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-144
June 1, 2004

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

Pit or Below-Grade Tank Registration or Closure

Final Report

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: Western Reserves Oil Company INC. Telephone: 432-682-4782 e-mail address: bmcbeth@westernreserves.com
Address: P O Box 993 Midland, TX 79702
Facility or well name: Lake McMillian 21 #1 API #: 30-015-35444 U/L or Qtr/Qtr C Sec 21 T 19S R 26E
County: Eddy Latitude 32.65.1303 Longitude 104.38.838 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 20 mil Clay ☐ Pit Volume 3800 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) XXX (0 points)
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) XXX
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 points) XXX
	Ranking Score (Total Points)	**10 points**

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: A burial pit was excavated and lined with a 12 mil impervious liner. Drilling mud was stiffened and placed in burial pit. The burial pit was capped with a 20 mil liner and backfilled with stockpiled soil. After drilling mud was removed the pit bottom was tested and meet NMOCD standards then backfilled with clean native soil. A plat map, analytical and pictures are attached.

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: 8/29/07
Printed Name/Title CHRIS KENAUD / AGENT Signature _____

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 _____ Signature _____ Signed By Mike Bratcher Date: OCT 12 2007

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

August 28, 2007

Western Reserves
Mr. Chris Renaud
P O Box 993
Midland, TX 79702

Re: Drilling Pit Closure of Western Reserves – Lake McMillian 21 #1
UL 'C' Sec. 21 T19S R26E Eddy County
API # 30-015-35444

Mr. Chris Renaud,

Enclosed is the closure report for the Lake McMillian 21 #1. NMOCD request that a Western Reserves representative sign and date the final C-144 which is the very last page of the closure report. Then mail one copy to:

NMOCD
Attn: Mike Bratcher
1301 W. Grand Ave.
Artesia, NM 88210

If you have any questions about the enclosed report please feel free to contact me at the office.

Sincerely,

Logan Anderson

Closure Report

Prepared for
Western Reserves

Lake McMillian 21 #1
API # 30-015-35444
Eddy County, NM

Prepared by
Elke Environmental, Inc.
P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

August 28, 2007

New Mexico Oil Conservation Division
Mr. Mike Bratcher
1301 West Grand Ave.
Artesia, New Mexico 88210

Re: Drilling Pit Closure of Western Reserves – Lake McMillian 21 #1

Mr. Mike Bratcher,

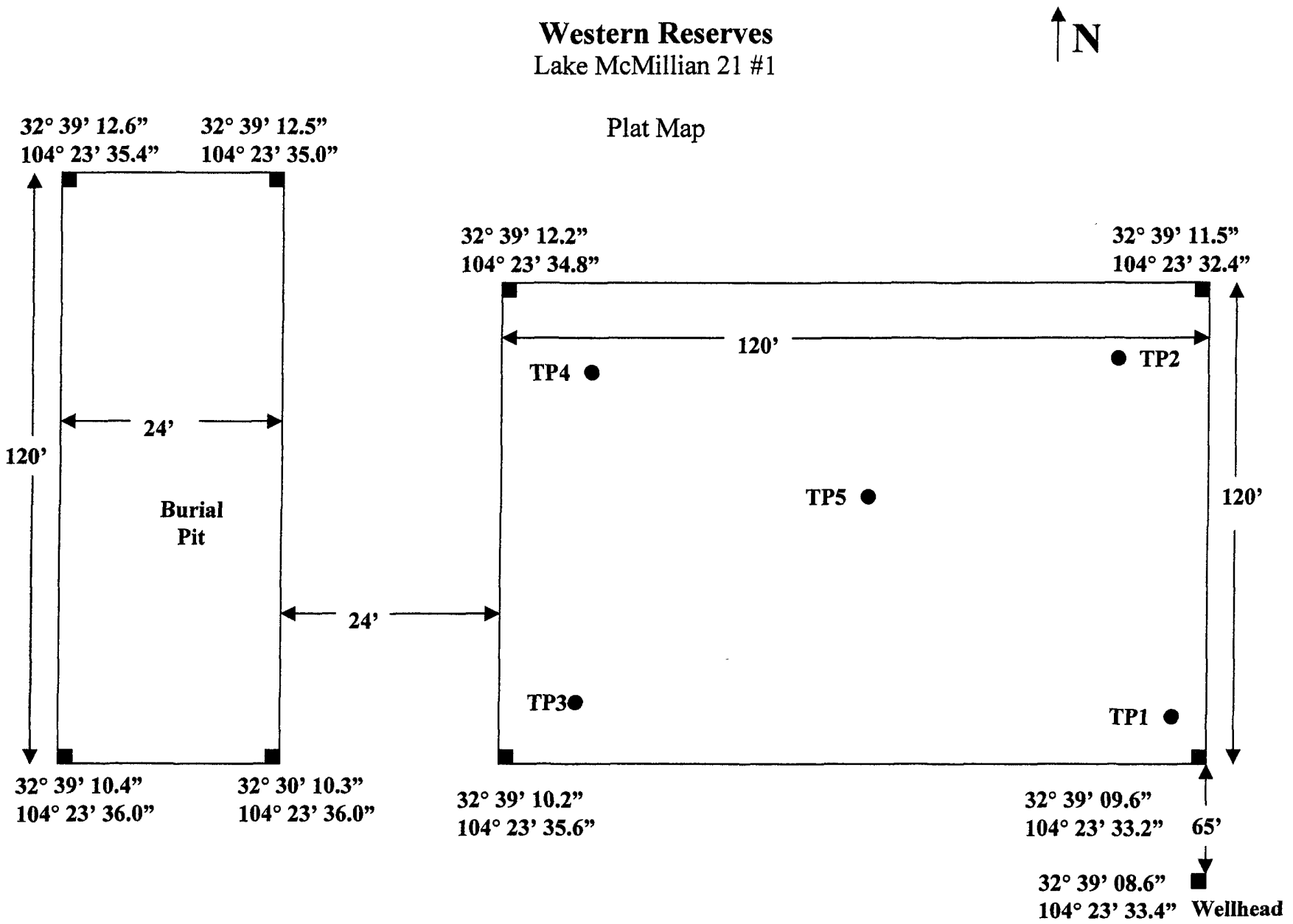
Elke Environmental was contracted by Western Reserves to complete the closure of the Lake McMillian 21 #1 drilling pit. As per the C-144 filed and signed by Mike Bratcher on 7-31-07 a burial pit was excavated and lined with a 12 mil liner. The drilling mud was mixed with dry soil to stiffen and then placed in the burial pit. The burial pit was capped with a 20 mil liner and backfilled with a 3' of clean native soil. After the drilling mud was removed five bottom samples were analyzed and NMOCD standards were meet. Lab samples were taken for confirmation. The drilling pit was then backfilled with clean native soil and domed to prevent pooling. If you have any questions about the enclosed report please contact me at the office.

Sincerely,

Logan Anderson

Western Reserves
Lake McMillian 21 #1

Plat Map



Elke Environmental, Inc.
P.O. Box 14167 Odessa, TX 79768

Field Analytical Report Form

Client Western Reserves **Analyst** Kim Baker

Site Lake McMillian 21 #1

Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	8-17-07	4'		93	7.9	32° 39' 10.1" N 104° 23' 32.7" W
TP2	8-17-07	4'		220	3.9	32° 39' 11.2" N 104° 23' 33.0" W
TP3	8-17-07	4'		91	2.1	32° 39' 10.5" N 104° 23' 34.9" W
TP4	8-17-07	4'		110	5.9	32° 39' 11.9" N 104° 23' 34.5" W
TP5	8-17-07	4'		193	5.5	32° 39' 11.0" N 104° 23' 33.6" W
5 Pt. Composite West Wall	8-17-07			125	13.1	Composite
5 Pt. Composite North Wall	8-17-07			112	12.9	Composite
5 Pt. Composite East Wall	8-17-07			158	22.1	Composite
5 Pt. Composite South Wall	8-17-07			118	10.9	Composite

Analytical Report 288230

for

Elke Environmental, Inc.

Project Manager: Kim Baker

Western Reserves

23-AUG-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

XENCO Laboratories

23-AUG-07

Project Manager: **Kim Baker**
Elke Environmental, Inc.
4817 Andrews Hwy
P.O. Box 14167 Odessa, tx 79768
Odessa, TX 79762

Reference: XENCO Report No: **288230**
Western Reserves
Project Address: Lake McMillan 21 # 1

Kim Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 288230. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 288230 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Sample Cross Reference 288230

Elke Environmental, Inc., Odessa, TX

Western Reserves

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP1 @ 4'	S	Aug-17-07 10:00		288230-001
TP2 @ 4'	S	Aug-17-07 10:30		288230-002
TP3 @ 4'	S	Aug-17-07 14:00		288230-003
TP4 @ 4'	S	Aug-17-07 12:30		288230-004
TP5 @ 4'	S	Aug-17-07 16:00		288230-005
West Wall	S	Aug-17-07 12:00		288230-006
East Wall	S	Aug-17-07 11:15		288230-007
South Wall	S	Aug-17-07 15:00		288230-008
North Wall	S	Aug-17-07 16:30		288230-009

Certificate of Analysis Summary 288230

Elke Environmental, Inc., Odessa, TX

Project Name: Western Reserves

Project Id:

Contact: Kim Baker

Project Location: Lake McMillan 21 # 1

Date Received in Lab: Mon Aug-20-07 04:45 pm

Report Date: 23-AUG-07

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	288230-001		288230-002		288230-003		288230-004		288230-005		288230-006	
	Field Id:	TP1 @ 4'		TP2 @ 4'		TP3 @ 4'		TP4 @ 4'		TP5 @ 4'		West Wall	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-17-07 10:00		Aug-17-07 10:30		Aug-17-07 14:00		Aug-17-07 12:30		Aug-17-07 16:00		Aug-17-07 12:00	
Percent Moisture	*Extracted:*												
	Analyzed:	Aug-21-07 10:30		Aug-21-07 10:30		Aug-21-07 10:30		Aug-21-07 10:30		Aug-21-07 10:30		Aug-21-07 10:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		15.6	1.00	22.9	1.00	11.5	1.00	9.08	1.00	12.1	1.00	13.0	1.00
TPH by SW8015 Mod	*Extracted:*	Aug-22-07 14:23		Aug-22-07 14:23		Aug-22-07 14:23		Aug-22-07 14:23		Aug-22-07 14:23		Aug-22-07 14:23	
	Analyzed:	Aug-22-07 22:12		Aug-22-07 22:38		Aug-22-07 23:03		Aug-22-07 23:28		Aug-22-07 23:53		Aug-23-07 00:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	11.9	ND	13.0	ND	11.3	ND	11.0	ND	11.4	ND	11.5
C12-C28 Diesel Range Hydrocarbons		ND	11.9	ND	13.0	ND	11.3	ND	11.0	ND	11.4	ND	11.5
C28-C35 Oil Range Hydrocarbons		ND	11.9	ND	13.0	ND	11.3	ND	11.0	ND	11.4	ND	11.5
Total TPH		ND		ND		ND		ND		ND		ND	
Total Chloride by EPA 325.3	*Extracted:*												
	Analyzed:	Aug-21-07 13:45		Aug-21-07 13:45		Aug-21-07 13:45		Aug-21-07 13:45		Aug-21-07 13:45		Aug-21-07 13:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		53.0	10.0	43.0	10.0	32.0	10.0	43.0	10.0	43.0	10.0	53.0	10.0

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 288230

Elke Environmental, Inc., Odessa, TX

Project Name: Western Reserves

Project Id:
Contact: Kim Baker
Project Location: Lake McMillan 21 # 1

Date Received in Lab: Mon Aug-20-07 04:45 pm
Report Date: 23-AUG-07
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	288230-007		288230-008		288230-009					
	Field Id:	East Wall		South Wall		North Wall					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Aug-17-07 11:15		Aug-17-07 15:00		Aug-17-07 16:30					
Percent Moisture	*Extracted:*										
	Analyzed:	Aug-21-07 10:30		Aug-21-07 10:30		Aug-21-07 10:30					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		19.1	1.00	10.5	1.00	19.9	1.00				
TPH by SW8015 Mod	*Extracted:*	Aug-22-07 14:23		Aug-22-07 14:23		Aug-22-07 14:23					
	Analyzed:	Aug-23-07 00:43		Aug-23-07 01:07		Aug-23-07 01:32					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	12.4	ND	11.2	ND	12.5				
C12-C28 Diesel Range Hydrocarbons		ND	12.4	ND	11.2	ND	12.5				
C28-C35 Oil Range Hydrocarbons		ND	12.4	ND	11.2	ND	12.5				
Total TPH		ND		ND		ND					
Total Chloride by EPA 325.3	*Extracted:*										
	Analyzed:	Aug-21-07 14:30		Aug-21-07 14:30		Aug-21-07 14:30					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		42.5	5.00	53.8	5.00	31.9	5.00				

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: Western Reserves

Work Order #: 288230 **Project ID:**

Lab Batch #: 702896 **Sample:** 288230-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	38.4	50.0	77	70-135	
1-Chlorooctane	37.8	50.0	76	70-135	

Lab Batch #: 702896 **Sample:** 288230-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	46.6	50.0	93	70-135	
1-Chlorooctane	53.5	50.0	107	70-135	

Lab Batch #: 702896 **Sample:** 288230-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	47.2	50.0	94	70-135	
1-Chlorooctane	54.3	50.0	109	70-135	

Lab Batch #: 702896 **Sample:** 288230-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	37.6	50.0	75	70-135	
1-Chlorooctane	37.6	50.0	75	70-135	

Lab Batch #: 702896 **Sample:** 288230-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	37.0	50.0	74	70-135	
1-Chlorooctane	37.2	50.0	74	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Western Reserves

Work Order #: 288230 **Project ID:**

Lab Batch #: 702896 **Sample:** 288230-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	38.1	50.0	76	70-135	
1-Chlorooctane	37.2	50.0	74	70-135	

Lab Batch #: 702896 **Sample:** 288230-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	39.9	50.0	80	70-135	
1-Chlorooctane	39.4	50.0	79	70-135	

Lab Batch #: 702896 **Sample:** 288230-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	39.8	50.0	80	70-135	
1-Chlorooctane	39.1	50.0	78	70-135	

Lab Batch #: 702896 **Sample:** 288230-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	40.0	50.0	80	70-135	
1-Chlorooctane	39.5	50.0	79	70-135	

Lab Batch #: 702896 **Sample:** 288230-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	41.2	50.0	82	70-135	
1-Chlorooctane	40.6	50.0	81	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Western Reserves

Work Order #: 288230 **Project ID:**

Lab Batch #: 702896 **Sample:** 288230-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	37.7	50.0	75	70-135	
1-Chlorooctane	37.6	50.0	75	70-135	

Lab Batch #: 702896 **Sample:** 498561-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	47.9	50.0	96	70-135	
1-Chlorooctane	53.5	50.0	107	70-135	

Lab Batch #: 702896 **Sample:** 498561-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	46.3	50.0	93	70-135	
1-Chlorooctane	40.2	50.0	80	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Western Reserves

Work Order #: 288230 **Project ID:**

Lab Batch #: 702896 **Sample:** 498561-1-BKS **Matrix:** Solid
Date Analyzed: 08/22/2007 **Date Prepared:** 08/22/2007 **Analyst:** SHE
Reporting Units: mg/kg **Batch #:** 1

TPH by SW8015 Mod Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
C6-C12 Gasoline Range Hydrocarbons	ND	500	605	121	70-135	
C12-C28 Diesel Range Hydrocarbons	ND	500	530	106	70-135	

Lab Batch #: 702724 **Sample:** 702724-1-BKS **Matrix:** Solid
Date Analyzed: 08/21/2007 **Date Prepared:** 08/21/2007 **Analyst:** IRO
Reporting Units: mg/kg **Batch #:** 1

Total Chloride by EPA 325.3 Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	100	93.6	94	75-125	

Lab Batch #: 702729 **Sample:** 702729 BKS **Matrix:** Solid
Date Analyzed: 08/21/2007 **Date Prepared:** 08/21/2007 **Analyst:** IRO
Reporting Units: mg/kg **Batch #:** 1

Total Chloride by EPA 325.3 Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	6.40	100	96.0	90	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS / MSD Recoveries

Project Name: Western Reserves

Work Order # : 288230 **Project ID:**

Lab Batch ID: 702896 **QC- Sample ID:** 288230-001 S **Batch #:** 1 **Matrix:** Soil
Date Analyzed: 08/23/2007 **Date Prepared:** 08/22/2007 **Analyst:** SHE
Reporting Units: mg/kg

TPH by SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	593	711	120	593	728	123	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	593	618	104	593	630	106	2	70-135	35	

Lab Batch ID: 702724 **QC- Sample ID:** 288249-026 S **Batch #:** 1 **Matrix:** Soil
Date Analyzed: 08/21/2007 **Date Prepared:** 08/21/2007 **Analyst:** IRO
Reporting Units: mg/kg

Total Chloride by EPA 325.3 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	3620	5000	11700	162	5000	11900	166	2	75-125	30	X

Lab Batch ID: 702729 **QC- Sample ID:** 288101-003 M S **Batch #:** 1 **Matrix:** Soil
Date Analyzed: 08/21/2007 **Date Prepared:** 08/21/2007 **Analyst:** IRO
Reporting Units: mg/kg

Total Chloride by EPA 325.3 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	7660	2500	9360	68	2500	9780	85	22	75-125	30	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Western Reserves

Work Order #: 288230

Lab Batch #: 702855 **Project ID:**

Date Analyzed: 08/21/2007 **Date Prepared:** 08/21/2007 **Analyst:** JLG

QC- Sample ID: 288230-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	15.6	15.8	1	20	

Lab Batch #: 702729

Date Analyzed: 08/21/2007 **Date Prepared:** 08/21/2007 **Analyst:** IRO

QC- Sample ID: 288101-003 M D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Total Chloride by EPA 325.3	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	7660	7660	0	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kim Baker
Company Name: Elke Environmental, Inc.
Company Address: P. O. Box 14167
City/State/Zip: Odessa, Tx 79768
Telephone No: 432-366-0043 Fax No: 432-366-0884
Sampler Signature:

Project Name: WESTERN RESERVES
Project #:
Project Loc: LAKE MCMILLAN 21 #1
PO #:

(lab use only) ORDER #: 288230

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: 1PH: 418.1 8015M 1005 1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	NORM	TDS/ TSS		RUSH TAT (Pre-Schedule)	Standard TAT
01	TP1 @ 4'	8-17-07	10:00	1	X								X		X		X											X
02	TP2 @ 4'	8-17-07	10:30	1	X								X		X		X											X
03	TP3 @ 4'	8-17-07	2:00	1	X								X		X		X											X
04	TP4 @ 4'	8-17-07	12:30	1	X								X		X		X											X
05	TP5 @ 4'	8-17-07	4:05	1	X								X		X		X											X
06	WEST WALL	8-17-07	12:00	1	X								X		X		X											X
07	EAST WALL	8-17-07	11:15	1	X								X		X		X											X
08	SOUTH WALL	8-17-07	3:00	1	X								X		X		X											X
09	NORTH WALL	8-17-07	4:30	1	X								X		X		X											X

Special Instructions: ions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 4.0
Laboratory Comments: w/labels & seals

Relinquished by:	Date	Time	Received by:	Date	Time
	8-20-07	07:00	C. Kelly	8-20-07	07:00
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
C. Kelly	8.20.07	9:45	Andrea Lam	8-20-07	4:45

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.

Date/ Time: 8.20.09 4.45

Lab ID # : 288230

Initials: RL

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	Yes	No	4.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

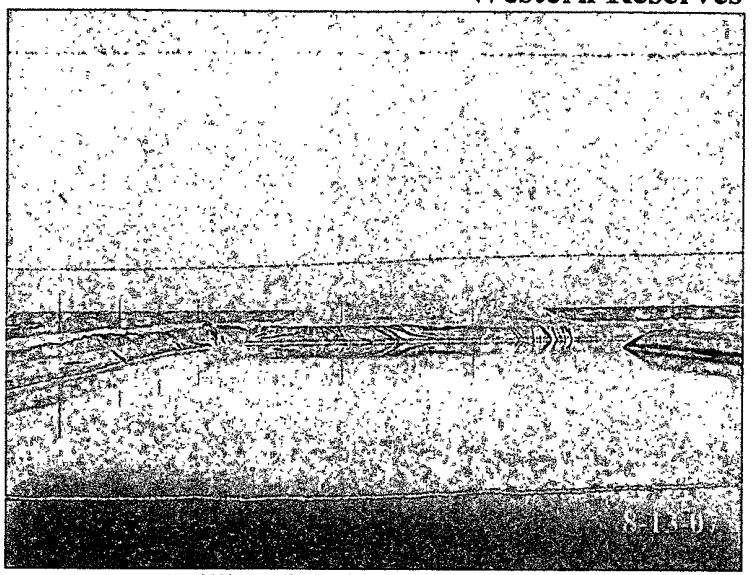
Regarding: _____

Corrective Action Taken: _____

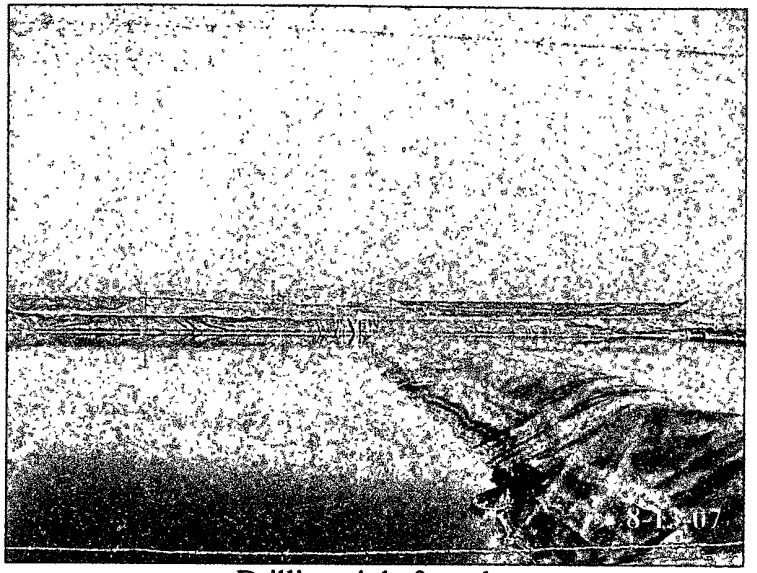
Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Western Reserves – Lake McMillian 21 #1

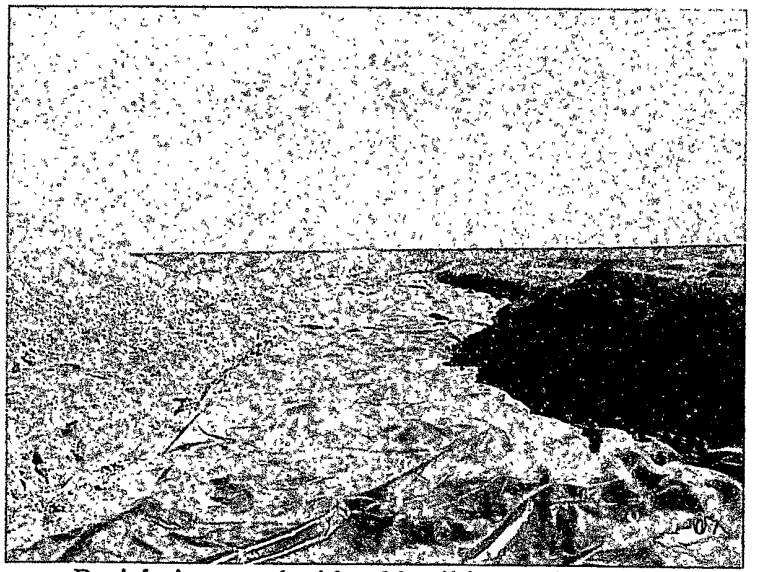


Drilling pit before closure.

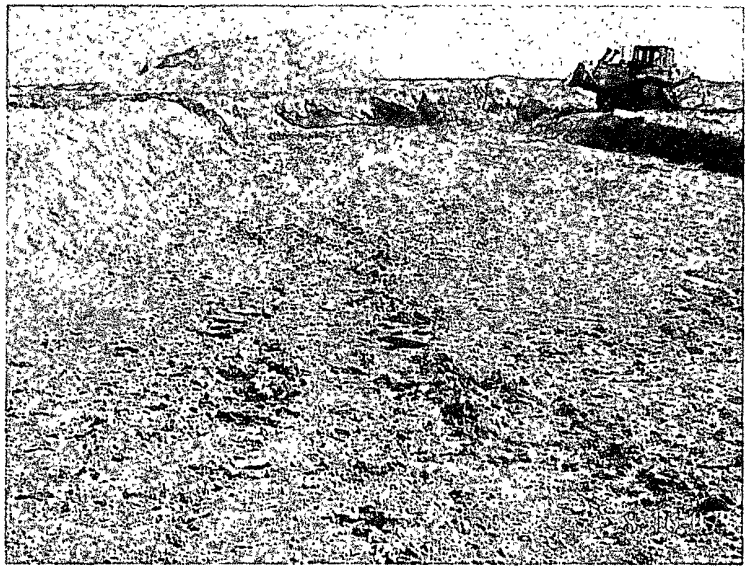


Drilling pit before closure.

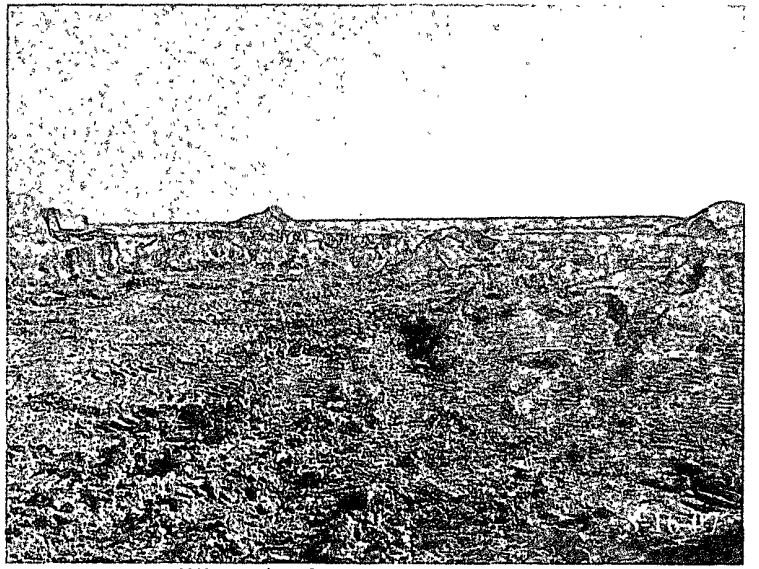
Burial pit with a 12 mil impervious liner.



Burial pit capped with a 20 mil impervious liner.

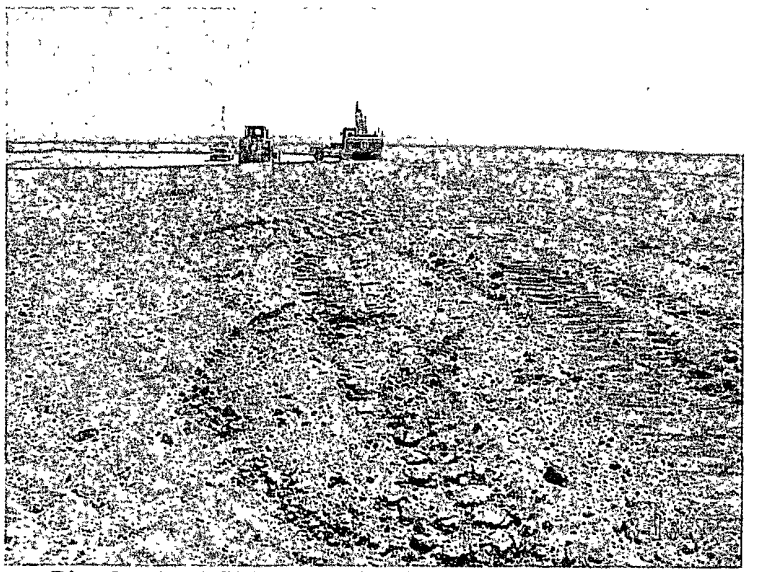


Drilling pit after mud was removed.



Drilling pit after mud was removed.

Pit after backfilling and doming to prevent pooling.



Pit after backfilling and doming to prevent pooling.

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-144
June 1, 2004

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

Pit or Below-Grade Tank Registration or Closure

JUL 26 2007
OCD-ARTESIA

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: Western Reserves Oil Company Telephone: 432-682-4782 e-mail address: bmcbeth@westernreserves.com
Address: P O Box 993 Midland, TX 79702
Facility or well name: Lake McMillian 21 #1 API #: 30-015-35444 U/L or Qtr/Qtr C Sec 21 T 19S R 26E
County: Eddy Latitude 32.65.1303 Longitude 104.38.838 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 20 mil Clay ☐ Pit Volume 3800 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.) **GW = 90'**	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) **XXX** (0 points)
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) **XXX**
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 points) **XXX**
	Ranking Score (Total Points)	**10 points**

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: Construct a burial pit and line with a 12 mil impervious liner. Stiffen all mud and place in a burial pit. Cap burial pit with a 20 mil liner and backfill the site with stockpiled soil. A final report will be submitted after job completion

NMOCD Artesia will be notified 48 hrs. before work starts.

If burial trench is constructed in pit area – **Sample analyses are to be submitted to NMOCD PRIOR** to lining the trench.

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: 7-25-07
Printed Name/Title Logan Anderson - Consultant Signature

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:

Signature Signed By Mike Bratcher Date: JUL 31 2007

amples are to be obtained from
it area and analysis submitted to
MOCD prior to back-filling.
OTIFY NM0CD 24 HOURS
RIOR TO OBTAINING SAMPLES.