TALON
"All the Pieces"

October 27,2008

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New Braunfels, Texas 78130
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318 East Taylor Street
Hobbs, New Mexico 88241
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ENVIRONMENTAL CONSULTING
ENGINEERING
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EMERGENCY RESPONSE

Toll Free: 866.742.0742
www.talonlpe.com

Paul Kautz
New Mexico Oil Conservation Division
District 1 Office
1625 French Dr.
Hobbs, New Mexico 88240

RE: **Request for closure of the Osudo "9" State Com #2 pit.**

In August of 2008 Talon/LPE was contracted by the Mewbourne Oil Company to perform the pit closure activities at the Osudo "9" State Com #2, API# 30-025-38903, Unit C, Sec 9-T21S-R35E, in Lea county New Mexico. The C-144 for this pit closure was submitted to Chris Williams and approved on August 18, 2008.

Talon/LPE completed this pit closure by excavating and hauling the drill cuttings from the brine section of the pit to Lea Land Disposal Facility (permit number WM-01-035). Copies of the waste manifests will be on file at the Talon/LPE office located at 318 E Taylor in Hobbs, New Mexico. After excavation of the brine section was completed, Talon/LPE collected a five point composite sample on August 28, 2008. The sample was sent to Trace Analysis and analyzed in compliance with 19.15.17.13 NMAC.

The remainder of the drill cuttings were mixed at no more than a 3:1 ratio to stabilize the cuttings in preparation for trench burial. To mix the material it was moved to the west side of the pit. The east side floor was exposed and cleaned. After the east side of the pit was exposed, a five point composite sample was collected on August 28, 2008 by Talon/LPE and sent to Trace Analysis to be analyzed in compliance with 19.15.17.13 NMAC. After mixing the drill cuttings Paul Kautz was contacted to witness sampling of the pit contents. Talon/LPE collected a five point composite sample of the mixed drill cuttings on August 28, 2008. The samples were sent to Trace Analysis and analyzed in compliance with 19.15.17.13 NMAC. Analytical results indicated that the drill cuttings had exceeded the chloride limits set by the New Mexico Oil conservation division.

Talon/LPE remixed the drill cuttings not above the 3:1 ratio and re-sampled the drill cuttings on September 11, 2008. After reviewing the analytical for results the remixed drill cuttings it was determined that they could be buried on site. Talon/LPE excavated a burial cell approximately150'x40'x20' in the east side of the existing reserve pit. After lining the burial cell with a 20 mil liner, the drill cuttings were placed in the burial cell and capped with a 20 mil liner. Once the drill cuttings were removed from the west side of the reserve pit Eb Taylor with Talon/LPE collected two samples on September 26, 2008 from the floor and sent them to Trace Analysis to be analyzed in compliance with 19.15.17.13 NMAC. After analytical was reviewed the pit was backfilled and Talon/LPE will seed the location with Homesteaders Choice seed mix.

No deed amendment is required due to the fact that the surface owner is the state of New Mexico, Mewbourne Oil Company will place the burial marker at 32° 29' 55.87"N
103° 22' 27.30"W

After reviewing the attached documents and analysis by the NMOCD, Talon/LPE, and Mewbourne Oil Company we are requesting that this pit be considered closed.

Sincerely,

Eb Taylor
New Mexico Division Manager
Talon/LPE

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.

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

125x

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

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

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

1.
Operator: MEWBOURNE OIL COMPANY OGRID #: 14744
Address: PO BOX 5270; HOBBS, NEW MEXICO 88241
Facility or well name: OSUDO 9 STATE COM 02
API Number: 30-025-38903 OCD Permit Number: P1-00296
U/L or Qtr/Qtr C Section 9 Township 21 S Range 35 E County: LEA
Center of Proposed Design: Latitude N32° 29' 55.87" Longitude W103° 22' 27.30" 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 20mil
☒ Lined ☐ Unlined Liner type: Thickness ~~12~~ mil ☐ LLDPE ☒ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: 15000 bbl Dimensions: L 125 x W 120 x D 6

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 Sys[illegible] That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number _____

Disposal Facility Name. _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

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

☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

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

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

18.

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

☑ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☑ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☑ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15 17.11 NMAC

☑ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19 15.17 11 NMAC

☑ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☑ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☑ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☑ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☑ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☑ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15 17 13 NMAC

☑ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

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

Name (Print): CHARLES MARTIN Title: Engineer

Signature: Charles E. Martin Date: 8/15/2008

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: Chris Williams **Approval Date:** 8/19/08

Title: Dist. Supervisor **OCD Permit Number:** P1-00296

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:** 9/29/08

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 32° 29'55.87" N Longitude 103° 22'27.30" W NAD: ☐1927 ☐ 1983

25.
Operator Closure Certification:

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

Name (Print): Charles Martin Title: Engineer

Signature: Charles E. Martin Date: 12-17-08

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

On the 21st day of May, 2008 Mewbourne Oil Co. visually inspected the Osudo "9" State #2 location in Unit Letter C of Sec 9, T21 S, R 35 E, of Lea County, NM with the API # 30-025-38903.

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: Charles L. Martin Date: 8-18-08

August 14, 2008

Larry Johnson
NMOCD District 1 Office
1625 N. French Dr
Hobbs, New Mexico

RE: **Osudo "9" State Com #2** – Temporary Pit Closure Request
API: 30-025-38903
Unit C Sec 9–T21S-R35E
660' FNL & 1980' FWL

Site Ranking Score: 0
Depth to Ground Water: 100-125'
100 Year Flood Plain: No
Potash Area: No per R-111P

Surface Owner: State of New Mexico
Analytical Testing: Chlorides, BTEX, TPH, GRO, DRO
Primary Land Use: Ranching and Oil & Gas Production

NOTE: THIS TEMPORARY PIT WAS ORIGIANLLY PERMITTED AND DRILLED UNDER PIT RULE 50

Pursuant to Rule 19.15.17.10 NMAC (a/k/a Pit Rule 17) of the New Mexico Oil Conservation District of the State of New Mexico regulatory requirement for temporary pit closure, please accept the following documentation for request of final closure of the temporary pit for the aforementioned location.

Talon/LPE (Talon) has been contracted by Mewbourne Oil Company (Mewbourne) to perform pit closure activities on the aforementioned location. Talon/LPE and Mewbourne wishes to purpose the following hybrid closure procedure for the aforementioned temporary pit.

NM-01-0035

- **Waste Removal:** In compliance with 19.15.17.13 NMAC, Talon will excavate all drill cuttings from the "duck pond" and transport to Lea Land Disposal Facility, Permit No. WM-1-035. The approximate amount of material will be 500 yards of brine saturated cuttings. Upon excavation of the "duck pond" all applicable soil testing will be performed pursuant to Pit Rule 17 to verify that the limits, which have been set by the NMOCD, have been obtained. A copy of the analytical data will be attached to the Final Report.

- **Burial Trench:** In compliance with 19.15.17.13 NMAC, Talon will stiffen the remaining "reef" area to a 3:1 ratio and place in a lined 20mil In-situ burial cell 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 of the "reef" all applicable soil testing will be performed pursuant to Pit Rule 17 to verify the limits, which have been set by the NMOCD, have been obtained. A copy of the analytical data. (**Note:** If the burial contents from the reef area are not at or below the required Chloride and TPH levels, this area will then be transported to Lea Land Disposal Facility, Permit No. WM-1-035.)

- **Sampling Plan (floor):** In compliance with Subsection F of 19.15.17.13 NMAC two five point composite samples will be taken from the floor of the excavation. One composite sample will be obtained from the "duck pond" area and the second composite will be obtained from the "reef" area. The NMOCD with be notified 48 hours prior to sampling. The following analytical tests/methods will be performed by Trace Analysis:

  - **Chlorides:** 4500B
  - **Benzene:** 8021B
  - **BTEX:** 8021B
  - **GRO/DRO:** 8015M
  - **TPH:** 418.1

- **Sampling [illegible] (burial contents):** In compliance with Subsection F of 19.15.17.13 NMAC a five point composite sample will be taken from the stiffened burial contents of the excavation. The NMOCD with be notified 48 hours prior to sampling. The following analytical tests/methods will be performed by Trace Analysis:

	EPA TEST
• **Chlorides:**	1312
• **TPH:**	418.1

- **Soil Cover Design:** In compliance with Subsection H of 19.15.17.13 NMAC four feet of native material will be placed over the burial cell with a minimum of one foot of top soil to ensure re-vegetation. The excavated pit area will be backfilled with three foot of native material and a minimum of one foot of topsoil.

- **Re-vegetation Plan:** In compliance with Subsection I of 19.15.17.13 NMAC the area will be re-seeded with an approved seed mixture "that equals 70% of the native perennial vegetative cover" to re-establish native vegetation.

- **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 steel marker with be cemented in the ground at the center of the burial trench. All required information will be permanently listed on the marker

- **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.

- **C-105 w/plat:** In compliance with 19.15.17.13 NMAC the C-105 and plat will be attached to the final report.

A copy of the Surface Owners Notification has been attached for documentation of compliance with Subsection F of 19.15.17.13 NMAC. A Topographical map and Satellite photo has been attached to verify that this location is not within any watercourse or wetlands area. Pursuant to Order R-111P, this area has also been cleared from the subsurface mining area. A copy of a Hydrological map and information from the iWaters Database has been attached as documentation for water depth and domestic/stock watering purposes. A copy of the FEMA 100-year Flood Plain map is not available for this area. Verbal verification has been obtained to verify this area is not within any municipal fresh water field.

Please review the attached documentation and you may contact Charles Martin of Mewbourne Oil Company at 575-441-2081 or Shelly J. Tucker of Talon/LPE at 575-706-7234 with any questions or concerns.

Sincerely,

Shelly J. Tucker
Project Manager
Talon/LPE

Attachments:

1. Surface Owner Notification letter
2. Diagram of burial cell
3. Diagram of temporary pit
4. Hydrogeologic Data (iWaters, Water Map)
5. Topographical Map
6. Satellite Image

/sjt

August 14, 2008

Thaddeus Kostrubala
New Mexico State Land Office
PO Box 1148
Santa Fe, New Mexico 87501

RE: **Osuda 9 State Com 02** – Temporary Pit Closure Surface Owner Notification
API: 30-025-38903
Unit C Sec 9–T21S-R35E
660' FNL & 1980' FWL

Mr. Kostrubala:

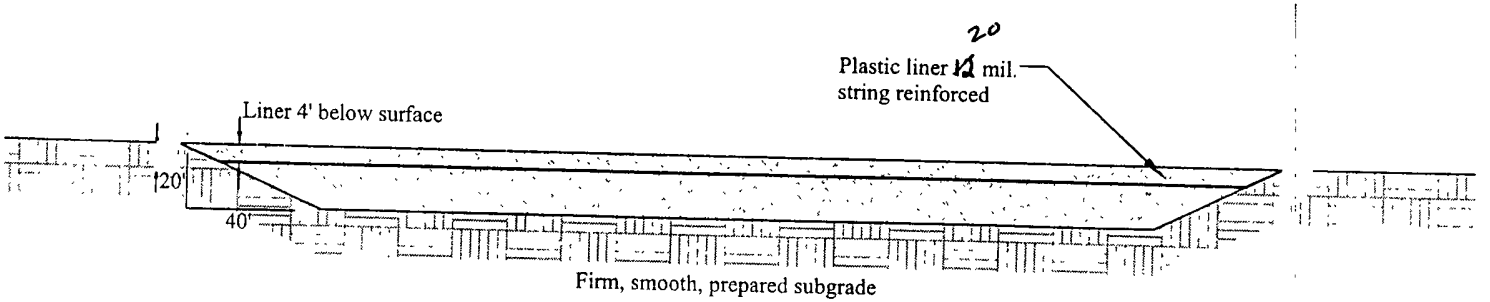
This letter is to notify the State of New Mexico, which is listed as the surface owner of the aforementioned location, that Talon/LPE (Talon) has been contracted by Mewbourne Oil Company (Mewbourne) to perform pit closure activities on the referenced location. Pursuant to Rule 19.15.17.10 NMAC (a/k/a Pit Rule 17) of the New Mexico Oil Conservation District of the State of New Mexico (NMOCD), Talon/LPE and Mewbourne have filed the required documentation with the NMOCD to close this reserve pit. A portion of this reserve pit will be buried in an in-situ burial cell and a portion will be excavated and transported to Lea Land Disposaly Facility (Permit No. ~~WM-1-035~~ NM-01-0035).

If you should have and questions or concerns, please feel to contact Charles Martin of Mewbourne Oil Company at 575-441-2081 or Shelly J. Tucker of Talon/LPE at 575-706-7234 with any questions or concerns.

Sincerely,

Shelly J. Tucker
Project Manager
Talon/LPE

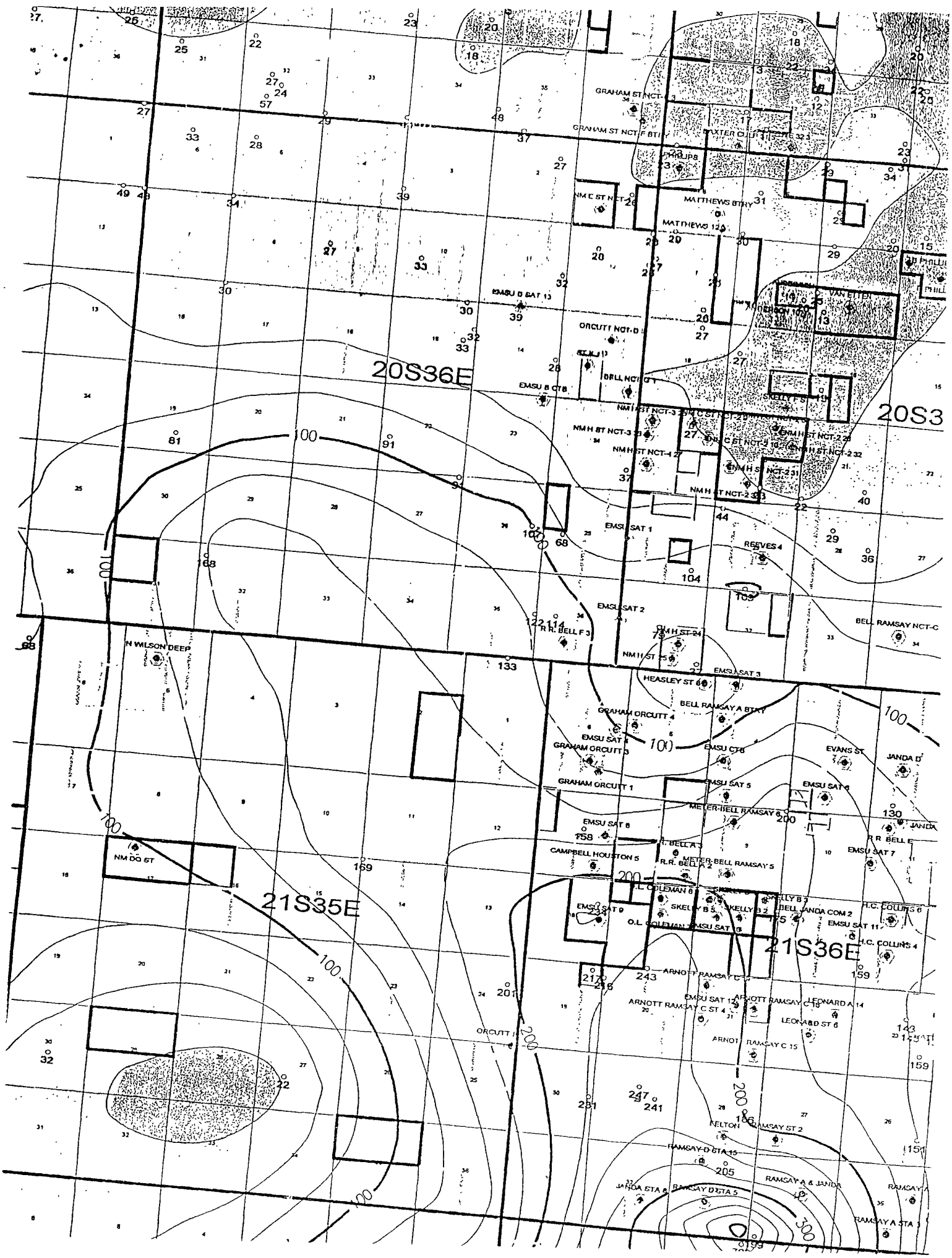
/sjt

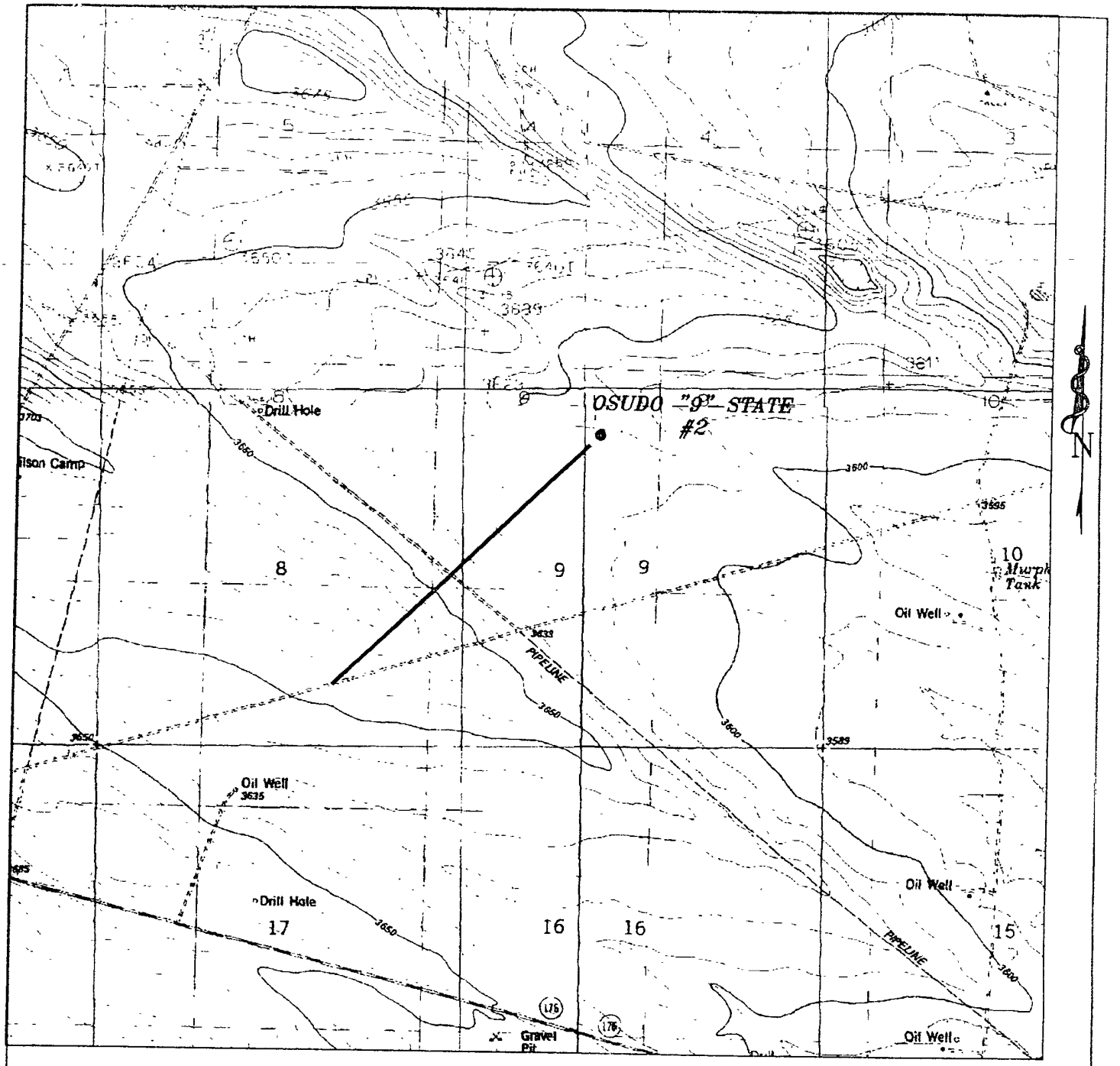


Site Detail

Date:	8/15/08
Scale:	Not To Scale
Drawn By:	SJA

Mewbourne Oil Company
OSUDO "9" STATE #1
LEA COUNTY NEW MEXICO
Pit Liner Detail Plat


20S36E
20S3
21S35E
21S36E
100
200
300
GRAHAM ST NCT-3
GRAHAM ST NCT-F BTRY
MATTHEWS BTRY
MATTHEWS 12
EMSU B SAT 13
ORCUTT NCT-B 1
EMSU B CT8
NM H ST NCT-3
NM H ST NCT-4
NM H ST NCT-2
EMSU SAT 1
REEVES 4
EMSU SAT 2
R.R. BELL F 3
N WILSON DEEP
HEASLEY ST 6
EMSU SAT 3
BELL RAMSAY A BTRY
GRAHAM ORCUTT 4
EMSU SAT 4
GRAHAM ORCUTT 3
EMSU CT8
GRAHAM ORCUTT 1
EMSU SAT 5
EMSU SAT 6
METER-BELL RAMSAY 6
EMSU SAT 8
CAMPBELL HOUSTON 5
R.R. BELL A 3
METER-BELL RAMSAY 5
R.R. BELL B 2
O.L. COLEMAN 6
EMSU SAT 9
SKELLY B 5
SKELLY B 2
BELL JANDA COM 2
O.L. COLEMAN EMSU SAT 10
EMSU SAT 11
H.C. COLLINS 6
H.C. COLLINS 4
ARNOTT RAMSAY C 6
EMSU SAT 12
ARNOTT RAMSAY C ST 4
ARNOTT RAMSAY C 16
LEONARD A 14
LEONARD ST 6
ARNOT RAMSAY C 15
ORCUTT 1
KELTON RAMSAY ST 2
RAMSAY D STA 15
RAMSAY D STA 5
RAMSAY A & JANDA
RAMSAY A STA 3
EVANS ST
JANDA D
R R BELL E
EMSU SAT 7
BELL RAMSAY NCT-C



OSUDO "9" STATE #2
Located 660' FNL and 1980' FWL
Section 9. Township 21 South, Range 35 East,
N.M.P.M., Lea County, New Mexico.

basin surveys
focused on excellence in the oilfield
P O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number	19687 JMS
Survey Date	05-14-2008
Scale	1" = 2000'
Date	05-15-2008

MEWBOURNE OIL CO.

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30 025-38903		

Property Code	Property Name	Well Number
	OSUDO "9" STATE	2
OGRID No.	**Operator Name**	**Elevation**
	MEWBOURNE OIL COMPANY	3623'

Surface Location

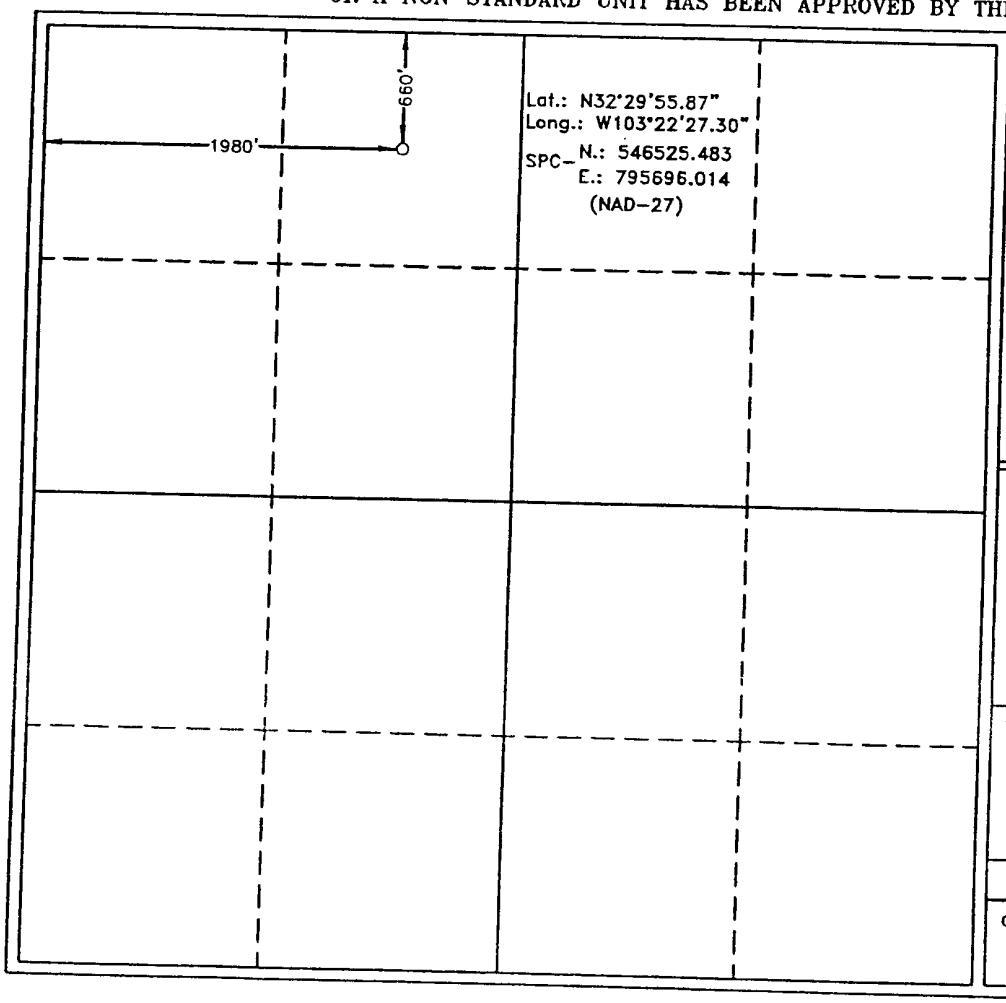
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	21 S	35 E		660	NORTH	1980	WEST	LEA

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.

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.

Signature Date

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.

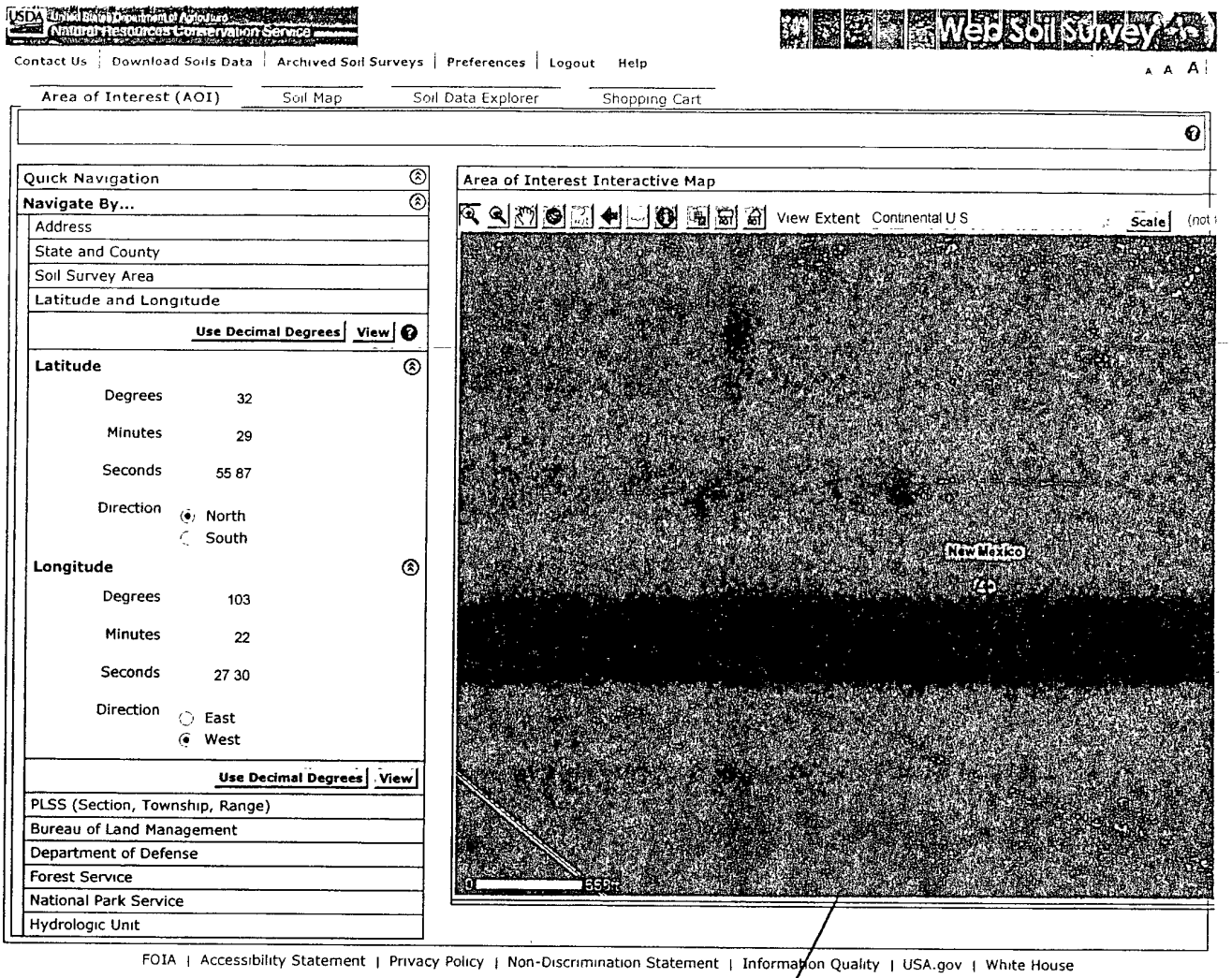
MAY 14, 2008

Date Surveyed

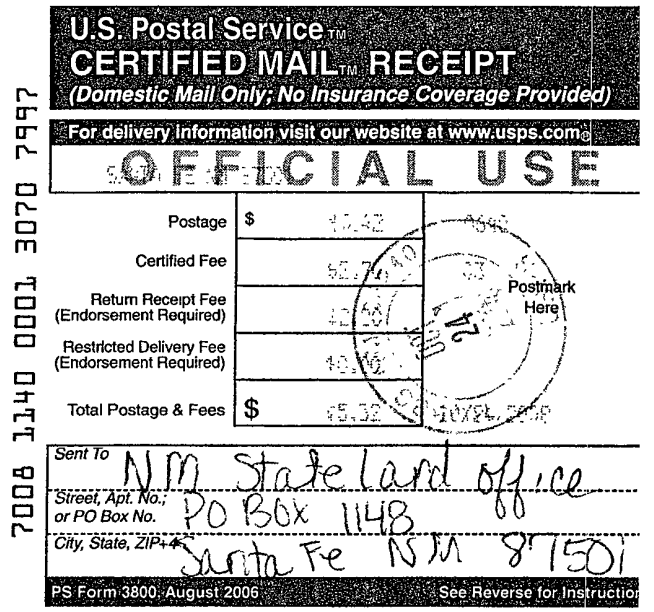
Signature & Seal of Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS



Osudo 9 State #2



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Street, Apt. No.; or PO Box No. PO Box 1148
City, State, ZIP+4 Santa Fe NM 87501

PS Form 3800, August 2006 See Reverse for Instructio

7008 1140 0001 3070 7997

Summary Report

Shelly Tucker
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: September 12, 2008

Work Order: 8082929

Project Name: OSUDO 9 State #2
Project Number: MEWBOU030PIT

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
172385	Duck Pond	soil	2008-08-28	12:04	2008-08-29
172386	BH-1	soil	2008-08-28	12:13	2008-08-29
172387	RH-2	soil	2008-08-28	12:18	2008-08-29
172388	Insitu Cuttings	soil	2008-08-28	12:40	2008-08-29

	BTEX				MTBE	TPH 418.1	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TRPHC	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
172385 - Duck Pond	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
172386 - BH-1	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
172387 - RH-2	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
172388 - Insitu Cuttings						**12.0**		

Sample: 172385 - Duck Pond

Param	Flag	Result	Units	RL
Chloride		**126**	mg/Kg	3.25

Sample: 172386 - BH-1

Param	Flag	Result	Units	RL
Chloride		**176**	mg/Kg	3.25

Sample: 172387 - RH-2

continued ...

sample 172387 continued ...

Param	Flag	Result	Units	RL
Param	Flag	Result	Units	RL
Chloride		**71.6**	mg/Kg	3.25

Sample: 172388 - Insitu Cuttings

Param	Flag	Result	Units	RL
SPLP Silver		<0.00300	mg/L	0.00300
SPLP Arsenic		<0.0100	mg/L	0.0100
SPLP Barium		**0.385**	mg/L	0.100
SPLP Cadmium		<0.00500	mg/L	0.00500
SPLP Chloride		**1320**	mg/L	0.500
SPLP Cyanide		<2.00	mg/Kg	2.00
SPLP Fluoride		<0.200	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
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

continued ...

sample 172388 continued ...

Param	Flag	Result	Units	RL
1,1-Dichloroethene		<1.00	µg/L	1.00
Methylene chloride	[1]	**8.23**	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		**1.43**	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		<1.00	µg/L	1.00
o-Xylene		<1.00	µg/L	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1.00

[1]Concentration due to possible lab contamination. •

TRACEANALYSIS, INC.

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

Shelly Tucker
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: September 12, 2008

Work Order: 8082929

Project Name: OSUDO 9 State #2
Project Number: MEWBOU030PIT

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
172385	Duck Pond	soil	2008-08-28	12:04	2008-08-29
172386	BH-1	soil	2008-08-28	12:13	2008-08-29
172387	RH-2	soil	2008-08-28	12:18	2008-08-29
172388	Insitu Cuttings	soil	2008-08-28	12:40	2008-08-29

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.

This report consists of a total of 46 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

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 OSUDO 9 State #2 were received by TraceAnalysis, Inc. on 2008-08-29 and assigned to work order 8082929. Samples for work order 8082929 were received intact at a temperature of 2.8 deg. C.

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

Test	Method
BTEX	S 8021B
Chloride (Titration)	SM 4500-Cl B
SPLP Ag	S 6010B
SPLP As	S 6010B
SPLP Ba	S 6010B
SPLP Cd	S 6010B
SPLP Cl	E 300.0
SPLP Cyanide	SM 4500-CN C,E
SPLP Fluoride	E 300.0
SPLP Hg	S 7470A
SPLP NO3 (IC)	E 300.0
SPLP PAH	S 8270C
SPLP Pb	S 6010B
SPLP PCB	S 8082
SPLP Radium 226+228	Outside Testing
SPLP Se	S 6010B
SPLP U	S 6010B
SPLP Volatiles	S 8260B
TPH 418.1	E 418.1
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8082929 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: 172385 - Duck Pond

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	51972	Date Analyzed:	2008-09-02	Analyzed By:	ER
Prep Batch:	44568	Sample Preparation:	2008-09-02	Prepared By:	ER

Parameter	Flag	Result	RL	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]	1.49	mg/Kg	1	1.00	149	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.39	mg/Kg	1	1.00	139	54.4 - 176.2

Sample: 172385 - Duck Pond

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	52180	Date Analyzed:	2008-09-09	Analyzed By:	RG
Prep Batch:	44744	Sample Preparation:	2008-09-08	Prepared By:	RG

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**126**		mg/Kg	10	3.25

Sample: 172385 - Duck Pond

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	51953	Date Analyzed:	2008-09-02	Analyzed By:	CM
Prep Batch:	44548	Sample Preparation:	2008-09-02	Prepared By:	CM

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

[1] High surrogate recovery. Sample non-detect, result bias high.

Sample: 172385 - Duck Pond

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	51983	Date Analyzed:	2008-09-02	Analyzed By:	MN
Prep Batch:	44578	Sample Preparation:	2008-09-02	Prepared By:	MN

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		112	mg/Kg	1	100	112	49.5 - 185

Sample: 172385 - Duck Pond

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	51974	Date Analyzed:	2008-09-02	Analyzed By:	ER
Prep Batch:	44568	Sample Preparation:	2008-09-02	Prepared By:	ER

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.46	mg/Kg	1	1.00	146	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.63	mg/Kg	1	1.00	163	45.6 - 214.7

Sample: 172386 - BH-1

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	51972	Date Analyzed:	2008-09-02	Analyzed By:	ER
Prep Batch:	44568	Sample Preparation:	2008-09-02	Prepared By:	ER

Parameter	Flag	Result	RL	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)		1.32	mg/Kg	1	1.00	132	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.26	mg/Kg	1	1.00	126	54.4 - 176.2

Sample: 172386 - BH-1

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	52180	Date Analyzed:	2008-09-09	Analyzed By:	RG
Prep Batch:	44744	Sample Preparation:	2008-09-08	Prepared By:	RG

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**176**		mg/Kg	10	3.25

Sample: 172386 - BH-1

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	51953	Date Analyzed:	2008-09-02	Analyzed By:	CM
Prep Batch:	44548	Sample Preparation:	2008-09-02	Prepared By:	CM

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

Sample: 172386 - BH-1

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	51983	Date Analyzed:	2008-09-02	Analyzed By:	MN
Prep Batch:	44578	Sample Preparation:	2008-09-02	Prepared By:	MN

Parameter	Flag	Result	RL	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	49.5 - 185

Sample: 172386 - BH-1

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	51974	Date Analyzed:	2008-09-02	Analyzed By:	ER
Prep Batch:	44568	Sample Preparation:	2008-09-02	Prepared By:	ER

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.30	mg/Kg	1	1.00	130	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.45	mg/Kg	1	1.00	145	45.6 - 214.7

Sample: 172387 - RH-2

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	51972	Date Analyzed:	2008-09-02	Analyzed By:	ER
Prep Batch:	44568	Sample Preparation:	2008-09-02	Prepared By:	ER

Parameter	Flag	Result	RL	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)	[2]	1.50	mg/Kg	1	1.00	150	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.42	mg/Kg	1	1.00	142	54.4 - 176.2

Sample: 172387 - RH-2

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	52180	Date Analyzed:	2008-09-09	Analyzed By:	RG
Prep Batch:	44744	Sample Preparation:	2008-09-08	Prepared By:	RG

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**71.6**		mg/Kg	10	3.25

[2]High surrogate recovery. Sample non-detect, result bias high.

Sample: 172387 - RH-2

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	51953	Date Analyzed:	2008-09-02	Analyzed By:	CM
Prep Batch:	44548	Sample Preparation:	2008-09-02	Prepared By:	CM

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

Sample: 172387 - RH-2

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	51983	Date Analyzed:	2008-09-02	Analyzed By:	MN
Prep Batch:	44578	Sample Preparation:	2008-09-02	Prepared By:	MN

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		118	mg/Kg	1	100	118	49.5 - 185

Sample: 172387 - RH-2

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	51974	Date Analyzed:	2008-09-02	Analyzed By:	ER
Prep Batch:	44568	Sample Preparation:	2008-09-02	Prepared By:	ER

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)		1.44	mg/Kg	1	1.00	144	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.64	mg/Kg	1	1.00	164	45.6 - 214.7

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Ag	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	SPLP Extraction:	2008-09-04	Prepared By:	KV
		Sample Preparation:	2008-09-05	Prepared By:	KV

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP As	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	SPLP Extraction:	2008-09-04	Prepared By:	KV
		Sample Preparation:	2008-09-05	Prepared By:	KV

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Ba	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	SPLP Extraction:	2008-09-04	Prepared By:	KV
		Sample Preparation:	2008-09-05	Prepared By:	KV

Parameter	Flag	Result	RL Units	Dilution	RL
SPLP Barium		**0.385**	mg/L	1	0.100

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Cd	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	SPLP Extraction:	2008-09-04	Prepared By:	KV
		Sample Preparation:	2008-09-05	Prepared By:	KV

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	52176	Date Analyzed:	2008-09-09	Analyzed By:	RD
Prep Batch:	44735	SPLP Extraction:	2008-09-02	Prepared By:	RD
		Sample Preparation:	2008-09-08	Prepared By:	RD

Parameter	Flag	Result	RL Units	Dilution	RL
SPLP Chloride		**1320**	mg/L	100	0.500

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	SPLP 1312
QC Batch:	52116	Date Analyzed:	2008-09-05	Analyzed By:	SS
Prep Batch:	44681	SPLP Extraction:	2008-09-03	Prepared By:	SS
		Sample Preparation:	2008-09-05	Prepared By:	SS

Parameter	Flag	Result	RL Units	Dilution	RL
SPLP Cyanide		<2.00	mg/Kg	1	2.00

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Fluoride	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	52176	Date Analyzed:	2008-09-09	Analyzed By:	RD
Prep Batch:	44735	SPLP Extraction:	2008-09-02	Prepared By:	RD
		Sample Preparation:	2008-09-08	Prepared By:	RD

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Hg	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	52082	Date Analyzed:	2008-09-04	Analyzed By:	TP
Prep Batch:	44652	Sample Preparation:	2008-09-04	Prepared By:	TP

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	52176	Date Analyzed:	2008-09-09	Analyzed By:	RD
Prep Batch:	44735	SPLP Extraction:	2008-09-02	Prepared By:	RD
		Sample Preparation:	2008-09-08	Prepared By:	RD

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP PAH	Analytical Method:	S 8270C	Prep Method:	SPLP 1312
QC Batch:	52031	Date Analyzed:	2008-09-03	Analyzed By:	DS
Prep Batch:	44606	SPLP Extraction:	2008-09-02	Prepared By:	DS
		Sample Preparation:	2008-09-03	Prepared By:	DS

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

continued ...

sample 172388 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
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		0.0374	mg/L	1	0.0800	47	37.4 - 123
Nitrobenzene-d5		0.0422	mg/L	1	0.0800	53	34.3 - 130
Terphenyl-d14		0.0596	mg/L	1	0.0800	74	10 - 252

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Pb	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	SPLP Extraction:	2008-09-04	Prepared By:	KV
		Sample Preparation:	2008-09-05	Prepared By:	KV

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP PCB	Analytical Method:	S 8082	Prep Method:	SPLP 1312
QC Batch:	52094	Date Analyzed:	2008-09-04	Analyzed By:	DS
Prep Batch:	44664	SPLP Extraction:	2008-09-02	Prepared By:	DS
		Sample Preparation:	2008-09-03	Prepared By:	DS

Parameter	Flag	RL Result	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

continued ...

sample 172388 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
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	[3]	0.000855	mg/L	1	0.000500	171	10 - 128

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Se	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	SPLP Extraction:	2008-09-04	Prepared By:	KV
		Sample Preparation:	2008-09-05	Prepared By:	KV

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP U	Analytical Method:	S 6010B	Prep Method:	SPLP 1312
QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	SPLP Extraction:	2008-09-04	Prepared By:	KV
		Sample Preparation:	2008-09-05	Prepared By:	KV

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

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	SPLP Volatiles	Analytical Method:	S 8260B	Prep Method:	SPLP 1312
QC Batch:	52233	Date Analyzed:	2008-09-09	Analyzed By:	KB
Prep Batch:	44786	SPLP Extraction:	2008-09-09	Prepared By:	KB
		Sample Preparation:	2008-09-09	Prepared By:	KB

[3]High surrogate recovery. Sample non-detect, result bias high.

Parameter	Flag	Result	RL	Units	Dilution	RL
Vinyl Chloride		<1.00		µg/L	1	1.00
1,1-Dichloroethene		<1.00		µg/L	1	1.00
Methylene chloride	[4]	**8.23**		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		**1.43**		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		<1.00		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		56.1	µg/L	1	50.0	112	70 - 130
Toluene-d8		53.5	µg/L	1	50.0	107	70 - 130
4-Bromofluorobenzene (4-BFB)		45.4	µg/L	1	50.0	91	70 - 130

Sample: 172388 - Insitu Cuttings

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	51953	Date Analyzed:	2008-09-02	Analyzed By:	CM
Prep Batch:	44548	Sample Preparation:	2008-09-02	Prepared By:	CM

Parameter	Flag	Result	RL	Units	Dilution	RL
TRPHC		**12.0**		mg/Kg	1	10.0

Method Blank (1) QC Batch: 51953

QC Batch:	51953	Date Analyzed:	2008-09-02	Analyzed By:	CM
Prep Batch:	44548	QC Preparation:	2008-09-02	Prepared By:	CM

[4]Concentration due to possible lab contamination. •

Parameter	Flag	MDL Result	Units	RL
TRPHC		<1.06	mg/Kg	10

Method Blank (1) QC Batch: 51972

QC Batch: 51972
Prep Batch: 44568

Date Analyzed: 2008-09-02
QC Preparation: 2008-09-02

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00347	mg/Kg	0.01
Toluene		<0.00525	mg/Kg	0.01
Ethylbenzene		<0.00607	mg/Kg	0.01
Xylene		<0.00724	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.945	mg/Kg	1	1.00	94	69.3 - 110.2
4-Bromofluorobenzene (4-BFB)		0.673	mg/Kg	1	1.00	67	24.4 - 114.6

Method Blank (1) QC Batch: 51974

QC Batch: 51974
Prep Batch: 44568

Date Analyzed: 2008-09-02
QC Preparation: 2008-09-02

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
GRO		<0.144	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.914	mg/Kg	1	1.00	91	83.3 - 108.5
4-Bromofluorobenzene (4-BFB)		0.771	mg/Kg	1	1.00	77	34.5 - 105.8

Method Blank (1) QC Batch: 51983

QC Batch: 51983
Prep Batch: 44578

Date Analyzed: 2008-09-02
QC Preparation: 2008-09-02

Analyzed By: MN
Prepared By: MN

Parameter	Flag	MDL Result	Units	RL
DRO		<6.77	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		96.7	mg/Kg	1	100	97	49.5 - 185

Method Blank (1) QC Batch: 52031

QC Batch: 52031 | Date Analyzed: 2008-09-03 | Analyzed By: DS
Prep Batch: 44606 | QC Preparation: 2008-09-03 | Prepared By: DS

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		0.0540	mg/L	1	0.0800	68	10 - 146
Nitrobenzene-d5		0.0654	mg/L	1	0.0800	82	10 - 141
Terphenyl-d14		0.0790	mg/L	1	0.0800	99	10 - 266

Method Blank (1) QC Batch: 52082

QC Batch: 52082 | Date Analyzed: 2008-09-04 | Analyzed By: TP
Prep Batch: 44652 | QC Preparation: 2008-09-04 | Prepared By: TP

Parameter	Flag	MDL Result	Units	RL
SPLP Mercury		<0.0000336	mg/L	0.0002

Method Blank (1) QC Batch: 52094

QC Batch: 52094 Date Analyzed: 2008-09-04 Analyzed By: DS
Prep Batch: 44664 QC Preparation: 2008-09-03 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		0.000586	mg/L	1	0.000500	117	10 - 128

Method Blank (1) QC Batch: 52116

QC Batch: 52116 Date Analyzed: 2008-09-05 Analyzed By: SS
Prep Batch: 44681 QC Preparation: 2008-09-05 Prepared By: SS

Parameter	Flag	MDL Result	Units	RL
SPLP Cyanide		<1.94	mg/Kg	2

Method Blank (1) QC Batch: 52144

QC Batch: 52144 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44655 QC Preparation: 2008-09-05 Prepared By: KV

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

Method Blank (1) QC Batch: 52144

QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	QC Preparation:	2008-09-05	Prepared By:	KV

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

Method Blank (1) QC Batch: 52144

QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	QC Preparation:	2008-09-05	Prepared By:	KV

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

Method Blank (1) QC Batch: 52144

QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	QC Preparation:	2008-09-05	Prepared By:	KV

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

Method Blank (1) QC Batch: 52144

QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	QC Preparation:	2008-09-05	Prepared By:	KV

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

Method Blank (1) QC Batch: 52144

QC Batch:	52144	Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44655	QC Preparation:	2008-09-05	Prepared By:	KV

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

Method Blank (1) QC Batch: 52144

QC Batch: 52144
Prep Batch: 44655

Date Analyzed: 2008-09-08
QC Preparation: 2008-09-05

Analyzed By: RR
Prepared By: KV

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

Method Blank (1) QC Batch: 52176

QC Batch: 52176
Prep Batch: 44735

Date Analyzed: 2008-09-09
QC Preparation: 2008-09-08

Analyzed By: RD
Prepared By: RD

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

Method Blank (1) QC Batch: 52176

QC Batch: 52176
Prep Batch: 44735

Date Analyzed: 2008-09-09
QC Preparation: 2008-09-08

Analyzed By: RD
Prepared By: RD

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

Method Blank (1) QC Batch: 52176

QC Batch: 52176
Prep Batch: 44735

Date Analyzed: 2008-09-09
QC Preparation: 2008-09-08

Analyzed By: RD
Prepared By: RD

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

Method Blank (1) QC Batch: 52180

QC Batch: 52180
Prep Batch: 44744

Date Analyzed: 2008-09-09
QC Preparation: 2008-09-08

Analyzed By: RG
Prepared By: RG

Parameter	Flag	MDL Result	Units	RL
Chloride		<1.80	mg/Kg	3.25

Method Blank (1) QC Batch: 52233

QC Batch: 52233
Prep Batch: 44786

Date Analyzed: 2008-09-09
QC Preparation: 2008-09-09

Analyzed By: KB
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		<0.0360	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

continued ...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
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		<0.0600	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		<0.0360	µg/L	1
m,p-Xylene		<0.0940	µg/L	1
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		<0.0590	µg/L	1
1,3,5-Trimethylbenzene		<0.0250	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		<0.0430	µg/L	1
1,3-Dichlorobenzene (meta)		<0.0690	µg/L	1
p-Isopropyltoluene		<0.106	µg/L	1
4-Chlorotoluene		<0.0940	µg/L	1
1,2-Dichlorobenzene (ortho)		<0.100	µg/L	1
n-Butylbenzene		<0.0850	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		54.8	µg/L	1	50.0	110	70 - 130
Toluene-d8		53.4	µg/L	1	50.0	107	70 - 130

continued ...

method blank continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		46.5	µg/L	1	50.0	93	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 51953 | Date Analyzed: 2008-09-02 | Analyzed By: CM
Prep Batch: 44548 | QC Preparation: 2008-09-02 | Prepared By: CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	212	mg/Kg	1	250	<1.06	85	75.5 - 136

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	234	mg/Kg	1	250	<1.06	94	75.5 - 136	10	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: 51972 | Date Analyzed: 2008-09-02 | Analyzed By: ER
Prep Batch: 44568 | QC Preparation: 2008-09-02 | Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.978	mg/Kg	1	1.00	<0.00347	98	80.5 - 115.5
Toluene	0.990	mg/Kg	1	1.00	<0.00525	99	80 - 114.7
Ethylbenzene	1.02	mg/Kg	1	1.00	<0.00607	102	77.1 - 114.2
Xylene	3.01	mg/Kg	1	3.00	<0.00724	100	77.6 - 114.5

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	1.01	mg/Kg	1	1.00	<0.00347	101	80.5 - 115.5	3	20
Toluene	1.01	mg/Kg	1	1.00	<0.00525	101	80 - 114.7	2	20
Ethylbenzene	0.994	mg/Kg	1	1.00	<0.00607	99	77.1 - 114.2	3	20
Xylene	2.99	mg/Kg	1	3.00	<0.00724	100	77.6 - 114.5	1	20

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

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.897	1.00	mg/Kg	1	1.00	90	100	74.2 - 114.7
4-Bromofluorobenzene (4-BFB)	0.887	0.954	mg/Kg	1	1.00	89	95	69.7 - 118.7

Laboratory Control Spike (LCS-1)

QC Batch: 51974 | Date Analyzed: 2008-09-02 | Analyzed By: ER
Prep Batch: 44568 | QC Preparation: 2008-09-02 | Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	10.6	mg/Kg	1	10.0	<0.144	106	73.1 - 114.7

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	10.8	mg/Kg	1	10.0	<0.144	108	73.1 - 114.7	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)	1.09	0.972	mg/Kg	1	1.00	109	97	77.4 - 111.4
4-Bromofluorobenzene (4-BFB)	1.02	0.944	mg/Kg	1	1.00	102	94	70.3 - 116.1

Laboratory Control Spike (LCS-1)

QC Batch: 51983 | Date Analyzed: 2008-09-02 | Analyzed By: MN
Prep Batch: 44578 | QC Preparation: 2008-09-02 | Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	289	mg/Kg	1	250	<6.77	116	73.9 - 138

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	267	mg/Kg	1	250	<6.77	107	73.9 - 138	8	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	84.9	71.3	mg/Kg	1	100	85	71	49.5 - 185

Laboratory Control Spike (LCS-1)

QC Batch: 52031 | Date Analyzed: 2008-09-03 | Analyzed By: DS
Prep Batch: 44606 | QC Preparation: 2008-09-03 | Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0383	mg/L	1	0.0800	<0.0000853	48	10 - 141
Acenaphthylene	0.0565	mg/L	1	0.0800	<0.0000768	71	10 - 152
Acenaphthene	0.0555	mg/L	1	0.0800	<0.000103	69	10 - 151
Dibenzofuran	0.0563	mg/L	1	0.0800	<0.000200	70	10 - 148
Fluorene	0.0693	mg/L	1	0.0800	<0.0000861	87	10 - 172
Anthracene	0.0589	mg/L	1	0.0800	<0.000170	74	19.6 - 172
Phenanthrene	0.0590	mg/L	1	0.0800	<0.0000884	74	22.5 - 172
Fluoranthene	0.0595	mg/L	1	0.0800	<0.0000969	74	17.3 - 187
Pyrene	0.0665	mg/L	1	0.0800	<0.0000855	83	14.9 - 199
Benzo(a)anthracene	0.0593	mg/L	1	0.0800	<0.0000703	74	19.4 - 185
Chrysene	0.0636	mg/L	1	0.0800	<0.000113	80	18.4 - 188
Benzo(b)fluoranthene	0.0558	mg/L	1	0.0800	<0.000134	70	10 - 193
Benzo(k)fluoranthene	0.0693	mg/L	1	0.0800	<0.000227	87	27.8 - 196
Benzo(a)pyrene	0.0654	mg/L	1	0.0800	<0.000200	82	12.4 - 205
Indeno(1,2,3-cd)pyrene	0.0725	mg/L	1	0.0800	<0.000253	91	10 - 198
Dibenzo(a,h)anthracene	0.0713	mg/L	1	0.0800	<0.000180	89	10 - 172
Benzo(g,h,i)perylene	0.0714	mg/L	1	0.0800	<0.000158	89	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	0.0384	mg/L	1	0.0800	<0.0000853	48	10 - 141	0	20
Acenaphthylene	0.0572	mg/L	1	0.0800	<0.0000768	72	10 - 152	1	20
Acenaphthene	0.0560	mg/L	1	0.0800	<0.000103	70	10 - 151	1	20
Dibenzofuran	0.0573	mg/L	1	0.0800	<0.000200	72	10 - 148	2	20
Fluorene	0.0707	mg/L	1	0.0800	<0.0000861	88	10 - 172	2	20
Anthracene	0.0601	mg/L	1	0.0800	<0.000170	75	19.6 - 172	2	20
Phenanthrene	0.0607	mg/L	1	0.0800	<0.0000884	76	22.5 - 172	3	20
Fluoranthene	0.0609	mg/L	1	0.0800	<0.0000969	76	17.3 - 187	2	20
Pyrene	0.0677	mg/L	1	0.0800	<0.0000855	85	14.9 - 199	2	20
Benzo(a)anthracene	0.0599	mg/L	1	0.0800	<0.0000703	75	19.4 - 185	1	20
Chrysene	0.0647	mg/L	1	0.0800	<0.000113	81	18.4 - 188	2	20
Benzo(b)fluoranthene	0.0563	mg/L	1	0.0800	<0.000134	70	10 - 193	1	20
Benzo(k)fluoranthene	0.0709	mg/L	1	0.0800	<0.000227	89	27.8 - 196	2	20
Benzo(a)pyrene	0.0668	mg/L	1	0.0800	<0.000200	84	12.4 - 205	2	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Indeno(1,2,3-cd)pyrene	0.0747	mg/L	1	0.0800	<0.000253	93	10 - 198	3	20
Dibenzo(a,h)anthracene	0.0740	mg/L	1	0.0800	<0.000180	92	10 - 172	4	20
Benzo(g,h,i)perylene	0.0737	mg/L	1	0.0800	<0.000158	92	10 - 186	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
2-Fluorobiphenyl	0.0410	0.0424	mg/L	1	0.0800	51	53	10 - 165
Nitrobenzene-d5	0.0495	0.0502	mg/L	1	0.0800	62	63	10 - 157
Terphenyl-d14	0.0627	0.0631	mg/L	1	0.0800	78	79	10 - 220

Laboratory Control Spike (LCS-1)

QC Batch: 52082 | Date Analyzed: 2008-09-04 | Analyzed By: TP
Prep Batch: 44652 | QC Preparation: 2008-09-04 | Prepared By: TP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Mercury	0.000973	mg/L	1	0.00100	<0.0000336	97	80 - 120

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	0.000967	mg/L	1	0.00100	<0.0000336	97	80 - 120	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: 52094 | Date Analyzed: 2008-09-04 | Analyzed By: DS
Prep Batch: 44664 | QC Preparation: 2008-09-03 | Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Aroclor 1260 (PCB-1260)	0.00190	mg/L	1	0.00200	<0.0000331	95	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)	0.00191	mg/L	1	0.00200	<0.0000331	96	10 - 128	0	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	0.000464	0.000464	mg/L	1	0.000500	93	93	10 - 128

Laboratory Control Spike (LCS-1)

QC Batch: 52116 | Date Analyzed: 2008-09-05 | Analyzed By: SS
Prep Batch: 44681 | QC Preparation: 2008-09-05 | Prepared By: SS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cyanide	12.4	mg/Kg	1	12.0	<1.94	103	-

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 Cyanide	12.0	mg/Kg	1	12.0	<1.94	100	-	3	

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: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cadmium	0.246	mg/L	1	0.250	<0.00140	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 Cadmium	0.239	mg/L	1	0.250	<0.00140	96	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: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Lead	0.514	mg/L	1	0.500	<0.00320	103	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	0.503	mg/L	1	0.500	<0.00320	101	85 - 115	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: 52144
Prep Batch: 44655

Date Analyzed: 2008-09-08
QC Preparation: 2008-09-05

Analyzed By: RR
Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Selenium	0.448	mg/L	1	0.500	<0.0131	90	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	0.438	mg/L	1	0.500	<0.0131	88	85 - 115	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: 52144
Prep Batch: 44655

Date Analyzed: 2008-09-08
QC Preparation: 2008-09-05

Analyzed By: RR
Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Arsenic	0.495	mg/L	1	0.500	<0.00430	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 Arsenic	0.479	mg/L	1	0.500	<0.00430	96	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: 52144
Prep Batch: 44655

Date Analyzed: 2008-09-08
QC Preparation: 2008-09-05

Analyzed By: RR
Prepared By: KV

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 Barium	1.05	mg/L	1	1.00	<0.00170	105	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	1.03	mg/L	1	1.00	<0.00170	103	85 - 115	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: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Silver	0.122	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	0.119	mg/L	1	0.125	<0.00210	95	85 - 115	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: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP U	0.531	mg/L	1	0.500	<0.0105	106	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	0.516	mg/L	1	0.500	<0.0105	103	90 - 110	3	

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: 52176 | Date Analyzed: 2008-09-09 | Analyzed By: RD
Prep Batch: 44735 | QC Preparation: 2008-09-08 | Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	2.52	mg/L	1	2.50	<0.0700	101	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	2.27	mg/L	1	2.50	<0.0700	91	90 - 110	10	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: 52176 | Date Analyzed: 2008-09-09 | Analyzed By: RD
Prep Batch: 44735 | QC Preparation: 2008-09-08 | Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	12.3	mg/L	1	12.5	<0.137	98	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	12.0	mg/L	1	12.5	<0.137	96	90 - 110	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: 52176 | Date Analyzed: 2008-09-09 | Analyzed By: RD
Prep Batch: 44735 | QC Preparation: 2008-09-08 | Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Fluoride	2.49	mg/L	1	2.50	<0.0889	100	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	2.34	mg/L	1	2.50	<0.0889	94	90 - 110	6	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: 52180 | Date Analyzed: 2008-09-09 | Analyzed By: RG
Prep Batch: 44744 | QC Preparation: 2008-09-08 | Prepared By: RG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	100	mg/Kg	1	100	<1.80	100	96.5 - 104.4

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
Chloride	99.6	mg/Kg	1	100	<1.80	100	96.5 - 104.4	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: 52233 | Date Analyzed: 2008-09-09 | Analyzed By: KB
Prep Batch: 44786 | QC Preparation: 2008-09-09 | Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	49.7	µg/L	1	50.0	<0.136	99	70 - 130
Benzene	49.3	µg/L	1	50.0	<0.146	99	70 - 130
Trichloroethene (TCE)	50.3	µg/L	1	50.0	<0.117	101	70 - 130
Toluene	51.5	µg/L	1	50.0	<0.0600	103	70 - 130
Chlorobenzene	50.5	µg/L	1	50.0	<0.0540	101	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
1,1-Dichloroethene	52.0	µg/L	1	50.0	<0.136	104	70 - 130	4	
Benzene	50.7	µg/L	1	50.0	<0.146	101	70 - 130	3	
Trichloroethene (TCE)	51.4	µg/L	1	50.0	<0.117	103	70 - 130	2	
Toluene	53.2	µg/L	1	50.0	<0.0600	106	70 - 130	3	
Chlorobenzene	51.7	µg/L	1	50.0	<0.0540	103	70 - 130	2	

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	52.3	51.1	µg/L	1	50.0	105	102	70 - 130
Toluene-d8	52.2	52.1	µg/L	1	50.0	104	104	70 - 130
4-Bromofluorobenzene (4-BFB)	50.7	50.9	µg/L	1	50.0	101	102	70 - 130

Matrix Spike (MS-1) Spiked Sample: 172380

QC Batch: 51953 | Date Analyzed: 2008-09-02 | Analyzed By: CM
Prep Batch: 44548 | QC Preparation: 2008-09-02 | Prepared By: CM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	202	mg/Kg	1	250	<1.06	81	10 - 354

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	214	mg/Kg	1	250	<1.06	86	10 - 354	6	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: 172379

QC Batch: 51972 | Date Analyzed: 2008-09-02 | Analyzed By: ER
Prep Batch: 44568 | QC Preparation: 2008-09-02 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.11	mg/Kg	1	1.00	<0.00347	111	42.9 - 130.7
Toluene	1.18	mg/Kg	1	1.00	<0.00525	118	46.9 - 135.4
Ethylbenzene	1.32	mg/Kg	1	1.00	<0.00607	132	48.3 - 149.3
Xylene	3.95	mg/Kg	1	3.00	<0.00724	132	48.8 - 150.9

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	0.979	mg/Kg	1	1.00	<0.00347	98	42.9 - 130.7	12	20
Toluene	1.04	mg/Kg	1	1.00	<0.00525	104	46.9 - 135.4	13	20
Ethylbenzene	1.14	mg/Kg	1	1.00	<0.00607	114	48.3 - 149.3	15	20
Xylene	3.39	mg/Kg	1	3.00	<0.00724	113	48.8 - 150.9	15	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)	1.22	1.09	mg/Kg	1	1	122	109	63.2 - 128.3
4-Bromofluorobenzene (4-BFB)	1.23	1.10	mg/Kg	1	1	123	110	61.5 - 161.2

Matrix Spike (MS-1) Spiked Sample: 172376

QC Batch: 51974 | Date Analyzed: 2008-09-02 | Analyzed By: ER
Prep Batch: 44568 | QC Preparation: 2008-09-02 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	14.3	mg/Kg	1	10.0	<0.144	143	48.9 - 155.8

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	14.6	mg/Kg	1	10.0	<0.144	146	48.9 - 155.8	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
Trifluorotoluene (TFT)	1.36	1.34	mg/Kg	1	1	136	134	41.8 - 145.4
4-Bromofluorobenzene (4-BFB)	1.83	1.84	mg/Kg	1	1	183	184	50.3 - 197.8

Matrix Spike (MS-1) Spiked Sample: 172374

QC Batch: 51983 | Date Analyzed: 2008-09-02 | Analyzed By: MN
Prep Batch: 44578 | QC Preparation: 2008-09-02 | Prepared By: MN

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO [5]	1120	mg/Kg	1	250	758	145	50.7 - 134

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 [6]	1140	mg/Kg	1	250	758	153	50.7 - 134	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
n-Triacontane [7] [8]	335	349	mg/Kg	1	100	335	349	49.5 - 185

Matrix Spike (MS-1) Spiked Sample: 172381

QC Batch: 52082 | Date Analyzed: 2008-09-04 | Analyzed By: TP
Prep Batch: 44652 | QC Preparation: 2008-09-04 | Prepared By: TP

[5]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[8]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Mercury	0.00118	mg/L	1	0.00100	0.000173	101	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 Mercury	0.00127	mg/L	1	0.00100	0.000173	110	80 - 120	7	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: 172388

QC Batch: 52116 | Date Analyzed: 2008-09-05 | Analyzed By: SS
Prep Batch: 44681 | QC Preparation: 2008-09-05 | Prepared By: SS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cyanide	10.8	mg/Kg	1	12.0	<1.94	90	-

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	10.9	mg/Kg	1	12.0	<1.94	91	-	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: 172381

QC Batch: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cadmium	0.238	mg/L	1	0.250	<0.00140	95	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	0.236	mg/L	1	0.250	<0.00140	94	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: 172381

QC Batch: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Lead	0.494	mg/L	1	0.500	<0.00320	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 Lead	0.490	mg/L	1	0.500	<0.00320	98	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: 172381

QC Batch: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Selenium	0.445	mg/L	1	0.500	<0.0131	89	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	0.449	mg/L	1	0.500	<0.0131	90	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: 172381

QC Batch: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Arsenic	0.496	mg/L	1	0.500	<0.00430	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 Arsenic	0.496	mg/L	1	0.500	<0.00430	99	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: 172381

QC Batch: 52144 | Date Analyzed: 2008-09-08 | Analyzed By: RR
Prep Batch: 44655 | QC Preparation: 2008-09-05 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Barium	1.28	mg/L	1	1.00	0.251	103	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	1.26	mg/L	1	1.00	0.251	101	75 - 125	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: 172381

QC Batch: 52144
Prep Batch: 44655

Date Analyzed: 2008-09-08
QC Preparation: 2008-09-05

Analyzed By: RR
Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Silver	0.119	mg/L	1	0.125	<0.00210	95	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	0.118	mg/L	1	0.125	<0.00210	94	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: 172381

QC Batch: 52144
Prep Batch: 44655

Date Analyzed: 2008-09-08
QC Preparation: 2008-09-05

Analyzed By: RR
Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP U	0.526	mg/L	1	0.500	<0.0105	105	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	0.518	mg/L	1	0.500	<0.0105	104	90 - 110	2	

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

Matrix Spike (MS-1) Spiked Sample: 172605

QC Batch: 52176
Prep Batch: 44735

Date Analyzed: 2008-09-09
QC Preparation: 2008-09-08

Analyzed By: RD
Prepared By: RD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	2320	mg/L	1000	2500	<70.0	93	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	2260	mg/L	1000	2500	<70.0	90	73.6 - 122	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: 172605

QC Batch: 52176 | Date Analyzed: 2008-09-09 | Analyzed By: RD
Prep Batch: 44735 | QC Preparation: 2008-09-08 | Prepared By: RD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride [9]	32900	mg/L	1000	12500	29755.5	25	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	39300	mg/L	1000	12500	29755.5	76	49.8 - 149	18	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: 172605

QC Batch: 52176 | Date Analyzed: 2008-09-09 | Analyzed By: RD
Prep Batch: 44735 | QC Preparation: 2008-09-08 | Prepared By: RD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Fluoride	1880	mg/L	1000	2500	<88.9	75	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	1840	mg/L	1000	2500	<88.9	74	63.5 - 127	2	20

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

[9]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: 172387

QC Batch: 52180
Prep Batch: 44744

Date Analyzed: 2008-09-09
QC Preparation: 2008-09-08

Analyzed By: RG
Prepared By: RG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	567	mg/Kg	10	500	71.57	99	74.7 - 123.2

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
Chloride	545	mg/Kg	10	500	71.57	95	74.7 - 123.2	4	20

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

Standard (CCV-1)

QC Batch: 51953

Date Analyzed: 2008-09-02

Analyzed By: CM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	104	104	80 - 120	2008-09-02

Standard (CCV-2)

QC Batch: 51953

Date Analyzed: 2008-09-02

Analyzed By: CM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	111	111	80 - 120	2008-09-02

Standard (ICV-1)

QC Batch: 51972

Date Analyzed: 2008-09-02

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.101	101	85 - 115	2008-09-02
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2008-09-02
Ethylbenzene		mg/Kg	0.100	0.106	106	85 - 115	2008-09-02
Xylene		mg/Kg	0.300	0.313	104	85 - 115	2008-09-02

Standard (CCV-1)

QC Batch: 51972 Date Analyzed: 2008-09-02 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	0.0929	93	85 - 115	2008-09-02
Toluene		mg/Kg	0.100	0.0938	94	85 - 115	2008-09-02
Ethylbenzene		mg/Kg	0.100	0.0924	92	85 - 115	2008-09-02
Xylene		mg/Kg	0.300	0.288	96	85 - 115	2008-09-02

Standard (ICV-1)

QC Batch: 51974 Date Analyzed: 2008-09-02 Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.997	100	85 - 115	2008-09-02

Standard (CCV-1)

QC Batch: 51974 Date Analyzed: 2008-09-02 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	1.12	112	85 - 115	2008-09-02

Standard (CCV-1)

QC Batch: 51983 Date Analyzed: 2008-09-02 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	223	89	85 - 115	2008-09-02

Standard (CCV-2)

QC Batch: 51983 Date Analyzed: 2008-09-02 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	258	103	85 - 115	2008-09-02

Standard (CCV-3)

QC Batch: 51983 Date Analyzed: 2008-09-02 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	236	94	85 - 115	2008-09-02

Standard (CCV-1)

QC Batch: 52031 Date Analyzed: 2008-09-03 Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	57.0	95	80 - 120	2008-09-03
Acenaphthylene		mg/L	60.0	59.0	98	80 - 120	2008-09-03
Acenaphthene		mg/L	60.0	58.5	98	80 - 120	2008-09-03
Dibenzofuran		mg/L	60.0	62.6	104	80 - 120	2008-09-03
Fluorene		mg/L	60.0	69.1	115	80 - 120	2008-09-03
Anthracene		mg/L	60.0	58.2	97	80 - 120	2008-09-03
Phenanthrene		mg/L	60.0	57.0	95	80 - 120	2008-09-03
Fluoranthene		mg/L	60.0	53.4	89	80 - 120	2008-09-03
Pyrene		mg/L	60.0	61.3	102	80 - 120	2008-09-03
Benzo(a)anthracene		mg/L	60.0	55.5	92	80 - 120	2008-09-03
Chrysene		mg/L	60.0	58.6	98	80 - 120	2008-09-03
Benzo(b)fluoranthene		mg/L	60.0	56.4	94	80 - 120	2008-09-03
Benzo(k)fluoranthene		mg/L	60.0	62.5	104	80 - 120	2008-09-03
Benzo(a)pyrene		mg/L	60.0	59.8	100	80 - 120	2008-09-03
Indeno(1,2,3-cd)pyrene		mg/L	60.0	67.4	112	80 - 120	2008-09-03
Dibenzo(a,h)anthracene		mg/L	60.0	67.4	112	80 - 120	2008-09-03
Benzo(g,h,i)perylene		mg/L	60.0	65.9	110	80 - 120	2008-09-03

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorobiphenyl		52.4	mg/L	1	60.0	87	80 - 120
Nitrobenzene-d5		60.1	mg/L	1	60.0	100	80 - 120
Terphenyl-d14		59.3	mg/L	1	60.0	99	80 - 120

Standard (ICV-1)

QC Batch: 52082 | Date Analyzed: 2008-09-04 | Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Mercury		mg/L	0.00100	0.000992	99	90 - 110	2008-09-04

Standard (CCV-1)

QC Batch: 52082 | Date Analyzed: 2008-09-04 | Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Mercury		mg/L	0.00100	0.000980	98	80 - 120	2008-09-04

Standard (ICV-1)

QC Batch: 52094 | Date Analyzed: 2008-09-04 | Analyzed By: DS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Aroclor 1242 (PCB-1242)		mg/L	0.400	0.393	98	85 - 115	2008-09-04
Aroclor 1254 (PCB-1254)		mg/L	0.400	0.366	92	85 - 115	2008-09-04
Aroclor 1260 (PCB-1260)		mg/L	0.400	0.382	96	85 - 115	2008-09-04

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Deca chlorobiphenyl	[10]	0.122	mg/L	1	0.100	122	85 - 115

Standard (CCV-1)

QC Batch: 52094 | Date Analyzed: 2008-09-04 | 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	0.445	111	85 - 115	2008-09-04
Aroclor 1254 (PCB-1254)		mg/L	0.400	0.362	90	85 - 115	2008-09-04
Aroclor 1260 (PCB-1260)		mg/L	0.400	0.415	104	85 - 115	2008-09-04

[10]Decachlorobipheny outside of control limits on CCV(ICV). CCV(ICV) component average is 102% which is within acceptable range. This is acceptable by Method 8000.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Deca chlorobiphenyl	[11]	0.123	mg/L	1	0.100	123	85 - 115

Standard (ICV-1)

QC Batch: 52116 Date Analyzed: 2008-09-05 Analyzed By: SS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cyanide		mg/Kg	0.120	<1.94	0	-	2008-09-05

Standard (CCV-1)

QC Batch: 52116 Date Analyzed: 2008-09-05 Analyzed By: SS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cyanide		mg/Kg	0.120	<1.94	0	-	2008-09-05

Standard (ICV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.05	105	90 - 110	2008-09-08

Standard (ICV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Lead		mg/L	1.00	1.06	106	90 - 110	2008-09-08

Standard (ICV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 Analyzed By: RR

[11] Decachlorobiphenyl outside of control limits on CCV(ICV). CCV(ICV) component average is 107% which is within acceptable range. This is acceptable by Method 8000.

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Selenium		mg/L	1.00	1.01	101	90 - 110	2008-09-08

Standard (ICV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Arsenic		mg/L	1.00	1.02	102	90 - 110	2008-09-08

Standard (ICV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.06	106	90 - 110	2008-09-08

Standard (ICV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Silver		mg/L	0.125	0.126	101	90 - 110	2008-09-08

Standard (ICV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	2008-09-08

Standard (CCV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.06	106	90 - 110	2008-09-08

Standard (CCV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.06	106	90 - 110	2008-09-08

Standard (CCV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.08	108	90 - 110	2008-09-08

Standard (CCV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.07	107	90 - 110	2008-09-08

Standard (CCV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.07	107	90 - 110	2008-09-08

Standard (CCV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	0.129	103	90 - 110	2008-09-08

Standard (CCV-1)

QC Batch: 52144 Date Analyzed: 2008-09-08 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	1.01	101	90 - 110	2008-09-08

Standard (ICV-1)

QC Batch: 52176 Date Analyzed: 2008-09-09 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.53	101	90 - 110	2008-09-09

Standard (ICV-1)

QC Batch: 52176 Date Analyzed: 2008-09-09 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	12.5	12.2	98	90 - 110	2008-09-09

Standard (ICV-1)

QC Batch: 52176 Date Analyzed: 2008-09-09 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Fluoride		mg/L	2.50	2.49	100	90 - 110	2008-09-09

Standard (CCV-1)

QC Batch: 52176 Date Analyzed: 2008-09-09 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.53	101	90 - 110	2008-09-09

Standard (CCV-1)

QC Batch: 52176 Date Analyzed: 2008-09-09 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	12.5	12.3	98	90 - 110	2008-09-09

Standard (CCV-1)

QC Batch: 52176 Date Analyzed: 2008-09-09 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Fluoride		mg/L	2.50	2.59	104	90 - 110	2008-09-09

Standard (ICV-1)

QC Batch: 52180 Date Analyzed: 2008-09-09 Analyzed By: RG

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	2008-09-09

Standard (CCV-1)

QC Batch: 52180 Date Analyzed: 2008-09-09 Analyzed By: RG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.2	99	85 - 115	2008-09-09

Standard (CCV-2)

QC Batch: 52233 Date Analyzed: 2008-09-09 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	53.1	106	80 - 120	2008-09-09
1,1-Dichloroethene		µg/L	50.0	45.1	90	80 - 120	2008-09-09
Chloroform		µg/L	50.0	54.4	109	80 - 120	2008-09-09
1,2-Dichloropropane		µg/L	50.0	54.3	109	80 - 120	2008-09-09
Toluene		µg/L	50.0	53.4	107	80 - 120	2008-09-09
Chlorobenzene		µg/L	50.0	50.5	101	80 - 120	2008-09-09
Ethylbenzene		µg/L	50.0	56.1	112	80 - 120	2008-09-09

LAB Order ID # 8082929 Page _____ of _____

TraceAnalysis, Inc.

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Company Name: TALON/LPE
Phone #: 432 238-6388
Address: (Street, City, Zip) 318 E TAYLOR HOBBS NM 88240
Fax #:
Contact Person: ER TAYLOR
E-mail:
Invoice to: (If different from above) NEWBOURNE OIL
Project #: NEWBOU030PIT
Project Name: OSUDA "9" STATE #2
Project Location (including state):
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 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO DRO TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007	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 4500B	2PA 13.12 SPLP	SPLP Chloride			Turn Around Time if different from standard	Hold
172385	DUCK POND	1			X							X		8/28	12:04		X	+	+													X						
386	BH-1	1			X							X		8/28	12:13		X	X	X													X						
387	BH-2	1			X							X		8/28	12:18		X	X	X													X						
388	INSITU Cuttings	2			X							X		8/28	12:40			X															X	X				

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	TALON	8/29	1045		Talon	8/29	1045	
	Talon	8/29	14:00					
				Brenda Ward	Trace Lubbock	8/29/01	14:00	2.8°

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in-Review

REMARKS: SEE ATTACHED SHEET

- ☐ 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 # Carrier

ORIGINAL COPY

TRACEANALYSIS, INC.

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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

Shelly Tucker
Talon LPE-Hobbs
318 E. Taylor
Hobbs, NM, 88240

Report Date: September 18, 2008

Work Order: 8091517

Project Location: Lea County, NM
Project Name: Osudo 9-2
Project Number: Osudo 9-2

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
173438	Insitu ocmp. (RM)	soil	2008-09-11	13:00	2008-09-15

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.

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of

TraceAnalysis, Inc.

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 Osudo 9-2 were received by TraceAnalysis, Inc. on 2008-09-15 and assigned to work order 8091517. Samples for work order 8091517 were received intact at a temperature of 22.0 deg. C.

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

Test	Method
SPLP Cl	E 300.0

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 8091517 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: 173438 - Insitu ocmp. (RM)

Laboratory:	Lubbock				
Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	52473	Date Analyzed:	2008-09-18	Analyzed By:	RD
Prep Batch:	44980	SPLP Extraction:	2008-09-16	Prepared By:	RD
		Sample Preparation:	2008-09-17	Prepared By:	RD

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		**187**	mg/L	5	0.500

Method Blank (1) QC Batch: 52473

QC Batch:	52473	Date Analyzed:	2008-09-18	Analyzed By:	RD
Prep Batch:	44980	QC Preparation:	2008-09-17	Prepared By:	RD

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

Laboratory Control Spike (LCS-1)

QC Batch:	52473	Date Analyzed:	2008-09-18	Analyzed By:	RD
Prep Batch:	44980	QC Preparation:	2008-09-17	Prepared By:	RD

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	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	12.9	mg/L	1	12.5	<0.137	103	90 - 110	7	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: 173437

QC Batch:	52473	Date Analyzed:	2008-09-18	Analyzed By:	RD
Prep Batch:	44980	QC Preparation:	2008-09-17	Prepared By:	RD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	711	mg/L	50	625	170.232	86	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	701	mg/L	50	625	170.232	85	49.8 - 149	1	20

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

Standard (ICV-1)

QC Batch: 52473 Date Analyzed: 2008-09-18 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	12.5	12.2	98	90 - 110	2008-09-18

Standard (CCV-1)

QC Batch: 52473 Date Analyzed: 2008-09-18 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/L	12.5	12.0	96	90 - 110	2008-09-18

LAB Order ID # 8091517 Page_______ of _______

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Company Name: Talon LPE
Phone #:
Address: (Street, City, Zip) 318 E Taylor Hobbs, NM 88240
Fax #:
Contact Person: Shelley Tucker
E-mail: Shelley
Invoice to: (If different from above) MEwbourne O&G
Project #:
Project Name: 0810092
Project Location (including state): Lea County NM
Sampler Signature: Shelley Tucker

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 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	Method BID Chloride Only					Turn Around Time if different from standard	Hold
173438	Insitu comp (BM)	2			X									9/11/08	1300																		X					RUSH	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Shelley Tucker	Talon	9-15-08	1215	[illegible signature]		9-15-08	12:15	
[illegible signature]		9-15-08	3:55					
				Brenda Ward	Trace LUBBOCK	9/15/08	3:55	22.0°

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

REMARKS:
- [ ] 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 # Carrying In

Summary Report

Shelly Tucker
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: October 1, 2008

Work Order: 8092923

Project Location: Lea County, NM
Project Name: Osudo 9 State #2

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
174933	BH-3	soil	2008-09-26	10:47	2008-09-29
174934	BH-4	soil	2008-09-26	10:59	2008-09-29

Sample - Field Code	BTEX Benzene (mg/Kg)	BTEX Toluene (mg/Kg)	BTEX Ethylbenzene (mg/Kg)	BTEX Xylene (mg/Kg)	MTBE MTBE (mg/Kg)	TPH 418.1 TRPHC (mg/Kg)	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
174933 - BH-3	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00
174934 - BH-4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0	<50.0	<1.00

Sample: 174933 - BH-3

Param	Flag	Result	Units	RL
Chloride		<32.5	mg/Kg	3.25

Sample: 174934 - BH-4

Param	Flag	Result	Units	RL
Chloride		**108**	mg/Kg	3.25

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[illegible] Parkway, Suite [illegible] | 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

Shelly Tucker
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: October 1, 2008

Work Order: 8092923

Project Location: Lea County, NM
Project Name: Osudo 9 State #2
Project Number: Osudo 9 State #2

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
174933	BH-3	soil	2008-09-26	10:47	2008-09-29
174934	BH-4	soil	2008-09-26	10:59	2008-09-29

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.

This report consists of a total of 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

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 Osudo 9 State #2 were received by TraceAnalysis, Inc. on 2008-09-29 and assigned to work order 8092923. Samples for work order 8092923 were received intact at a temperature of 3.9 deg. C.

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

Test	Method
BTEX	S 8021B
Chloride (Titration)	SM 4500-Cl B
TPH 418.1	E 418.1
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8092923 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: 174933 - BH-3

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	52815	Date Analyzed:	2008-09-29	Analyzed By:	ER
Prep Batch:	45262	Sample Preparation:	2008-09-29	Prepared By:	ER

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)		1.10	mg/Kg	1	1.00	110	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.23	mg/Kg	1	1.00	123	54.4 - 176.2

Sample: 174933 - BH-3

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	52819	Date Analyzed:	2008-09-29	Analyzed By:	RD
Prep Batch:	45264	Sample Preparation:	2008-09-29	Prepared By:	RD

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<32.5	mg/Kg	10	3.25

Sample: 174933 - BH-3

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	52850	Date Analyzed:	2008-09-30	Analyzed By:	CM
Prep Batch:	45291	Sample Preparation:	2008-09-30	Prepared By:	CM

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

Sample: 174933 - BH-3

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	52840	Date Analyzed:	2008-09-29	Analyzed By:	MN
Prep Batch:	45282	Sample Preparation:	2008-09-29	Prepared By:	MN

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	144	mg/Kg	1	100	144	57.5 - 139

Sample: 174933 - BH-3

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	52816	Date Analyzed:	2008-09-29	Analyzed By:	ER
Prep Batch:	45262	Sample Preparation:	2008-09-29	Prepared By:	ER

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.32	mg/Kg	1	1.00	132	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.52	mg/Kg	1	1.00	152	45.6 - 214.7

Sample: 174934 - BH-4

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	52815	Date Analyzed:	2008-09-29	Analyzed By:	ER
Prep Batch:	45262	Sample Preparation:	2008-09-29	Prepared By:	ER

Parameter	Flag	Result	RL	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

[1] High surrogate recovery. Sample non-detect, result bias high.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.24	mg/Kg	1	1.00	124	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.23	mg/Kg	1	1.00	123	54.4 - 176.2

Sample: 174934 - BH-4

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	52819	Date Analyzed:	2008-09-29	Analyzed By:	RD
Prep Batch:	45264	Sample Preparation:	2008-09-29	Prepared By:	RD

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**108**	mg/Kg	10	3.25

Sample: 174934 - BH-4

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	52850	Date Analyzed:	2008-09-30	Analyzed By:	CM
Prep Batch:	45291	Sample Preparation:	2008-09-30	Prepared By:	CM

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

Sample: 174934 - BH-4

Laboratory:	Lubbock				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	52840	Date Analyzed:	2008-09-29	Analyzed By:	MN
Prep Batch:	45282	Sample Preparation:	2008-09-29	Prepared By:	MN

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		115	mg/Kg	1	100	115	57.5 - 139

Sample: 174934 - BH-4

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	52816	Date Analyzed:	2008-09-29	Analyzed By:	ER
Prep Batch:	45262	Sample Preparation:	2008-09-29	Prepared By:	ER

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)		1.51	mg/Kg	1	1.00	151	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.52	mg/Kg	1	1.00	152	45.6 - 214.7

Method Blank (1) QC Batch: 52815

QC Batch:	52815	Date Analyzed:	2008-09-29	Analyzed By:	ER
Prep Batch:	45262	QC Preparation:	2008-09-29	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00347	mg/Kg	0.01
Toluene		<0.00525	mg/Kg	0.01
Ethylbenzene		<0.00607	mg/Kg	0.01
Xylene		<0.00724	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.864	mg/Kg	1	1.00	86	69.3 - 110.2
4-Bromofluorobenzene (4-BFB)		0.631	mg/Kg	1	1.00	63	24.4 - 114.6

Method Blank (1) QC Batch: 52816

QC Batch:	52816	Date Analyzed:	2008-09-29	Analyzed By:	ER
Prep Batch:	45262	QC Preparation:	2008-09-29	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
GRO		<0.144	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	83.3 - 108.5

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		0.783	mg/Kg	1	1.00	78	34.5 - 105.8

Method Blank (1) QC Batch: 52819

QC Batch: 52819 Date Analyzed: 2008-09-29 Analyzed By: RD
Prep Batch: 45264 QC Preparation: 2008-09-29 Prepared By: RD

Parameter	Flag	MDL Result	Units	RL
Chloride		<1.80	mg/Kg	3.25

Method Blank (1) QC Batch: 52840

QC Batch: 52840 Date Analyzed: 2008-09-29 Analyzed By: MN
Prep Batch: 45282 QC Preparation: 2008-09-29 Prepared By: MN

Parameter	Flag	MDL Result	Units	RL
DRO		<14.5	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		94.4	mg/Kg	1	100	94	72.4 - 150

Method Blank (1) QC Batch: 52850

QC Batch: 52850 Date Analyzed: 2008-09-30 Analyzed By: CM
Prep Batch: 45291 QC Preparation: 2008-09-30 Prepared By: CM

Parameter	Flag	MDL Result	Units	RL
TRPHC		<1.06	mg/Kg	10

Laboratory Control Spike (LCS-1)

QC Batch: 52815 Date Analyzed: 2008-09-29 Analyzed By: ER
Prep Batch: 45262 QC Preparation: 2008-09-29 Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.831	mg/Kg	1	1.00	<0.00347	83	80.5 - 115.5
Toluene	0.849	mg/Kg	1	1.00	<0.00525	85	80 - 114.7
Ethylbenzene	0.815	mg/Kg	1	1.00	<0.00607	82	77.1 - 114.2
Xylene	2.52	mg/Kg	1	3.00	<0.00724	84	77.6 - 114.5

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	0.875	mg/Kg	1	1.00	<0.00347	88	80.5 - 115.5	5	20
Toluene	0.864	mg/Kg	1	1.00	<0.00525	86	80 - 114.7	2	20
Ethylbenzene	0.835	mg/Kg	1	1.00	<0.00607	84	77.1 - 114.2	2	20
Xylene	2.58	mg/Kg	1	3.00	<0.00724	86	77.6 - 114.5	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)	0.830	0.833	mg/Kg	1	1.00	83	83	74.2 - 114.7
4-Bromofluorobenzene (4-BFB)	0.774	0.804	mg/Kg	1	1.00	77	80	69.7 - 118.7

Laboratory Control Spike (LCS-1)

QC Batch: 52816 | Date Analyzed: 2008-09-29 | Analyzed By: ER
Prep Batch: 45262 | QC Preparation: 2008-09-29 | Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.62	mg/Kg	1	10.0	<0.144	96	73.1 - 114.7

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	8.91	mg/Kg	1	10.0	<0.144	89	73.1 - 114.7	8	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)	0.961	0.903	mg/Kg	1	1.00	96	90	77.4 - 111.4
4-Bromofluorobenzene (4-BFB)	0.956	0.945	mg/Kg	1	1.00	96	94	70.3 - 116.1

Laboratory Control Spike (LCS-1)

QC Batch: 52819 | Date Analyzed: 2008-09-29 | Analyzed By: RD
Prep Batch: 45264 | QC Preparation: 2008-09-29 | Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.0	mg/Kg	1	100	<1.80	99	96.5 - 104.4

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
Chloride	97.5	mg/Kg	1	100	<1.80	98	96.5 - 104.4	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: 52840
Prep Batch: 45282

Date Analyzed: 2008-09-29
QC Preparation: 2008-09-29

Analyzed By: MN
Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	293	mg/Kg	1	250	<14.5	117	73.4 - 123

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	281	mg/Kg	1	250	<14.5	112	73.4 - 123	4	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	102	99.4	mg/Kg	1	100	102	99	57.5 - 139

Laboratory Control Spike (LCS-1)

QC Batch: 52850
Prep Batch: 45291

Date Analyzed: 2008-09-30
QC Preparation: 2008-09-30

Analyzed By: CM
Prepared By: CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	231	mg/Kg	1	250	<1.06	92	75.5 - 136

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	240	mg/Kg	1	250	<1.06	96	75.5 - 136	4	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: 174928

QC Batch: 52815 | Date Analyzed: 2008-09-29 | Analyzed By: ER
Prep Batch: 45262 | QC Preparation: 2008-09-29 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.740	mg/Kg	1	1.00	<0.00347	74	42.9 - 130.7
Toluene	0.772	mg/Kg	1	1.00	<0.00525	77	46.9 - 135.4
Ethylbenzene	0.802	mg/Kg	1	1.00	<0.00607	80	48.3 - 149.3
Xylene	2.44	mg/Kg	1	3.00	<0.00724	81	48.8 - 150.9

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	0.854	mg/Kg	1	1.00	<0.00347	85	42.9 - 130.7	14	20
Toluene	0.897	mg/Kg	1	1.00	<0.00525	90	46.9 - 135.4	15	20
Ethylbenzene	0.929	mg/Kg	1	1.00	<0.00607	93	48.3 - 149.3	15	20
Xylene	2.82	mg/Kg	1	3.00	<0.00724	94	48.8 - 150.9	14	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)	0.882	0.997	mg/Kg	1	1	88	100	63.2 - 128.3
4-Bromofluorobenzene (4-BFB)	0.946	1.05	mg/Kg	1	1	95	105	61.5 - 161.2

Matrix Spike (MS-1) Spiked Sample: 174933

QC Batch: 52816 | Date Analyzed: 2008-09-29 | Analyzed By: ER
Prep Batch: 45262 | QC Preparation: 2008-09-29 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	12.9	mg/Kg	1	10.0	<0.144	129	48.9 - 155.8

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	12.6	mg/Kg	1	10.0	<0.144	126	48.9 - 155.8	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
Trifluorotoluene (TFT)	1.32	1.20	mg/Kg	1	1	132	120	41.8 - 145.4
4-Bromofluorobenzene (4-BFB)	1.60	1.48	mg/Kg	1	1	160	148	50.3 - 197.8

Matrix Spike (MS-1) Spiked Sample:

QC Batch: 52819 | Date Analyzed: 2008-09-29 | Analyzed By: RD
Prep Batch: 45264 | QC Preparation: 2008-09-29 | Prepared By: RD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	788	mg/Kg	10	500	243.24	109	74.7 - 123.2

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
Chloride	792	mg/Kg	10	500	243.24	110	74.7 - 123.2	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: 174870

QC Batch: 52840 | Date Analyzed: 2008-09-29 | Analyzed By: MN
Prep Batch: 45282 | QC Preparation: 2008-09-29 | Prepared By: MN

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	99.2	mg/Kg	1	250	64.1	14	0 - 197

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	[2]	131	mg/Kg	1	250	64.1	27	0 - 197	28	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-Triacontane	[3] [4]	346	372	mg/Kg	1	100	346	372	57.5 - 139

Matrix Spike (MS-1) Spiked Sample:

QC Batch: 52850 | Date Analyzed: 2008-09-30 | Analyzed By: CM
Prep Batch: 45291 | QC Preparation: 2008-09-30 | Prepared By: CM

[2]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	116	mg/Kg	1	250	<1.06	46	10 - 354

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	124	mg/Kg	1	250	<1.06	50	10 - 354	7	20

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

Standard (ICV-1)

QC Batch: 52815 Date Analyzed: 2008-09-29 Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0908	91	85 - 115	2008-09-29
Toluene		mg/Kg	0.100	0.0890	89	85 - 115	2008-09-29
Ethylbenzene		mg/Kg	0.100	0.0860	86	85 - 115	2008-09-29
Xylene		mg/Kg	0.300	0.268	89	85 - 115	2008-09-29

Standard (CCV-1)

QC Batch: 52815 Date Analyzed: 2008-09-29 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	0.0889	89	85 - 115	2008-09-29
Toluene		mg/Kg	0.100	0.0891	89	85 - 115	2008-09-29
Ethylbenzene		mg/Kg	0.100	0.0887	89	85 - 115	2008-09-29
Xylene		mg/Kg	0.300	0.268	89	85 - 115	2008-09-29

Standard (ICV-1)

QC Batch: 52816 Date Analyzed: 2008-09-29 Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.916	92	85 - 115	2008-09-29

Standard (CCV-1)

QC Batch: 52816 Date Analyzed: 2008-09-29 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	0.970	97	85 - 115	2008-09-29

Standard (ICV-1)

QC Batch: 52819 Date Analyzed: 2008-09-29 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.6	100	85 - 115	2008-09-29

Standard (CCV-1)

QC Batch: 52819 Date Analyzed: 2008-09-29 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2008-09-29

Standard (ICV-1)

QC Batch: 52840 Date Analyzed: 2008-09-29 Analyzed By: MN

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	109	85 - 115	2008-09-29

Standard (CCV-1)

QC Batch: 52840 Date Analyzed: 2008-09-29 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	279	112	85 - 115	2008-09-29

Standard (ICV-1)

QC Batch: 52850 | Date Analyzed: 2008-09-30 | Analyzed By: CM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	91.3	91	80 - 120	2008-09-30

Standard (CCV-1)

QC Batch: 52850 | Date Analyzed: 2008-09-30 | Analyzed By: CM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	91.4	91	80 - 120	2008-09-30

LAB Order ID # 8092923 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

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

8808 Camp Bowie Blvd West Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: Talon LPE
Phone #: 432-238-6387
Address: (Street, City, Zip) 318 E Taylor Hobbs, NM 88240
Fax #:
Contact Person: E B Taylor
E-mail:
Invoice to: (If different from above) ~~NewBourne Oil~~ Sam NewBourne Oil
Project #:
Project Name: Osudo 9 State #2
Project Location (including state): Lea 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 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015GRO / 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 4500B			Turn Around Time if different from standard	Hold
174933	BH-3	1			X							X		9/26	10:47	X	X	X														X			X	
934	BH-4	1			X							X		9/26	10:59	X	X	X														X			X	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
[signature]	TALON	9/29/08	6:00					
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
[signature]	TALON	9/29/08	9:32 AM	[signature]		09290809	32	3.9

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

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-in-Review [signature]

REMARKS:

ASAP

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

Carrier # Conway