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.

RECEIVED
FEB -4 2010
NMOCD ARTESIA

1.
Operator: Mewbourne Oil Company OGRID #: 14744
Address: P.O. Box 5270, Hobbs, NM 88241
Facility or well name: "Bradley 31 Fed #3"
API Number: 30-015-36877 OCD Permit Number:
U/L or Qtr/Qtr P Section 31 Township 18S Range 30E County: Eddy
Center of Proposed Design: Latitude N 32°41'50" Longitude W 104°00'34" 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 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other Volume: 14400 bbl Dimensions: L 120' x W 100' x D 8'

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

ENTERED 2-11-10

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.

Final Closure date 6/1/09

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: CRI Disposal Facility Permit Number: R9166

Disposal Facility Name: Lea Land Disposal Facility Permit Number: WM-1-035

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): Charles Martin Title: Engineer

Signature: Date:

e-mail address: cmartin@mewbourne.com Telephone: (575)393-5905

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: 06/01/09**

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: Disposal Facility Permit Number:

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) N/A Federal Land
☒ 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 N 32.69887 Longitude W 104.00498 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): Charles Martin Title: Engineer

Signature: Date: 2-1-10

e-mail address: cmartin@mewbourne.com Telephone: (575)393-5905

Accepted for record
NMOCD
FEB 11 2010

TALON LPE

AMARILLO
921 North Bivins
Amarillo, Texas 79107
Phone 806.467.0607
Fax 806.467.0622

ARTESIA
104 West Hermosa
Artesia, New Mexico 88210
Phone 575.746.8768
Fax 575 746.8905

AUSTIN
911 West Anderson Lane
Suite 202
Austin, Texas 78757
Phone 512.989.3428
Fax 512.989.3487

HOBBS
318 East Taylor Street
Hobbs, New Mexico 88240
Phone 575.393.4261
Fax 575.393.4658

MIDLAND
2901 State Hwy 349
Midland, Texas 79706
Phone 432.522.2133
Fax 432.522.2180

SAN ANTONIO
17170 Jordan Rd
Suite 102
Selma, Texas 78154
Phone 210.579.0235
Fax 210.568.2191

TULSA
525 South Main Street
Suite 535
Tulsa, Oklahoma 74103
Phone 918 742.0871
Fax 918.382.0232

TYLER
719 West Front
Suite 255
Tyler, Texas 75702
Phone 903.531.9971
Fax 903.531 9979

ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
EMERGENCY RESPONSE

Toll Free: 866.742.0742
www.talonlpe.com

January 27, 2010

Mr. Mike Bratcher
NMOCD District 2 Office
1301 W. Grand
Artesia, NM 88210

RE: Bradley 31 Fed #3 Pit Closure, Mewbourne Oil Company
API: 30-015-36877
Sec 31, T 18S, R 30E, Eddy County, NM

Surface Owner: Federal
Analytical: Groundwater Protective Human Health Parameters, BTEX 8021, TPH 418.1, TPH GRO/DRO, Chlorides
Primary Land Use: Ranching/Oil and Gas

Pursuant to Rule 19.15.17.10 NMAC of the New Mexico Oil Conservation Division of New Mexico (NMOCD) regulatory requirement for temporary pit closure, please accept the following documentation for request of final closure of the temporary pit for the aforementioned location. The C-144 was approved for permit application and closure plan by Mike Bratcher on November 21, 2008.

Talon/LPE (Talon) was contracted by Mewbourne Oil Company (Mewbourne) to perform pit closure activities at the aforementioned location. During April 2009, Talon mixed all drill cuttings from the reserve pit with soil at a ratio of no more than 3 to 1 (soil to cuttings) to stabilize the soil in preparation for lined trench burial.

An initial five part composite mixed mud sample (Drill Cuttings dated 4/7/09, attached) was collected from the mixed pit contents on April 7, 2009 and submitted to Trace Analysis in Lubbock, Texas to be analyzed for SPLP chlorides. The analytical results indicated slightly elevated chlorides when compared to the regulatory requirements at that time (250 mg/kg). The pit contents were re-mixed and a second five part composite sample (Drill Cuttings dated 4/21/09, attached) was collected on April 21, 2009. This analysis indicated that the chlorides contained in the drill cuttings met the NMOCD standards for trench burial.

A burial trench was excavated west of the temporary pit. This trench was lined with a 20 mil liner. The burial trench dimensions are 38' x 121'. Once the pit contents were placed onto the liner, a 20 mil cap liner was installed over the material to cover the burial cell. The area was backfilled and covered with a minimum of three feet of native material and one foot of topsoil, contoured to surrounding grade and reseeded. The pit burial marker is placed at N 32.69887, W

104.00498. From the marker, the pit extends 18 feet north, 20 feet south, 55 feet west, and 66 feet east.

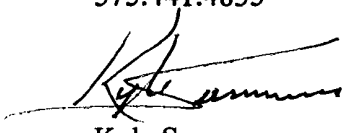
A five part composite pit bottom sample (Floor Composite, attached) was collected on May 11, 2009. These results are within the NMOCD guidelines.

After the discovery that not all the appropriate analytical tests had been performed on the temporary pit contents, another sample was collected. This additional five part composite pit contents sample (P-Comp, attached) was acquired on November 12, 2009, after receiving NMOCD approval to re-enter the burial trench and puncture the burial trench cover-liner. Once the sample was collected, the liner was resealed by the original vendor (photos enclosed). The sample was submitted to Trace Analysis in Lubbock, Texas for analysis. Upon final analytical review, the results indicate that the mixed pit contents are within acceptable NMOCD limits for the deep trench burial. With NMOCD approval the burial trench sample locations were covered with soil and reseeded.

After review of the attached documents, it is requested that the NMOCD consider this pit properly closed.

Respectfully submitted,

Simon Hudgens
Environmental Scientist
Talon/LPE-Artesia
575.441.4835



Kyle Summers
District Manager
Talon/LPE –Artesia
575.746.8768

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1625 N French Dr., Hobbs, NM 88240
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NOV 14 2008
OCD-ARTESIA

Form C-144
July 21, 2008

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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

S

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
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☐ 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: Mewbourne Oil company OGRID #: 14744
Address: P.O. Box 5270, Hobbs, NM 88241
Facility or well name: Bradley 31 Fed #3
API Number: 30-015-36877 OCD Permit Number:
U/L or Qtr/Qtr P Section 31 Township 18S Range 30E County: Eddy
Center of Proposed Design: Latitude N32° 41' 50" Longitude W104° 00' 34" 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 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other Volume: 14400 bbl Dimensions: L 120' x W 100' x D 8'

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: CRI Disposal Facility Permit Number: R9166

Disposal Facility Name: Lea Land Disposal Facility Permit Number: WM-1-035

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): Charles Martin Title: Engineer

Signature: Charles Martin Date: 11/05/08

e-mail address: cmartin@mewbourne.com Telephone: (575) 393-5905

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

OCD Representative Signature: ~~Signed By~~ Phillip Brennan **Approval Date:** NOV 21 2008

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:**

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: Disposal Facility Permit Number:

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 Longitude 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): Title:

Signature: Date:

e-mail address: Telephone:

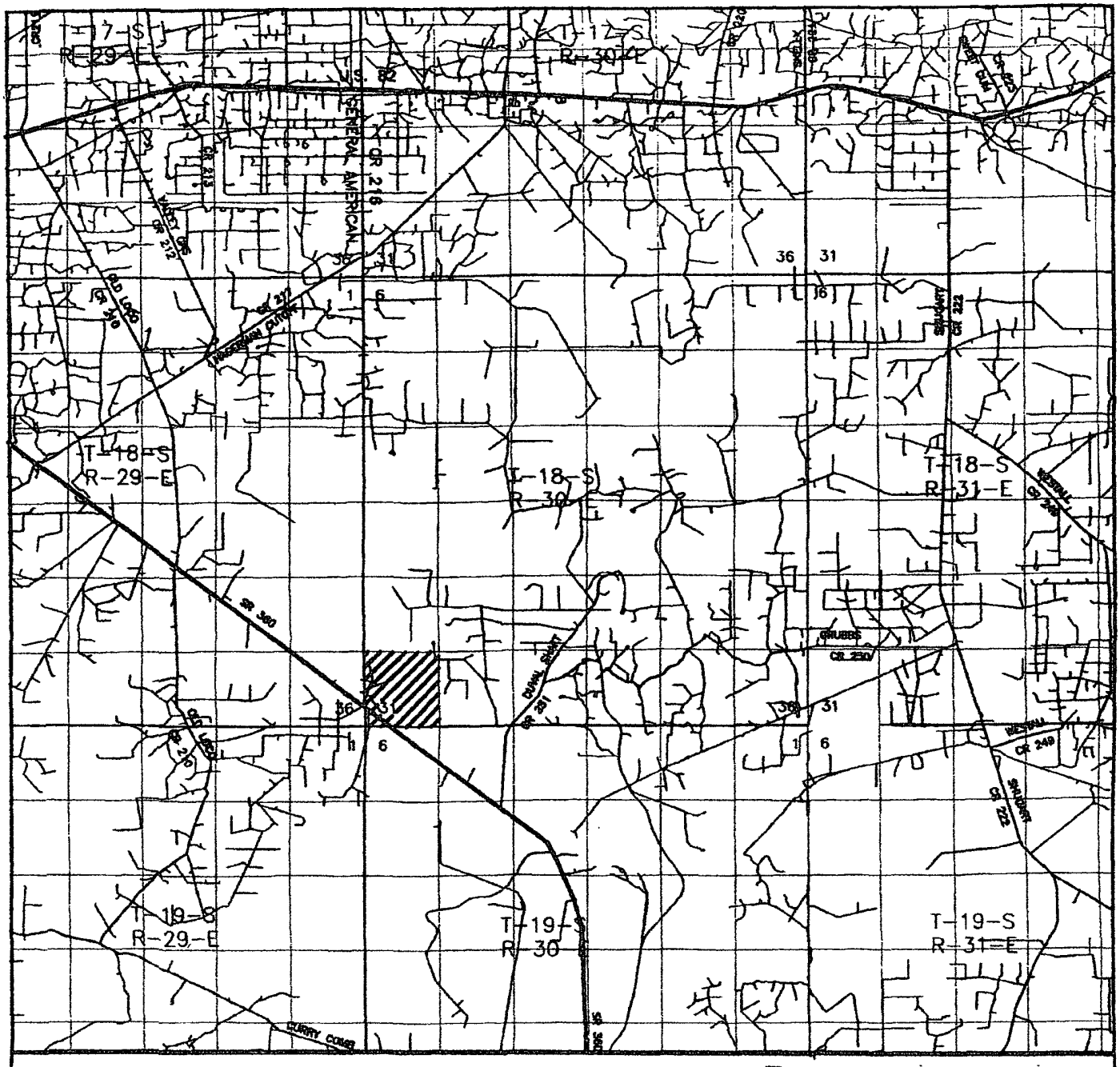


Exhibit 3

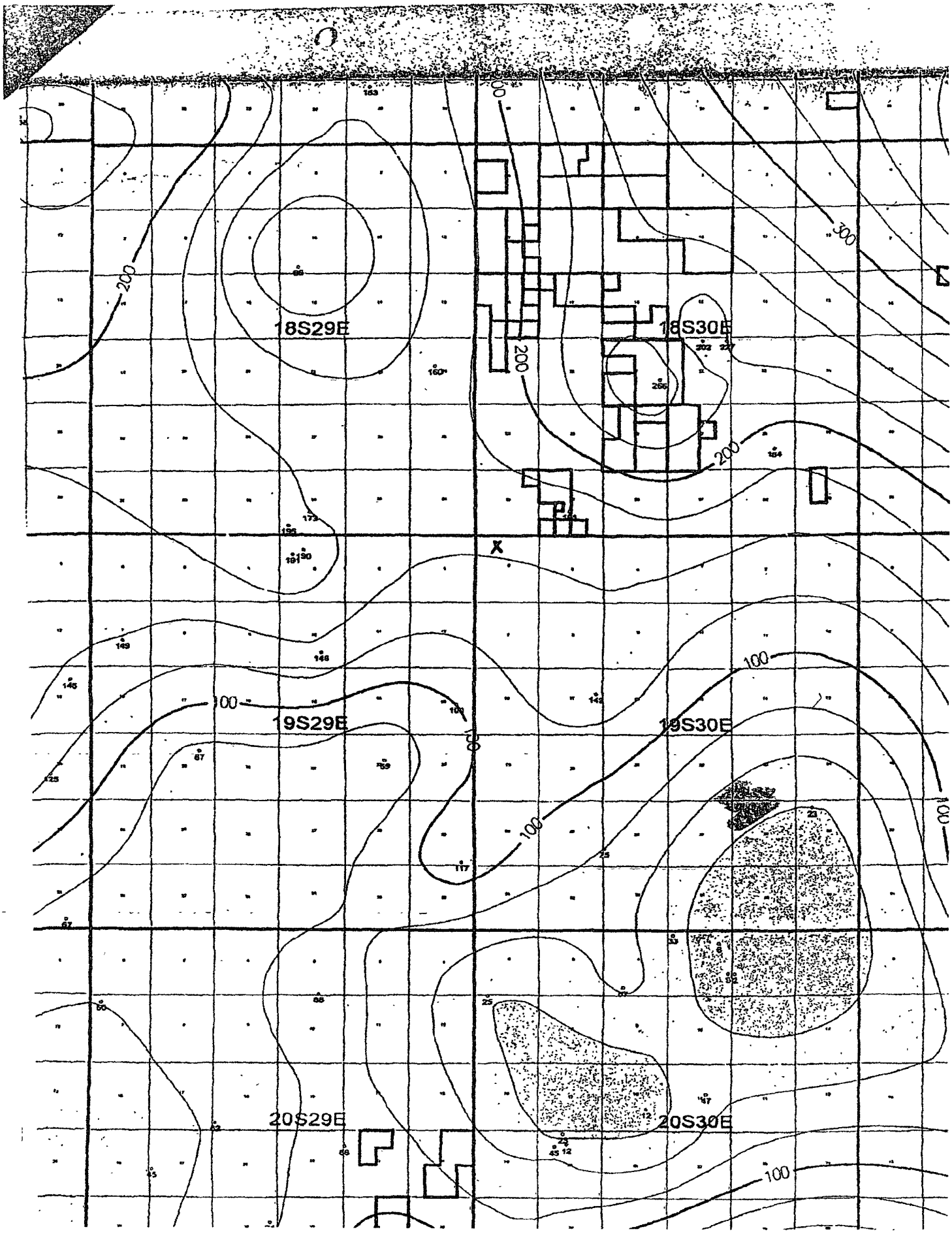
BRADLEY "31" FEDERAL Com #3
Located 875' FSL and 825' FEL
Section 31, Township 18 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield

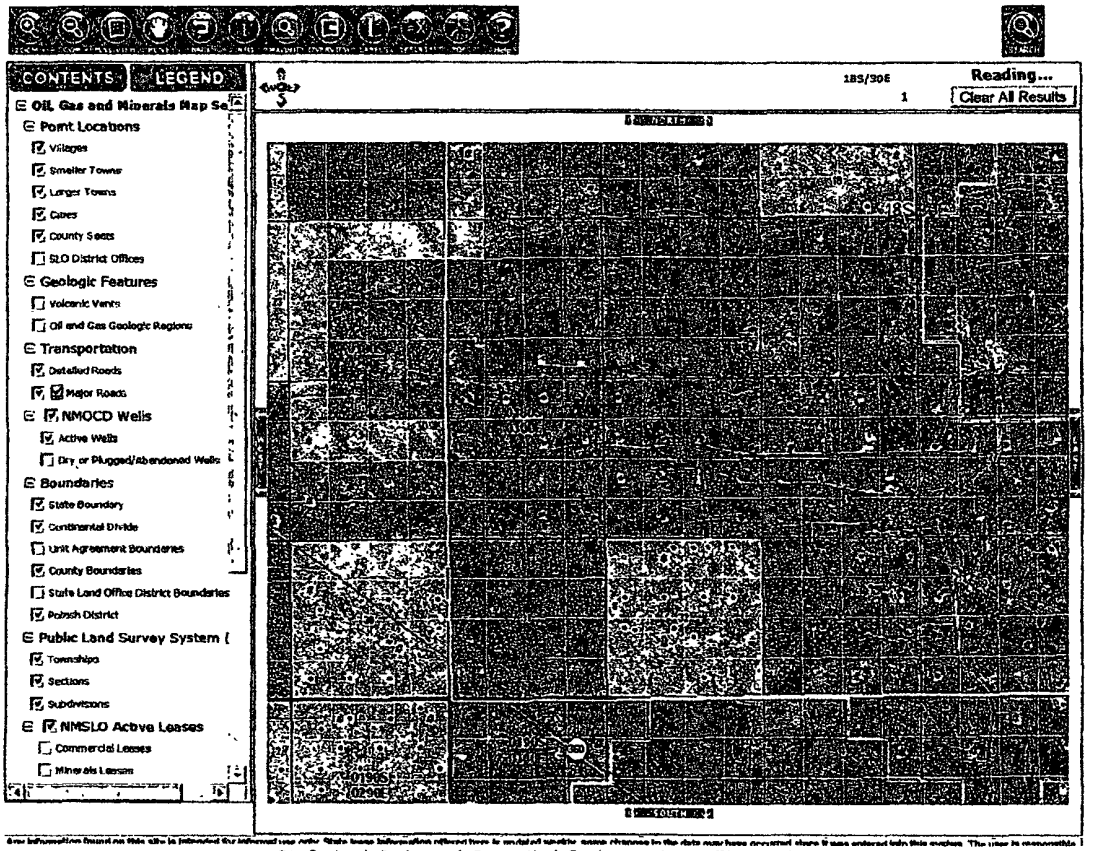
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O Number.	20740 JMS
Survey Date:	11-05-2008
Scale:	1" = 2000'
Date:	11-06-2008

MEWBOURNE OIL CO.

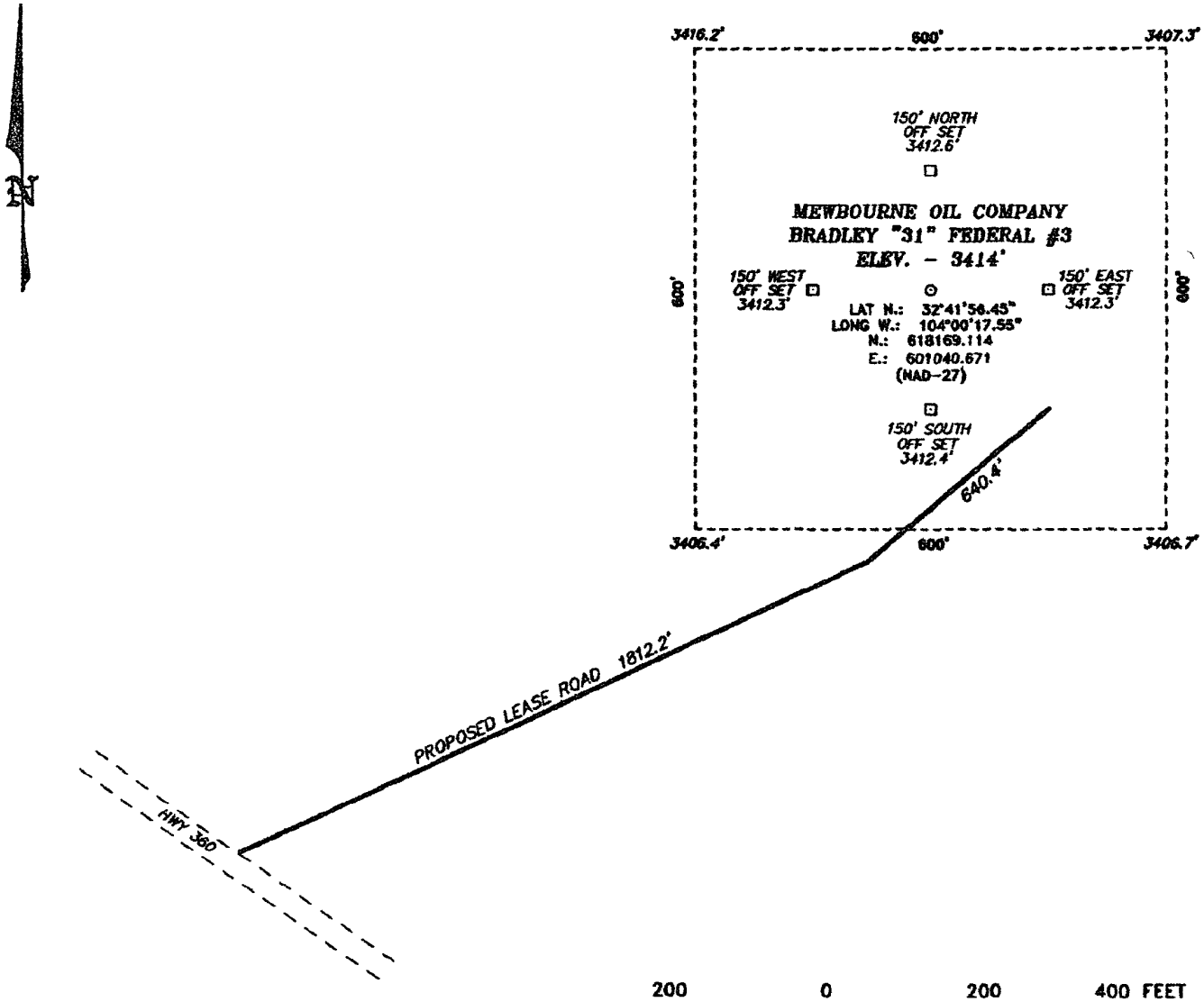

18S29E
18S30E
19S29E
19S30E
20S29E
20S30E
200
300
100

New Mexico State Land Office - Oil, Gas and Minerals Map Service



Site Credits | Disclaimer | Contact Us | Employee Lookup | Affiliated Websites

SECTION 31, TOWNSHIP 18 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



200 0 200 400 FEET

SCALE: 1" = 200'

DRIVING DIRECTIONS:

FROM MILE MARKER 13 OF HWY 360, GO NORTHWEST 0.2 MILES TO PROPOSED LEASE ROAD.

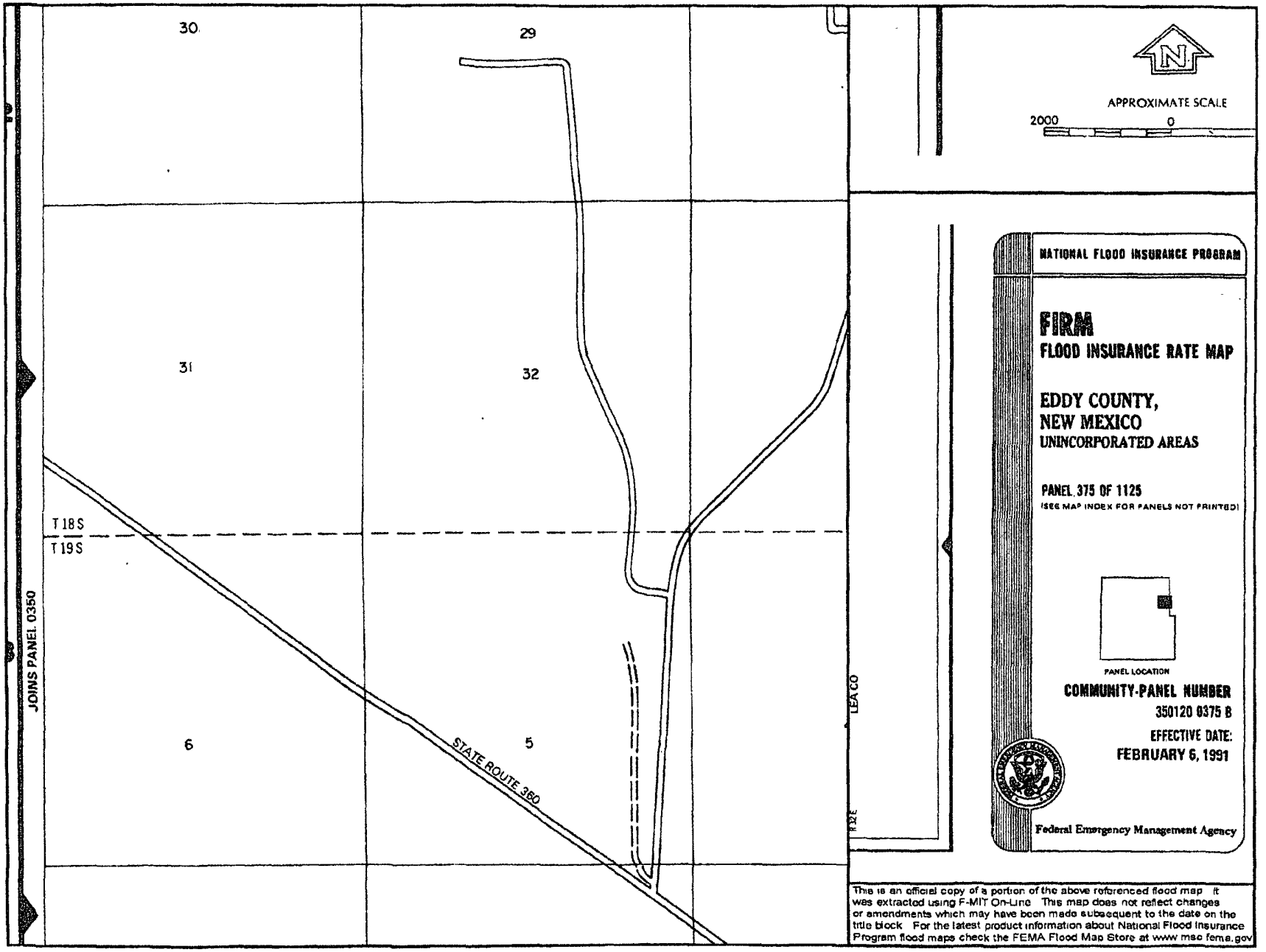
MEWBOURNE OIL COMPANY

REF: BRADLEY "31" FEDERAL #3 / WELL PAD TOPO

THE BRADLEY "31" FEDERAL #3 LOCATED 875' FROM THE SOUTH LINE AND 825' FROM THE EAST LINE OF SECTION 31, TOWNSHIP 18 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

W.O. Number: 20852	Drawn By: J. SMALL		
Date: 11-24-2008	Disk: JMS 20852	Survey Date: 11-19-2008	Sheet 1 of 1 Sheets



This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., 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, New Mexico 87505

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-015-36877	86480	Turkey Track; Morrow (Gas) 03205

Property Code	Property Name	Well Number
35896	BRADLEY "31" FEDERAL Com	3

OGRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3414'

Surface Location

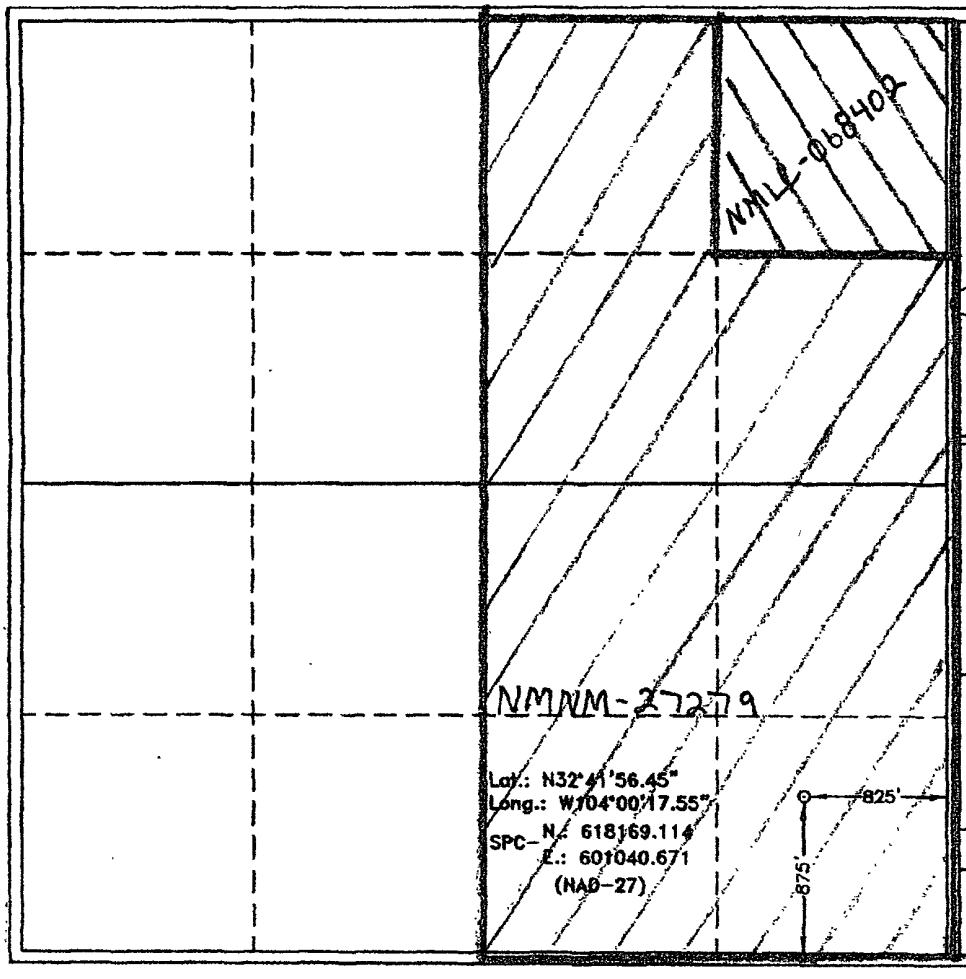
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	18 S	30 E		875	SOUTH	825	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Jackie Lathan 11/11/08
Signature Date

Jackie Lathan
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

NOVEMBER 06, 2008
Date Surveyed

Signature & Seal of Professional Surveyor

NEW MEXICO 7977 REGISTERED PROFESSIONAL SURVEYOR

W.O. Number 20

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

ATS-09-112

Form 3160-3
(September 2001)

JAN 05 2009
OCD-ARTESIA

OCD-ARTESIA

208

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.	NMNM-27279
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No.	
8. Lease Name and Well No.	Bradley 31 Federal Com #3
9. API Well No.	30-015-36877
10. Field and Pool, or Exploratory	Turkey Track Morrow
11. Sec., T., R., M., or Blk. and Survey or Area	Sec 31 - T18S - R30E
12. County or Parish	Eddy
13. State	NM

1a. Type of Work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator: Mewbourne Oil Company - 14744

3a. Address: PO Box 5270 Hobbs, NM 88241

3b. Phone No. *(include area code)*: 575-393-5905

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*

At surface 875' FSL & 825' FEL Unit P

Capitan Controlled Water Basin

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office*: 8 miles S of Loco Hills, NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 825'	16. No. of Acres in lease: 520	17. Spacing Unit dedicated to this well: 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx 2910'	19. Proposed Depth: 11950'	20. BLM/BIA Bond No. on file: NM1693, Nationwide
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3414' GL	22. Approximate date work will start*: ASAP	23. Estimated duration: 45

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature: Jackie Lathan	Name *(Printed/Typed)*: Jackie Lathan	Date: 11/11/08
Title: Hobbs Regulatory		
Approved by *(Signature)*: /s/ Don Peterson	Name *(Printed/Typed)*: /s/ Don Peterson	Date: DEC 24 2008
Title: FIELD MANAGER	Office: CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**(Instructions on reverse)*

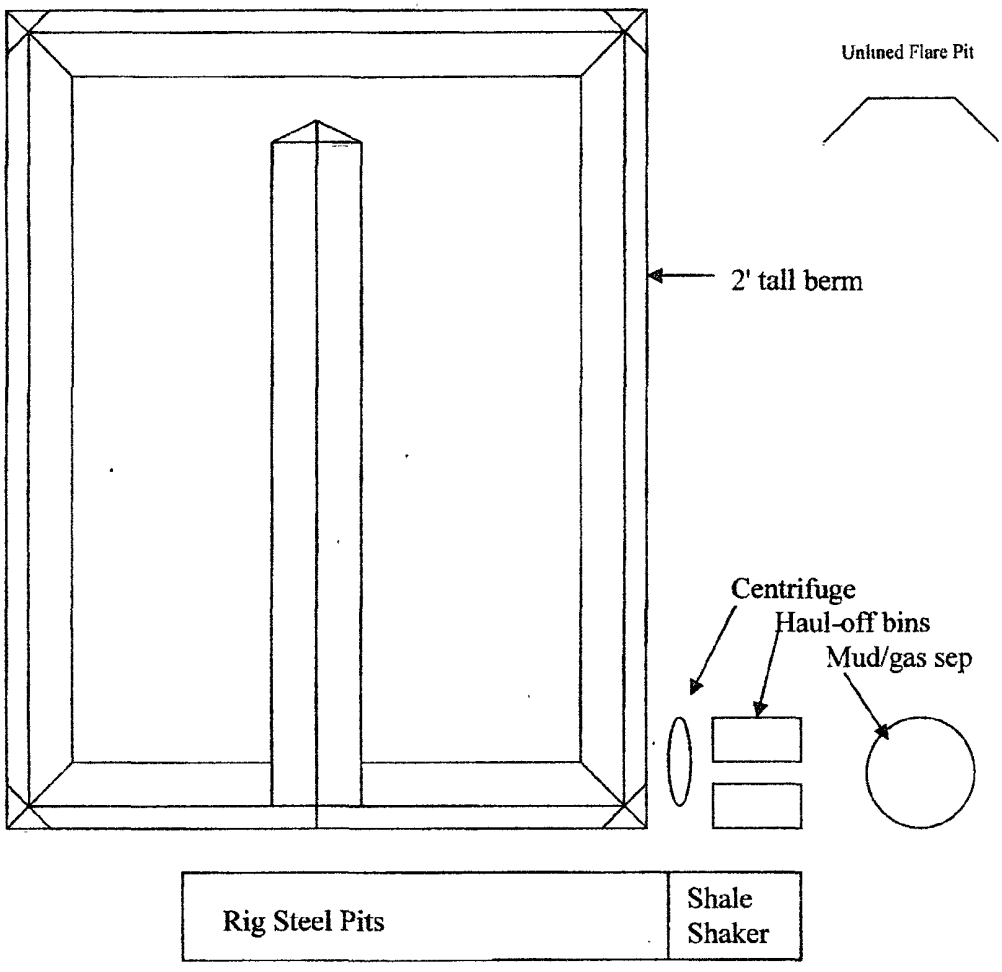
SEE ATTACHED FOR
CONDITIONS OF APPROVAL

ENTERED
AFMSS

1-8-09

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Temporary Pit Design and Construction



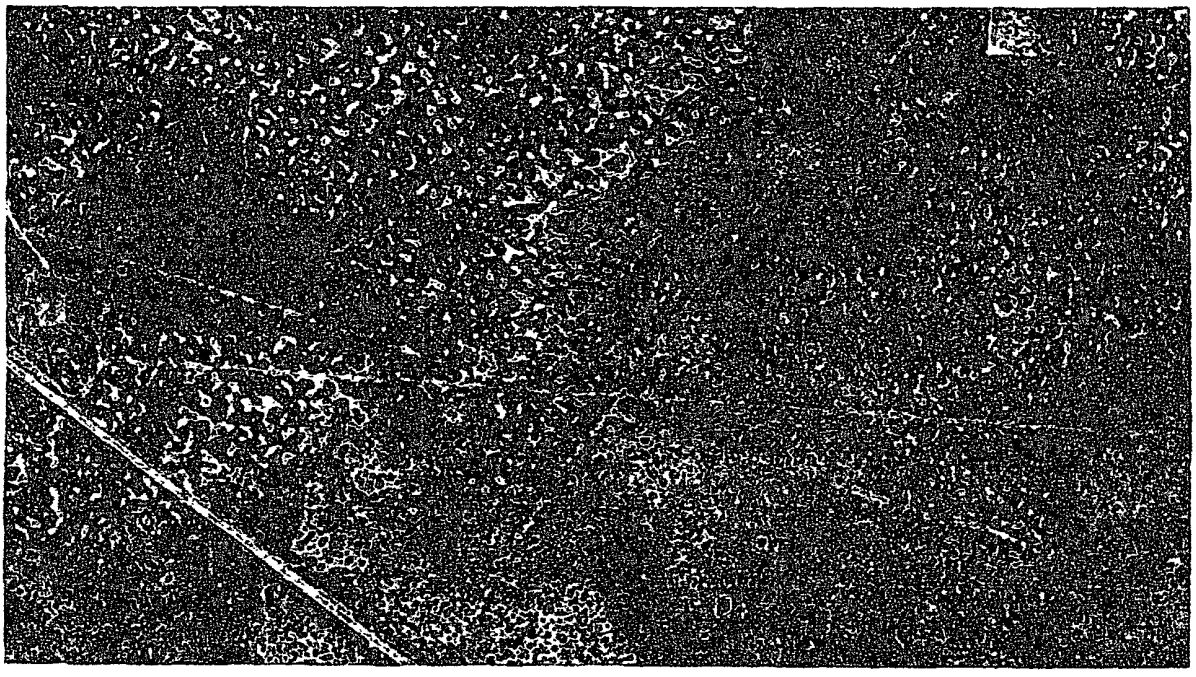
Pit Dimensions:
Peak Width: 100'. Floor Width: 76'
Peak Length: 120' Floor Length: 96'
Floor is 6' below GL.
Perimeter berm is 2' above GL.
All walls are built with 2:1 slope.
Pit is fenced on 3 sides with barbed wire before & during drilling operations. Fourth side will be installed after drilling operations are completed.
Pit is lined with 20 mil string reinforced LLDPE installed with 18" anchor trench.
Approximate volume including 2' freeboard: 14,400 bbl.

Temporary Pit Operating and Maintenance and Closure Plan

Temporary pit will be built in a single horse shoe as shown in the attached drawing. The pit will only be utilized for "fresh" water-based fluids. Brine water fluids will be hauled off location and disposed of in an approved facility. Drilling cuttings in the high chloride sections of the well will collect in haul-off bins and will be disposed at either Lea Land Farm or CRI. Drilling cuttings in the low chloride sections of the well will collect in the temporary pit. The temporary pit will be dewatered and solids will be buried in a deep trench on site.

Contingency-
If the temporary pit does not meet the required specifications to bury on site, material will be disposed of at Lea Land Farm or CRI.

Google Maps



On-Site Closure Plan

- **Siting Criteria:** See attachments.
- **Proof of Surface Owner Notice:** BLM approved APD shall serve as notice.
- **Construction/Design Plan of Burial Trench:** See attachment.
- **Burial Trench:** In compliance with 19.15.17.13 NMAC, material form temporary pit will be stiffened with a maximum 3:1 ratio and placed in a lined 20mil burial trench with approximate dimensions of 150x40x20. A 20mil lid will be placed on top of the burial cell to seal in the impacted material. Upon excavation all applicable soil testing will be performed pursuant to Pit Rule 17 to verify the limits set by the NMOCD have been obtained. A copy of the analytical data will be attached to the Final Report.
- **Sampling Plan:** In compliance with Subsection F of 19.15.17.13 NMAC a five point composite sample will be taken from the floor of the excavation and the burial contents.
- **Soil Cover Design:** In compliance with Subsection H of 19.15.17.13 NMAC three foot of native material will be placed over the burial trench and the excavated pit area with one foot of top soil to ensure re-vegetation.
- **Re-vegetation Plan:** In compliance with Subsection I of 19.15.17.13 NMAC the area will be re-seeded with a native vegetation of BLM's choice.
- **Site Reclamation Plan:** In compliance with Subsection I of 19.15.17.13 NMAC the impacted and disturbed area will be re-contoured to surrounding terrain.
- **Marker:** A marker will be placed over the buried material. The permanent marker will have all required information permanently listed on it.
- **Deed:** In compliance with 19.15.17.13 NMAC a deed will be filed with the county clerk and an approved copy will be attached to the final report.

On the 29th day of October, 2008 Mewbourne Oil Co. visually inspected the Bradley 31 Fed #3 location in Unit Letter P of Sec 31, T18S, R30E, of Eddy County, NM.

This is to certify that upon visual inspection of the above mentioned location there are no permanent residences, schools, hospitals, institutions or churches within 300 feet. The location is not within 500 feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, nor within 1000 horizontal feet of any other fresh water well or spring, nor within 500 feet of a wetland, nor within 300 feet of a continuously flowing water course, nor within 200 feet of any other significant watercourse or lakebed, sinkhole or playa lake (measured from the ordinary high-water mark).

Signature: _____ Date: 11/05/08

Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
(575) 393-5905

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route for the Bradley 31 Federal Com #3, 875' FSL & 825' FEL of Sec 31-T18S- R30E, Eddy County, New Mexico; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mewbourne Oil Company, its contractors and subcontractors, in accordance with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Signature: _____ Date: 4/11/08

Print: NM Young

Hobbs District Manager

United States Department of the Interior
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: Mewbourne Oil Company
Street or Box: P.O. Box 5270
City, State: Hobbs, New Mexico
Zip Code: 88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number: Lease Number #NMNM-27279

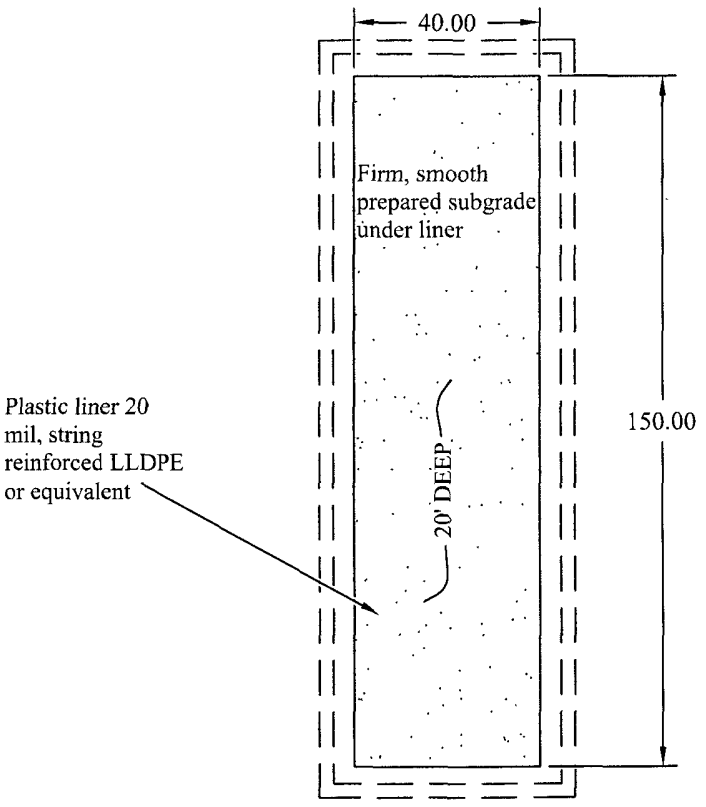
Legal Description of Land: Section 31, T-18S, R-30E Eddy County, New Mexico.
Location @ 875' FSL & 825' FEL.

Formation (if applicable):

Bond Coverage: $150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: _____
Name: NM (Micky) Young
Title: District Manager
Date: November 11, 2008



Anticipated Trench Dimensions

TALON LPE

Date:	9/15/2009
Scale:	1" = 40'
Drawn By:	HDJ

Mewbourne Oil Company
Pit Liner Site Plan

Submit To Appropriate District Office
Two Copies
District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd , 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-105
July 17, 2008

1. WELL API NO.
30-015-36877

2. Type of Lease
☐ STATE ☐ FEE ☒ FED/INDIAN

3 State Oil & Gas Lease No. NMNM-27279

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4 Reason for filing

☐ **COMPLETION REPORT** (Fill in boxes #1 through #31 for State and Fee wells only)

☒ **C-144 CLOSURE ATTACHMENT** (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17 13.K NMAC)

5. Lease Name or Unit Agreement Name
Bradley 31 Fed Com

6 Well Number: 3

RECEIVED
FEB - 4 2010
NMOCD ARTESIA

7 Type of Completion:
☐ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER

8 Name of Operator Mewbourne Oil Company

9. OGRID 14744

10 Address of Operator PO Box 5270, Hobbs, NM 88241

11. Pool name or Wildcat

12.Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:										
BH:										

13 Date Spudded	14 Date T D Reached	15 Date Rig Released	16. Date Completed (Ready to Produce)	17 Elevations (DF and RKB, RT, GR, etc)
		03/10/09		

18 Total Measured Depth of Well	19 Plug Back Measured Depth	20. Was Directional Survey Made?	21. Type Electric and Other Logs Run

22 Producing Interval(s), of this completion - Top, Bottom, Name

23. **CASING RECORD** (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25 TUBING RECORD

SIZE	DEPTH SET	PACKER SET

26 Perforation record (interval, size, and number)

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

28 **PRODUCTION**

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod or Shut-in)*

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl	Gas - Oil Ratio

Flow Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API - *(Corr)*

29 Disposition of Gas *(Sold, used for fuel, vented, etc.)*

30 Test Witnessed By

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit

33 If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude 32.67887 Longitude 104.00498 NAD 1927 1983

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Jackie Lathan
Printed Name

Signature Jackie Lathan

Hobbs Regulatory
Title

01/07/10
Date

E-mail Address jlathan@mewbourne.com

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., 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, New Mexico 87505

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-015-36877		Turkey Track Atoka

Property Code	Property Name	Well Number
	BRADLEY "31" FEDERAL	3

OGRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3414'

Surface Location

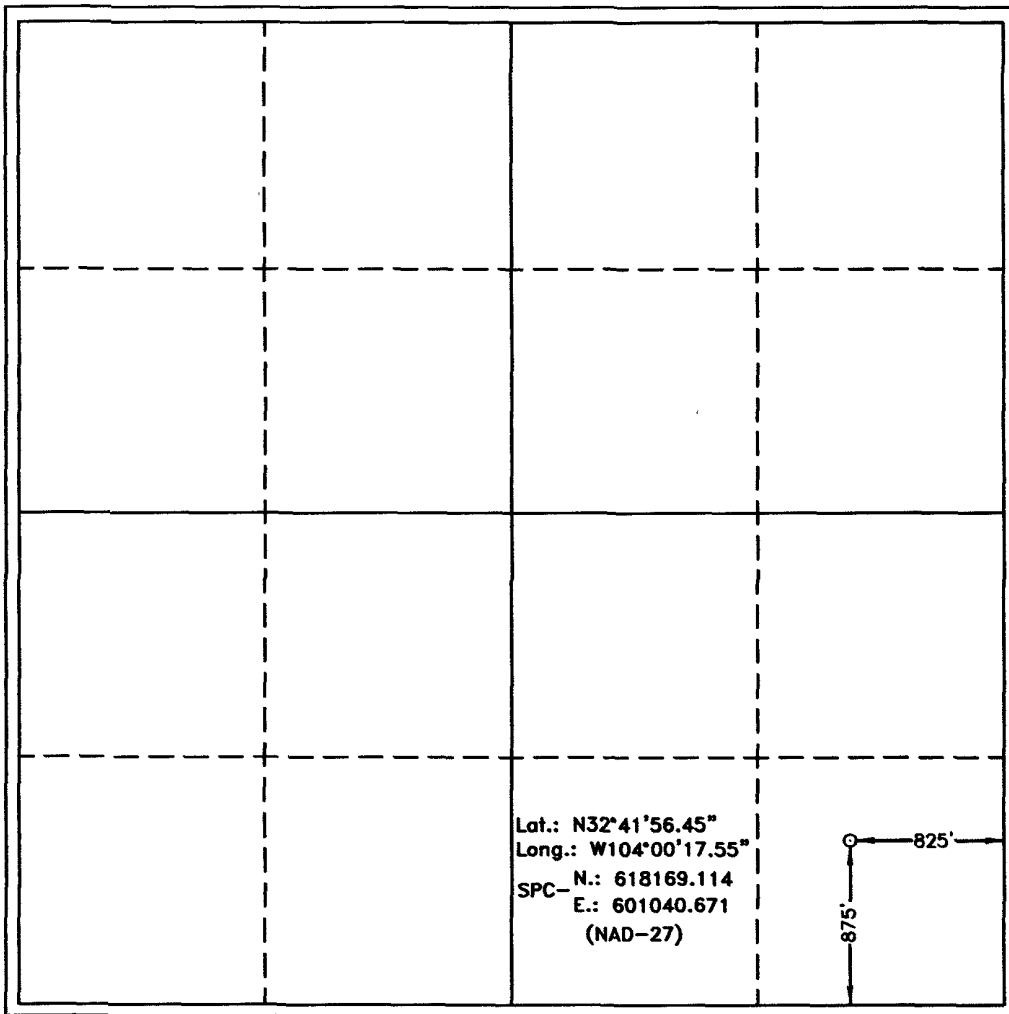
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	18 S	30 E		875	SOUTH	825	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Jackie Lathan 1/8/2010
Signature Date

Jackie Lathan
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

NOVEMBER 05, 2008
Date Surveyed

Signature & Seal of Professional Surveyor

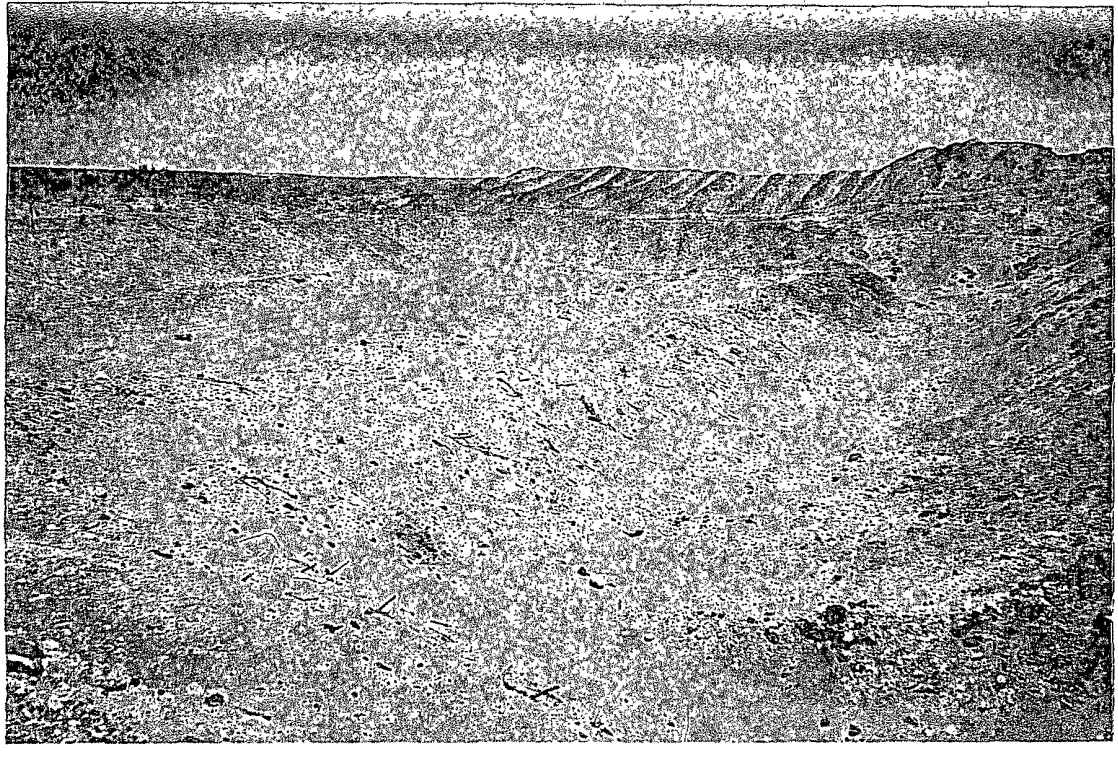
NEW MEXICO 7977 REGISTERED PROFESSIONAL SURVEYOR

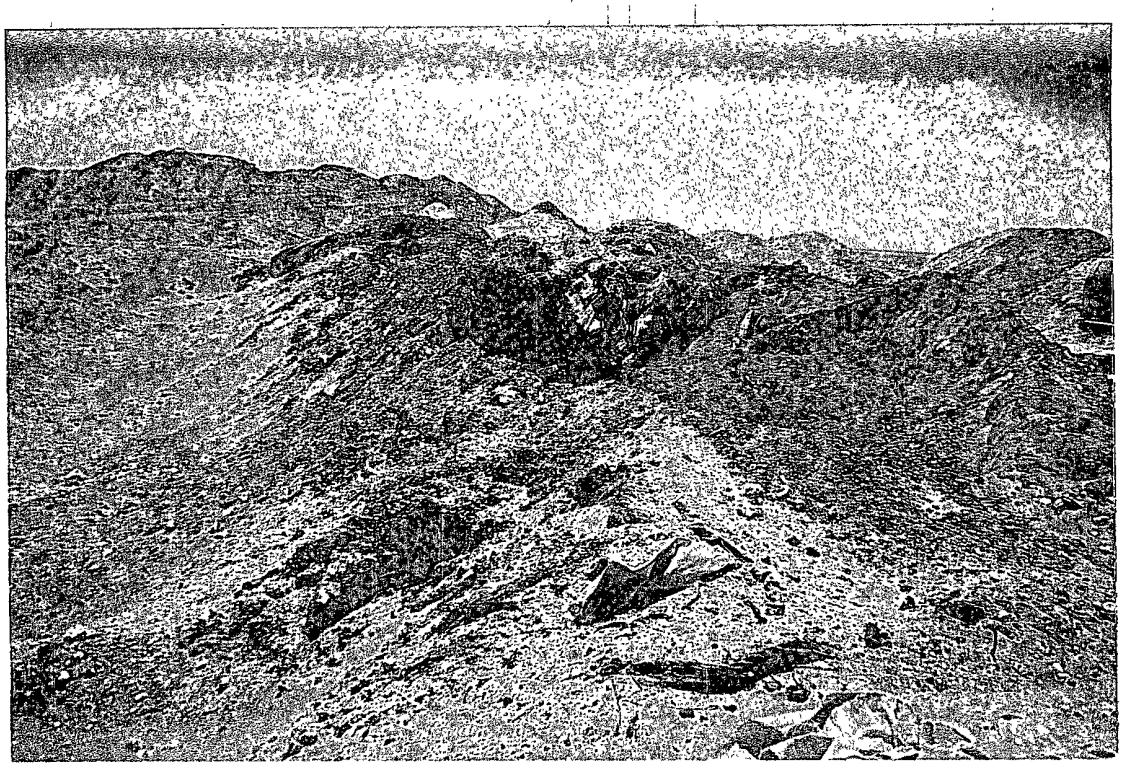
W.O. [illegible]

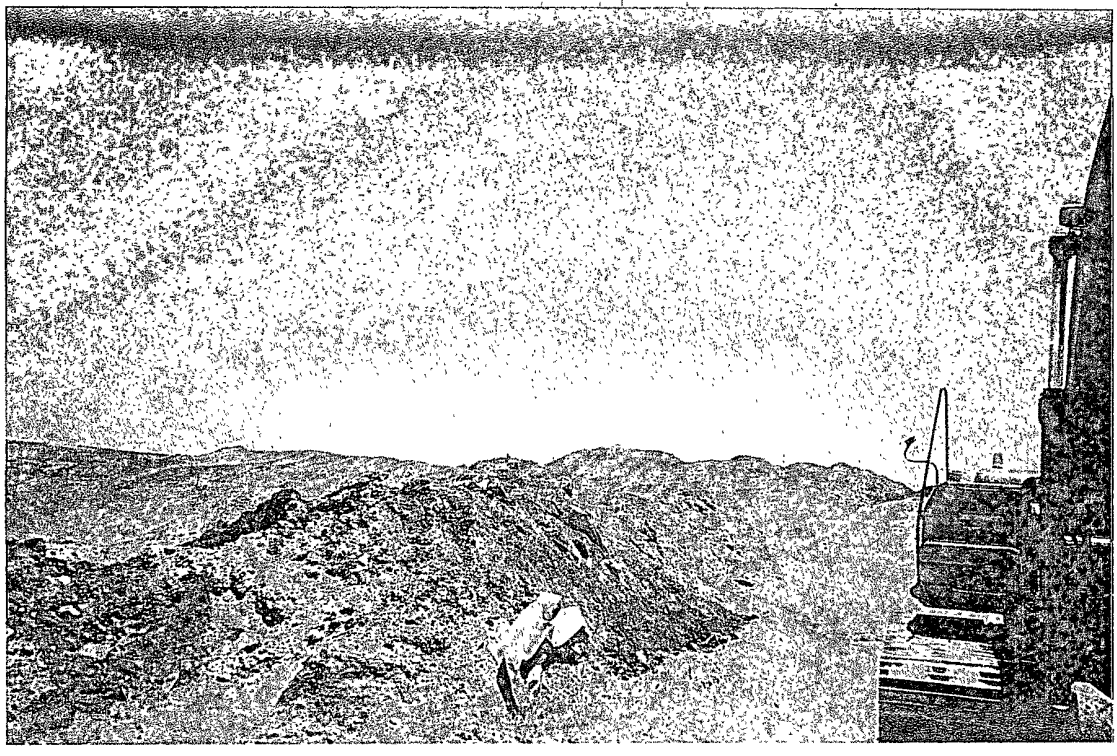
Certificate No. Gary L. Jones 7977

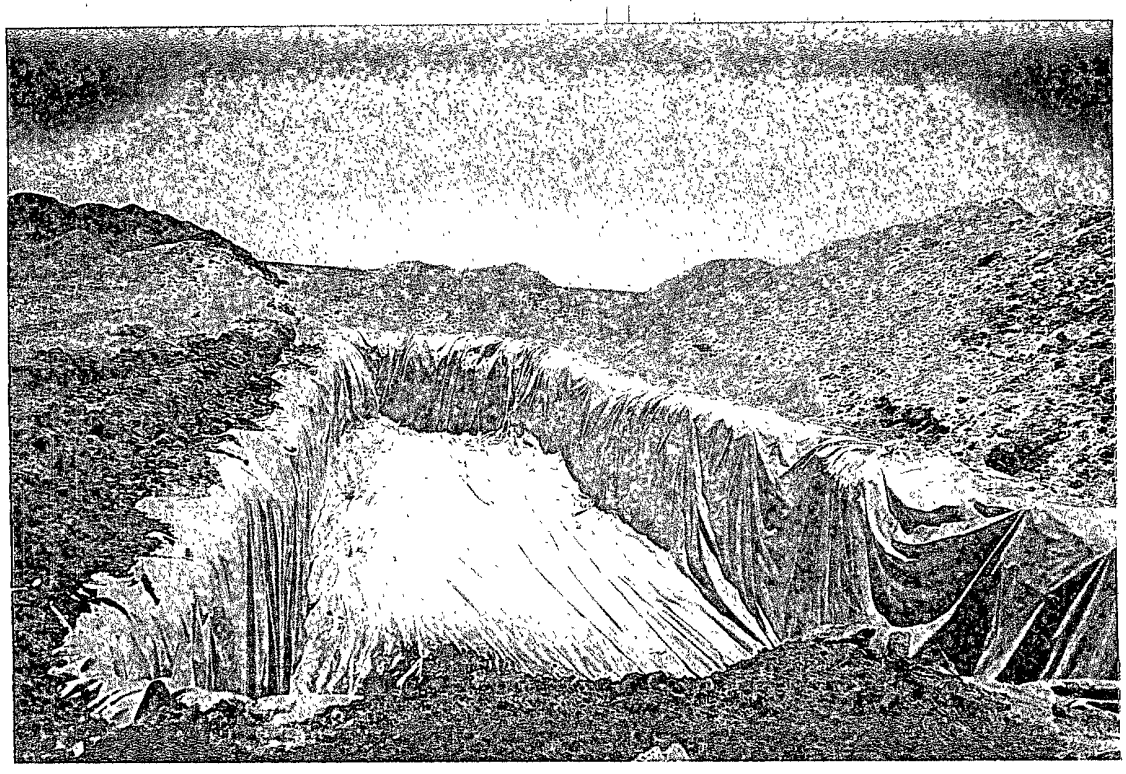
BASIN SURVEYS

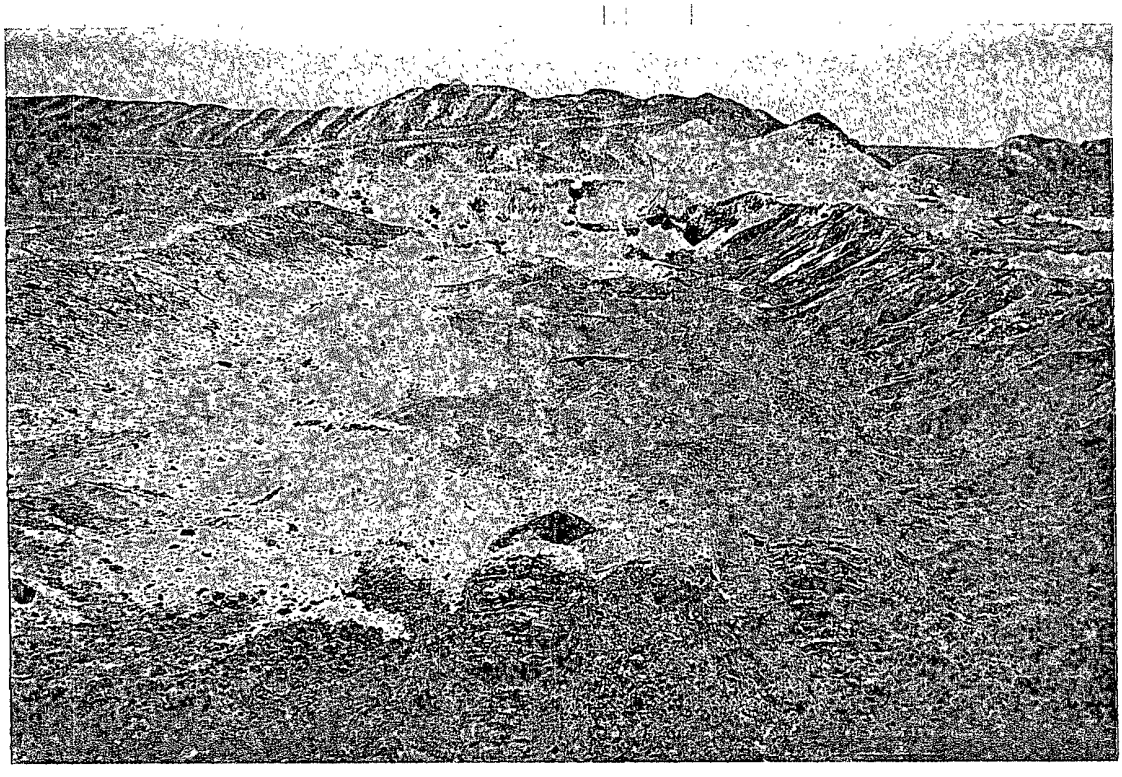

MEWBOURNE OIL COMPANY
BRADLEY "31" FED COM #3
875' FSL & 825' FEL
SEC. 31, T18S, R30E
EDDY COUNTY, NEW MEXICO
LEASE #NMNM-2727

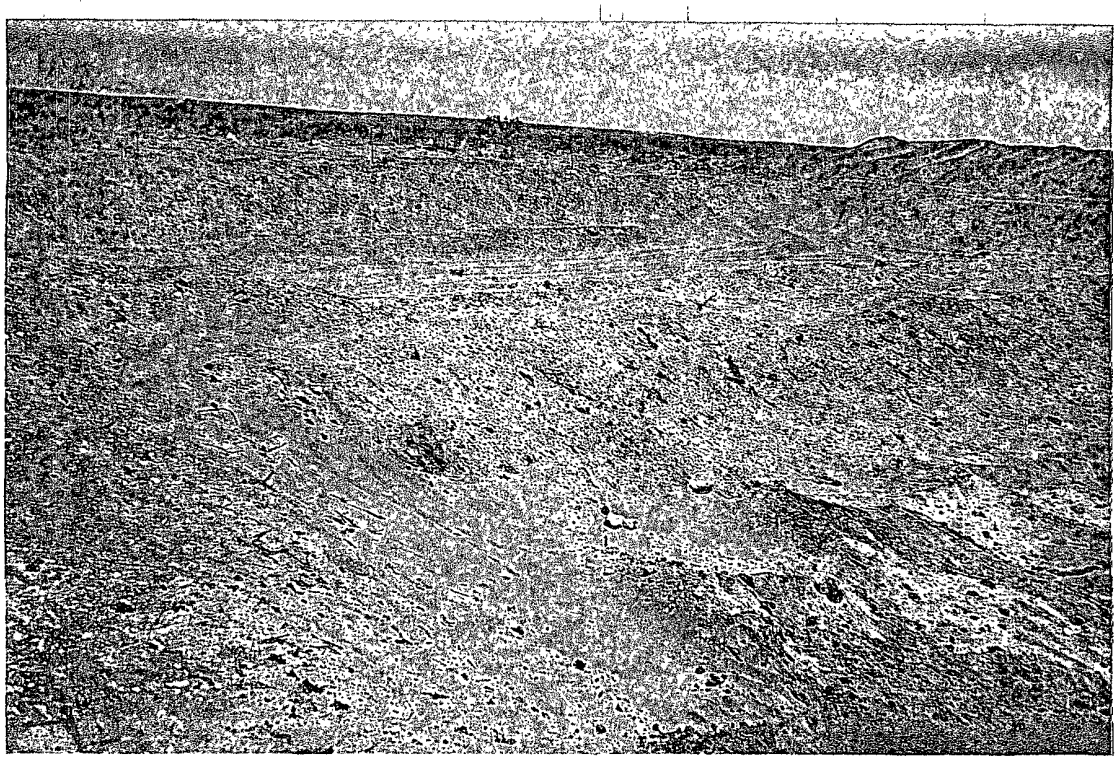


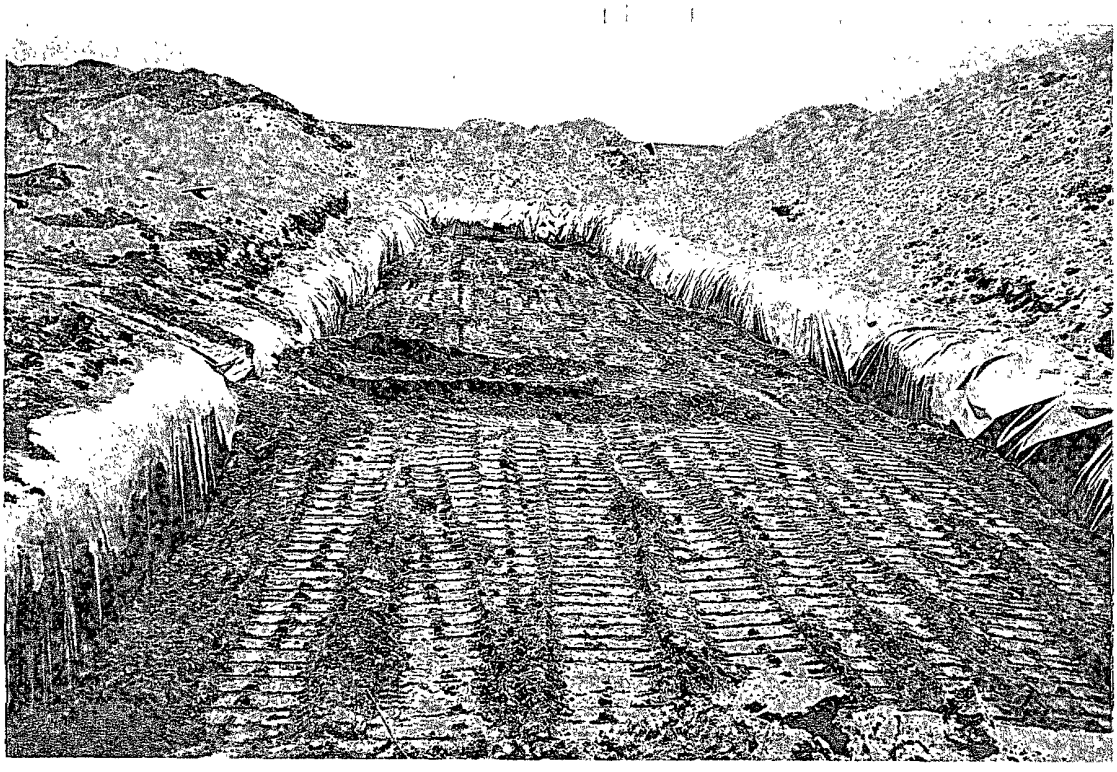


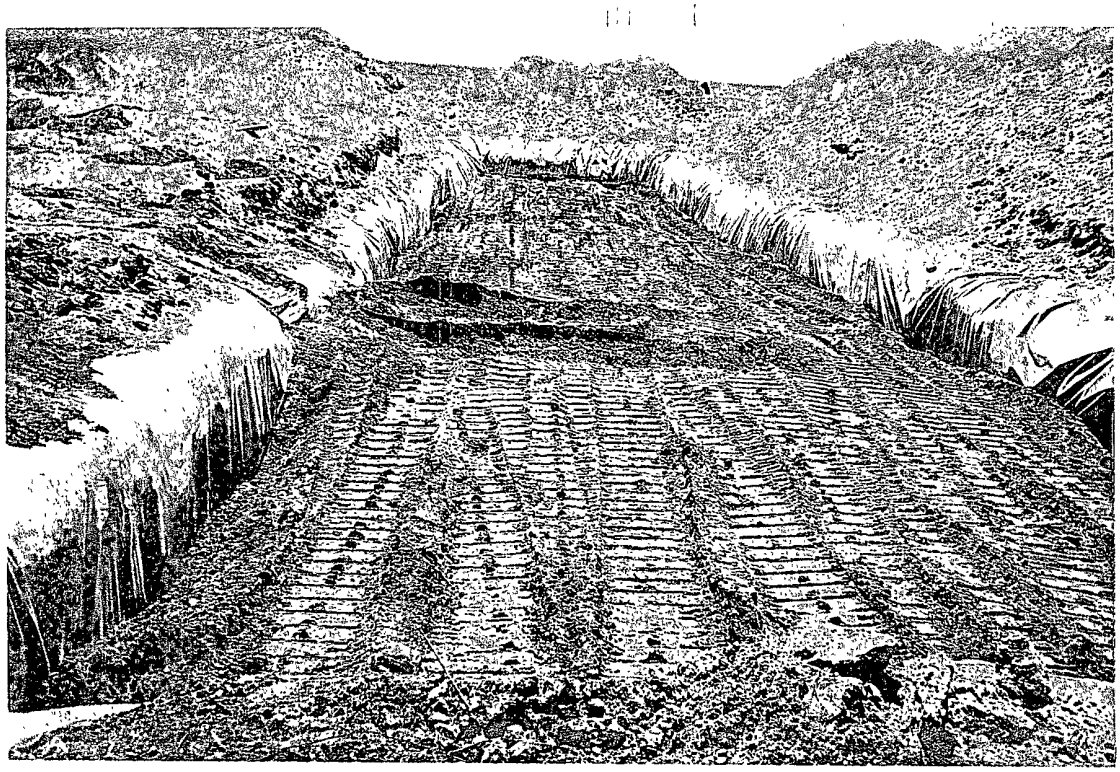


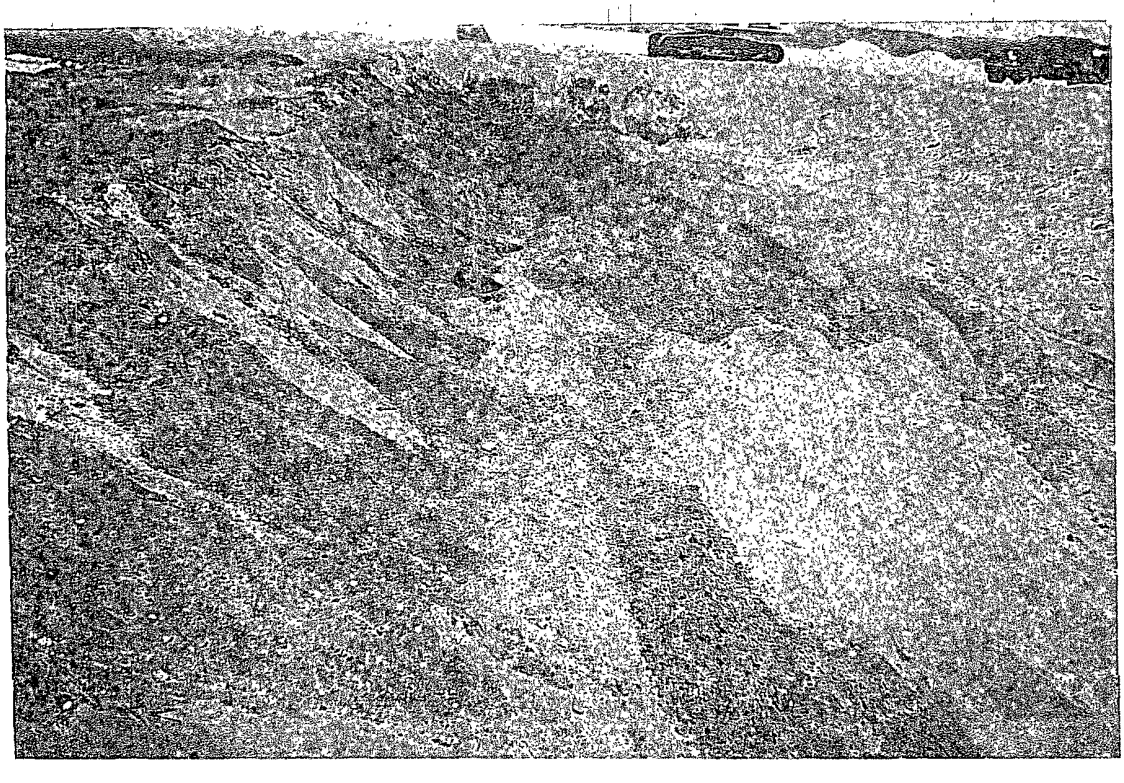




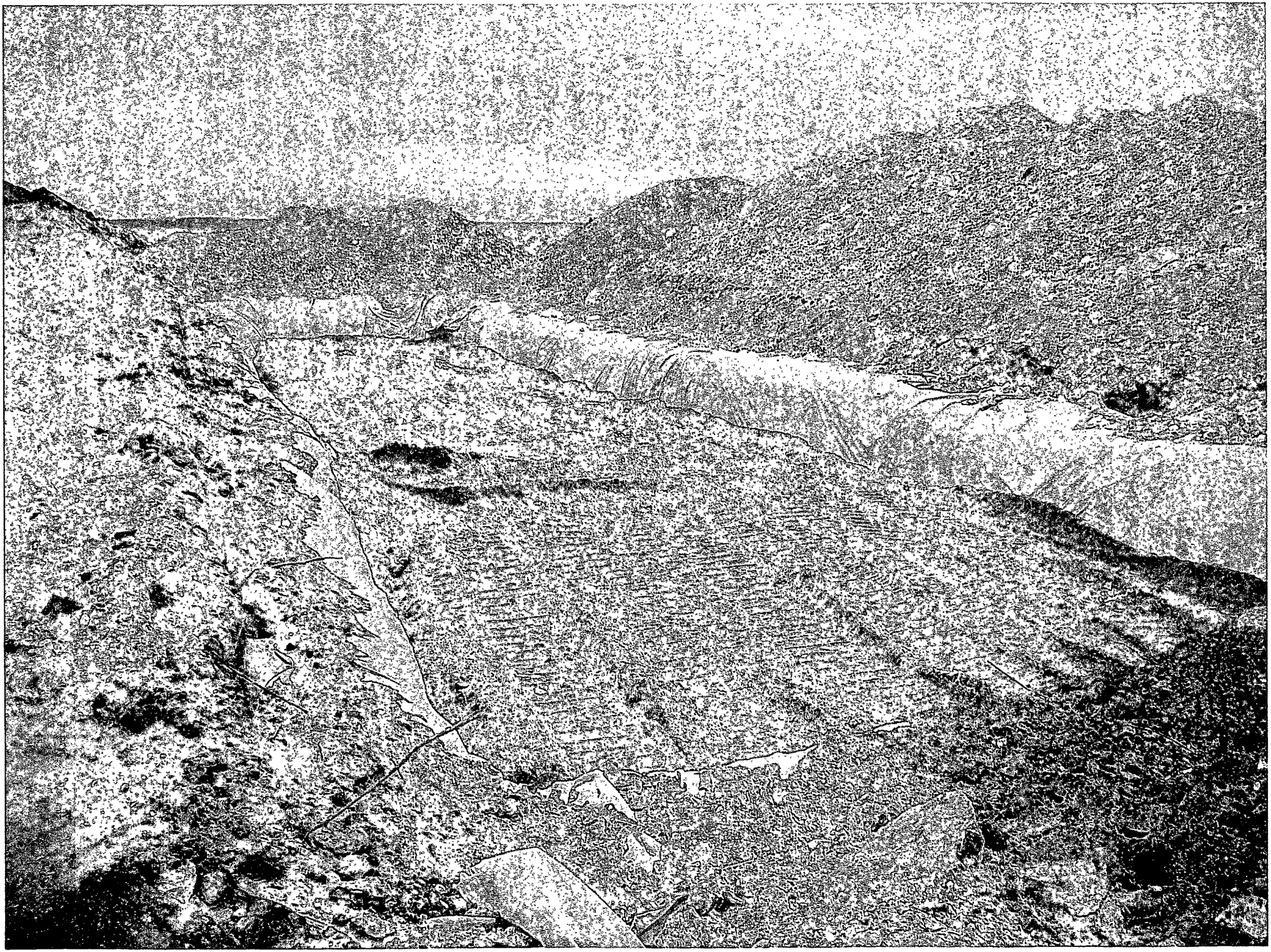


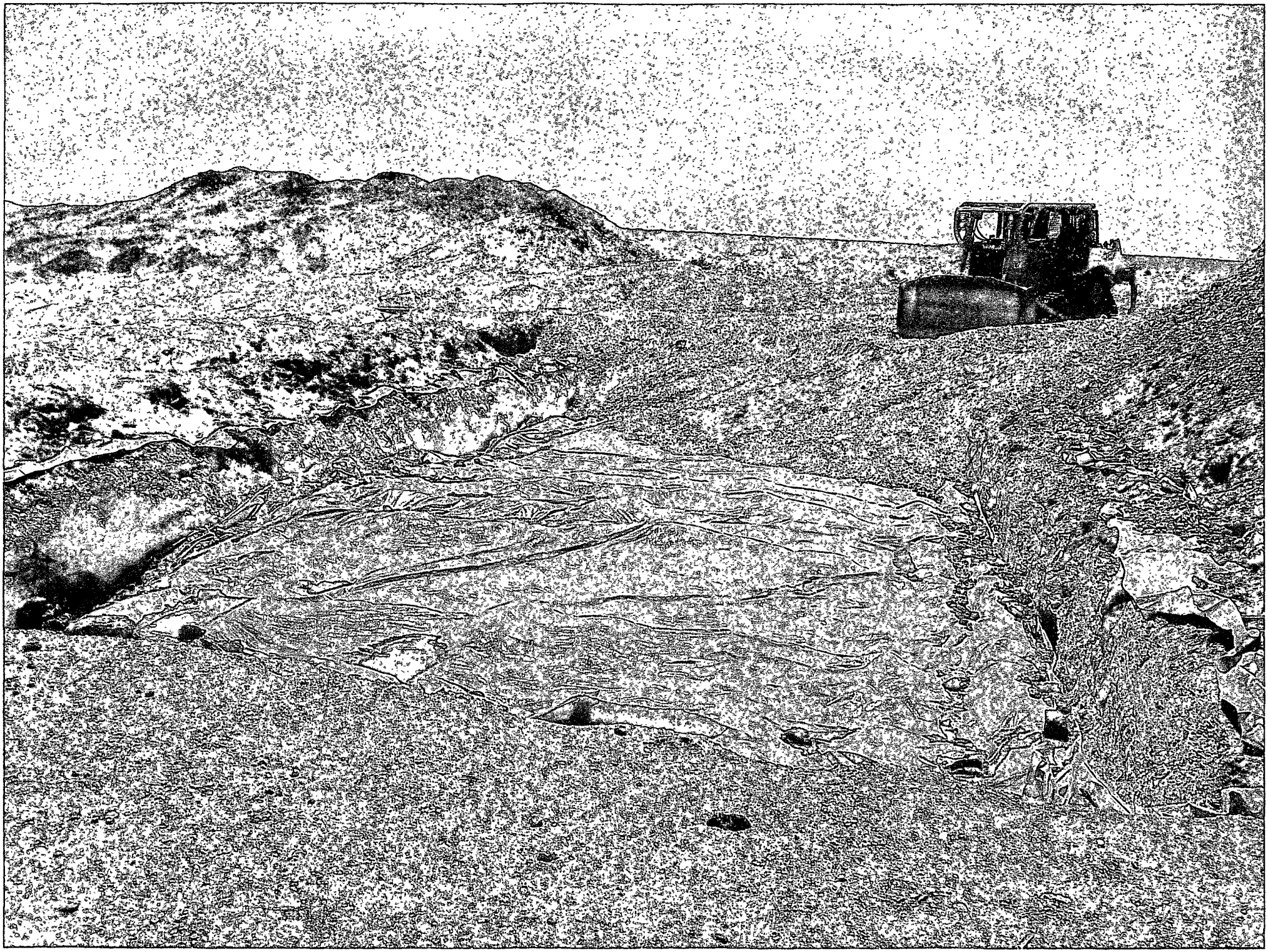


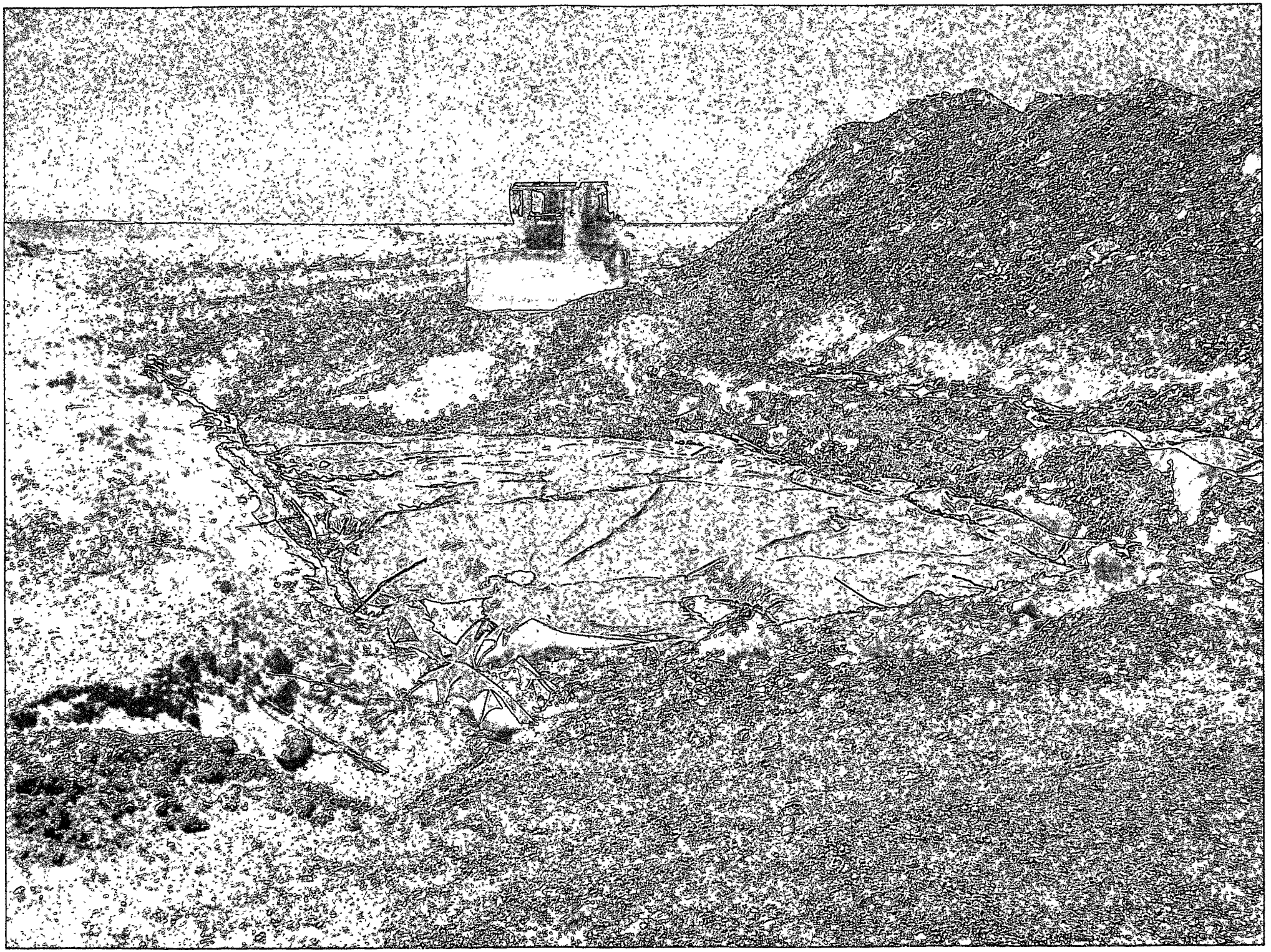


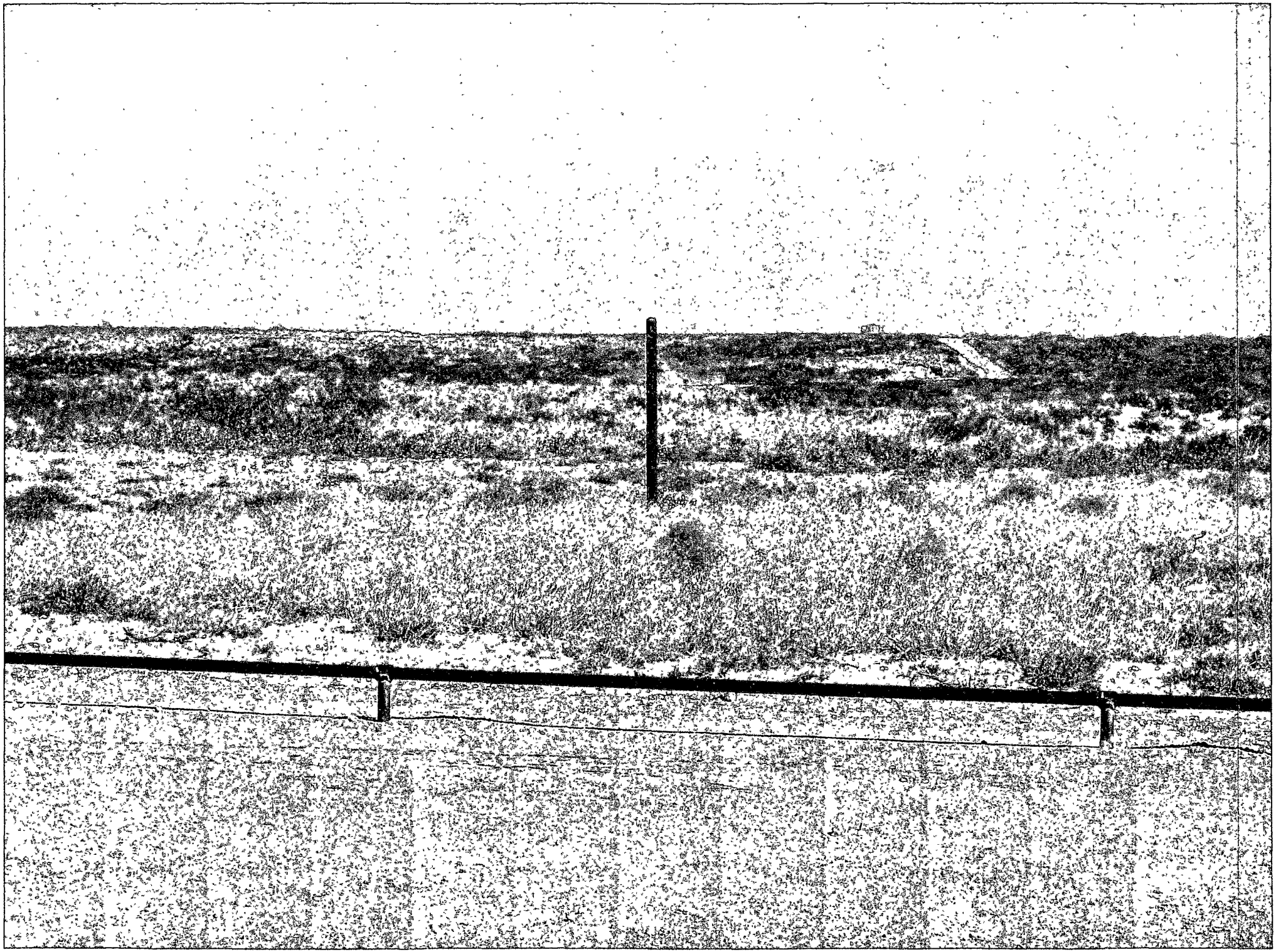


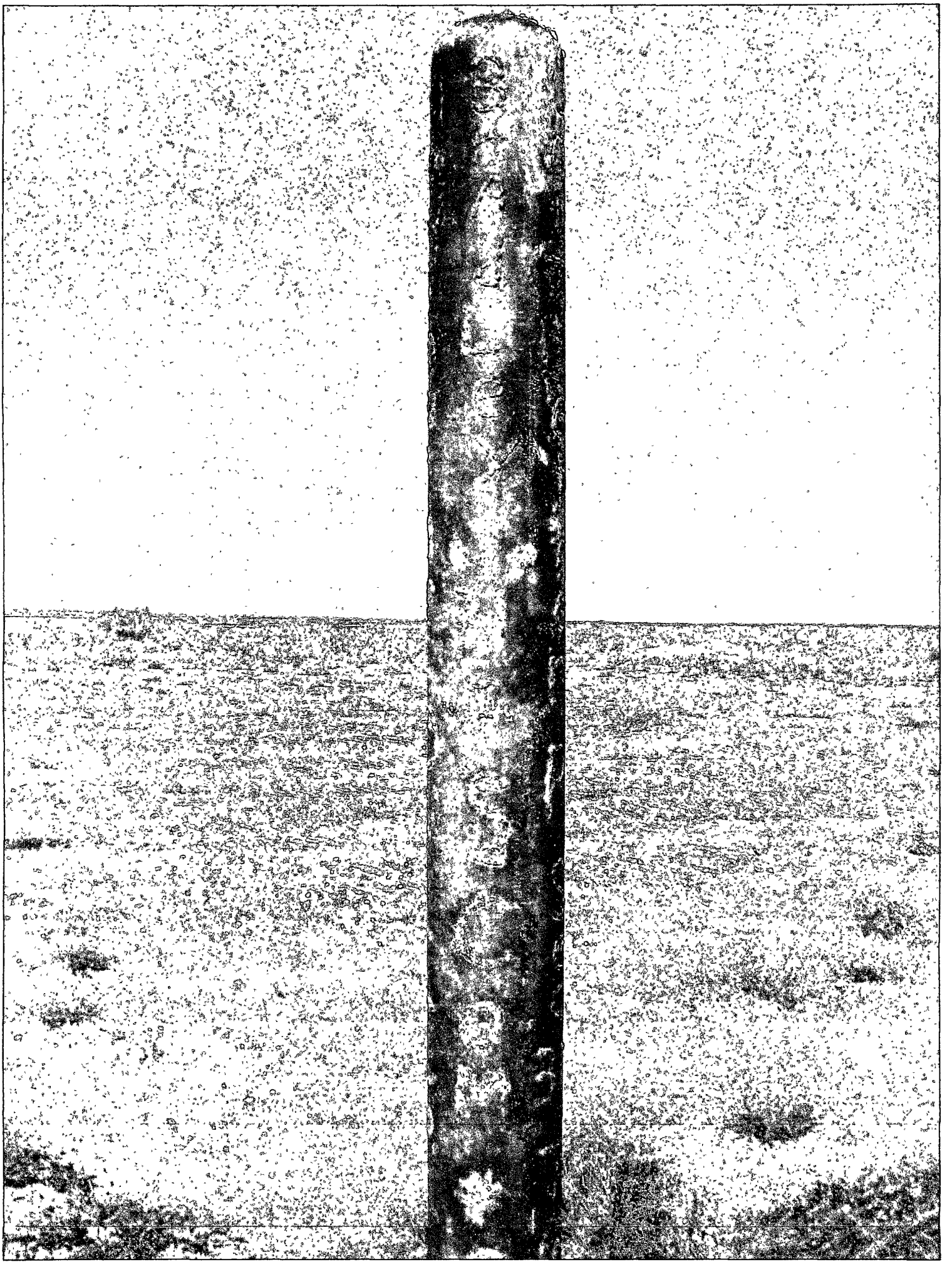

NEWBOURNE OIL COMPANY
BRADLEY "31" FED COM #3
875' FSL & 825' FEL
SEC. 31, T18S, R30E
EDDY COUNTY, NEW MEXICO
LEASE #NMNM-27279

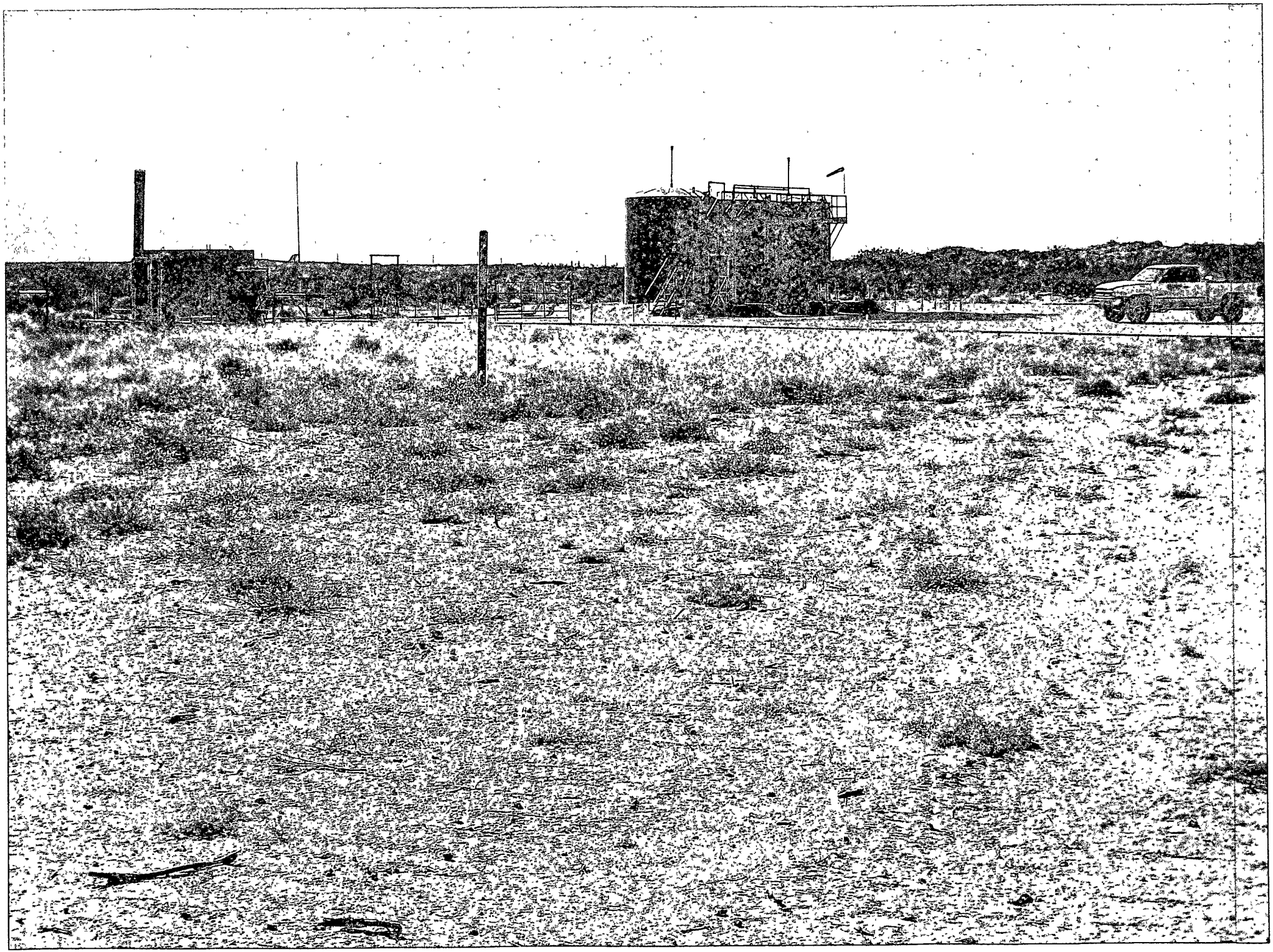


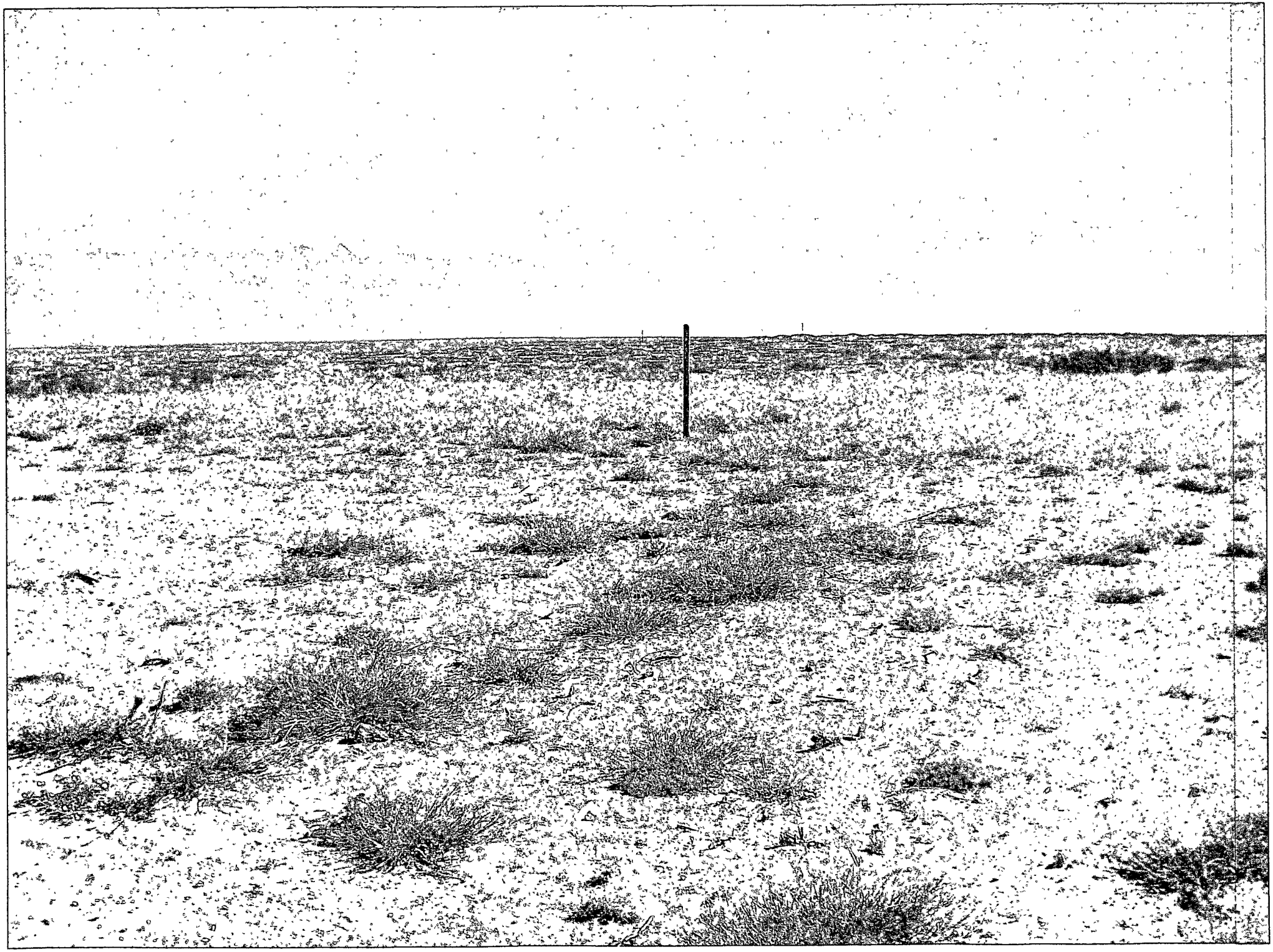


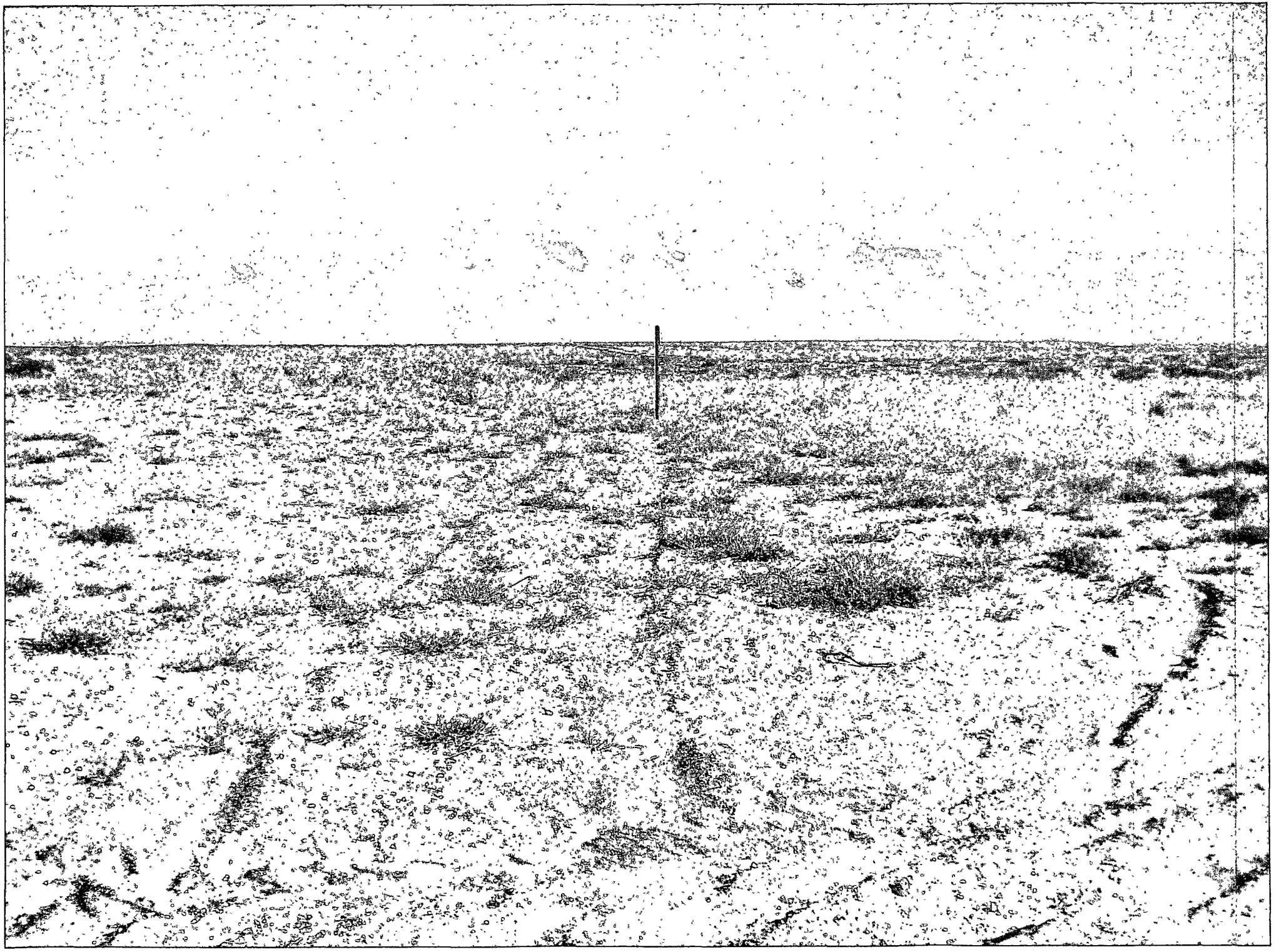


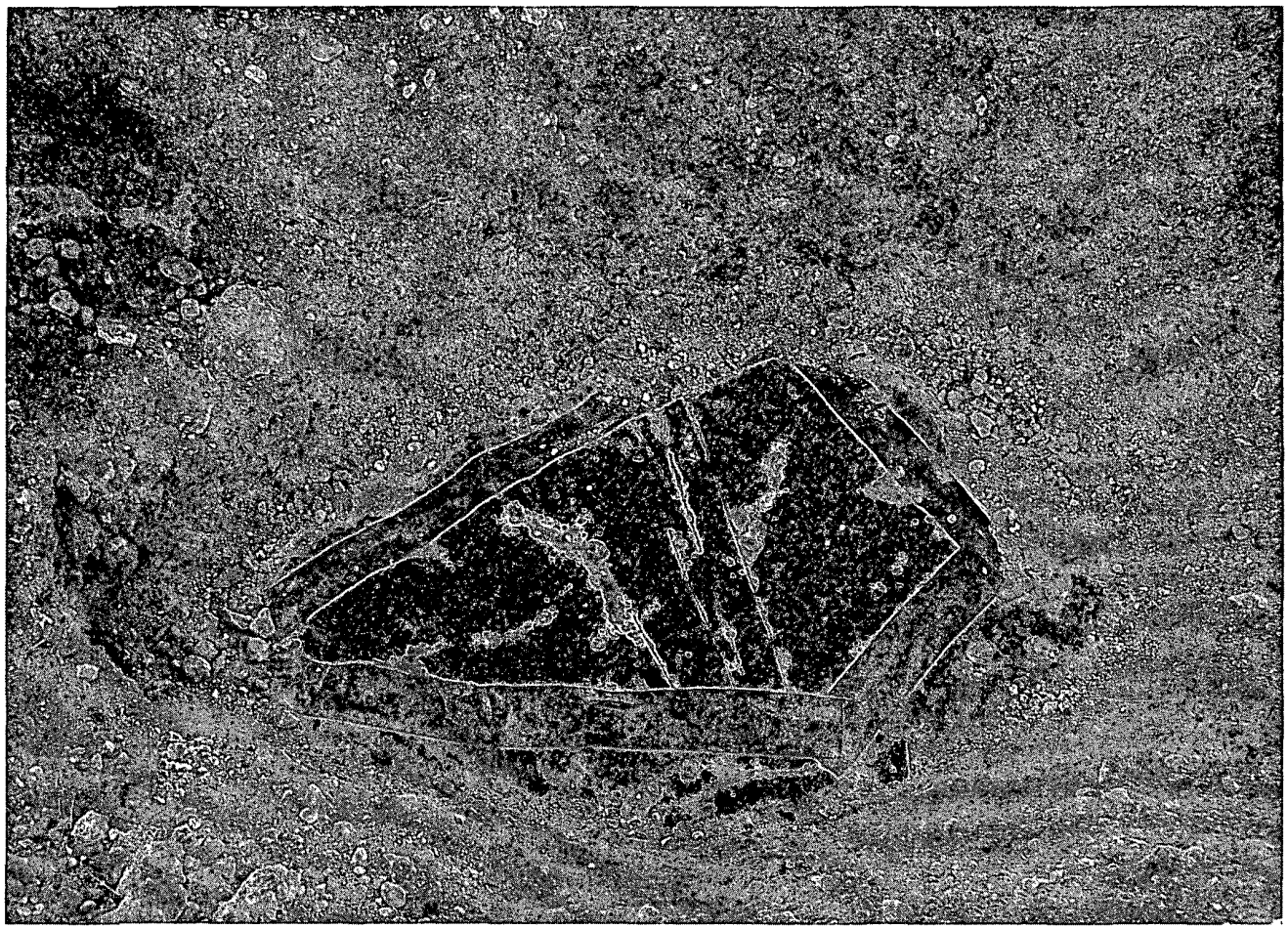


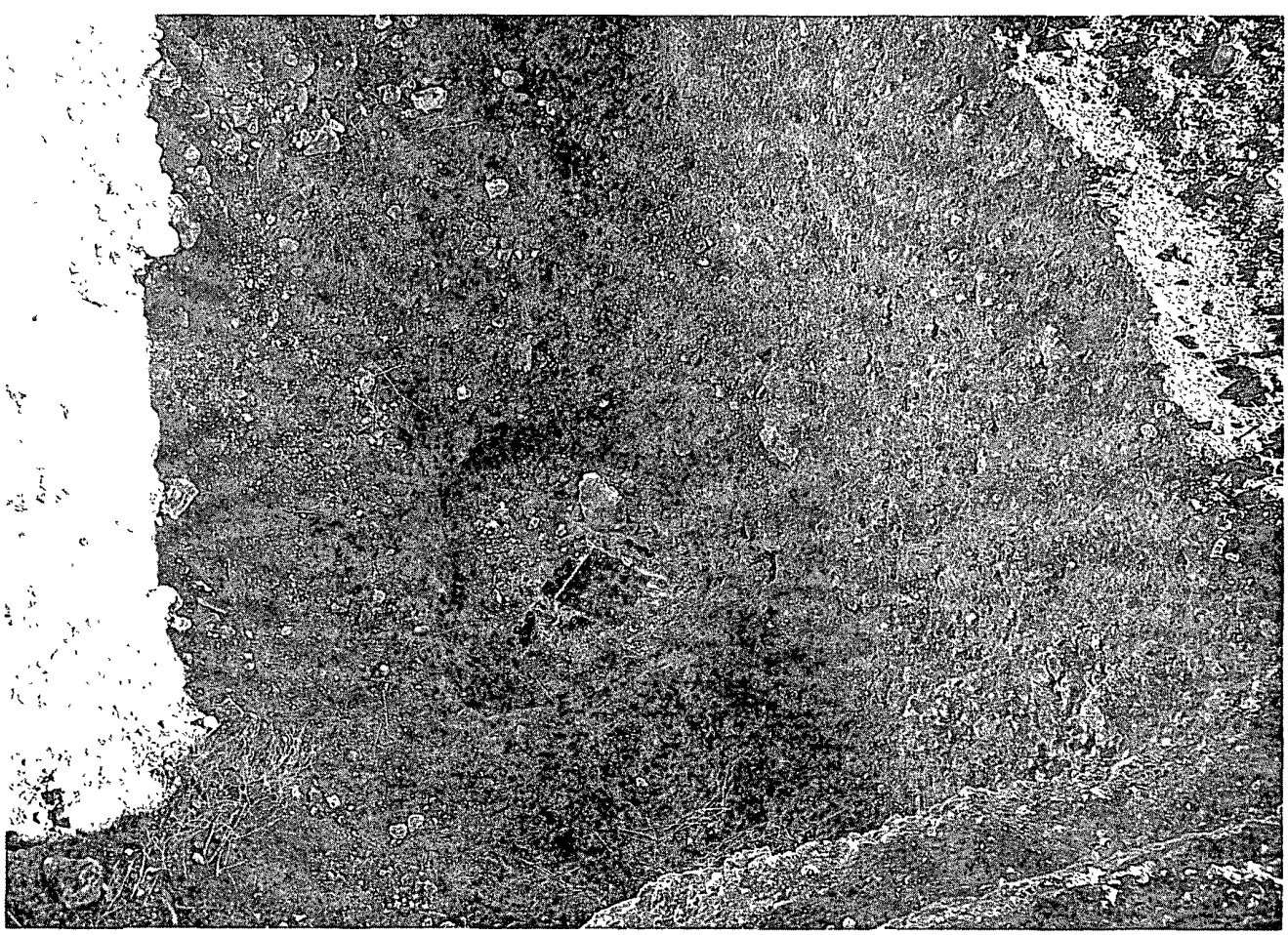


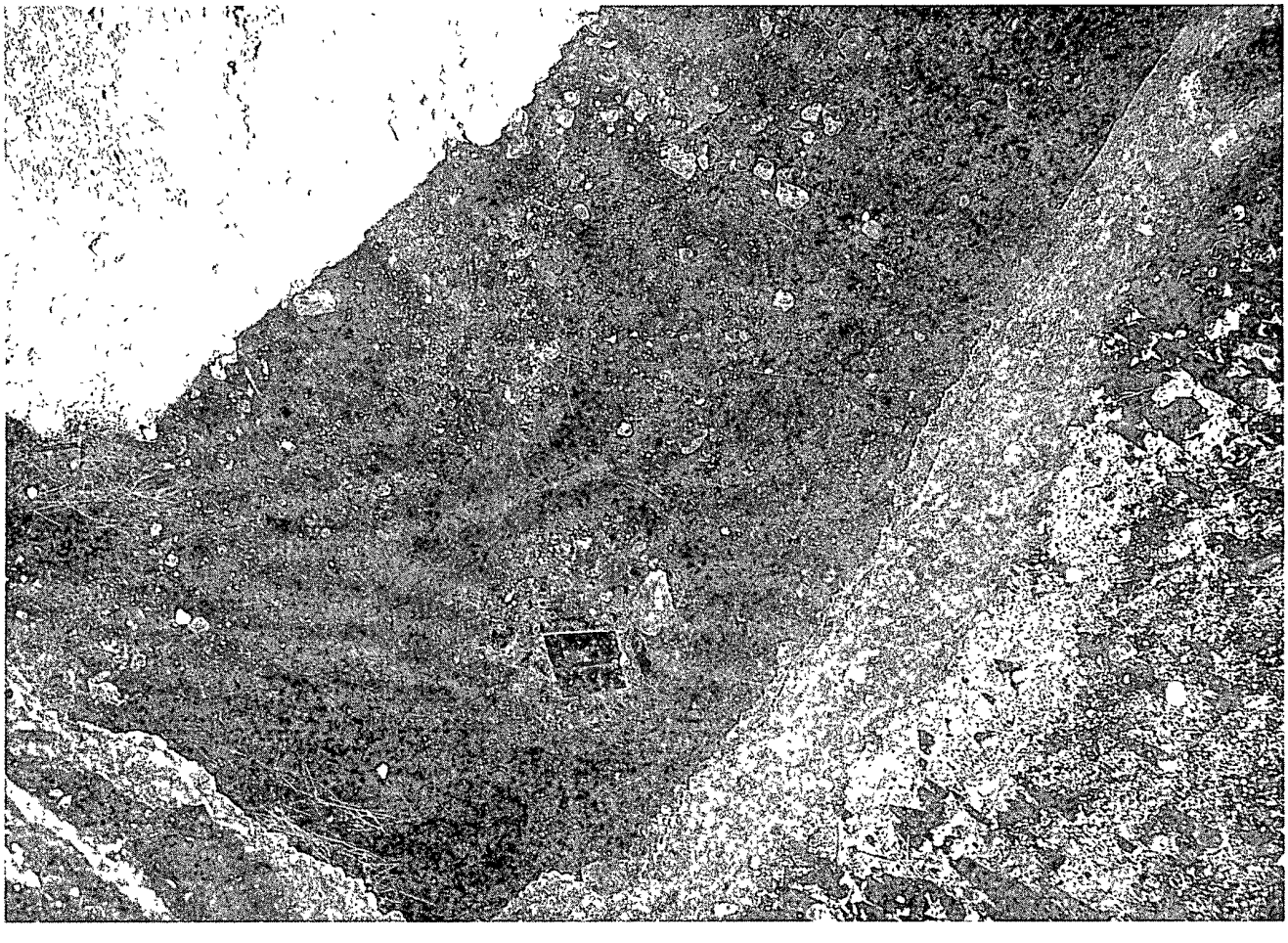












Summary Report

Eb Taylor
Talon LPE-Hobbs
318 E. Taylor
Hobbs, NM 88240

Report Date: April 17, 2009

Work Order: 9041010

Project Location: Eddy Co., NM
Project Name: Bradley 31 Fed. #3

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
192740	Drill Cuttings	soil	2009-04-07	15:45	2009-04-09

Sample: 192740 - Drill Cuttings

Param	Flag	Result	Units	RL
SPLP Chloride		**350**	mg/L	0.500

TRACEANALYSIS, INC.

6701 Aberdeen Avenue Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E 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
6015 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

Eb Taylor
Talon LPE-Hobbs
318 E. Taylor
Hobbs, NM, 88240

Report Date: April 17, 2009

Work Order: 9041010

Project Location: Eddy Co., NM
Project Name: Bradley 31 Fed. #3
Project Number: Bradley 31 Fed. #3

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
192740	Drill Cuttings	soil	2009-04-07	15:45	2009-04-09

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.

Blair Leftwich

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Bradley 31 Fed. #3 were received by TraceAnalysis, Inc. on 2009-04-09 and assigned to work order 9041010. Samples for work order 9041010 were received intact at a temperature of 23.6 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
SPLP Cl	E 300.0	50055	2009-04-15 at 13:27	58627	2009-04-16 at 03:57

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 9041010 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: 192740 - Drill Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	58627	Date Analyzed:	2009-04-16	Analyzed By:	SS
Prep Batch:	50055	SPLP Extraction:	0200-04-14	Prepared By:	SS
		Sample Preparation:	2009-04-15	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		**350**	mg/L	50	0.500

Method Blank (1) QC Batch: 58627

QC Batch:	58627	Date Analyzed:	2009-04-16	Analyzed By:	SS
Prep Batch:	50055	QC Preparation:	2009-04-15	Prepared By:	SS

Parameter	Flag	MDL Result	Units	RL
SPLP Chloride		<0.137	mg/L	0.5

Laboratory Control Spike (LCS-1)

QC Batch:	58627	Date Analyzed:	2009-04-16	Analyzed By:	SS
Prep Batch:	50055	QC Preparation:	2009-04-15	Prepared By:	SS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	12.0	mg/L	1	12.5	<0.137	96	90 - 110

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
SPLP Chloride	11.8	mg/L	1	12.5	<0.137	94	90 - 110	2	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: 192740

QC Batch:	58627	Date Analyzed:	2009-04-16	Analyzed By:	SS
Prep Batch:	50055	QC Preparation:	2009-04-15	Prepared By:	SS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	884	mg/L	50	625	350	85	49.8 - 149

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
SPLP Chloride	891	mg/L	50	625	350	86	49.8 - 149	1	20

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

Standard (CCV-1)

QC Batch: 58627 Date Analyzed: 2009-04-16 Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	12.5	11.9	95	90 - 110	2009-04-16

Standard (CCV-2)

QC Batch: 58627 Date Analyzed: 2009-04-16 Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	12.5	11.9	95	90 - 110	2009-04-16

LAB Order ID # 904|010 Page _____ of _____

TraceAnalysis, Inc.

email lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
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200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: TAION LPE
Phone #: 432 238-6388
Address. (Street, City, Zip): 318 E TAYLOR HOBBS NM 88240
Fax #:
Contact Person: EB TAYLOR
E-mail:
Invoice to: (If different from above) MEWBOURNE OIL ATTN CHARLES MARTIN
Project #.
Project Name: BRADLEY 31 FED #3
Project Location (including state): EDDY CO NEW MEXICO
Sampler Signature: Eb Ty

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
192740	Drill Cuttings	1			X								X	4/7	3:45

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B / 624	GC/MS Semi Vol 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD TSS pH	Moisture Content	SPLP Chlorides					Turn Around Time if different from standard	Hold
																	X						X

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Eb Ty	TAION	4/9/09	8:45	[signature]	Trace	4-9-09	08:45	23.6°
[signature]	Trace	4-9-09	17:00	[signature]				
				Carol Fox	Trace	4-10-09	9:40	5.0 5.5

LAB USE ONLY
Intact (Y) N
Headspace Y / N (NA)
23.6°
Log-in-Review

REMARKS: All tests Lubbock

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C O C

Carrier # Carry-in (LS ZH690865)

project_id	client_sam	sample_de	sample_de	sample_da	prep_date	analysis_da	matrix	analytical_	analyte_sh	cas_numbe	result	sample_fla
Bradley 31	Drill Cuttings			4/7/2009	########	########	soil	E 300.0	SPLP Chlori	N/A	350	

result_unit	mdl_unadj	dilution	sql	mql_adjust	lab_sample_id
mg/L	0.137	50	6.85	0.5	9041010

Summary Report

Eb Taylor
Talon LPE-Hobbs
318 E. Taylor
Hobbs, NM 88240

Report Date: April 29, 2009

Work Order: 9042328

Project Location: Eddy Co., NM
Project Name: Bradley 31 Fed. Com. #3
Project Number: MEWBOU042PIT

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
193841	Drill Cuttings	soil	2009-04-21	15:30	2009-04-22

Sample: 193841 - Drill Cuttings

Param	Flag	Result	Units	RL
SPLP Chloride		**234**	mg/L	0.500

TRACEANALYSIS, INC.

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5002 Basin Street Suite A1 Midland Texas 79703 432•689•6301 FAX 432•689•6313
6015 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

Eb Taylor
Talon LPE-Hobbs
318 E. Taylor
Hobbs, NM, 88240

Report Date: April 29, 2009

Work Order: 9042328

Project Location: Eddy Co., NM
Project Name: Bradley 31 Fed. Com. #3
Project Number: MEWBOU042PIT

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
193841	Drill Cuttings	soil	2009-04-21	15:30	2009-04-22

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

Standard Flags

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

Case Narrative

Samples for project Bradley 31 Fed. Com. #3 were received by TraceAnalysis, Inc. on 2009-04-22 and assigned to work order 9042328. Samples for work order 9042328 were received intact at a temperature of 31.1 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
SPLP Cl	E 300.0	50364	2009-04-28 at 10:28	59011	2009-04-28 at 17:10

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 9042328 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: 193841 - Drill Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	59011	Date Analyzed:	2009-04-28	Analyzed By:	SS
Prep Batch:	50364	SPLP Extraction:	2009-04-27	Prepared By:	SS
		Sample Preparation:	2009-04-28	Prepared By:	SS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		**234**	mg/L	50	0.500

Method Blank (1) QC Batch: 59011

QC Batch:	59011	Date Analyzed:	2009-04-28	Analyzed By:	SS
Prep Batch:	50364	QC Preparation:	2009-04-28	Prepared By:	SS

Parameter	Flag	MDL Result	Units	RL
SPLP Chloride		<0.137	mg/L	0.5

Laboratory Control Spike (LCS-1)

QC Batch:	59011	Date Analyzed:	2009-04-28	Analyzed By:	SS
Prep Batch:	50364	QC Preparation:	2009-04-28	Prepared By:	SS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	23.4	mg/L	1	25.0	<0.137	94	90 - 110

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
SPLP Chloride	23.4	mg/L	1	25.0	<0.137	94	90 - 110	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: 193841

QC Batch:	59011	Date Analyzed:	2009-04-28	Analyzed By:	SS
Prep Batch:	50364	QC Preparation:	2009-04-28	Prepared By:	SS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	1480	mg/L	50	1250	<6.85	118	49.8 - 149

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
SPLP Chloride	1470	mg/L	50	1250	<6.85	118	49.8 - 149	1	20

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

Standard (CCV-1)

QC Batch: 59011 Date Analyzed: 2009-04-28 Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	25.0	23.3	93	90 - 110	2009-04-28

Standard (CCV-2)

QC Batch: 59011 Date Analyzed: 2009-04-28 Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	25.0	23.4	94	90 - 110	2009-04-28

LAB Order ID # 9042328 Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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200 East Sunset Rd. Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
6015 Harris Pkwy Suite 110, Ft. Worth, Texas 76132, Tel (817) 201-5260

Company Name: TALON LPE
Phone #: 432 238-6388
Address: (Street, City, Zip) 318 E TAYLOR HOBBS NM 88240
Fax #:
Contact Person: EB TALLEY
E-mail:
Invoice to: (If different from above) NEWBOURNE OIL ATTN: CHARLES MARTIN
Project #: NEWBOU042 PIT
Project Name: BRADLEY 31 FED COM #3
Project Location (including state): EDDY CO NM
Sampler Signature: EL

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
193841	DRILL CUTTINGS	1			X									4/21	3:30

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB #	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B / 624	GC/MS Semi Vol 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	SPLP CHLORIDES					Turn Around Time if different from standard	Hold
193841																		X					X	

Relinquished by	Date	Time	Received by	Date	Time
Ryan Goolsby	4/22/09	3:00	Scott Ann	4/22/09	3:00 PM
Relinquished by: Scott Ann	Date: 4/22/09	Time: 3:15	Received by: RJ Nil	Date: 4-22-09	Time: 15:15
Relinquished by: RJ Nil	Date: 4-22-09	Time: 15:15	Received at Laboratory by: Carol Fox	Date: 4-23-09	Time: 9:30

4.6
5.1
IR

LAB USE ONLY
Intact (Y) N
Headspace Y / N (NA)
Temp 31.1°C
Log-in-Review RF

REMARKS: RUSH 3-day
All tests Lubbock
Dry Weight Basis Required
TRRP Report Required
Check If Special Reporting Limits Are Needed

Carrier # Carry-in (LS 2H719970)

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C O C

ORIGINAL COPY

project_id	client_sam	sample_de	sample_de	sample_da	prep_date	analysis_da	matrix	analytical_	analyte_sh	cas_numbe	result	sample_fla
MEWBOUC	Drill Cuttings			########	########	########	soil	E 300.0	SPLP Chlori	N/A	234	

result_unit	mdl_unadju	dilution	sql	mql_adjust	lab_sample_id
mg/L	0.137	50	6.85	25	9042328

Summary Report

Eb Taylor
Talon LPE-Hobbs
318 E. Taylor
Hobbs, NM 88240

Report Date: May 15, 2009

Work Order: 9051202

Project Location: Eddy Co., NM
Project Name. Bradley 31 Fed. Com. #3
Project Number: MEWBOU042PIT

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
195570	Floor Composite	soil	2009-05-11	08:45	2009-05-12

	BTEX				TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
195570 - Floor Composite	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1 00

Sample: 195570 - Floor Composite

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

TRACEANALYSIS, INC.

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6015 Harris Parkway, Suite 110 Ft Worth Texas 76132 817•201•5260
E-Mail lah@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

Eb Taylor
Talon LPE-Hobbs
318 E. Taylor
Hobbs, NM, 88240

Report Date: May 15, 2009

Work Order: 9051202

Project Location: Eddy Co., NM
Project Name: Bradley 31 Fed. Com. #3
Project Number: MEWBOU042PIT

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
195570	Floor Composite	soil	2009-05-11	08:45	2009-05-12

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

Standard Flags

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

Case Narrative

Samples for project Bradley 31 Fed. Com. #3 were received by TraceAnalysis, Inc. on 2009-05-12 and assigned to work order 9051202. Samples for work order 9051202 were received intact at a temperature of 12.1 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	50680	2009-05-12 at 15:54	59380	2009-05-12 at 15:54
Chloride (Titration)	SM 4500-Cl B	50742	2009-05-14 at 13:45	59456	2009-05-14 at 13:45
TPH DRO	Mod. 8015B	50666	2009-05-12 at 09:30	59370	2009-05-12 at 11:00
TPH GRO	S 8015B	50734	2009-05-13 at 16:19	59381	2009-05-13 at 16:19

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 9051202 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: 195570 - Floor Composite

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	59380	Date Analyzed:	2009-05-12	Analyzed By:	ME
Prep Batch:	50680	Sample Preparation:	2009-05-12	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.94	mg/Kg	1	2.00	97	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.49	mg/Kg	1	2.00	74	45.2 - 144.3

Sample: 195570 - Floor Composite

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59456	Date Analyzed:	2009-05-14	Analyzed By:	AR
Prep Batch:	50742	Sample Preparation:	2009-05-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 195570 - Floor Composite

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	59370	Date Analyzed:	2009-05-12	Analyzed By:	LD
Prep Batch:	50666	Sample Preparation:	2009-05-12	Prepared By:	LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		110	mg/Kg	1	100	110	13.2 - 219.3

Sample: 195570 - Floor Composite

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	59381	Date Analyzed:	2009-05-13	Analyzed By:	ME
Prep Batch:	50734	Sample Preparation:	2009-05-13	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.86	mg/Kg	1	2.00	93	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.48	mg/Kg	1	2.00	74	52 - 117

Method Blank (1) QC Batch: 59370

QC Batch:	59370	Date Analyzed:	2009-05-12	Analyzed By:	LD
Prep Batch:	50666	QC Preparation:	2009-05-12	Prepared By:	LD

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		81.0	mg/Kg	1	100	81	13 - 178.5

Method Blank (1) QC Batch: 59380

QC Batch:	59380	Date Analyzed:	2009-05-12	Analyzed By:	ME
Prep Batch:	50680	QC Preparation:	2009-05-12	Prepared By:	ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00100	mg/Kg	0.01
Toluene		<0.00100	mg/Kg	0.01
Ethylbenzene		<0.00110	mg/Kg	0.01

continued ...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Xylene		<0.00360	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.98	mg/Kg	1	2.00	99	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		1.76	mg/Kg	1	2.00	88	51.9 - 128.1

Method Blank (1) QC Batch: 59381

QC Batch: 59381 Date Analyzed: 2009-05-13 Analyzed By: ME
Prep Batch: 50734 QC Preparation: 2009-05-13 Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
GRO		<0.482	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.85	mg/Kg	1	2.00	92	71.9 - 115
4-Bromofluorobenzene (4-BFB)		1.79	mg/Kg	1	2.00	90	45.7 - 118.9

Method Blank (1) QC Batch: 59456

QC Batch: 59456 Date Analyzed: 2009-05-14 Analyzed By: AR
Prep Batch: 50742 QC Preparation: 2009-05-14 Prepared By: AR

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

Laboratory Control Spike (LCS-1)

QC Batch: 59370 Date Analyzed: 2009-05-12 Analyzed By: LD
Prep Batch: 50666 QC Preparation: 2009-05-12 Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	278	mg/Kg	1	250	<5.86	111	57.4 - 133.4

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
DRO	276	mg/Kg	1	250	<5.86	110	57.4 - 133.4	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	95.2	100	mg/Kg	1	100	95	100	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 59380 | Date Analyzed: 2009-05-12 | Analyzed By: ME
Prep Batch: 50680 | QC Preparation: 2009-05-12 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.01	mg/Kg	1	2.00	<0.00100	100	72.7 - 129.8
Toluene	2.00	mg/Kg	1	2.00	<0.00100	100	71.6 - 129.6
Ethylbenzene	1.97	mg/Kg	1	2.00	<0.00110	98	70.8 - 129.7
Xylene	5.86	mg/Kg	1	6.00	<0.00360	98	70.9 - 129.4

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
Benzene	1.90	mg/Kg	1	2.00	<0.00100	95	72.7 - 129.8	6	20
Toluene	1.92	mg/Kg	1	2.00	<0.00100	96	71.6 - 129.6	4	20
Ethylbenzene	1.90	mg/Kg	1	2.00	<0.00110	95	70.8 - 129.7	4	20
Xylene	5.69	mg/Kg	1	6.00	<0.00360	95	70.9 - 129.4	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	2.00	mg/Kg	1	2.00	98	100	65.9 - 132
4-Bromofluorobenzene (4-BFB)	1.85	1.87	mg/Kg	1	2.00	92	94	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch: 59381 | Date Analyzed: 2009-05-13 | Analyzed By: ME
Prep Batch: 50734 | QC Preparation: 2009-05-13 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	14.3	mg/Kg	1	20.0	<0.482	72	60.5 - 100.1

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
GRO	14.0	mg/Kg	1	20.0	<0.482	70	60.5 - 100.1	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.90	1.87	mg/Kg	1	2.00	95	94	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	1.91	1.89	mg/Kg	1	2.00	96	94	66.1 - 107.3

Laboratory Control Spike (LCS-1)

QC Batch: 59456 | Date Analyzed: 2009-05-14 | Analyzed By: AR
Prep Batch: 50742 | QC Preparation: 2009-05-14 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.2	mg/Kg	1	100	<2.18	97	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	98.5	mg/Kg	1	100	<2.18	98	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: 195575

QC Batch: 59370 | Date Analyzed: 2009-05-12 | Analyzed By: LD
Prep Batch: 50666 | QC Preparation: 2009-05-12 | Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	202	mg/Kg	1	250	19.4	73	35.2 - 167.1

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
DRO [1]	165	mg/Kg	1	250	19.4	66	35.2 - 167.1	20	20

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

continued ...

[1] MS/MSD RPD out of RPD Limits Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ..

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	118	107	mg/Kg	1	100	118	107	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 195575

QC Batch: 59380 | Date Analyzed: 2009-05-12 | Analyzed By: ME
Prep Batch: 50680 | QC Preparation: 2009-05-12 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.88	mg/Kg	1	2.00	<0.00100	94	58.6 - 165.2
Toluene	1.86	mg/Kg	1	2.00	<0.00100	93	64.2 - 153.8
Ethylbenzene	1.91	mg/Kg	1	2.00	<0.00110	96	61.6 - 159.4
Xylene	5.57	mg/Kg	1	6.00	<0.00360	93	64.4 - 155.3

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
Benzene	1.92	mg/Kg	1	2.00	<0.00100	96	58.6 - 165.2	2	20
Toluene	1.91	mg/Kg	1	2.00	<0.00100	96	64.2 - 153.8	3	20
Ethylbenzene	1.95	mg/Kg	1	2.00	<0.00110	98	61.6 - 159.4	2	20
Xylene	5.72	mg/Kg	1	6.00	<0.00360	95	64.4 - 155.3	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.00	2.04	mg/Kg	1	2	100	102	76 - 127.9
4-Bromofluorobenzene (4-BFB)	1.58	1.60	mg/Kg	1	2	79	80	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 195575

QC Batch: 59381 | Date Analyzed: 2009-05-13 | Analyzed By: ME
Prep Batch: 50734 | QC Preparation: 2009-05-13 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	20.7	mg/Kg	1	20.0	5.9871	74	12.8 - 175.2

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
GRO	24.8	mg/Kg	1	20.0	5.9871	94	12.8 - 175.2	18	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.85	1.89	mg/Kg	1	2	92	94	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	1.59	2.98	mg/Kg	1	2	80	149	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 195575

QC Batch: 59456 | Date Analyzed: 2009-05-14 | Analyzed By: AR
Prep Batch: 50742 | QC Preparation: 2009-05-14 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	5080	mg/Kg	50	5000	<109	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	5140	mg/Kg	50	5000	<109	103	85 - 115	1	20

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

Standard (CCV-1)

QC Batch: 59370 | Date Analyzed: 2009-05-12 | Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	290	116	80 - 120	2009-05-12

Standard (CCV-2)

QC Batch: 59370 | Date Analyzed: 2009-05-12 | Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	293	117	80 - 120	2009-05-12

Standard (CCV-1)

QC Batch: 59380 Date Analyzed: 2009-05-12 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0965	96	80 - 120	2009-05-12
Toluene		mg/Kg	0.100	0.0954	95	80 - 120	2009-05-12
Ethylbenzene		mg/Kg	0.100	0.0949	95	80 - 120	2009-05-12
Xylene		mg/Kg	0.300	0.284	95	80 - 120	2009-05-12

Standard (CCV-2)

QC Batch: 59380 Date Analyzed: 2009-05-12 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.102	102	80 - 120	2009-05-12
Toluene		mg/Kg	0.100	0.0993	99	80 - 120	2009-05-12
Ethylbenzene		mg/Kg	0.100	0.100	100	80 - 120	2009-05-12
Xylene		mg/Kg	0.300	0.302	101	80 - 120	2009-05-12

Standard (CCV-1)

QC Batch: 59381 Date Analyzed: 2009-05-13 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.935	94	80 - 120	2009-05-13

Standard (CCV-2)

QC Batch: 59381 Date Analyzed: 2009-05-13 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.828	83	80 - 120	2009-05-13

Standard (ICV-1)

QC Batch: 59456 Date Analyzed: 2009-05-14 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-05-14

Standard (CCV-1)

QC Batch: 59456 Date Analyzed: 2009-05-14 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2009-05-14

LAB Order ID # 905 1202 Page 1 of 1

TraceAnalysis, Inc.

email. lab@traceanalysis.com

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Lubbock, Texas 79424
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Tel (817) 201-5260

Company Name: TALON LPE
Phone #: 432 238-6388
Address: (Street, City, Zip) 318 E TAYLOR HOBBS NM 88240
Fax #:
Contact Person: EB TAYLOR
E-mail:
Invoice to:
(If different from above) NEWBOURNE OIL ATTN: CHARLES MARTIN
Project #: NEWBOU 042 PIT
Project Name: BRAPEL4 31 FED COM #3
Project Location (including state): EDDY COUNTY NM
Sampler Signature: EB

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
49570	FLOOR COMPOSITE	1			X									5/11	8:45

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B / 624	GC/MS Semi Vol 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	CHLORIDES 4500						Turn Around Time if different from standard	Hold
	X		X													X								

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
EB	5/12	9:10		5-12-09	9:10
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY
Intact (Y) / N
Headspace Y / N (NA)
Temp 12.1 °C
Log-In-Review

REMARKS: All tests Midland.

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry-in

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O C

ORIGINAL COPY

project_id	client_sam	sample_de	sample_de	sample_da	prep_date	analysis_da	matrix	analytical_	analyte_sh	cas_numbe	result		sample_fla
MEWBOUC	Floor Composite		########	########	########		soil	S 8021B	Benzene	71-43-2	BRL		U
MEWBOUC	Floor Composite		########	########	########		soil	S 8021B	Toluene	108-88-3	BRL		U
MEWBOUC	Floor Composite		########	########	########		soil	S 8021B	Ethylbenze	100-41-4	BRL		U
MEWBOUC	Floor Composite		########	########	########		soil	S 8021B	Total Xylen	1330-20-7	BRL		U
MEWBOUC	Floor Composite		########	########	########		soil	S 8021B	Trifluoroto	70-00-8		1.94	
MEWBOUC	Floor Composite		########	########	########		soil	S 8021B	4-Bromoflu	460-00-4		1.49	
MEWBOUC	Floor Composite		########	########	########		soil	SM 4500-C	Chloride	16887-00-6	BRL		J
MEWBOUC	Floor Composite		########	########	########		soil	Mod. 8015	DRO	68334-30-5	BRL		J
MEWBOUC	Floor Composite		########	########	########		soil	Mod. 8015	n-Triaconta	638-68-6		110	
MEWBOUC	Floor Composite		########	########	########		soil	S 8015B	GRO	86290-81-5	BRL		U
MEWBOUC	Floor Composite		########	########	########		soil	S 8015B	Trifluoroto	70-00-8		1.86	
MEWBOUC	Floor Composite		########	########	########		soil	S 8015B	4-Bromoflu	460-00-4		1.48	

result_unit	mdl_unadj	dilution	sql	mql_adjust	lab_sample_id
mg/Kg	0.001	1	0.001	0.01	9051202
mg/Kg	0.001	1	0.001	0.01	9051202
mg/Kg	0.0011	1	0.0011	0.01	9051202
mg/Kg	0.0036	1	0.0036	0.01	9051202
mg/Kg	0	1	0	0.01	9051202
mg/Kg	0	1	0	0.01	9051202
mg/Kg	2.18	50	109	200	9051202
mg/Kg	5.861	1	5.86	50	9051202
mg/Kg	0	1	0	50	9051202
mg/Kg	0.4817	1	0.482	1	9051202
mg/Kg	0	1	0	1	9051202
mg/Kg	0	1	0	1	9051202

Summary Report

Kyle Summers
Talon LPE-Artesia
104 Hermosa Dr.
Artesia, NM 88210

Report Date: December 3, 2009

Work Order: 9111607

Project Location: Eddy Co., NM
Project Name: Bradley 31 Fed. Com. #3
Project Number: 700738.017.01

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
214956	P-Comp.	soil	2009-11-12	09:15	2009-11-13

	BTEX				TPH 418.1	TPH DRO - NEW	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	TRPHC	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
214956 - P-Comp.	<0.0200	<0.0200	<0.0200	<0.0200	**315**	**84.1**	**2.84**

Sample: 214956 - P-Comp.

Param	Flag	Result	Units	RL
SPLP Silver		<0.00300	mg/L	0.00300
SPLP Arsenic		<0.0100	mg/L	0.0100
SPLP Barium		**0.448**	mg/L	0.100
SPLP Cadmium		<0.00500	mg/L	0.00500
SPLP Chromium		<0.00500	mg/L	0.00500
SPLP Cyanide		<0.0150	mg/L	0.0150
SPLP Fluoride		**0.270**	mg/L	0.200
SPLP Mercury		<0.000200	mg/L	0.000200
Nitrate-N		<0.200	mg/L	0.200
Naphthalene		<0.000200	mg/L	0.000200
Acenaphthylene		<0.000200	mg/L	0.000200
Acenaphthene		<0.000200	mg/L	0.000200
Dibenzofuran		<0.000200	mg/L	0.000200
Fluorene		<0.000200	mg/L	0.000200
Anthracene		<0.000200	mg/L	0.000200
Phenanthrene		<0.000200	mg/L	0.000200
Fluoranthene		<0.000200	mg/L	0.000200
Pyrene		<0.000200	mg/L	0.000200

continued ...

sample 214956 continued ...

Param	Flag	Result	Units	RL
Benzo(a)anthracene		<0.000200	mg/L	0.000200
Chrysene		<0.000200	mg/L	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	0.000200
Benzo(a)pyrene		<0.000200	mg/L	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	0.000200
SPLP Lead		<0.0100	mg/L	0.0100
Total PCB		<0.000500	mg/L	0.000500
Aroclor 1016 (PCB-1016)		<0.000500	mg/L	0.000500
Aroclor 1221 (PCB-1221)		<0.000500	mg/L	0.000500
Aroclor 1232 (PCB-1232)		<0.000500	mg/L	0.000500
Aroclor 1242 (PCB-1242)		<0.000500	mg/L	0.000500
Aroclor 1248 (PCB-1248)		<0.000500	mg/L	0.000500
Aroclor 1254 (PCB-1254)		<0.000500	mg/L	0.000500
Aroclor 1260 (PCB-1260)		<0.000500	mg/L	0.000500
Aroclor 1268 (PCB-1268)		<0.000500	mg/L	0.000500
SPLP Selenium		<0.0500	mg/L	0.0500
SPLP U		<0.0500	mg/L	0.0500
Vinyl Chloride		<1.00	µg/L	1.00
1,1-Dichloroethene		<1.00	µg/L	1.00
Methylene chloride		**14.6**	µg/L	5.00
1,1-Dichloroethane		<1.00	µg/L	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1.00
Chloroform		<1.00	µg/L	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1.00
Benzene		<1.00	µg/L	1.00
Carbon Tetrachloride		<1.00	µg/L	1.00
Trichloroethene (TCE)		<1.00	µg/L	1.00
Toluene		**1.10**	µg/L	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1.00
Ethylbenzene		<1.00	µg/L	1.00
m,p-Xylene		**1.96**	µg/L	1.00
o-Xylene		<1.00	µg/L	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1.00

LAB Order ID #_____ Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296

5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313

200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443

BioAquatic Testing, 2501 Mayes Rd., Ste 100, Carrollton, Texas 75006, Tel (972) 242-7750

Company Name: Talon/LPE	Phone #: (432) 230-7673
Address: (Street, City, Zip) 104 W Texas Dr Artesia, NM 88210	Fax #: (575) 746-8905
Contact Person: Kyle Summers	E-mail: ksummers@talonlpe.com
Invoice to: (If different from above) Melbourne 0,1 - Chuck Morris	
Project #: 700738.017.01	Project Name: Bradley 31 Fed Com #3
Project Location (including state): Eddy County, NM	Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, SO4, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC	Turn Around Time If different from standard	Hold
	P-Comp	3	4oz	X								X		11/12/09	09:15	X	X	X	X														X	X	X	X	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Talon	11/13/09			Talon LPE	11-13-09	1100	INST ___ C, OBS ___ C, COR ___ C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Talon	11/13/09	14:10			11/13/09	14:10	INST ___ C, OBS 4.3 C, COR ___ C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
								INST ___ C, OBS ___ C, COR ___ C

LAB USE ONLY: Intact Y / N, Headspace Y / N / NA, Log-In-Review

REMARKS: Drilling Mud New Mexico
See Attached List
No Chlorides - Already Analyzed

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # _____

11/13/2009 15:42 1432522180 MIDLAND LPE PAGE 01/01

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
2501 East Sunset Road, Suite E 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
6015 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

Kyle Summers
Talon LPE-Artesia
104 Hermosa Dr.
Artesia, NM, 88210

Report Date: December 3, 2009

Work Order: 9111607

Project Location: Eddy Co., NM
Project Name: Bradley 31 Fed. Com. #3
Project Number: 700738.017.01

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
214956	P-Comp.	soil	2009-11-12	09:15	2009-11-13

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 Bradley 31 Fed. Com. #3 were received by TraceAnalysis, Inc. on 2009-11-13 and assigned to work order 9111607. Samples for work order 9111607 were received intact at a temperature of 4.0 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	55826	2009-11-16 at 13:44	65331	2009-11-16 at 13:44
SPLP Ag	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP As	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP Ba	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP Cd	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP Cr	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP Cyanide	SM 4500-CN C,E	56100	2009-11-30 at 12:00	65644	2009-11-30 at 14:00
SPLP Fluoride	E 300.0	55992	2009-11-20 at 13:23	65514	2009-11-21 at 00:29
SPLP Hg	S 7470A	55913	2009-11-19 at 09:47	65446	2009-11-19 at 16:28
SPLP NO3 (IC)	E 300.0	55992	2009-11-20 at 13:23	65514	2009-11-21 at 00:29
SPLP PAH	S 8270C	55996	2009-11-20 at 15:00	65518	2009-11-23 at 13:48
SPLP Pb	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP PCB	S 8082	55902	2009-11-19 at 11:30	65425	2009-11-19 at 11:38
SPLP Se	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP U	S 6010B	56174	2009-12-03 at 07:56	65737	2009-12-03 at 11:49
SPLP Volatiles	S 8260B	56014	2009-11-23 at 12:00	65547	2009-11-23 at 12:00
TPH 418.1	E 418.1	55904	2009-11-19 at 11:00	65427	2009-11-19 at 13:51
TPH DRO - NEW	Mod. 8015B	55831	2009-11-16 at 15:00	65337	2009-11-16 at 19:00
TPH GRO	S 8015B	55826	2009-11-16 at 13:44	65332	2009-11-16 at 13:44

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 9111607 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: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65331	Date Analyzed:	2009-11-16	Analyzed By:	ER
Prep Batch:	55826	Sample Preparation:	2009-11-16	Prepared By:	ER

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0200		mg/Kg	1	0.0200
Toluene		<0.0200		mg/Kg	1	0.0200
Ethylbenzene		<0.0200		mg/Kg	1	0.0200
Xylene		<0.0200		mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.09	mg/Kg	1	2.00	104	71.8 - 112
4-Bromofluorobenzene (4-BFB)		2.29	mg/Kg	1	2.00	114	72.8 - 115

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Ag	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	Result	RL	Units	Dilution	RL
SPLP Silver		<0.00300		mg/L	1	0.00300

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP As	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	Result	RL	Units	Dilution	RL
SPLP Arsenic		<0.0100		mg/L	1	0.0100

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Ba	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Barium		**0.448**	mg/L	1	0.100

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Cd	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Cadmium		<0.00500	mg/L	1	0.00500

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Cr	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chromium		<0.00500	mg/L	1	0.00500

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	SPLP 1312
QC Batch:	65644	Date Analyzed:	2009-11-30	Analyzed By:	AH
Prep Batch:	56100	SPLP Extraction:	2009-11-22	Prepared By:	AH
		Sample Preparation:	2009-11-30	Prepared By:	AH

Parameter	Flag	Result	RL	Units	Dilution	RL
SPLP Cyanide		<0.0150		mg/L	1	0.0150

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Fluoride	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	65514	Date Analyzed:	2009-11-21	Analyzed By:	SS
Prep Batch:	55992	SPLP Extraction:	2009-11-19	Prepared By:	SS
		Sample Preparation:	2009-11-20	Prepared By:	SS

Parameter	Flag	Result	RL	Units	Dilution	RL
SPLP Fluoride		**0.270**		mg/L	1	0.200

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Hg	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	65446	Date Analyzed:	2009-11-19	Analyzed By:	TP
Prep Batch:	55913	Sample Preparation:	2009-11-19	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
SPLP Mercury		<0.000200		mg/L	1	0.000200

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	65514	Date Analyzed:	2009-11-21	Analyzed By:	SS
Prep Batch:	55992	SPLP Extraction:	2009-11-19	Prepared By:	SS
		Sample Preparation:	2009-11-20	Prepared By:	SS

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<0.200		mg/L	1	0.200

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP PAH	Analytical Method:	S 8270C	Prep Method:	SPLP 1312
QC Batch:	65518	Date Analyzed:	2009-11-23	Analyzed By:	MN
Prep Batch:	55996	SPLP Extraction:	2009-11-19	Prepared By:	MN
		Sample Preparation:	2009-11-20	Prepared By:	MN

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene		<0.000200		mg/L	1	0.000200
Acenaphthylene		<0.000200		mg/L	1	0.000200
Acenaphthene		<0.000200		mg/L	1	0.000200
Dibenzofuran		<0.000200		mg/L	1	0.000200
Fluorene		<0.000200		mg/L	1	0.000200
Anthracene		<0.000200		mg/L	1	0.000200
Phenanthrene		<0.000200		mg/L	1	0.000200
Fluoranthene		<0.000200		mg/L	1	0.000200
Pyrene		<0.000200		mg/L	1	0.000200
Benzo(a)anthracene		<0.000200		mg/L	1	0.000200
Chrysene		<0.000200		mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200		mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200		mg/L	1	0.000200
Benzo(a)pyrene		<0.000200		mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200		mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200		mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200		mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl		0.0323	mg/L	1	0.0800	40	37.4 - 123
Nitrobenzene-d5		0.0375	mg/L	1	0.0800	47	34.3 - 130
Terphenyl-d14		0.0571	mg/L	1	0.0800	71	10 - 252

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Pb	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	Result	RL	Units	Dilution	RL
SPLP Lead		<0.0100		mg/L	1	0.0100

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP PCB	Analytical Method:	S 8082	Prep Method:	SPLP 1312
QC Batch:	65425	Date Analyzed:	2009-11-19	Analyzed By:	DS
Prep Batch:	55902	SPLP Extraction:	2009-11-18	Prepared By:	DS
		Sample Preparation:	2009-11-19	Prepared By:	DS

Parameter	Flag	Result	RL Units	Dilution	RL
Total PCB		<0.000500	mg/L	1	0.000500
Aroclor 1016 (PCB-1016)		<0.000500	mg/L	1	0.000500
Aroclor 1221 (PCB-1221)		<0.000500	mg/L	1	0.000500
Aroclor 1232 (PCB-1232)		<0.000500	mg/L	1	0.000500
Aroclor 1242 (PCB-1242)		<0.000500	mg/L	1	0.000500
Aroclor 1248 (PCB-1248)		<0.000500	mg/L	1	0.000500
Aroclor 1254 (PCB-1254)		<0.000500	mg/L	1	0.000500
Aroclor 1260 (PCB-1260)		<0.000500	mg/L	1	0.000500
Aroclor 1268 (PCB-1268)		<0.000500	mg/L	1	0.000500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.000469	mg/L	1	0.000500	94	10 - 128

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Se	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	Result	RL Units	Dilution	RL
SPLP Selenium		<0.0500	mg/L	1	0.0500

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP U	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	SPLP Extraction:	2009-12-03	Prepared By:	KV
		Sample Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP U		<0.0500	mg/L	1	0.0500

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	SPLP Volatiles	Analytical Method:	S 8260B	Prep Method:	SPLP 1312
QC Batch:	65547	Date Analyzed:	2009-11-23	Analyzed By:	KB
Prep Batch:	56014	SPLP Extraction:	2009-11-20	Prepared By:	KB
		Sample Preparation:	2009-11-23	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<1.00	µg/L	1	1.00
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		**14.6**	µg/L	1	5.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Toluene		**1.10**	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		**1.96**	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.8	µg/L	1	50.0	106	92.3 - 115
Toluene-d8		49.5	µg/L	1	50.0	99	89.8 - 109
4-Bromofluorobenzene (4-BFB)		47.8	µg/L	1	50.0	96	89.5 - 112

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	65427	Date Analyzed:	2009-11-19	Analyzed By:	CM
Prep Batch:	55904	Sample Preparation:	2009-11-19	Prepared By:	CM

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		**315**	mg/Kg	1	10.0

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65337	Date Analyzed:	2009-11-16	Analyzed By:	AW
Prep Batch:	55831	Sample Preparation:	2009-11-16	Prepared By:	AW

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**84.1**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		110	mg/Kg	1	100	110	38.6 - 167

Sample: 214956 - P-Comp.

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65332	Date Analyzed:	2009-11-16	Analyzed By:	ER
Prep Batch:	55826	Sample Preparation:	2009-11-16	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**2.84**	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.06	mg/Kg	1	2.00	103	86.9 - 113
4-Bromofluorobenzene (4-BFB)		2.31	mg/Kg	1	2.00	116	56.2 - 130

Method Blank (1) QC Batch: 65331

QC Batch:	65331	Date Analyzed:	2009-11-16	Analyzed By:	ER
Prep Batch:	55826	QC Preparation:	2009-11-16	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00331	mg/Kg	0.02
Toluene		<0.00528	mg/Kg	0.02

continued ...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Ethylbenzene		<0.00448	mg/Kg	0.02
Xylene		<0.00456	mg/Kg	0.02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.83	mg/Kg	1	2.00	92	71.8 - 112
4-Bromofluorobenzene (4-BFB)		1.86	mg/Kg	1	2.00	93	72.8 - 115

Method Blank (1) QC Batch: 65332

QC Batch:	65332	Date Analyzed:	2009-11-16	Analyzed By:	ER
Prep Batch:	55826	QC Preparation:	2009-11-16	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
GRO		<0.403	mg/Kg	2

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.80	mg/Kg	1	2.00	90	86.9 - 113
4-Bromofluorobenzene (4-BFB)		1.75	mg/Kg	1	2.00	88	56.2 - 130

Method Blank (1) QC Batch: 65337

QC Batch:	65337	Date Analyzed:	2009-11-16	Analyzed By:	AW
Prep Batch:	55831	QC Preparation:	2009-11-16	Prepared By:	AW

Parameter	Flag	MDL Result	Units	RL
DRO		<4.66	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		127	mg/Kg	1	100	127	38.6 - 167

Method Blank (1) QC Batch: 65425

QC Batch:	65425	Date Analyzed:	2009-11-19	Analyzed By:	DS
Prep Batch:	55902	QC Preparation:	2009-11-19	Prepared By:	DS

Parameter	Flag	MDL Result	Units	RL
Total PCB		<0.000125	mg/L	0.0005
Aroclor 1016 (PCB-1016)		<0.000122	mg/L	0.0005
Aroclor 1221 (PCB-1221)		<0.000118	mg/L	0.0005
Aroclor 1232 (PCB-1232)		<0.0000459	mg/L	0.0005
Aroclor 1242 (PCB-1242)		<0.000125	mg/L	0.0005
Aroclor 1248 (PCB-1248)		<0.0000546	mg/L	0.0005
Aroclor 1254 (PCB-1254)		<0.0000569	mg/L	0.0005
Aroclor 1260 (PCB-1260)		<0.0000331	mg/L	0.0005
Aroclor 1268 (PCB-1268)		<0.0000282	mg/L	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.000470	mg/L	1	0.000500	94	10 - 128

Method Blank (1) QC Batch: 65427

QC Batch: 65427 | Date Analyzed: 2009-11-19 | Analyzed By: CM
Prep Batch: 55904 | QC Preparation: 2009-11-19 | Prepared By: CM

Parameter	Flag	MDL Result	Units	RL
TRPHC		<5.28	mg/Kg	10

Method Blank (1) QC Batch: 65446

QC Batch: 65446 | Date Analyzed: 2009-11-19 | Analyzed By: TP
Prep Batch: 55913 | QC Preparation: 2009-11-19 | Prepared By: TP

Parameter	Flag	MDL Result	Units	RL
SPLP Mercury		<0.0000329	mg/L	0.0002

Method Blank (1) QC Batch: 65514

QC Batch: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS
Prep Batch: 55992 | QC Preparation: 2009-11-20 | Prepared By: SS

Parameter	Flag	MDL Result	Units	RL
Nitrate-N		<0.0700	mg/L	0.2

Method Blank (1) QC Batch: 65514

QC Batch:	65514	Date Analyzed:	2009-11-21	Analyzed By:	SS
Prep Batch:	55992	QC Preparation:	2009-11-20	Prepared By:	SS

Parameter	Flag	MDL Result	Units	RL
SPLP Fluoride		<0.0889	mg/L	0.2

Method Blank (1) QC Batch: 65518

QC Batch:	65518	Date Analyzed:	2009-11-23	Analyzed By:	MN
Prep Batch:	55996	QC Preparation:	2009-11-20	Prepared By:	MN

Parameter	Flag	MDL Result	Units	RL
Naphthalene		<0.0000853	mg/L	0.0002
Acenaphthylene		<0.0000768	mg/L	0.0002
Acenaphthene		<0.000103	mg/L	0.0002
Dibenzofuran		<0.000200	mg/L	0.0002
Fluorene		<0.0000861	mg/L	0.0002
Anthracene		<0.000170	mg/L	0.0002
Phenanthrene		<0.0000884	mg/L	0.0002
Fluoranthene		<0.0000969	mg/L	0.0002
Pyrene		<0.0000855	mg/L	0.0002
Benzo(a)anthracene		<0.0000703	mg/L	0.0002
Chrysene		<0.000113	mg/L	0.0002
Benzo(b)fluoranthene		<0.000134	mg/L	0.0002
Benzo(k)fluoranthene		<0.000227	mg/L	0.0002
Benzo(a)pyrene		<0.000200	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000253	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000180	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000158	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl		0.0385	mg/L	1	0.0800	48	10 - 146
Nitrobenzene-d5		0.0456	mg/L	1	0.0800	57	10 - 141
Terphenyl-d14		0.0671	mg/L	1	0.0800	84	10 - 266

Method Blank (1) QC Batch: 65547

QC Batch:	65547	Date Analyzed:	2009-11-23	Analyzed By:	KB
Prep Batch:	56014	QC Preparation:	2009-11-23	Prepared By:	KB

Parameter	Flag	MDL Result	Units	RL
Bromochloromethane		<0.177	µg/L	1
Dichlorodifluoromethane		<0.208	µg/L	1
Chloromethane (methyl chloride)		<0.134	µg/L	1
Vinyl Chloride		<0.135	µg/L	1
Bromomethane (methyl bromide)		<1.23	µg/L	5
Chloroethane		<0.182	µg/L	1
Trichlorofluoromethane		<0.0610	µg/L	1
Acetone		<5.50	µg/L	10
Iodomethane (methyl iodide)		<0.107	µg/L	5
Carbon Disulfide		0.0900	µg/L	1
Acrylonitrile		<0.0970	µg/L	1
2-Butanone (MEK)		<0.531	µg/L	5
4-Methyl-2-pentanone (MIBK)		<0.421	µg/L	5
2-Hexanone		<0.168	µg/L	5
trans 1,4-Dichloro-2-butene		<0.517	µg/L	10
1,1-Dichloroethene		<0.136	µg/L	1
Methylene chloride		<0.649	µg/L	5
MTBE		<0.123	µg/L	1
trans-1,2-Dichloroethene		<0.126	µg/L	1
1,1-Dichloroethane		<0.0600	µg/L	1
cis-1,2-Dichloroethene		<0.151	µg/L	1
2,2-Dichloropropane		<0.180	µg/L	1
1,2-Dichloroethane (EDC)		<0.113	µg/L	1
Chloroform		<0.141	µg/L	1
1,1,1-Trichloroethane		<0.116	µg/L	1
1,1-Dichloropropene		<0.0540	µg/L	1
Benzene		<0.146	µg/L	1
Carbon Tetrachloride		<0.0790	µg/L	1
1,2-Dichloropropane		<0.111	µg/L	1
Trichloroethene (TCE)		<0.117	µg/L	1
Dibromomethane (methylene bromide)		<0.140	µg/L	1
Bromodichloromethane		<0.161	µg/L	1
2-Chloroethyl vinyl ether		<0.388	µg/L	5
cis-1,3-Dichloropropene		<0.0890	µg/L	1
trans-1,3-Dichloropropene		<0.0760	µg/L	1
Toluene		0.100	µg/L	1
1,1,2-Trichloroethane		<0.135	µg/L	1
1,3-Dichloropropane		<0.0990	µg/L	1
Dibromochloromethane		<0.0900	µg/L	1
1,2-Dibromoethane (EDB)		<0.0700	µg/L	1
Tetrachloroethene (PCE)		<0.270	µg/L	1
Chlorobenzene		<0.0540	µg/L	1
1,1,1,2-Tetrachloroethane		<0.0990	µg/L	1
Ethylbenzene		0.0500	µg/L	1
m,p-Xylene		<0.0940	µg/L	1

continued ...

method blank continued . .

Parameter	Flag	MDL Result	Units	RL
Bromoform		<0.0570	µg/L	1
Styrene		<0.0910	µg/L	1
o-Xylene		<0.0960	µg/L	1
1,1,2,2-Tetrachloroethane		<0.125	µg/L	1
2-Chlorotoluene		<0.0570	µg/L	1
1,2,3-Trichloropropane		<0.458	µg/L	1
Isopropylbenzene		<0.0850	µg/L	1
Bromobenzene		<0.106	µg/L	1
n-Propylbenzene		0.0700	µg/L	1
1,3,5-Trimethylbenzene		0.0600	µg/L	1
tert-Butylbenzene		<0.107	µg/L	1
1,2,4-Trimethylbenzene		<0.0990	µg/L	1
1,4-Dichlorobenzene (para)		<0.217	µg/L	1
sec-Butylbenzene		0.120	µg/L	1
1,3-Dichlorobenzene (meta)		<0.0690	µg/L	1
p-Isopropyltoluene		0.120	µg/L	1
4-Chlorotoluene		<0.0940	µg/L	1
1,2-Dichlorobenzene (ortho)		<0.100	µg/L	1
n-Butylbenzene		0.180	µg/L	1
1,2-Dibromo-3-chloropropane		<0.690	µg/L	5
1,2,3-Trichlorobenzene		<0.135	µg/L	5
1,2,4-Trichlorobenzene		<0.155	µg/L	5
Naphthalene		<0.594	µg/L	5
Hexachlorobutadiene		<0.248	µg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.9	µg/L	1	50.0	100	92.3 - 115
Toluene-d8		48.4	µg/L	1	50.0	97	89.8 - 109
4-Bromofluorobenzene (4-BFB)		48.0	µg/L	1	50.0	96	89.5 - 112

Method Blank (1) QC Batch: 65644

QC Batch: 65644 | Date Analyzed: 2009-11-30 | Analyzed By: AH
Prep Batch: 56100 | QC Preparation: 2009-11-30 | Prepared By: AH

Parameter	Flag	MDL Result	Units	RL
SPLP Cyanide		<0.0148	mg/L	0.015

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP Cadmium		<0.00140	mg/L	0.005

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP Lead		<0.00320	mg/L	0.01

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP Selenium		<0.0131	mg/L	0.05

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP Arsenic		<0.00430	mg/L	0.01

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP Barium		<0.00170	mg/L	0.1

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP Chromium		<0.000900	mg/L	0.005

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP Silver		<0.00210	mg/L	0.003

Method Blank (1) QC Batch: 65737

QC Batch:	65737	Date Analyzed:	2009-12-03	Analyzed By:	RR
Prep Batch:	56174	QC Preparation:	2009-12-03	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
SPLP U		<0.0105	mg/L	0.05

Laboratory Control Spike (LCS-1)

QC Batch:	65331	Date Analyzed:	2009-11-16	Analyzed By:	ER
Prep Batch:	55826	QC Preparation:	2009-11-16	Prepared By:	ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.06	mg/Kg	1	2.00	<0.00331	103	78.9 - 113
Toluene	2.10	mg/Kg	1	2.00	<0.00528	105	78.3 - 116
Ethylbenzene	2.01	mg/Kg	1	2.00	<0.00448	100	79.1 - 117

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Xylene	6.05	mg/Kg	1	6.00	<0.00456	101	79.6 - 116

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
Benzene	1.97	mg/Kg	1	2.00	<0.00331	98	78.9 - 113	4	20
Toluene	1.98	mg/Kg	1	2.00	<0.00528	99	78.3 - 116	6	20
Ethylbenzene	1.93	mg/Kg	1	2.00	<0.00448	96	79.1 - 117	4	20
Xylene	5.77	mg/Kg	1	6.00	<0.00456	96	79.6 - 116	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.98	1.87	mg/Kg	1	2.00	99	94	70.8 - 111
4-Bromofluorobenzene (4-BFB)	1.98	1.89	mg/Kg	1	2.00	99	94	68.3 - 117

Laboratory Control Spike (LCS-1)

QC Batch: 65332 | Date Analyzed: 2009-11-16 | Analyzed By: ER
Prep Batch: 55826 | QC Preparation: 2009-11-16 | Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	18.9	mg/Kg	1	20.0	<0.403	94	72.6 - 121

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
GRO	19.3	mg/Kg	1	20.0	<0.403	96	72.6 - 121	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.78	1.77	mg/Kg	1	2.00	89	88	75.2 - 112
4-Bromofluorobenzene (4-BFB)	1.92	1.87	mg/Kg	1	2.00	96	94	54.9 - 133

Laboratory Control Spike (LCS-1)

QC Batch: 65337 | Date Analyzed: 2009-11-16 | Analyzed By: AW
Prep Batch: 55831 | QC Preparation: 2009-11-16 | Prepared By: AW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	230	mg/Kg	1	250	<4.66	92	70 - 130

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
DRO	225	mg/Kg	1	250	<4.66	90	70 - 130	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	112	111	mg/Kg	1	100	112	111	38.6 - 167

Laboratory Control Spike (LCS-1)

QC Batch: 65425 | Date Analyzed: 2009-11-19 | Analyzed By: DS
Prep Batch: 55902 | QC Preparation: 2009-11-19 | Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Aroclor 1260 (PCB-1260)	0.00175	mg/L	1	0.00200	<0.0000331	88	10 - 128

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
Aroclor 1260 (PCB-1260)	0.00174	mg/L	1	0.00200	<0.0000331	87	10 - 128	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Deca chlorobiphenyl	0.000490	0.000487	mg/L	1	0.000500	98	97	10 - 128

Laboratory Control Spike (LCS-1)

QC Batch: 65427 | Date Analyzed: 2009-11-19 | Analyzed By: CM
Prep Batch: 55904 | QC Preparation: 2009-11-19 | Prepared By: CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	242	mg/Kg	1	250	<5.28	97	84.9 - 124

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
TRPHC	247	mg/Kg	1	250	<5.28	99	84.9 - 124	2	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: 65446 | Date Analyzed: 2009-11-19 | Analyzed By: TP
Prep Batch: 55913 | QC Preparation: 2009-11-19 | Prepared By: TP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Mercury	0.00434	mg/L	1	0.00400	<0.0000329	108	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
SPLP Mercury	0.00432	mg/L	1	0.00400	<0.0000329	108	85 - 115	0	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: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS
Prep Batch: 55992 | QC Preparation: 2009-11-20 | Prepared By: SS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	5.21	mg/L	1	5.00	<0.0700	104	90 - 110

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
Nitrate-N	5.17	mg/L	1	5.00	<0.0700	103	90 - 110	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: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS
Prep Batch: 55992 | QC Preparation: 2009-11-20 | Prepared By: SS

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Fluoride	4.80	mg/L	1	5.00	<0.0889	96	90 - 110

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
SPLP Fluoride	4.84	mg/L	1	5.00	<0.0889	97	90 - 110	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: 65518 | Date Analyzed: 2009-11-23 | Analyzed By: MN
Prep Batch: 55996 | QC Preparation: 2009-11-20 | Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0558	mg/L	1	0.0800	<0.0000853	70	10 - 141
Acenaphthylene	0.0612	mg/L	1	0.0800	<0.0000768	76	10 - 152
Acenaphthene	0.0609	mg/L	1	0.0800	<0.000103	76	10 - 151
Dibenzofuran	0.0580	mg/L	1	0.0800	<0.000200	72	10 - 148
Fluorene	0.0658	mg/L	1	0.0800	<0.0000861	82	10 - 172
Anthracene	0.0605	mg/L	1	0.0800	<0.000170	76	19.6 - 172
Phenanthrene	0.0605	mg/L	1	0.0800	<0.0000884	76	22.5 - 172
Fluoranthene	0.0678	mg/L	1	0.0800	<0.0000969	85	17.3 - 187
Pyrene	0.0626	mg/L	1	0.0800	<0.0000855	78	14.9 - 199
Benzo(a)anthracene	0.0604	mg/L	1	0.0800	<0.0000703	76	19.4 - 185
Chrysene	0.0684	mg/L	1	0.0800	<0.000113	86	18.4 - 188
Benzo(b)fluoranthene	0.0577	mg/L	1	0.0800	<0.000134	72	10 - 193
Benzo(k)fluoranthene	0.0874	mg/L	1	0.0800	<0.000227	109	27.8 - 196
Benzo(a)pyrene	0.0905	mg/L	1	0.0800	<0.000200	113	12.4 - 205
Indeno(1,2,3-cd)pyrene	0.0723	mg/L	1	0.0800	<0.000253	90	10 - 198
Dibenzo(a,h)anthracene	0.0705	mg/L	1	0.0800	<0.000180	88	10 - 172
Benzo(g,h,i)perylene	0.0703	mg/L	1	0.0800	<0.000158	88	10 - 186

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
Naphthalene	0.0530	mg/L	1	0.0800	<0.0000853	66	10 - 141	5	20
Acenaphthylene	0.0582	mg/L	1	0.0800	<0.0000768	73	10 - 152	5	20
Acenaphthene	0.0573	mg/L	1	0.0800	<0.000103	72	10 - 151	6	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dibenzofuran	0.0552	mg/L	1	0.0800	<0.000200	69	10 - 148	5	20
Fluorene	0.0627	mg/L	1	0.0800	<0.0000861	78	10 - 172	5	20
Anthracene	0.0584	mg/L	1	0.0800	<0.000170	73	19.6 - 172	4	20
Phenanthrene	0.0582	mg/L	1	0.0800	<0.0000884	73	22.5 - 172	4	20
Fluoranthene	0.0654	mg/L	1	0.0800	<0.0000969	82	17.3 - 187	4	20
Pyrene	0.0584	mg/L	1	0.0800	<0.0000855	73	14.9 - 199	7	20
Benzo(a)anthracene	0.0559	mg/L	1	0.0800	<0.0000703	70	19.4 - 185	8	20
Chrysene	0.0631	mg/L	1	0.0800	<0.000113	79	18.4 - 188	8	20
Benzo(b)fluoranthene	0.0593	mg/L	1	0.0800	<0.000134	74	10 - 193	3	20
Benzo(k)fluoranthene	0.0853	mg/L	1	0.0800	<0.000227	107	27.8 - 196	2	20
Benzo(a)pyrene	0.0861	mg/L	1	0.0800	<0.000200	108	12.4 - 205	5	20
Indeno(1,2,3-cd)pyrene	0.0665	mg/L	1	0.0800	<0.000253	83	10 - 198	8	20
Dibenzo(a,h)anthracene	0.0671	mg/L	1	0.0800	<0.000180	84	10 - 172	5	20
Benzo(g,h,i)perylene	0.0656	mg/L	1	0.0800	<0.000158	82	10 - 186	7	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorobiphenyl	0.0521	0.0490	mg/L	1	0.0800	65	61	10 - 165
Nitrobenzene-d5	0.0598	0.0560	mg/L	1	0.0800	75	70	10 - 157
Terphenyl-d14	0.0573	0.0540	mg/L	1	0.0800	72	68	10 - 220

Laboratory Control Spike (LCS-1)

QC Batch: 65547 | Date Analyzed: 2009-11-23 | Analyzed By: KB
Prep Batch: 56014 | QC Preparation: 2009-11-23 | Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	55.0	µg/L	1	50.0	<0.136	110	76.9 - 123
Benzene	51.1	µg/L	1	50.0	<0.146	102	79.5 - 119
Trichloroethene (TCE)	53.4	µg/L	1	50.0	<0.117	107	75.3 - 122
Toluene	50.9	µg/L	1	50.0	0.1	102	81.4 - 118
Chlorobenzene	50.8	µg/L	1	50.0	<0.0540	102	78.2 - 117

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
1,1-Dichloroethene	51.4	µg/L	1	50.0	<0.136	103	76.9 - 123	7	20
Benzene	50.4	µg/L	1	50.0	<0.146	101	79.5 - 119	1	20
Trichloroethene (TCE)	52.3	µg/L	1	50.0	<0.117	105	75.3 - 122	2	20
Toluene	50.1	µg/L	1	50.0	0.1	100	81.4 - 118	2	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chlorobenzene	49.1	µg/L	1	50.0	<0.0540	98	78.2 - 117	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.4	49.0	µg/L	1	50.0	101	98	91.4 - 114
Toluene-d8	50.8	49.9	µg/L	1	50.0	102	100	89.8 - 108
4-Bromofluorobenzene (4-BFB)	49.1	47.2	µg/L	1	50.0	98	94	90.2 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cadmium	0.247	mg/L	1	0.250	<0.00140	99	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
SPLP Cadmium	0.247	mg/L	1	0.250	<0.00140	99	85 - 115	0	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: 65737 | Date Analyzed: 2009-12-03 | Analyzed By. RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Lead	0.511	mg/L	1	0.500	<0.00320	102	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
SPLP Lead	0.518	mg/L	1	0.500	<0.00320	104	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: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Selenium	0.424	mg/L	1	0.500	<0.0131	85	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
SPLP Selenium	0.447	mg/L	1	0.500	<0.0131	89	85 - 115	5	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: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Arsenic	0.476	mg/L	1	0.500	<0.00430	95	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
SPLP Arsenic	0.480	mg/L	1	0.500	<0.00430	96	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: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Barium	0.994	mg/L	1	1.00	<0.00170	99	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
SPLP Barium	1.02	mg/L	1	1.00	<0.00170	102	85 - 115	3	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: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chromium	0.0980	mg/L	1	0.100	<0.000900	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
SPLP Chromium	0.0990	mg/L	1	0.100	<0.000900	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: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Silver	0.123	mg/L	1	0.125	<0.00210	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
SPLP Silver	0.124	mg/L	1	0.125	<0.00210	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: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP U	0.515	mg/L	1	0.500	<0.0105	103	90 - 110

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
SPLP U	0.518	mg/L	1	0.500	<0.0105	104	90 - 110	1	

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

Matrix Spike (MS-1) Spiked Sample: 214956

QC Batch: 65331 | Date Analyzed: 2009-11-16 | Analyzed By: ER
Prep Batch: 55826 | QC Preparation: 2009-11-16 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.07	mg/Kg	1	2.00	<0.00331	104	61.5 - 134
Toluene	2.16	mg/Kg	1	2.00	<0.00528	108	64.2 - 143
Ethylbenzene	2.20	mg/Kg	1	2.00	<0.00448	110	67.7 - 152
Xylene	6.68	mg/Kg	1	6.00	<0.00456	111	67.8 - 152

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
Benzene	2.05	mg/Kg	1	2.00	<0.00331	102	61.5 - 134	1	20
Toluene	2.18	mg/Kg	1	2.00	<0.00528	109	64.2 - 143	1	20
Ethylbenzene	2.22	mg/Kg	1	2.00	<0.00448	111	67.7 - 152	1	20
Xylene	6.75	mg/Kg	1	6.00	<0.00456	112	67.8 - 152	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.03	2.05	mg/Kg	1	2	102	102	65.3 - 134
4-Bromofluorobenzene (4-BFB)	2.14	2.18	mg/Kg	1	2	107	109	61.9 - 143

Matrix Spike (MS-1) Spiked Sample: 214956

QC Batch: 65332 | Date Analyzed: 2009-11-16 | Analyzed By: ER
Prep Batch: 55826 | QC Preparation: 2009-11-16 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	24.1	mg/Kg	1	20.0	2.84	106	34.1 - 160

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
GRO [1]	4.34	mg/Kg	1	20.0	2.84	8	34.1 - 160	139	20

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

continued ...

[1] Matrix spike recovery and RPD out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	[2]	1.86	0.375	mg/Kg	1	2	93	19	56.9 - 137
4-Bromofluorobenzene (4-BFB)	[3]	1.95	0.479	mg/Kg	1	2	98	24	42.1 - 171

Matrix Spike (MS-1) Spiked Sample: 214956

QC Batch: 65337 | Date Analyzed: 2009-11-16 | Analyzed By: AW
Prep Batch: 55831 | QC Preparation: 2009-11-16 | Prepared By: AW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	271	mg/Kg	1	250	84.1	75	70 - 130

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
DRO	273	mg/Kg	1	250	84.1	76	70 - 130	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	103	102	mg/Kg	1	100	103	102	38.6 - 167

Matrix Spike (MS-1) Spiked Sample: 215044

QC Batch: 65427 | Date Analyzed: 2009-11-19 | Analyzed By: CM
Prep Batch: 55904 | QC Preparation: 2009-11-19 | Prepared By: CM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	360	mg/Kg	1	250	202.73	63	10 - 196

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
TRPHC	372	mg/Kg	1	250	202.73	68	10 - 196	3	20

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

[2]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Matrix Spike (MS-1) Spiked Sample: 214956

QC Batch: 65446 | Date Analyzed: 2009-11-19 | Analyzed By: TP
Prep Batch: 55913 | QC Preparation: 2009-11-19 | Prepared By: TP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Mercury	0.00452	mg/L	1	0.00400	<0.0000329	113	75 - 125

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
SPLP Mercury	0.00457	mg/L	1	0.00400	<0.0000329	114	75 - 125	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: 214956

QC Batch: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS
Prep Batch: 55992 | QC Preparation: 2009-11-20 | Prepared By: SS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	5.01	mg/L	1	5.00	<0.0700	100	73.6 - 122

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
Nitrate-N	4.96	mg/L	1	5.00	<0.0700	99	73.6 - 122	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: 214956

QC Batch: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS
Prep Batch: 55992 | QC Preparation: 2009-11-20 | Prepared By: SS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Fluoride	4.88	mg/L	1	5.00	0.27	92	63.5 - 127

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
SPLP Fluoride	4.85	mg/L	1	5.00	0.27	92	63.5 - 127	1	20

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

Matrix Spike (xMS-1) Spiked Sample:

QC Batch: 65547 | Date Analyzed: 2009-11-23 | Analyzed By: KB
Prep Batch: 56014 | QC Preparation: 2009-11-23 | Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	50.5	µg/L	1	50.0	<0.136	101	66 - 134
Benzene	52.1	µg/L	1	50.0	<0.146	104	81.5 - 124
Trichloroethene (TCE)	49.9	µg/L	1	50.0	<0.117	100	80.5 - 113
Toluene	50.6	µg/L	1	50.0	<0.0600	101	81.6 - 122
Chlorobenzene	50.0	µg/L	1	50.0	<0.0540	100	82.2 - 116

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
1,1-Dichloroethene	51.9	µg/L	1	50.0	<0.136	104	66 - 134	3	20
Benzene	52.0	µg/L	1	50.0	<0.146	104	81.5 - 124	0	20
Trichloroethene (TCE)	50.3	µg/L	1	50.0	<0.117	101	80.5 - 113	1	20
Toluene	50.6	µg/L	1	50.0	<0.0600	101	81.6 - 122	0	20
Chlorobenzene	51.2	µg/L	1	50.0	<0.0540	102	82.2 - 116	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	51.2	52.6	µg/L	1	50	102	105	84.3 - 127
Toluene-d8	51.9	53.1	µg/L	1	50	104	106	90.5 - 107
4-Bromofluorobenzene (4-BFB)	49.1	50.2	µg/L	1	50	98	100	88.7 - 120

Matrix Spike (MS-1) Spiked Sample: 214956

QC Batch: 65644 | Date Analyzed: 2009-11-30 | Analyzed By: AH
Prep Batch: 56100 | QC Preparation: 2009-11-30 | Prepared By: AH

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cyanide	12.4	mg/L	1	12.0	<0.0148	103	80 - 120

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
SPLP Cyanide	12.2	mg/L	1	12.0	<0.0148	102	80 - 120	2	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cadmium	0.240	mg/L	1	0.250	<0.00140	96	75 - 125

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
SPLP Cadmium	0.241	mg/L	1	0.250	<0.00140	96	75 - 125	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Lead	0.480	mg/L	1	0.500	<0.00320	96	75 - 125

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
SPLP Lead	0.487	mg/L	1	0.500	<0.00320	97	75 - 125	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Selenium	0.422	mg/L	1	0.500	<0.0131	84	75 - 125

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
SPLP Selenium	0.419	mg/L	1	0.500	<0.0131	84	75 - 125	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Arsenic	0.478	mg/L	1	0.500	<0.00430	96	75 - 125

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
SPLP Arsenic	0.477	mg/L	1	0.500	<0.00430	95	75 - 125	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Barium	1.44	mg/L	1	1.00	0.448	99	75 - 125

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
SPLP Barium	1.45	mg/L	1	1.00	0.448	100	75 - 125	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chromium	0.100	mg/L	1	0.100	0.003	97	75 - 125

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
SPLP Chromium	0.0970	mg/L	1	0.100	0.003	94	75 - 125	3	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Silver	0.122	mg/L	1	0.125	<0.00210	98	75 - 125

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
SPLP Silver	0.121	mg/L	1	0.125	<0.00210	97	75 - 125	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: 214956

QC Batch: 65737 | Date Analyzed: 2009-12-03 | Analyzed By: RR
Prep Batch: 56174 | QC Preparation: 2009-12-03 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP U	0.520	mg/L	1	0.500	<0.0105	104	90 - 110

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
SPLP U	0.524	mg/L	1	0.500	<0.0105	105	90 - 110	1	

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

Standard (CCV-1)

QC Batch: 65331 | Date Analyzed: 2009-11-16 | Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.102	102	80 - 120	2009-11-16
Toluene		mg/Kg	0.100	0.104	104	80 - 120	2009-11-16
Ethylbenzene		mg/Kg	0.100	0.0991	99	80 - 120	2009-11-16
Xylene		mg/Kg	0.300	0.300	100	80 - 120	2009-11-16

Standard (CCV-2)

QC Batch: 65331 Date Analyzed: 2009-11-16 Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.103	103	80 - 120	2009-11-16
Toluene		mg/Kg	0.100	0.102	102	80 - 120	2009-11-16
Ethylbenzene		mg/Kg	0.100	0.0963	96	80 - 120	2009-11-16
Xylene		mg/Kg	0.300	0.291	97	80 - 120	2009-11-16

Standard (CCV-1)

QC Batch: 65332 Date Analyzed: 2009-11-16 Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.902	90	80 - 120	2009-11-16

Standard (CCV-2)

QC Batch: 65332 Date Analyzed: 2009-11-16 Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.918	92	80 - 120	2009-11-16

Standard (CCV-1)

QC Batch: 65337 Date Analyzed: 2009-11-16 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	224	90	80 - 120	2009-11-16

Standard (CCV-2)

QC Batch: 65337 Date Analyzed: 2009-11-16 Analyzed By: AW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	271	108	80 - 120	2009-11-16

Standard (CCV-1)

QC Batch: 65425 Date Analyzed: 2009-11-19 Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Aroclor 1242 (PCB-1242)		mg/L	0.400	0.363	91	85 - 115	2009-11-19
Aroclor 1254 (PCB-1254)		mg/L	0.400	0.398	100	85 - 115	2009-11-19
Aroclor 1260 (PCB-1260)		mg/L	0.400	0.436	109	85 - 115	2009-11-19

Standard (CCV-2)

QC Batch: 65425 Date Analyzed: 2009-11-19 Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Aroclor 1242 (PCB-1242)		mg/L	0.400	0.361	90	85 - 115	2009-11-19
Aroclor 1254 (PCB-1254)		mg/L	0.400	0.416	104	85 - 115	2009-11-19
Aroclor 1260 (PCB-1260)		mg/L	0.400	0.383	96	85 - 115	2009-11-19

Standard (ICV-1)

QC Batch: 65427 Date Analyzed: 2009-11-19 Analyzed By: CM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	85.2	85	80 - 120	2009-11-19

Standard (CCV-1)

QC Batch: 65427 Date Analyzed: 2009-11-19 Analyzed By: CM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	85.5	85	80 - 120	2009-11-19

Standard (CCV-1)

QC Batch: 65446 | Date Analyzed: 2009-11-19 | Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Mercury		mg/L	0.00500	0.00499	100	90 - 110	2009-11-19

Standard (CCV-2)

QC Batch: 65446 | Date Analyzed: 2009-11-19 | Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Mercury		mg/L	0.00500	0.00497	99	90 - 110	2009-11-19

Standard (CCV-1)

QC Batch: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	5.00	5.13	103	90 - 110	2009-11-21

Standard (CCV-1)

QC Batch: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Fluoride		mg/L	5.00	4.77	95	90 - 110	2009-11-21

Standard (CCV-2)

QC Batch: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	5.00	5.14	103	90 - 110	2009-11-21

Standard (CCV-2)

QC Batch: 65514 | Date Analyzed: 2009-11-21 | Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Fluoride		mg/L	5.00	4.87	97	90 - 110	2009-11-21

Standard (CCV-1)

QC Batch: 65518 | Date Analyzed: 2009-11-23 | Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	53.2	89	80 - 120	2009-11-23
Acenaphthylene		mg/L	60.0	51.0	85	80 - 120	2009-11-23
Acenaphthene		mg/L	60.0	50.4	84	80 - 120	2009-11-23
Dibenzofuran		mg/L	60.0	51.6	86	80 - 120	2009-11-23
Fluorene		mg/L	60.0	54.6	91	80 - 120	2009-11-23
Anthracene		mg/L	60.0	56.5	94	80 - 120	2009-11-23
Phenanthrene		mg/L	60.0	54.2	90	80 - 120	2009-11-23
Fluoranthene		mg/L	60.0	57.3	96	80 - 120	2009-11-23
Pyrene		mg/L	60.0	48.9	82	80 - 120	2009-11-23
Benzo(a)anthracene		mg/L	60.0	50.3	84	80 - 120	2009-11-23
Chrysene		mg/L	60.0	51.9	86	80 - 120	2009-11-23
Benzo(b)fluoranthene		mg/L	60.0	50.8	85	80 - 120	2009-11-23
Benzo(k)fluoranthene		mg/L	60.0	63.3	106	80 - 120	2009-11-23
Benzo(a)pyrene		mg/L	60.0	63.0	105	80 - 120	2009-11-23
Indeno(1,2,3-cd)pyrene		mg/L	60.0	53.8	90	80 - 120	2009-11-23
Dibenzo(a,h)anthracene		mg/L	60.0	54.4	91	80 - 120	2009-11-23
Benzo(g,h,i)perylene		mg/L	60.0	51.6	86	80 - 120	2009-11-23

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorobiphenyl		48.2	mg/L	1	60.0	80	80 - 120
Nitrobenzene-d5		58.5	mg/L	1	60.0	98	80 - 120
Terphenyl-d14	[4]	46.2	mg/L	1	60.0	77	80 - 120

Standard (CCV-1)

QC Batch: 65547 | Date Analyzed: 2009-11-23 | Analyzed By: KB

[4]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	54.5	109	80 - 120	2009-11-23
1,1-Dichloroethene		µg/L	50.0	59.4	119	80 - 120	2009-11-23
Chloroform		µg/L	50.0	49.7	99	80 - 120	2009-11-23
1,2-Dichloropropane		µg/L	50.0	51.4	103	80 - 120	2009-11-23
Toluene		µg/L	50.0	51.8	104	80 - 120	2009-11-23
Chlorobenzene		µg/L	50.0	50.9	102	80 - 120	2009-11-23
Ethylbenzene		µg/L	50.0	51.3	103	80 - 120	2009-11-23

Standard (ICV-1)

QC Batch: 65644 Date Analyzed: 2009-11-30 Analyzed By: AH

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cyanide		mg/L	0.120	0.121	101	80 - 120	2009-11-30

Standard (CCV-1)

QC Batch: 65644 Date Analyzed: 2009-11-30 Analyzed By: AH

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cyanide		mg/L	0.120	0.121	101	80 - 120	2009-11-30

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cadmium		mg/L	1.00	1.06	106	90 - 110	2009-12-03

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Lead		mg/L	2.00	2.05	102	90 - 110	2009-12-03

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Selenium		mg/L	1.00	1.02	102	90 - 110	2009-12-03

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Arsenic		mg/L	2.00	2.06	103	90 - 110	2009-12-03

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Barium		mg/L	1.00	1.02	102	90 - 110	2009-12-03

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chromium		mg/L	1.00	1.04	104	90 - 110	2009-12-03

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Silver		mg/L	0.250	0.253	101	90 - 110	2009-12-03

Standard (ICV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP U		mg/L	1.00	1.02	102	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cadmium		mg/L	1.00	0.996	100	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Lead		mg/L	1.00	1.01	101	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Selenium		mg/L	1.00	0.938	94	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Arsenic		mg/L	1.00	0.951	95	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Barium		mg/L	1.00	0.991	99	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chromium		mg/L	1.00	0.988	99	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Silver		mg/L	0.125	0.124	99	90 - 110	2009-12-03

Standard (CCV-1)

QC Batch: 65737 Date Analyzed: 2009-12-03 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP U		mg/L	1.00	1.02	102	90 - 110	2009-12-03

LAB Order ID # 9111607

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TraceAnalysis, Inc.

email: lab@traceanalysis.com

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BioAquatic Testing
2501 Mayes Rd , Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Talon/LPE	Phone #: (432) 230 - 7673
Address: (Street, City, Zip) 104 W. Hermosa Dr Artesia, NM 88210	Fax #: (575) 746 - 8905
Contact Person: Kyle Summers	E-mail: ksummers@talonlpe.com
Invoice to: (If different from above) Mewbourne Oil - Charles Martin	
Project #: 700738.017.01	Project Name: Bradley 31 Fed Com # 3
Project Location (including state): Eddy County, NM	Sampler Signature: Kyle

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260 / 624	GC/MS Semi. Vol 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, Fl, S04, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC	Chlorides	Radium-226 / 228	Inorganics See List	Organics See List	Turn Around Time if different from standard	Hold
214956	P-Comp	3	4oz		X							X		11/12/09	0915		X	X	X																X	X	X		

NKS

KS

	Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Kyle	Talon	11/13/09			Trace LAS	11-13-09	(11:00)	INST ____ OBS ____ °C COR ____ °C
		Trace	11/13/09	14:10		Trace	11/13/09	14:10	INST ____ OBS 4.0 °C COR ____ °C
		Trace	11/13/09	17:00			11/14/09	11:00	INST IR OBS 5.2 °C COR 5.6 °C

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-In-Review MA

REMARKS: Drilling mud - New Mexico

See Attached List

No Chlorides - Already Analyzed.

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

All tests-Lubbock

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C

Carrier # Carry-in Lone Star 2575253

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection D of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants.

A. **Human Health Standards-Ground water shall meet the standards of Subsection A and B of this section** unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 20.6.2.1101 NMAC for the combination of contaminants, or the Human Health Standard of Subsection A of Section 20.6.2.3103 NMAC for each contaminant shall apply, whichever is more stringent. Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l
(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l
(23) total xylenes.....0.62 mg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l
(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l
(32) PAHs: total naphthalene plus monomethylnaphthalenes.....0.03 mg/l
(33) benzo-a-pyrene.....0.0007 mg/l

already analyzed

B. **Other Standards for Domestic Water Supply**

(1) Chloride (Cl).....250.0 mg/l
(2) Copper (Cu).....1.0 mg/l
(3) Iron (Fe).....1.0 mg/l
(4) Manganese (Mn).....0.2 mg/l
(6) Phenols.....0.005 mg/l
(7) Sulfate (SO_4).....600.0 mg/l
(8) Total Dissolved Solids (TDS).....1000.0 mg/l
(9) Zinc (Zn).....10.0 mg/l
(10) pH.....between 6 and 9

C. **Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of**

this section unless otherwise provided.

(1) Aluminum (Al).....5.0 mg/l
(2) Boron (B).....0.75 mg/l
(3) Cobalt (Co).....0.05 mg/l
(4) Molybdenum (Mo).....1.0 mg/l
(5) Nickel (Ni).....0.2 mg/l

[2-18-77, 1-29-82, 11-17-83, 3-3-86, 12-1-95; 20.6.2.3103 NMAC - Rn, 20 NMAC 6.2.III.3103, 1-15-01; A, 9-26-04]
[Note: For purposes of application of the amended numeric uranium standard to past and current water discharges (as of 9-26-04), the new standard will not become effective until June 1, 2007. For any new water discharges, the uranium standard is effective 9-26-04.]