

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

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 ☒

Final Report

| | | |
|--|--|---|
| Operator: <u>Oxy USA Inc</u> Telephone: <u>505-887-8337</u> e-mail address: <u>rick_kerby@oxy.com</u> | | |
| Address: <u>P O Box 1988 Carlsbad, NM 88221</u> | | |
| Facility or well name: <u>Cypress 34 Federal #4H</u> API #: <u>30-015-35742</u> U/L or Qtr/Qtr <u>D</u> Sec <u>34</u> T <u>23S</u> R <u>29E</u> | | |
| County: <u>Eddy</u> Latitude <u>32.16022</u> Longitude <u>103.58457</u> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/> | | |
| Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/> | | |
| Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>16000</u> bbl | Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> 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 you 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: All excess water was removed. A burial pit was constructed and lined with 4 oz Geotec Liner then a 12 mil poly liner. The drilling mud was mixed with dry soil to stiffen Then placed in the burial pit. After all drilling mud and liner was removed the pit bottoms were sampled per NMOCD Guidelines. The samples did not meet NMOCD Standards. The site was vertically delineated. A second burial pit was constructed, lined with 4 oz Geotec Liner then a 12 mil poly liner. Six feet of contamination was excavated and placed in the second burial pit. Both burial pits were capped with a 20 mil liner then backfilled with clean native soil. Lab confirmation samples were taken at the bottom of the pit and then capped with a 20 mil poly liner for a risk based closure. The site was backfilled with clean native soil, contoured to the surrounding area and seeded with BLM Seed Mixture #3 & #4. The job started 6-9-08 and was completed 6-30-08.

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: 7-8-08

Printed Name/Title Kelvin Beard Oxy HES Spec. Signature [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 _____

Accepted for record
NMOCD

Date: JUL 10 2008

Final Closure

Closure Report

JUL 10 2008
OCD-ARTESIA

Prepared for
Oxy USA

Cypress 34 Federal #4H
API # 30-015-35742
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

July 3, 2008

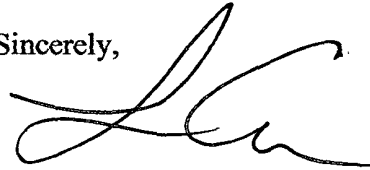
New Mexico Oil Conservation Division
Mr. Mike Bratcher
1301 West Grand Ave.
Artesia, New Mexico 88210

Re: Drilling Pit Closure of Oxy USA – Cypress 34 Federal #4H
UL'D' Sec. 34 T23S R29E Eddy County
API# 30-015-35742

Mr. Mike Bratcher,

Elke Environmental was contracted by Oxy USA to complete the closure of the Cypress 34 Federal #4H drilling pit. The initial C-144 was filed and signed by Mike Bratcher on 5-5-08. Work started on 6-9-08, a burial pit was constructed and lined with a 12 mil liner. The drilling mud was mixed with dry soil to stiffen then placed in the burial pit. After all mud and liner was removed the pit bottoms were sampled per NMOCD Guidelines. The samples did not meet NMOCD Standards for this site. As per the conversation between Mike Bratcher and Kim Baker (Elke) on 6-16-08, a delineation was performed and the drilling pit area was excavated to a depth of 6' below the original pit liner and placed in a second burial pit. The remaining area was capped with a 20 mil poly liner overlapping 3' in all directions. The burial pits were capped with a 20 mil liner overlapping 3' in all directions and then the site was backfilled with clean native soil and contoured to the surrounding area. The site was seeded with BLM Seed Mixture #2. If you have any questions about the enclosed report please contact me at the office.

Sincerely,

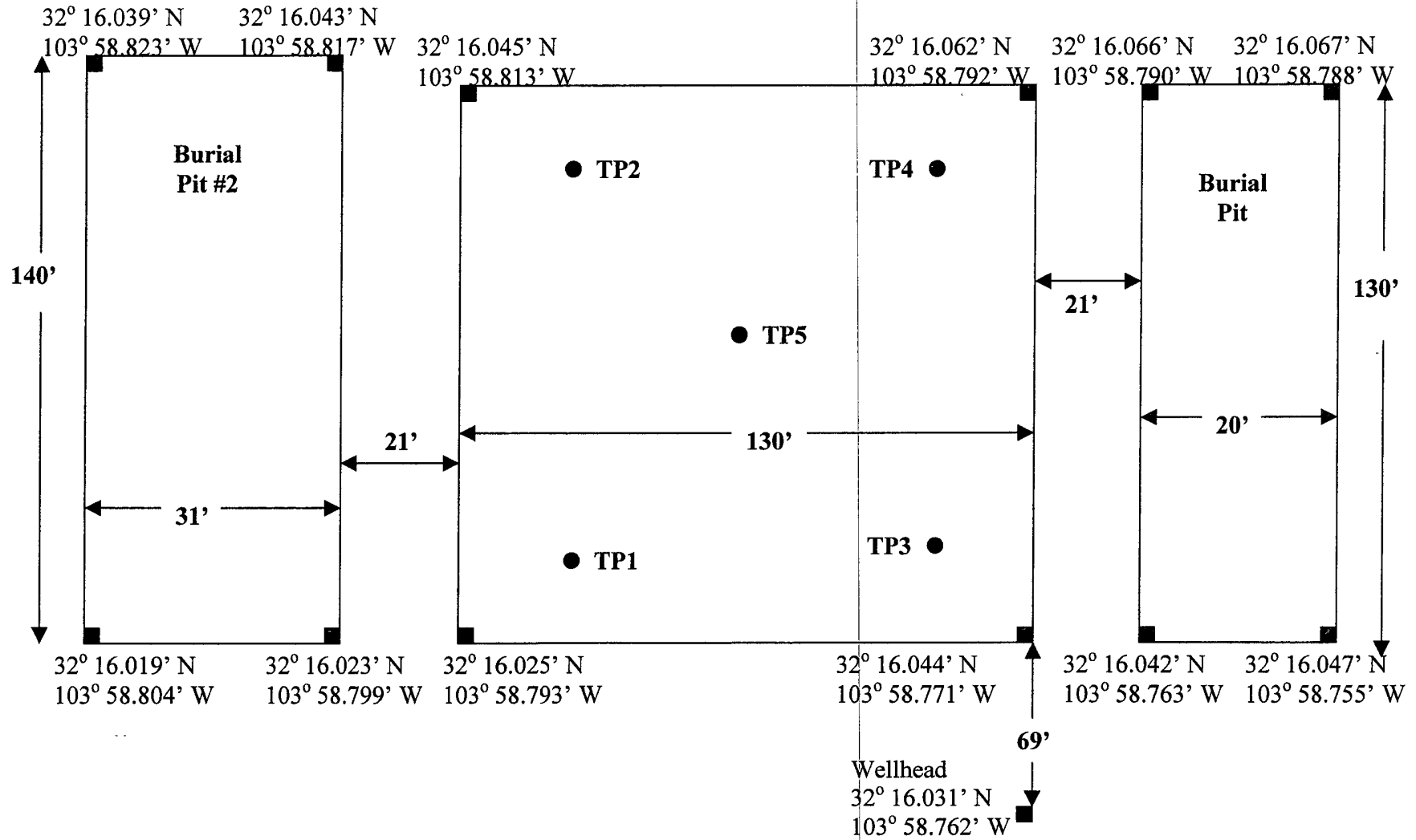


Logan Anderson



OXY USA – Cypress 34 Federal #4H

Plat Map



Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

Field Analytical Report FormClient Oxy USAAnalyst Kim BakerSite Cypress 34 Federal #4H

| Sample ID | Date | Depth | TPH / PPM | CI / PPM | PID / PPM | GPS |
|-----------|---------|-------|-----------|----------|-----------|---------------------------------|
| TP1 | 6-12-08 | 8' | | 12,230 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 10' | | 5,729 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 12' | | 4,838 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 14' | | 3,274 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 16' | | 2,406 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 18' | | 2,928 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 20' | | 2,651 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 22' | | 2,489 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 24' | | 3,621 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 26' | | 4,006 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 28' | | 3,723 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 30' | | 3,215 | | 32° 16.033' N 103° 58.794' W |
| TP1 | 6-12-08 | 32' | | 3,003 | 12.7 | 32° 16.033' N 103° 58.794' W |
| TP2 | 6-12-08 | 8' | | 11,930 | | 32° 16.043' N 103° 58.804' W |
| TP2 | 6-12-08 | 10' | | 9,230 | | 32° 16.043' N 103° 58.804' W |
| TP2 | 6-12-08 | 12' | | 7,850 | | 32° 16.043' N 103° 58.804' W |
| TP2 | 6-12-08 | 14' | | 5,420 | | 32° 16.043' N 103° 58.804' W |
| TP2 | 6-12-08 | 16' | | 3,843 | | 32° 16.043' N 103° 58.804' W |

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

Field Analytical Report FormClient Oxy USAAnalyst Kim BakerSite Cypress 34 Federal #4H

| Sample ID | Date | Depth | TPH / PPM | CI / PPM | PID / PPM | GPS |
|-----------|---------|-------|-----------|----------|-----------|---------------------------------|
| TP2 | 6-12-08 | 18' | | 1,431 | | 32° 16.043' N 103° 58.804' W |
| TP2 | 6-12-08 | 20' | | 518 | | 32° 16.043' N 103° 58.804' W |
| TP2 | 6-12-08 | 22' | | 280 | 13.5 | 32° 16.043' N 103° 58.804' W |
| TP3 | 6-12-08 | 8' | | 10,580 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 10' | | 8,310 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 12' | | 6,959 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 14' | | 5,290 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 16' | | 5,003 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 18' | | 4,880 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 20' | | 4,984 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 22' | | 5,363 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 24' | | 5,535 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 26' | | 6,120 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 28' | | 6,391 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 30' | | 6,980 | | 32° 16.045' N 103° 58.780' W |
| TP3 | 6-12-08 | 32' | | 7,553 | 15.1 | 32° 16.045' N 103° 58.780' W |
| TP4 | 6-12-08 | 8' | | 16,310 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 10' | | 8,351 | | 32° 16.051' N 103° 58.781' W |

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

Field Analytical Report Form**Client** Oxy USA**Analyst** Kim Baker**Site** Cypress 34 Federal #4H

| Sample ID | Date | Depth | TPH / PPM | CI / PPM | PID / PPM | GPS |
|-----------|---------|-------|-----------|----------|-----------|---------------------------------|
| TP4 | 6-12-08 | 12' | | 7,881 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 14' | | 6,423 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 16' | | 5,868 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 18' | | 4,243 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 20' | | 3,458 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 22' | | 3,632 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 24' | | 4,541 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 26' | | 3,921 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 28' | | 3,459 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 30' | | 3,113 | | 32° 16.051' N 103° 58.781' W |
| TP4 | 6-12-08 | 32' | | 2,952 | 17.9 | 32° 16.051' N 103° 58.781' W |
| TP5 | 6-12-08 | 8' | | 9,428 | | 32° 16.044' N 103° 58.793' W |
| TP5 | 6-12-08 | 10' | | 7,931 | | 32° 16.044' N 103° 58.793' W |
| TP5 | 6-12-08 | 12' | | 7,152 | | 32° 16.044' N 103° 58.793' W |
| TP5 | 6-12-08 | 14' | | 6,235 | | 32° 16.044' N 103° 58.793' W |
| TP5 | 6-12-08 | 16' | | 5,918 | | 32° 16.044' N 103° 58.793' W |
| TP5 | 6-12-08 | 18' | | 5,230 | | 32° 16.044' N 103° 58.793' W |
| TP5 | 6-12-08 | 20' | | 4,150 | | 32° 16.044' N 103° 58.793' W |

P.O. Box 14167 Odessa, TX 79768

Client Oxy USA **Analyst** Kim Baker

Site Cypress 34 Federal #4H

[illegible]

OXY USA – Cypress 34 Federal #4H



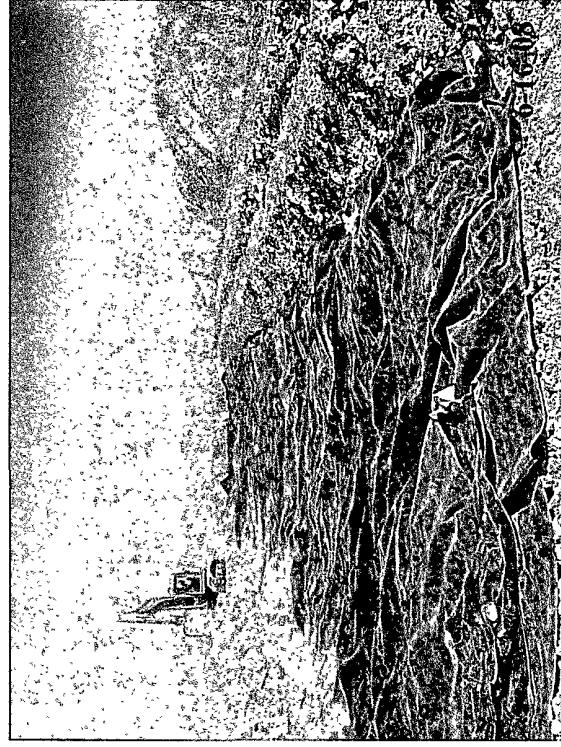
Drilling pit before closure.



Burial pit lined with 4 oz Geotec Liner.



Burial pit lined with a 12 mil poly liner.



Burial pit capped with a 20 mil poly liner.

OXY USA – Cypress 34 Federal #4H



6-12-08

Drilling pit after removal of all drilling mud and liner.



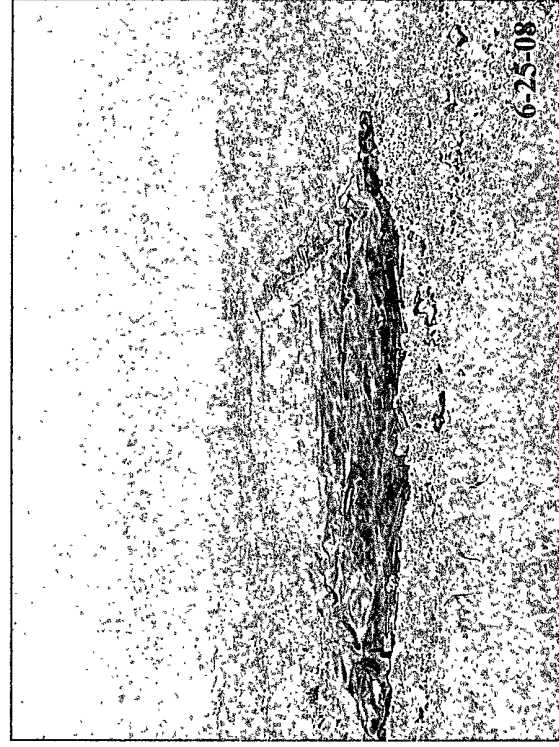
6-23-08

Burial pit #2 lined with 4 oz Geotec Liner.



6-23-08

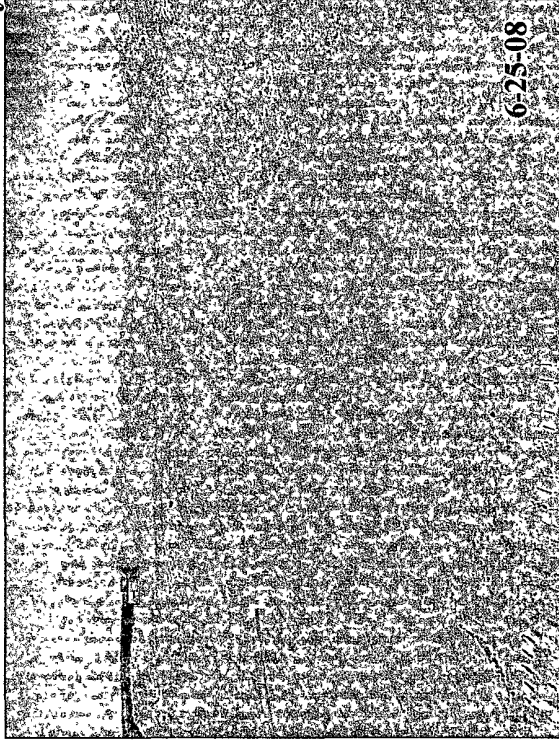
Burial pit #2 lined with a 12 mil poly liner.



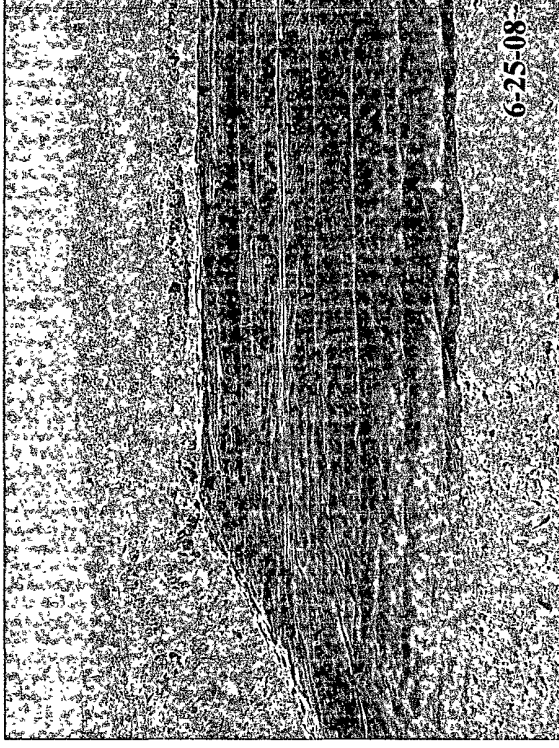
6-25-08

Burial pit #2 capped with a 20 mil poly liner.

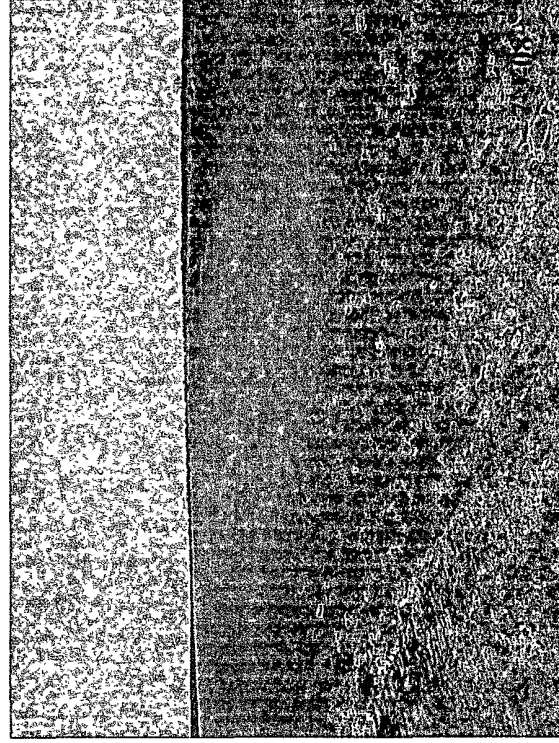
OXY USA – Cypress 34 Federal #4H



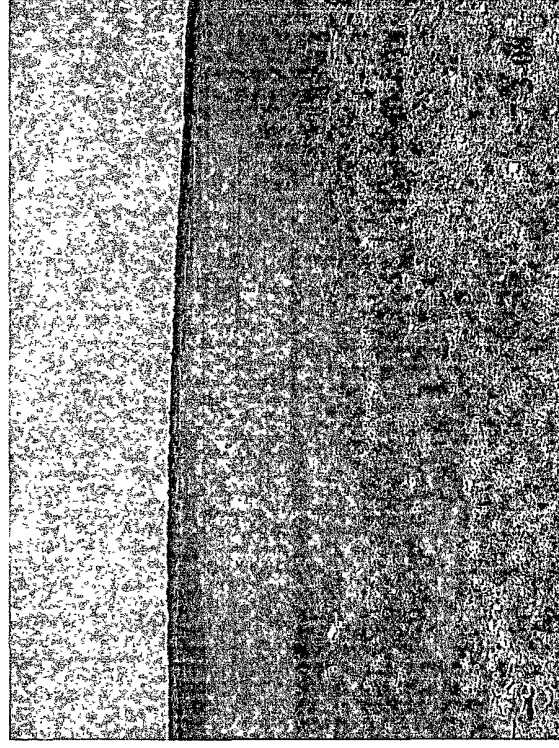
Drilling pit area after excavation of 6' of contamination.



Drilling pit area capped with a 20 mil poly liner.



Drilling pit and burial pits after backfill of clean native soil and contouring to the surrounding area.



Analytical Report 306718

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Oxy-USA

03-JUL-08



12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta



03-JUL-08

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

Reference: XENCO Report No: **306718**
Oxy-USA
Project Address: Cypress 34 # 4 H

Logan Anderson:

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 306718. 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. 306718 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, II
Odessa Laboratory Manager

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Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 306718**Elke Environmental, Inc., Odessa, TX**

Oxy-USA

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|-----------------|--------------|---------------|
| TP1 @ 16' | S | Jun-25-08 10:00 | 16 ft | 306718-001 |
| TP2 @ 16' | S | Jun-25-08 10:30 | 16 ft | 306718-002 |
| TP3 @ 16' | S | Jun-25-08 11:00 | 16 ft | 306718-003 |
| TP4 @ 16' | S | Jun-25-08 11:30 | 16 ft | 306718-004 |
| TP5 @ 16' | S | Jun-25-08 12:00 | 16 ft | 306718-005 |



Certificate of Analysis Summary 306718

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy-USA

Project Id:

Contact: Logan Anderson

Project Location: Cypress 34 # 4 H

Date Received in Lab: Thu Jun-26-08 04:18 pm


Report Date: 03-JUL-08

Project Manager: Brent Barron, II

| Analysis Requested | Lab Id: | 306718-001 | 306718-002 | 306718-003 | 306718-004 | 306718-005 | |
|------------------------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| | Field Id: | TP1 @ 16' | TP2 @ 16' | TP3 @ 16' | TP4 @ 16' | TP5 @ 16' | |
| | Depth: | 16 ft | 16 ft | 16 ft | 16 ft | 16 ft | |
| | Matrix: | SOIL | SOIL | SOIL | SOIL | SOIL | |
| | Sampled: | Jun-25-08 10:00 | Jun-25-08 10:30 | Jun-25-08 11:00 | Jun-25-08 11:30 | Jun-25-08 12:00 | |
| Inorganic Anions by EPA 300 | Extracted: | | | | | | |
| | Analyzed: | Jul-01-08 08:51 | Jul-01-08 08:51 | Jul-01-08 08:51 | Jul-01-08 08:51 | Jul-01-08 08:51 | |
| | Units/RL: | mg/kg RL | mg/kg RL | mg/kg RL | mg/kg RL | mg/kg RL | |
| Chloride | | 18000 213 | 13200 213 | 5490 54.2 | 4890 54.2 | 10600 106 | |
| Percent Moisture | Extracted: | | | | | | |
| | Analyzed: | Jun-27-08 17:00 | Jun-27-08 17:00 | Jun-27-08 17:00 | Jun-27-08 17:00 | Jun-27-08 17:00 | |
| | Units/RL: | % RL | % RL | % RL | % RL | % RL | |
| Percent Moisture | | 6.32 | 5.89 | 7.76 | 7.76 | 5.81 | |
| TPH by SW8015 Mod | Extracted: | Jul-01-08 15:10 | Jul-01-08 15:10 | Jul-01-08 15:10 | Jul-01-08 15:10 | Jul-01-08 15:10 | |
| | Analyzed: | Jul-02-08 22:34 | Jul-02-08 23:03 | Jul-02-08 23:33 | Jul-03-08 00:01 | Jul-03-08 00:29 | |
| | Units/RL: | mg/kg RL | mg/kg RL | mg/kg RL | mg/kg RL | mg/kg RL | |
| C6-C12 Gasoline Range Hydrocarbons | | ND 16.0 | ND 15.9 | ND 16.3 | ND 16.3 | ND 15.9 | |
| C12-C28 Diesel Range Hydrocarbons | | ND 16.0 | ND 15.9 | ND 16.3 | ND 16.3 | ND 15.9 | |
| C28-C35 Oil Range Hydrocarbons | | ND 16.0 | ND 15.9 | ND 16.3 | ND 16.3 | ND 15.9 | |
| Total TPH | | ND | ND | ND | ND | ND | |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi


Brent Barron
Odessa Laboratory Director



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(PQL) and above the SQL(MDL).
 - 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.
- * Outside XENCO'S scope of NELAC Accreditation

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5332 Blackberry Drive, Suite 104, San Antonio, TX 78238
2505 N. Falkenburg Rd., Tampa, FL 33619
5757 NW 158th St, Miami Lakes, FL 33014
6017 Financial Dr., Norcross, GA 30071

| Phone | Fax |
|----------------|----------------|
| (281) 589-0692 | (281) 589-0695 |
| (214) 902 0300 | (214) 351-9139 |
| (210) 509-3334 | (210) 509-3335 |
| (813) 620-2000 | (813) 620-2033 |
| (305) 823-8500 | (305) 823-8555 |
| (770) 449-8800 | (770) 449-5477 |



Form 2 - Surrogate Recoveries

Project Name: Oxy-USA



Work Order #: 306718

Project ID:

Lab Batch #: 727092

Sample: 306718-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 71.7 | 100 | 72 | 70-135 | |
| o-Terphenyl | 39.6 | 50.0 | 79 | 70-135 | |

Lab Batch #: 727092

Sample: 306718-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 76.0 | 100 | 76 | 70-135 | |
| o-Terphenyl | 41.3 | 50.0 | 83 | 70-135 | |

Lab Batch #: 727092

Sample: 306718-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 77.4 | 100 | 77 | 70-135 | |
| o-Terphenyl | 42.4 | 50.0 | 85 | 70-135 | |

Lab Batch #: 727092

Sample: 306718-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 77.5 | 100 | 78 | 70-135 | |
| o-Terphenyl | 42.4 | 50.0 | 85 | 70-135 | |

Lab Batch #: 727092

Sample: 306718-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 76.2 | 100 | 76 | 70-135 | |
| o-Terphenyl | 41.2 | 50.0 | 82 | 70-135 | |

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 \times A / B$

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

Work Order #: 306718

Project ID:

Lab Batch #: 727092

Sample: 306745-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 88.9 | 100 | 89 | 70-135 | |
| o-Terphenyl | 47.6 | 50.0 | 95 | 70-135 | |

Lab Batch #: 727092

Sample: 306745-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 88.5 | 100 | 89 | 70-135 | |
| o-Terphenyl | 46.9 | 50.0 | 94 | 70-135 | |

Lab Batch #: 727092

Sample: 511555-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 93.3 | 100 | 93 | 70-135 | |
| o-Terphenyl | 50.4 | 50.0 | 101 | 70-135 | |

Lab Batch #: 727092

Sample: 511555-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 87.8 | 100 | 88 | 70-135 | |
| o-Terphenyl | 46.7 | 50.0 | 93 | 70-135 | |

Lab Batch #: 727092

Sample: 511555-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

| SURROGATE RECOVERY STUDY | | | | | |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH by SW8015 Mod | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes | | | | | |
| 1-Chlorooctane | 93.7 | 100 | 94 | 70-135 | |
| o-Terphenyl | 51.4 | 50.0 | 103 | 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: Oxy-USA

Work Order #: 306718

Project ID:

Lab Batch #: 726918

Sample: 726918-1-BKS

Matrix: Solid

Date Analyzed: 07/01/2008

Date Prepared: 07/01/2008

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

| Inorganic Anions by EPA 300 Analytes | Blank Result [A] | Spike Added [B] | Blank Spike Result [C] | Blank Spike %R [D] | Control Limits %R | Flags |
|---|------------------------|-----------------------|---------------------------------|-----------------------------|-------------------------|-------|
| Chloride | ND | 10.0 | 10.8 | 108 | 75-125 | |

Blank Spike Recovery [D] = $100 * [C] / [B]$

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



BS / BSD Recoveries



Project Name: Oxy-USA

Work Order #: 306718

Analyst: ASA

Date Prepared: 07/01/2008

Project ID:

Date Analyzed: 07/02/2008

Lab Batch ID: 727092

Sample: 511555-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

| TPH by SW8015 Mod | Blank Sample Result [A] | Spike Added [B] | Blank Spike Result [C] | Blank Spike %R [D] | Spike Added [E] | Blank Spike Duplicate Result [F] | Blk. Spk Dup. %R [G] | RPD % | Control Limits %R | Control Limits %RPD | Flag |
|------------------------------------|-------------------------------|-----------------------|---------------------------------|-----------------------------|-----------------------|---|-------------------------------|----------|-------------------------|---------------------------|------|
| Analytes | | | | | | | | | | | |
| C6-C12 Gasoline Range Hydrocarbons | ND | 1000 | 851 | 85 | 1000 | 841 | 84 | 1 | 70-135 | 35 | |
| C12-C28 Diesel Range Hydrocarbons | ND | 1000 | 815 | 82 | 1000 | 808 | 81 | 1 | 70-135 | 35 | |

Relative Percent Difference RPD = $200 * |(D-F)/(D+F)|$

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries

Project Name: Oxy-USA



Work Order #: 306718

Lab Batch #: 726918

Date Analyzed: 07/01/2008

QC- Sample ID: 306754-001 S

Reporting Units: mg/kg

Project ID:

Analyst: LATCOR

Date Prepared: 07/01/2008

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY

| Inorganic Anions by EPA 300 Analytes | Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | %R [D] | Control Limits %R | Flag |
|---|-----------------------------------|-----------------------|--------------------------------|-----------|-------------------------|------|
| | | | | | | |
| Chloride | 413 | 1160 | 1840 | 123 | 75-125 | |

Matrix Spike Percent Recovery [D] = $100 * (C-A) / B$

Relative Percent Difference [E] = $200 * (C-A) / (C+B)$

All Results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: Oxy-USA

Work Order #: 306718

Project ID:

Lab Batch ID: 727092

QC- Sample ID: 306745-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 07/03/2008

Date Prepared: 07/01/2008

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| TPH by SW8015 Mod Analytes | 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 | 1010 | 795 | 79 | 1010 | 781 | 77 | 3 | 70-135 | 35 | |
| C12-C28 Diesel Range Hydrocarbons | ND | 1010 | 801 | 79 | 1010 | 780 | 77 | 3 | 70-135 | 35 | |

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

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

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



Sample Duplicate Recovery



Project Name: Oxy-USA

Work Order #: 306718

Lab Batch #: 726918

Date Analyzed: 07/01/2008

QC- Sample ID: 306754-001 D

Reporting Units: mg/kg

Project ID:

Analyst: LATCOR

Date Prepared: 07/01/2008

Batch #: 1

Matrix: Soil

| SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | | |
|------------------------------------|--------------------------|-----------------------------|-----|---------------------|------|
| Inorganic Anions by EPA 300 | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
| Analyte | | | | | |
| Chloride | 413 | 407 | 1 | 20 | |

Lab Batch #: 726606

Date Analyzed: 06/27/2008

QC- Sample ID: 306718-001 D

Reporting Units: %

Date Prepared: 06/27/2008

Analyst: JLG

Batch #: 1

Matrix: Soil

| SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | | |
|------------------------------------|--------------------------|-----------------------------|-----|---------------------|------|
| Percent Moisture | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
| Analyte | | | | | |
| Percent Moisture | 6.32 | 6.94 | 9 | 20 | |

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

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.
Date/ Time: 6-26-08 4:18
Lab ID #: 326718
Initials: AL

Sample Receipt Checklist

| | | | Client Initials |
|--|------------|-----------|--------------------------|
| #1 Temperature of container/ cooler? | <u>Yes</u> | No | <u>1.5 °C</u> |
| #2 Shipping container in good condition? | <u>Yes</u> | No | |
| #3 Custody Seals intact on shipping container/ cooler? | Yes | No | <u>Not Present</u> |
| #4 Custody Seals intact on sample bottles/ container? | Yes | No | <u>Not Present</u> |
| #5 Chain of Custody present? | <u>Yes</u> | No | |
| #6 Sample instructions complete of Chain of Custody? | <u>Yes</u> | No | |
| #7 Chain of Custody signed when relinquished/ received? | <u>Yes</u> | No | |
| #8 Chain of Custody agrees with sample label(s)? | <u>Yes</u> | <u>No</u> | ID written on Cont./ Lid |
| #9 Container label(s) legible and intact? | <u>Yes</u> | No | Not Applicable |
| #10 Sample matrix/ properties agree with Chain of Custody? | <u>Yes</u> | No | |
| #11 Containers supplied by ELOT? | <u>Yes</u> | No | |
| #12 Samples in proper container/ bottle? | <u>Yes</u> | No | See Below |
| #13 Samples properly preserved? | <u>Yes</u> | No | See Below |
| #14 Sample bottles intact? | <u>Yes</u> | No | |
| #15 Preservations documented on Chain of Custody? | <u>Yes</u> | No | |
| #16 Containers documented on Chain of Custody? | <u>Yes</u> | No | |
| #17 Sufficient sample amount for indicated test(s)? | <u>Yes</u> | No | See Below |
| #18 All samples received within sufficient hold time? | <u>Yes</u> | No | See Below |
| #19 Subcontract of sample(s)? | Yes | No | <u>Not Applicable</u> |
| #20 VOC samples have zero headspace? | <u>Yes</u> | No | Not Applicable |

Variance Documentation

Contact: Kim Baker Contacted by: Andrea Date/ Time: 6-26-08 4:18

Regarding: Sample labels say 15' LOC states 16'.

Corrective Action Taken:

Sample labels should state 16'

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

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

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: <u>Oxy USA Inc</u> Telephone: <u>505-887-8337</u> e-mail address: <u>rick_kerby@oxy.com</u> | | | | |
| Address: <u>P.O. Box 1988 Carlsbad, NM 88221</u> | | | | |
| Facility or well name: <u>Cypress 34 Federal #4H</u> | API #: <u>30-015-35742</u> | U/L or Qtr/Qtr D <u>D</u> Sec <u>34</u> T <u>23S</u> R <u>29E</u> | | |
| County: <u>Eddy</u> | Latitude <u>32.16022</u> | Longitude <u>103.58457</u> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/> | | |
| Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/> | | | | |
| <table border="1"> <tr> <td> Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>16000</u> bbl </td> <td> Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____ </td> </tr> </table> | | | Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>16000</u> bbl | Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____ |
| Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>16000</u> bbl | Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> 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 you 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: All excess water will be removed. A burial pit will be constructed and lined with a 12 mil liner. The drilling mud will be mixed with dry soil to stiffen. Then placed in the burial pit. After all drilling mud and liner has been removed, the pit bottom will be sampled per NMOCD Guidelines. After the samples have met NMOCD Standards the pit will be backfilled. The burial pit will be capped with a 20 mil liner overlapping 3' in all directions and a minimum of 3' below ground surface. The site will be backfilled and contoured to the surrounding area. The site will be reseeded to promote re-vegetation.

NMOCD Artesia will be notified 48 hrs before the start of the job and any sampling.

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: 5-2-08

Printed Name/Title: Logan Anderson - 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: 

Date: MAY 05 2008

NOTIFY OCD 24 HOURS PRIOR to beginning closure and 24 HOURS PRIOR to obtaining samples. Samples are to be obtained from pit area and analyses submitted to OCD prior to back-filling.

If burial trench is to be constructed in pit area, samples are to be obtained and analyses submitted to OCD PRIOR to lining trench.