEIVED BY: (Signature) — Date: 10/27/09 Time: 17:00

SAMPLED BY: (Print & Initial) Jeffrey Kindley JWK — Date: 10/27/09 Time:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS
HAND DELIVERED UPS

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

TETRA TECH CONTACT PERSON: Jeffrey Kindley

Results by:

RECEIVING LABORATORY: Texas Analysis

ADDRESS:

CITY: Midland STATE: TX ZIP:

CONTACT: PHONE: DATE: TIME:

RECEIVED BY: (Signature)

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 19.0°C intact

REMARKS: All tests-Midland

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 9102801

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: Unit Petroleum
SITE MANAGER: Jeffrey Kindley
PROJECT NO.: 115-6403654
PROJECT NAME: Gourley Federal #3

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
213191	10/26/09		S		✓	SB-2 (25')	1					✓												✓				
192	10/26/09		S		✓	SB-2 (30')	1					✓												✓				
193	10/26/09		S		✓	SB-3 (5')	1					✓												✓				
194	10/26/09		S		✓	SB-3 (10')	1					✓												✓				
195	10/26/09		S		✓	SB-3 (15')	1					✓												✓				
196	10/26/09		S		✓	SB-3 (20')	1					✓												✓				
197	10/26/09		S		✓	SB-3 (25')	1					✓												✓				
198	10/26/09		S		✓	SB-3 (30')	1					✓												✓				
199	10/27/09		S		✓	SB-4 (5')	1					✓												✓				
200	10/27/09		S		✓	SB-4 (10')	1					✓												✓				

RELINQUISHED BY: (Signature) — Date: October 27, 2009 — Time: 1700
RECEIVED BY: (Signature) — Date: 10/27/09 — Time: 1708
SAMPLED BY: (Print & Initial) Jeffrey Kindley JWK — Date: 10/26/09 — Time:
RELINQUISHED BY: (Signature) — Date: — Time:
RECEIVED BY: (Signature) — Date: — Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS — AIRBILL #: — OTHER:
RELINQUISHED BY: (Signature) — Date: — Time:
RECEIVED BY: (Signature) — Date: — Time:
RECEIVING LABORATORY: Texas Analysis
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:
TETRA TECH CONTACT PERSON: Jeffrey Kindley
Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 19.0°C intact
REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 9102801

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: Unit Petroleum

SITE MANAGER: Jeffrey Kindley

PROJECT NO.: 115-6403654

PROJECT NAME: Gourley Federal #3

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	Past. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
21320	10/27/09		S		✓	SB-4 (15')	1					✓													✓				
202	10/27/09		S		✓	SB-4 (20')	1					✓													✓				
203	10/27/09		S		✓	SB-4 (25')	1					✓													✓				
204	10/27/09		S		✓	SB-4 (30')	1					✓													✓				
205	10/27/09		S		✓	SB-5 (5')	1					✓													✓				
206	10/27/09		S		✓	SB-5 (10')	1					✓													✓				
207	10/27/09		S		✓	SB-5 (15')	1					✓													✓				
208	10/27/09		S		✓	SB-5 (20')	1					✓													✓				
209	10/27/09		S		✓	SB-5 (25')	1					✓													✓				
210	10/27/09		S		✓	SB-5 (30')	1					✓													✓				

RELINQUISHED BY: (Signature) Jeffrey Kindley — Date: 10/27/09 Time: 1700

RECEIVED BY: (Signature) — Date: 10/27/09 Time: 17:00

SAMPLED BY: (Print & Initial) Jeffrey Kindley JWK — Date: Oct 27, 2009 Time:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS — AIRBILL #: OTHER:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

TETRA TECH CONTACT PERSON: Jeffrey Kindley — Results by:

RECEIVING LABORATORY: Trace Analysis
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) — DATE: TIME:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 19.0°C intact

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

APPENDIX B
SOIL BORING LOGS

SAMPLE LOG

Boring/Well: SB-1
Project Number: 3654
Client: Unit Petroleum Company
Site Location: Gourley Federal #3
Location: Eddy County, New Mexico
Total Depth 30
Date Installed: 10/26/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Backfill of sand/gravel and limestone
5-10	--	Tan fine grain sand with gravel (backfill)
10-15	--	Tan fine grain sand
15-20	--	Tan coarse grain sand
20-25	--	Tan fine grain sand
25-30	--	Tan coarse grain sand

Total Depth is 30 feet No groundwater was encountered during drilling.

SAMPLE LOG

Boring/Well: SB-2
Project Number: 3654
Client: Unit Petroleum Company
Site Location: Gourley Federal #3
Location: Eddy County, New Mexico
Total Depth 30
Date Installed: 10/26/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Backfill of sand with brown silt intermixed
5-10	--	Tan fine grain sand
10-15	--	Tan fine grain sand
15-20	--	Tan fine grain sand
20-25	--	Tan gravelly sand
25-30	--	Red sandy clay

Total Depth is 30 feet No groundwater was encountered during drilling.

SAMPLE LOG

Boring/Well: SB-3
Project Number: 3654
Client: Unit Petroleum Company
Site Location: Gourley Federal #3
Location: Eddy County, New Mexico
Total Depth 30
Date Installed: 10/26/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Tan fine grain sand
5-10	--	Tan fine grain sand with limestone
10-15	--	Tan fine grain sand
15-20	--	Tan fine grain sand
20-25	--	Tan medium grain sand
25-30	--	Tan fine grain sand

Total Depth is 30 feet No groundwater was encountered during drilling.

SAMPLE LOG

Boring/Well: SB-4
Project Number: 3654
Client: Unit Petroleum Company
Site Location: Gourley Federal #3
Location: Eddy County, New Mexico
Total Depth 30
Date Installed: 10/27/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Tan fine grain sand
5-10	--	Tan fine grain sand with limestone
10-15	--	Tan fine grain sand
15-20	--	Tan fine grain sand
20-25	--	Tan medium grain sand
25-30	--	Tan fine grain sand

Total Depth is 30 feet No groundwater was encountered during drilling.

SAMPLE LOG

Boring/Well: SB-5
Project Number: 3654
Client: Unit Petroleum Company
Site Location: Gourley Federal #3
Location: Eddy County, New Mexico
Total Depth 30
Date Installed: 10/27/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Tan fine grain calcareous sand
5-10	--	Tan fine grain calcareous sand
10-15	--	Tan fine grain sand
15-20	--	Tan fine grain sand
20-25	--	Tan fine grain sand
25-30	--	Tan fine grain sand

Total Depth is 30 feet No groundwater was encountered during drilling.

APPENDIX C
INITIAL/FINAL C-141 & C-144

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 Unit Petroleum Company	Contact Skip L. Wedel
Address 7130 S. Lewis Ave. Ste. 1000	Telephone No. (918) 477-4574
Facility Name Gourley Federal 003 Q	Facility Type Production

Surface Owner BLM	Mineral Owner BLM	Lease No. NM-26684-A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	28	22S	28E	1650	North	810 Feet	East	Eddy

Latitude 32° 22' 0.48" N **Longitude** 104° 5' 12.91" W

NATURE OF RELEASE

Type of Release Drilling fluids contained in reserve pit	Volume of Release	Volume Recovered
Source of Release Drilling activity	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.*

Describe Area Affected and Cleanup Action Taken.*

Samples were taken from the pit bottom material which contain chloride levels above 500 mg/kg. Groundwater samples collected up gradient from the pit and south of the pit indicate seemingly elevated background chloride levels in the area. Unit Petroleum Company is working with OCD to develop an approved plan to address the chloride levels in the center of the pit.

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:

Printed Name: Skip L. Wedel, CSP

Title: Manager – Safety, Health, Environment

E-mail Address: skip.wedel@unitcorp.com

Date: June 2, 2009 Phone: (918) 477-4574

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

* 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
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 June 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: Unit Petroleum Company	Contact: Skip L. Wedel
Address: 7130 S. Lewis Ave. Ste. 1000	Telephone No. (918) 477-4574
Facility Name: Gourley Federal #3	Facility Type: Production

Surface Owner BLM	Mineral Owner BLM	Lease No. NM-26684-A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	28	22S	28E	1650	North	810	East	Eddy

Latitude 32° 22' 0.48"N **Longitude** 104° 05' 12.91"W

NATURE OF RELEASE

Type of Release Drilling fluids contained in pit	Volume of Release	Volume Recovered
Source of Release Drilling activity	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.*

Describe Area Affected and Cleanup Action Taken.*
Five soil borings were installed in horseshoe area of pit. Upon completion, two areas measuring 30' x 20' x 5' and 30' x 30' x 15' were excavated and approximately 670 cubic yards of soil transported offsite. Site was leveled, brought up to 5 feet bgs and a 40 mil liner measuring 130' x 130' installed over former pit area. Upon completion of liner, clean soils were placed in pit, brought up to surface grade and reseeded with BLM #3 seed mixture.

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: Skip L. Wedel, CSP	Approved by District Supervisor:	
Title: Manager-Safety, Health, Environment	Approval Date:	Expiration Date:
E-mail Address: skip.wedel@unitcorp.com	Conditions of Approval:	Attached ☐
Date: 11/20/09 Phone: (918) 477-4574		

* Attach Additional Sheets If Necessary

District I
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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Month - Year
APR 2? 2007
OCD - ARTESIA, NM

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Unit Pet Telephone: 432-685-8020 e-mail address:
Address: 407 N. Big Spring st. Ste 101 Midland TX 79701
Facility or well name: Gourley Fed 3 API #: 30015 32403 U/L or Qtr/Qtr SW/NE Sec 28 T 22s R 23E
County: Eddy Latitude Longitude NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☐ Thickness 12 mil Clay ☐ Pit Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) 0 (0 points)
	Ranking Score (Total Points)	0

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☒ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: Sweatt Const. plan to trench bury the drilling pit at the Gourley Fed #3. As per rule 50 of Pit and Below-Grade TANK Guidelines, we we line the trench with 12 mil liner and bury pit contents and liner then cover with 20 mil plastic. We will cap with 3' of native material capable of supporting native plant growth. We will contour the pit area to prevent erosion and ponding of rainwater onto the site

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: 4-23-04
Printed Name/Title Brad Larson / Agent Signature Brad Larson

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title Brad W. Green District II Supervisor

Notify OCD 24 hours prior to beginning pit closure

Samples are to be obtained from pit area and analysis submitted to NMOCD prior to back-filling

Date: 4/24/07

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

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☒ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Unit Petroleum Corporation OGRID #:
Address: 7130 South Lewis Avenue, Suite 1000, Tulsa, OK 74136
Facility or well name: Gourley Federal #3 Well
API Number: 30-015-34152 OCD Permit Number:
U/L or Qtr/Qtr H Section 28 Township T-22-S Range R-28-E County: Eddy
Center of Proposed Design: Latitude 32.36611 N Longitude 104.08717 W NAD: ☒1927 ☐ 1983
Surface Owner: ☒Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 40 mil ☐ LLDPE ☒ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: bbl Dimensions: L 120 x W 120 x D 5

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: ☐ Welded ☐ Factory ☐ Other

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ HDPE ☐ PVC ☐ Other

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method:
- ☐ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date: 10-15-09**

22.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

- Disposal Facility Name: Lea Land, Inc. Disposal Facility Permit Number: WM-01-035

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☒ Disposal Facility Name and Permit Number
☒ Soil Backfilling and Cover Installation
☒ Re-vegetation Application Rates and Seeding Technique
☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude 32.36611 N Longitude 104.08717 W NAD: ☒ 1927 ☐ 1983

25.
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Jeffrey Kindley, P.G., Tetra Tech, Inc. (Agent for Unit Petroleum Corp.) Title: Sr. PM

Signature: Jeffrey Kindley Date: 11-10-09

e-mail address: jeff.kindley@tetratech.com Telephone: 432-682-4559

APPENDIX D
SITE PHOTOGRAPHS

Unit Petroleum Corporation
Gourley Federal #3 Well Site
Eddy County, New Mexico

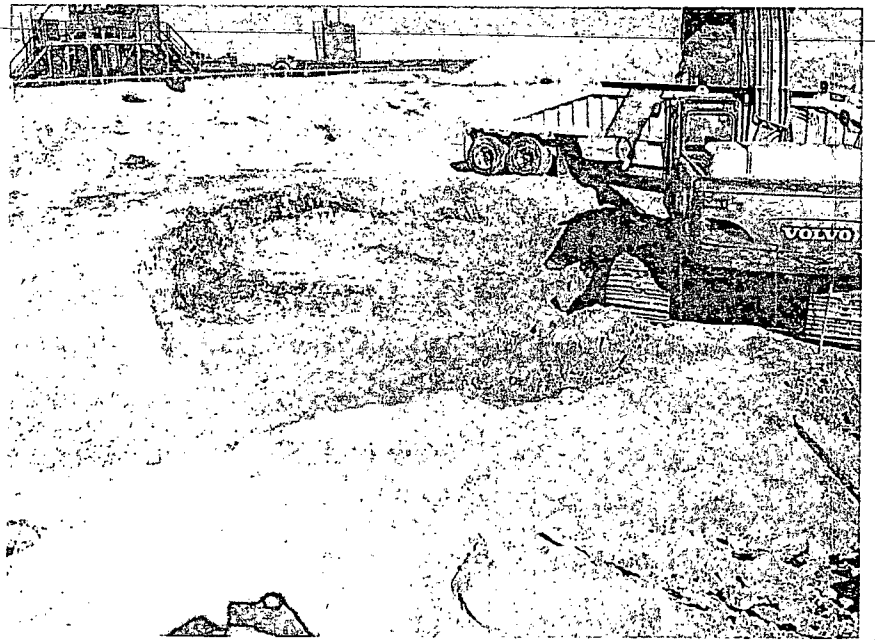

Photo 1: Removal of impacted soils.

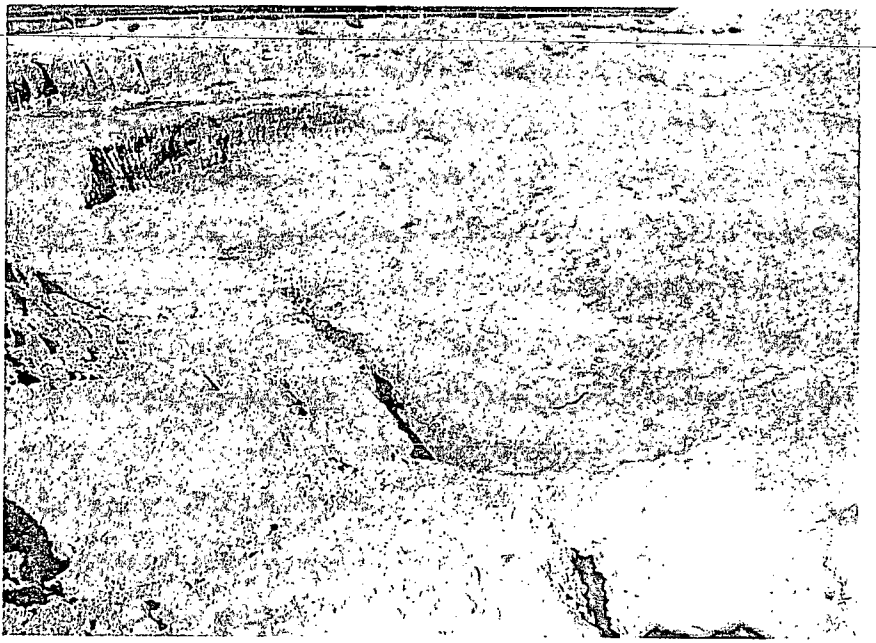

Photo 2: Excavated impacted soils.

Unit Petroleum Corporation
Gourley Federal #3 Well Site
Eddy County, New Mexico

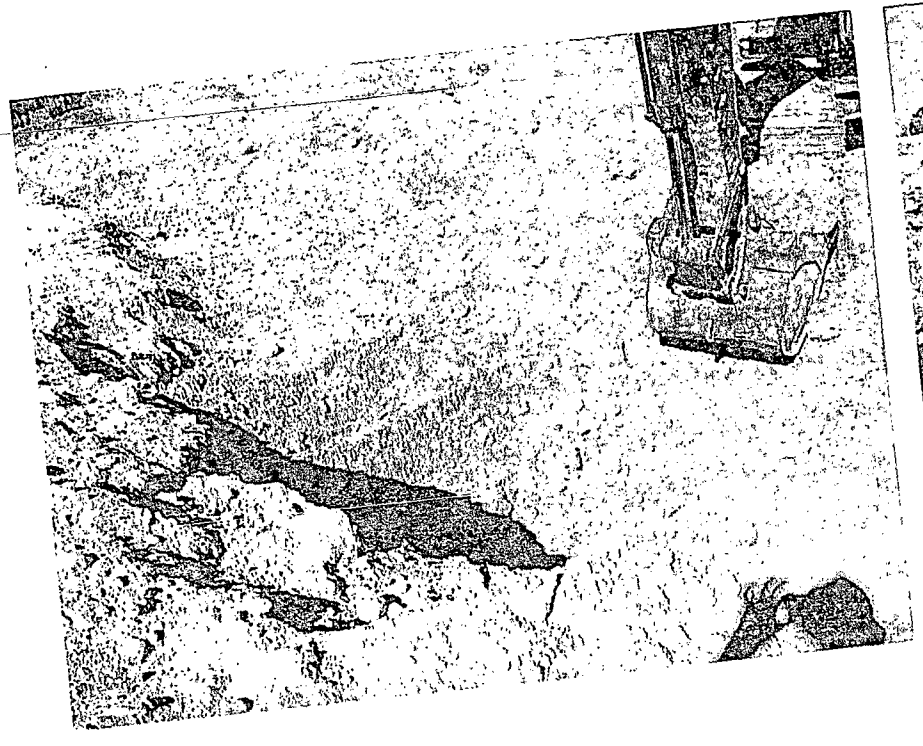

Photo 3: Excavation of impacted soils.

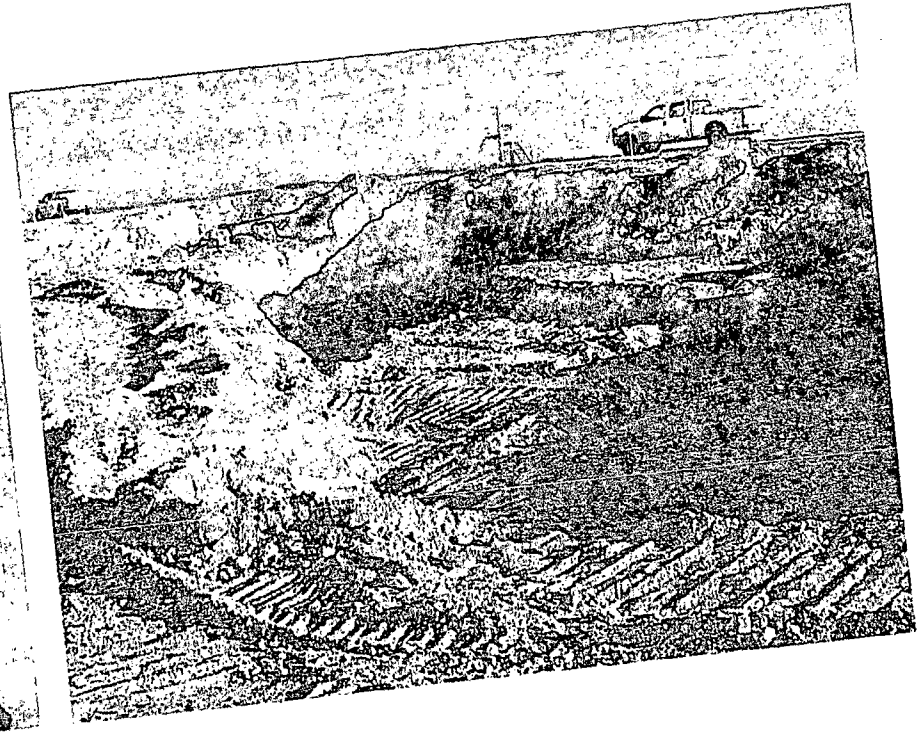

Photo 4: View of pit after removal of impacted soils.

Unit Petroleum Corporation
Gourley Federal #3 Well Site
Eddy County, New Mexico

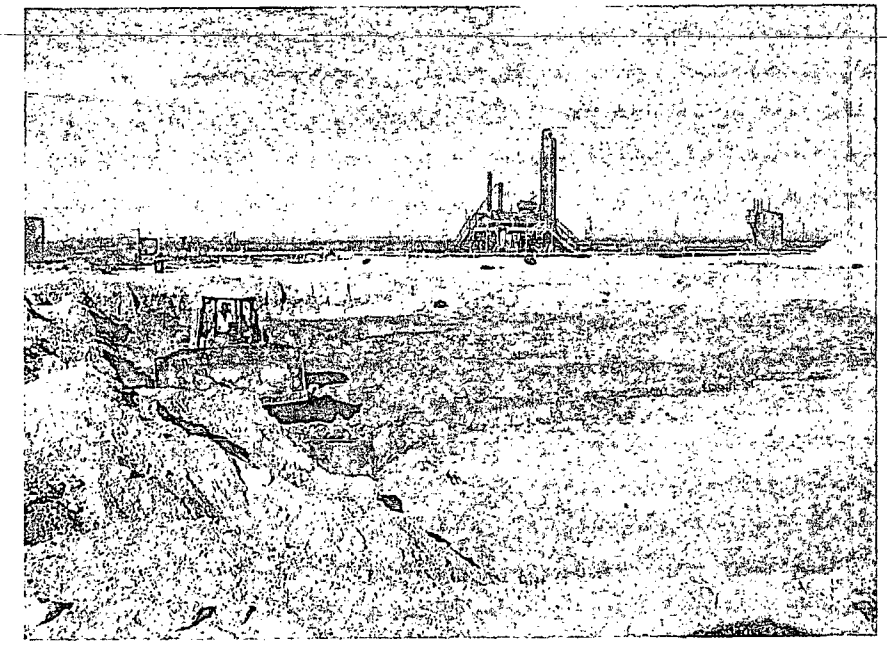

Photo 5: Leveling of soils for preparation of laying liner.

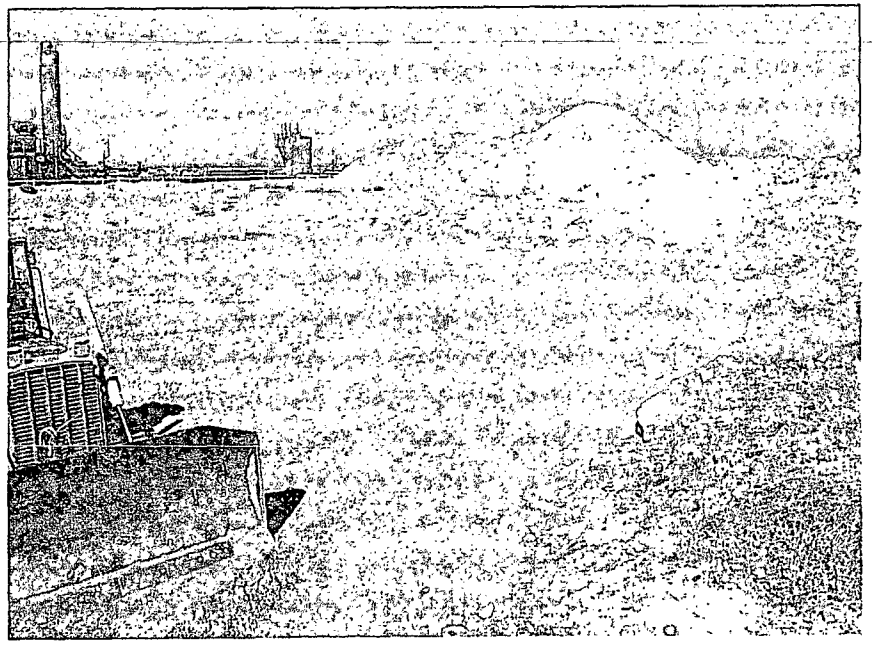

Photo 6: Completed leveling of soils at 5 feet below grade.

Unit Petroleum Corporation
Gourley Federal #3 Well Site
Eddy County, New Mexico

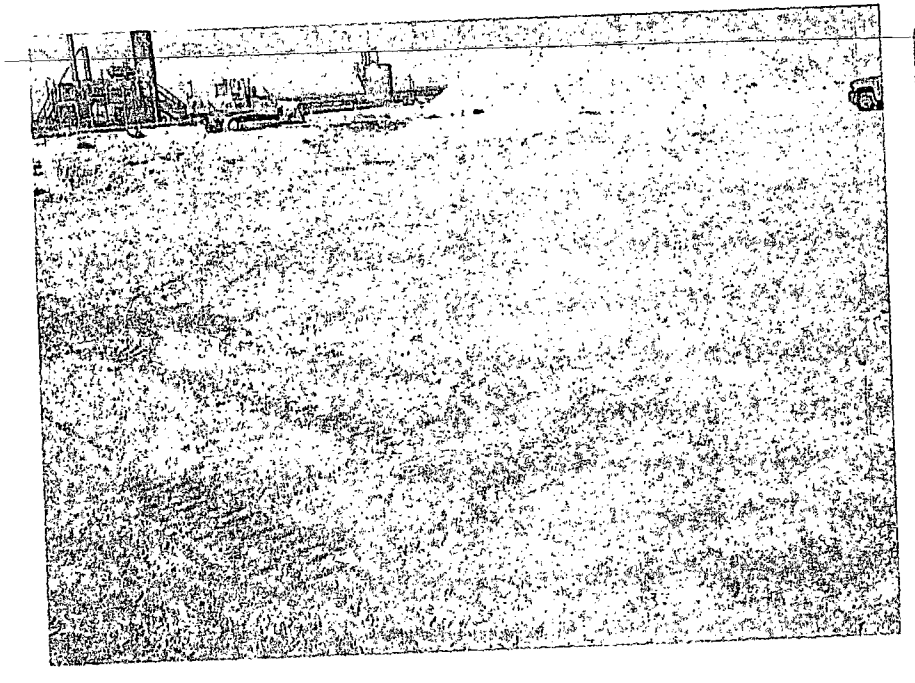

Photo 7: Completed leveling of site for placement of liner.

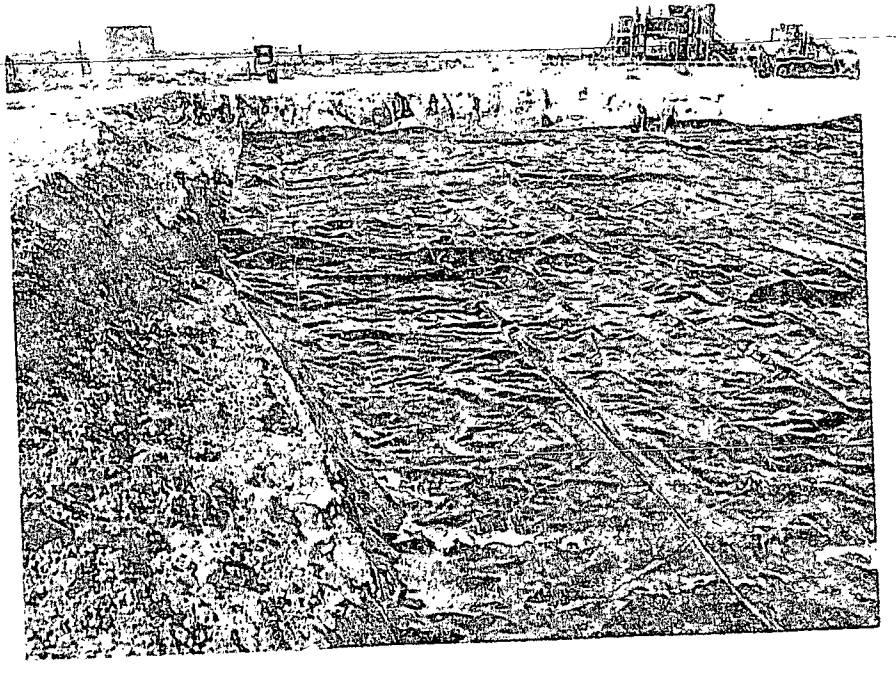

Photo 8: Placement of liner at 5 feet below grade.

Unit Petroleum Corporation
Gourley Federal #3 Well Site
Eddy County, New Mexico

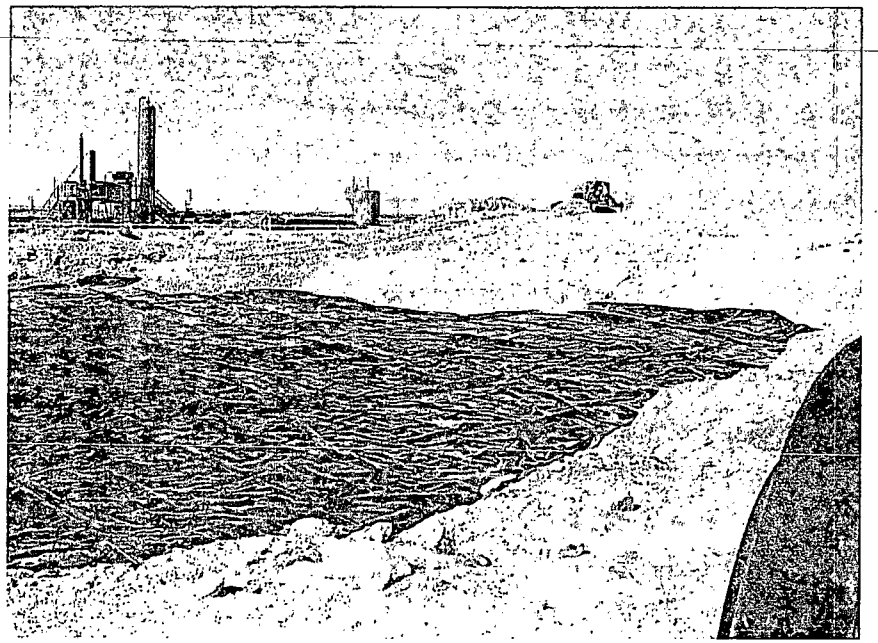

Photo 9: Backfilling site over liner.

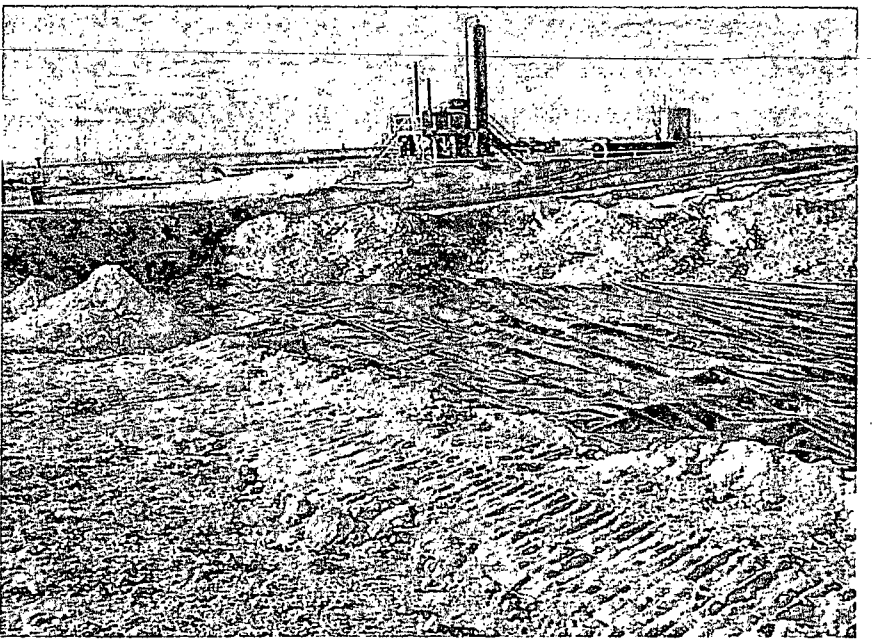

Photo 10: Backfilling site over line.

Unit Petroleum Corporation
Gourley Federal #3 Well Site
Eddy County, New Mexico

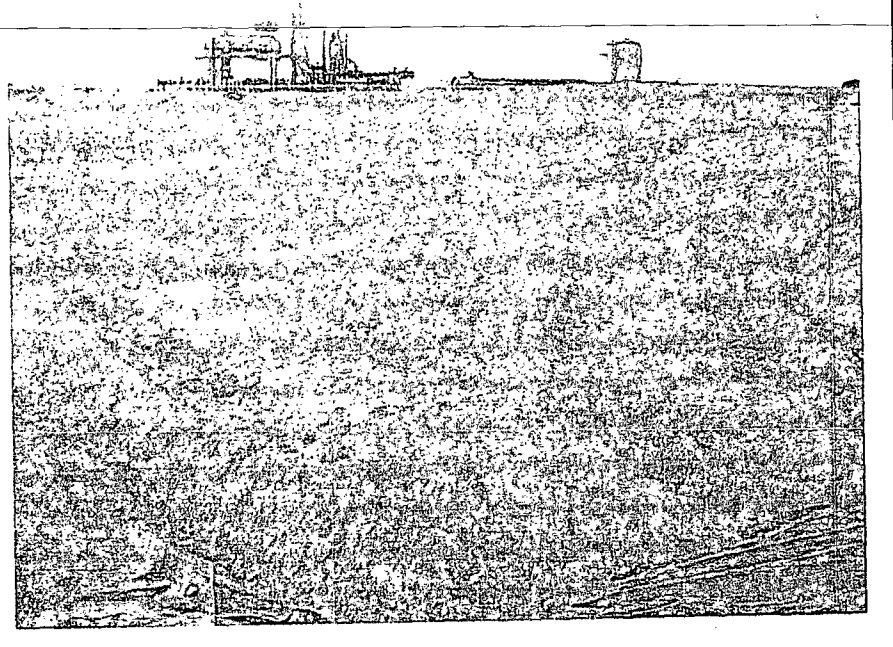

Photo 11: Backfilled material over liner.

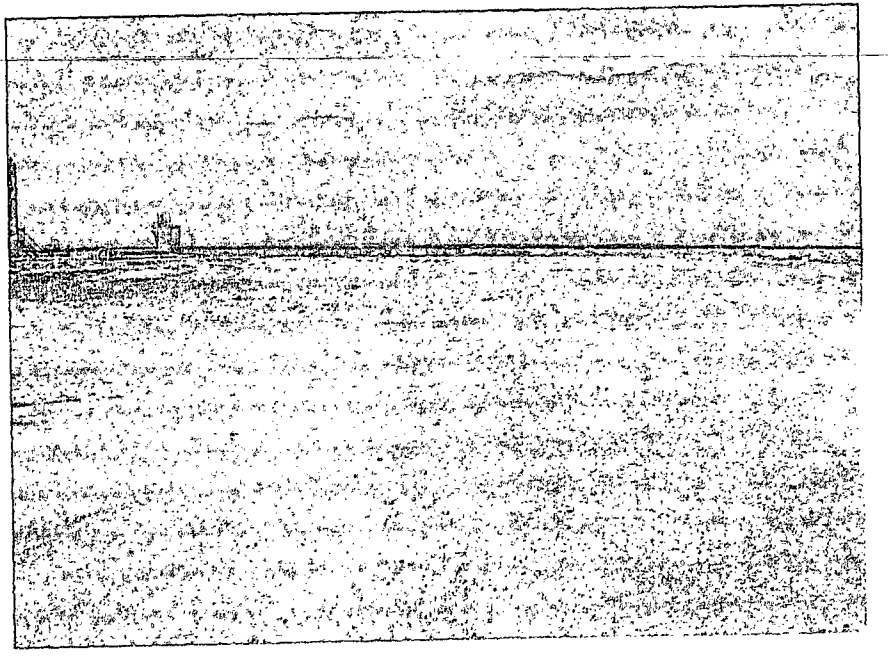

Photo 12: Completed backfill to 2 feet below ground surface.

Unit Petroleum Corporation
Gourley Federal #3 Well Site
Eddy County, New Mexico

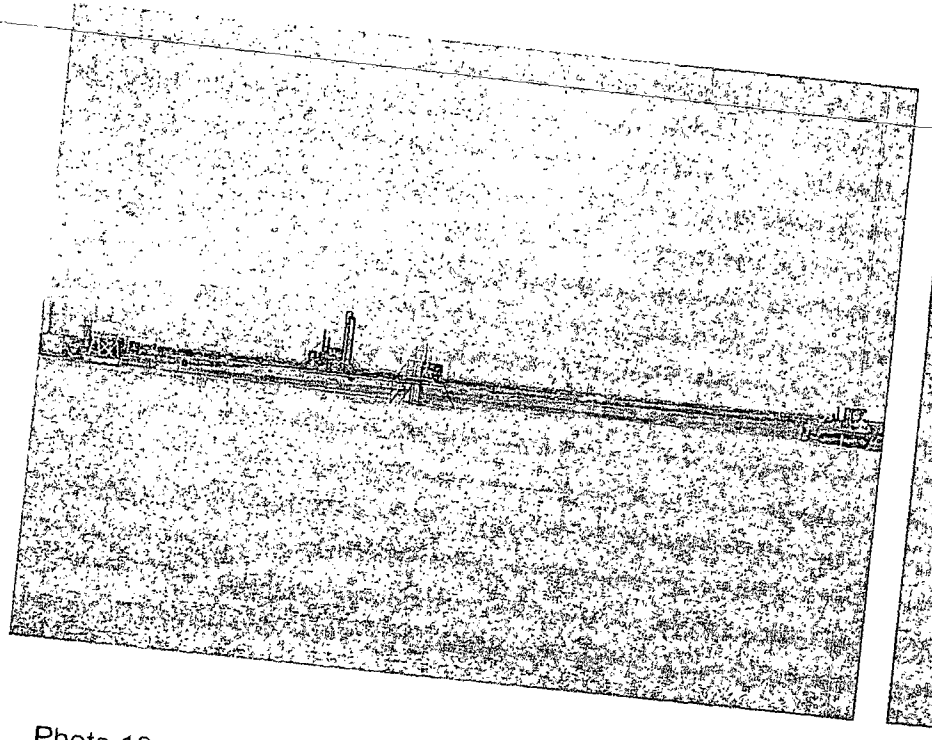

Photo 13: Completed backfilling of site.

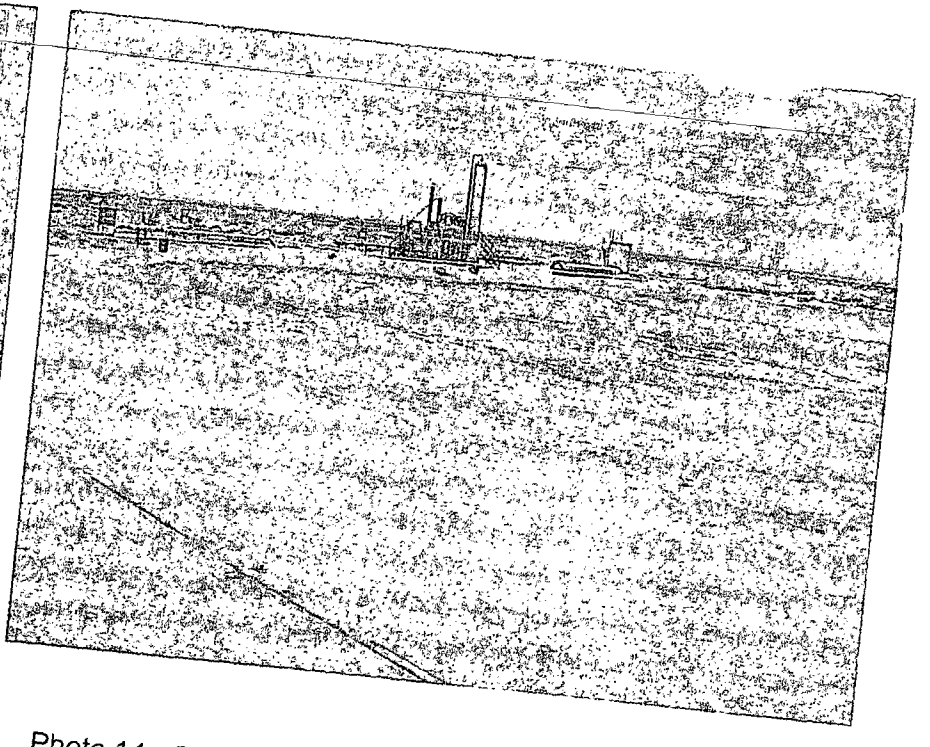

Photo 14: Completed backfilling of site.

Unit Petroleum Company
Gourley Federal #3 Well Site
Eddy County, New Mexico

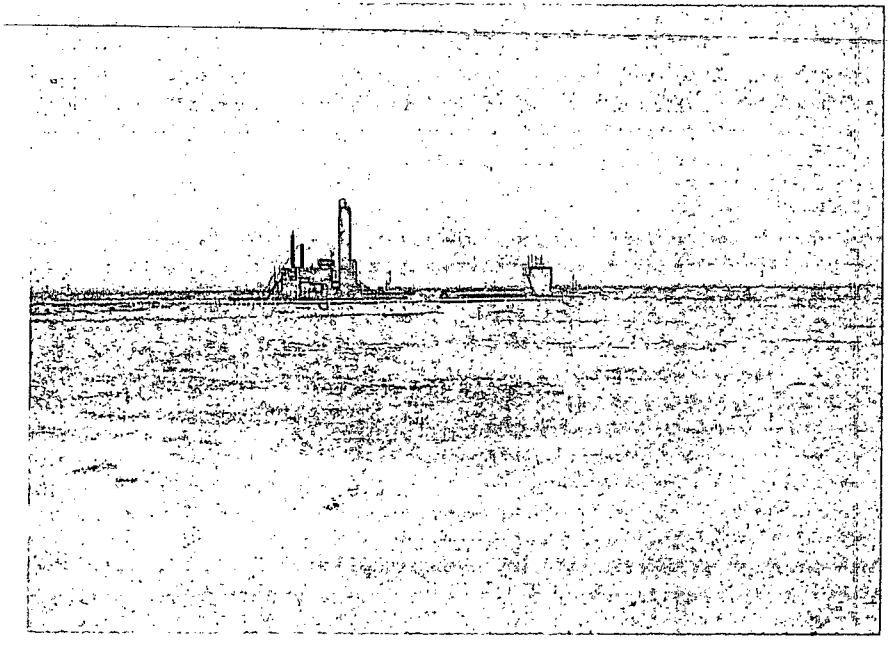

Photo 15: Completed backfilling of site.

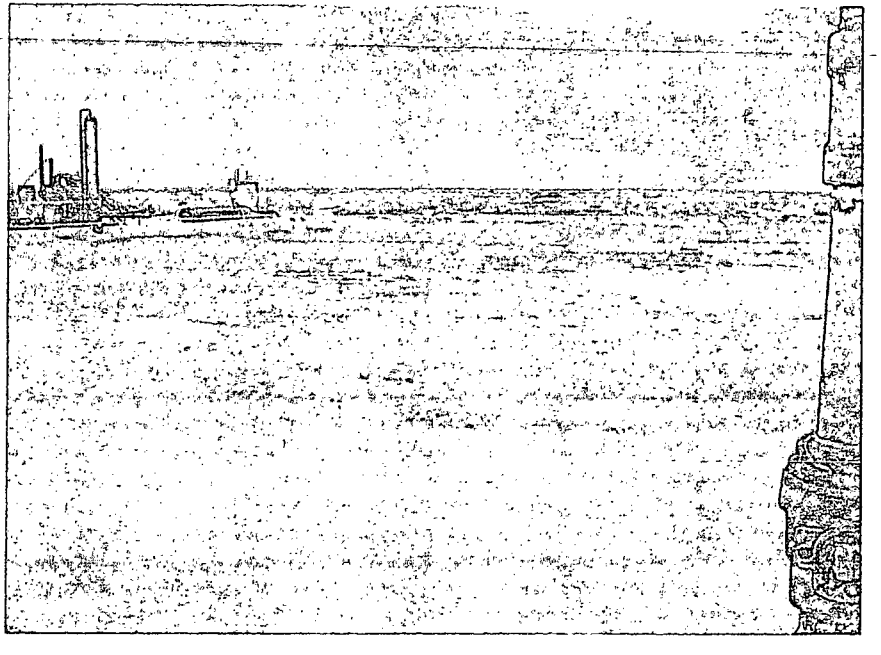

Photo 16: Completed backfilling of site.