



October 27, 2008

DEC 22 2008  
OCD-ARTESIA

AMARILLO  
921 North Bivins  
Amarillo, Texas 79107  
Phone 806.467.0667  
Fax 806.467.0622

Mike Bratcher  
New Mexico Oil Conservation Division  
District 2 office  
1301 W. Grand  
Artesia, New Mexico 88210

30-015-35928

RE: Request for closure of the Bradley "6" Federal Com #1 pit.

AUSTIN  
3003 Torn Gary Cove  
Building C-100  
Round Rock, Texas 78664  
Phone 512.988.3428  
Fax 512.988.3487

In July of 2008 Talon/LPE was contracted by the Mewbourne Oil Company to perform the pit closure activities at the Bradley "6" Federal Com #1, API# 30-015-35928, Unit C, Sec 6-T19S-R30E, in Eddy county New Mexico. The C-144 for this pit closure was submitted to Mike Bratcher on July 30, 2008 and approved on August 11, 2008.

MIDLAND  
#9 East Industrial Loop  
Midland, Texas 79701  
Phone 432.522.2133  
Fax 432.522.2180

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, Shelly Tucker with Talon/LPE collected a five point composite sample for laboratory analysis. The sample was sent to Trace Analysis and analyzed in compliance with 19.15.17.13 NMAC for official analytical results (see attached analytical).

NEW BRAUNFELS  
707 N Walnut Ave  
Suite 208  
New Braunfels, Texas 78130  
Phone 281.579.0235  
Fax 281.568.2191

The remainder of the drill cuttings were mixed at not 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 and 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 15, 2008 by Shelly Tucker, and sent to Trace Analysis to be analyzed in compliance with 19.15.17.13 NMAC. After mixing the remaining drill cuttings, Mike Bratcher was contacted to witness sampling of the pit contents. Shelly Tucker met with Mike Bratcher on August 18, 2008 to collect a five point composite sample of the mixed drill cuttings. The samples were sent to Trace Analysis and analyzed in compliance with 19.15.17.13 NMAC. After reviewing the analytical for the drill cuttings, it was determined that they could be buried on site. Talon/LPE excavated a burial cell approximately 150'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 collected two samples on August 27, 2008 from the pit floor and sent them to Trace Analysis to be analyzed in compliance with 19.15.17.13 NMAC for official analytical results (see attached analytical). After analytical results were evaluated for compliance the pit was backfilled, seeded with a BLM #2 seed mix and contoured to promote proper drainage and re-vegetation.


TULSA  
9906 East 43rd Street, Ste. G  
Tulsa, OK 74146  
Phone 918.742.0871  
Fax 918.742.0876

No deed amendment is required due to the fact the BLM is the surface owner, Mewbourne Oil Company will place the burial marker at 32° 41' 41.36"N 104° 00' 51.41"W.

HOBBS  
318 East Taylor Street  
Hobbs, New Mexico 88241  
Phone 505.393.4261  
Fax 505.393.4650

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

ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
EMERGENCY RESPONSE

Sincerely,  
  
Eb Taylor  
New Mexico Division Manager  
Talon/LPE

Accepted for record  
NMOCD

JAN 07 2009

Toll Free: 866.742.0742  
www.talonlpe.com

C-144 Final Closure Report - Closure Complete 9/3/08  
PERMIT NO N/A

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

JUL 30 2008

Form C-14  
July 21, 200

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

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

DEC 22 2008

**OCD-ARTESIA**

- 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 ordinance

1.  
Operator: MEWBOURNE OIL COMPANY OGRID #: 14744  
Address: PO BOX 5270; HOBBS, NEW MEXICO 88241  
Facility or well name: BRADLEY 6 FEDERAL COM 01  
API Number: 30-015-35928 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr C Section 6 Township 19 S Range 30 E County: EDDY  
Center of Proposed Design: Latitude N32° 41' 41.36" Longitude W104° 00' 51.41" NAD: ☒ 1927 ☐ 1983  
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2  
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☒ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☒ Lined ☐ Unlined Liner type: Thickness 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

Approved with stipulations. See attachment.

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.

Form C-144  
*Final Closure Report*

6.	<p><b>Fencing:</b> Subsection D of 19.15.17.11 NMAC (<i>Applies to permanent pits, temporary pits, and below-grade tanks</i>)</p> <p><input type="checkbox"/> Chain link, six feet in height, two strands of barbed wire at top (<i>Required if located within 1000 feet of a permanent residence, school, hospital, institution or church</i>)</p> <p><input checked="" type="checkbox"/> Four foot height, four strands of barbed wire evenly spaced between one and four feet</p> <p><input type="checkbox"/> Alternate Please specify _____</p>																					
7.	<p><b>Netting:</b> Subsection E of 19.15.17.11 NMAC (<i>Applies to permanent pits and permanent open top tanks</i>)</p> <p><input type="checkbox"/> Screen <input type="checkbox"/> Netting <input type="checkbox"/> Other _____</p> <p><input type="checkbox"/> Monthly inspections (If netting or screening is not physically feasible)</p>																					
8.	<p><b>Signs:</b> Subsection C of 19.15.17.11 NMAC</p> <p><input checked="" type="checkbox"/> 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers</p> <p><input checked="" type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC</p>																					
9.	<p><b>Administrative Approvals and Exceptions:</b></p> <p>Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</p> <p><b>Please check a box if one or more of the following is requested, if not leave blank:</b></p> <p><input type="checkbox"/> Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.</p> <p><input type="checkbox"/> Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</p>																					
10.	<p><b>Siting Criteria (regarding permitting):</b> 19.15.17.10 NMAC</p> <p><b>Instructions:</b> <i>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.</i></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; vertical-align: top;"> <p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <p>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p> </td> <td style="width: 20%; text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>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).</p> <p>- Topographic map; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> NA </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> NA </td> </tr> <tr> <td style="vertical-align: top;"> <p>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.</p> <p>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>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.</p> <p>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 500 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within the area overlying a subsurface mine.</p> <p>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within an unstable area.</p> <p>- Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within a 100-year floodplain.</p> <p>- FEMA map</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> </table>		<p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <p>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>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).</p> <p>- Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<p>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.</p> <p>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>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.</p> <p>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Within 500 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Within the area overlying a subsurface mine.</p> <p>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Within an unstable area.</p> <p>- Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Within a 100-year floodplain.</p> <p>- FEMA map</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <p>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No																					
<p>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).</p> <p>- Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No																					
<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA																					
<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA																					
<p>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.</p> <p>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No																					
<p>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.</p> <p>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No																					
<p>Within 500 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No																					
<p>Within the area overlying a subsurface mine.</p> <p>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No																					
<p>Within an unstable area.</p> <p>- Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No																					
<p>Within a 100-year floodplain.</p> <p>- FEMA map</p>	<input type="checkbox"/> Yes <input type="checkbox"/> 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<sub>2</sub>S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.

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

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

☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal

☐ Waste Removal (Closed-loop systems only)

☒ On-site Closure Method (Only for temporary pits and closed-loop systems)

☐ In-place Burial ☒ On-site Trench Burial

☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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

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

16.

**Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13 D NMAC)

**Instructions:** Please identify 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 L. Martin Date: 7/28/2008

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: Signed By: [Signature] Approval Date: AUG 11 2008

Title: Field Supervisor OCD Permit Number: N/A

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: 9/3/08

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 identify 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) BLM No Deed  
☒ 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 33° 41' 41.34 N Longitude 104° 00' 51.41 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 L. Martin Date: 12-17-08

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

Accepted for record  
 NMOCD JAN 07 2009

# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
**Reese Fullerton**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



Mewbourne Oil Co. Bradley 6 Fed Com 001 API: 30-015-35928 C-6-19s-30e

Drilling pit at this site was constructed under Rule 50 and is being closed per NMOCD Part 17 "Pit Rule". A C-144 registration from was not found in the well file. A copy (unsigned) was faxed to District 2 office 8/8/08 and accepted for record.

**Stipulations for closing drilling pit:**

- Notify NMOCD District 2 office 48 hours prior to obtaining samples where analyses of samples obtained are to be submitted to NMOCD.
- The proposal to place the burial trench marker at the corner of the trench cannot be approved from this office and is therefore denied at this time.
- All criteria pertaining to 19.15.17 [NMAC] (Part 17 "Pit Rule") must be met for closure of this pit.



July 14, 2008

Mike Bratcher  
NMOCD District 2 Office  
1301 W. Grand  
Artesia, New Mexico 88210

RE: **Bradley 6 Federal Com 001** – Temporary Pit Closure Request  
API: 30-015-35928  
Unit C Sec 6–T19S-R30E  
660' FNL & 1500' FWL

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

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

**NOTE: THIS TEMPORARY PIT WAS ORIGINALLY 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.

- **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 (a C-105 and plat have been attached). 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 will be attached to the Final Report. (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:** In compliance with Subsection F of 19.15.17.13 NMAC a five point composite sample will be taken from the floor of the excavation and the burial contents. The samples will be sent Trace Analysis for official analytical results.
- **Soil Cover Design:** In compliance with Subsection H of 19.15.17.13 NMAC three foot of native material will be placed over the burial cell with one foot of top soil to ensure re-vegetation. The excavated pit area will be backfilled with native material and 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 BLM seed mixture No. 2 to re-establish native vegetation.

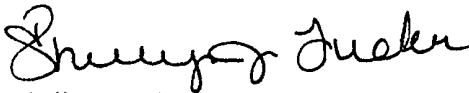


- **Site Reclamation Plan:** In compliance with Subsection I of 19.15.17.13 NMAC the impacted and disturbed area will be re-contoured to surrounding terrain.
- **Marker:** ~~Talon/LPE and Mewbourne Oil Company at this time requests an exception to the placement of the permanent marker. It is of our opinion that the permanent marker will be better served if it is placed at the corner of the burial cell in native none disturbed soil rather than in the center of the burial area. In the area of the burial cell the material is not as compact and we feel could pose future problems with the stability of the permanent marker. The permanent marker will have all required information permanently listed on it.~~
- **Deed:** In compliance with 19.15.17.13 NMAC a deed will be filed with the county clerk and an approved copy will be attached to the final report.

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 has also been attached for verification purposes. 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. FEMA 100 Flood Plain Map
6. Topographical Map
7. Satellite Image
8. Exhibit "A" of Order R-111P

/sjt

July 14, 2008

Jim Amos  
Bureau of Land Management  
602 E. Green Street  
Carlsbad, New Mexico 88220

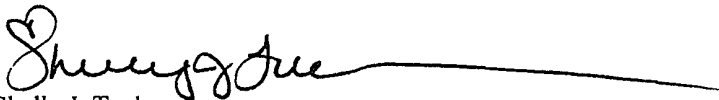
RE: **Bradley 6 Federal Com 001** – Temporary Pit Closure Surface Owner Notification  
API: 30-015-35928  
Unit C Sec 6–T19S-R30E  
660' FNL & 1500' FWL

Mr. Amos:

This letter is to notify the Bureau of Land Management, 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).

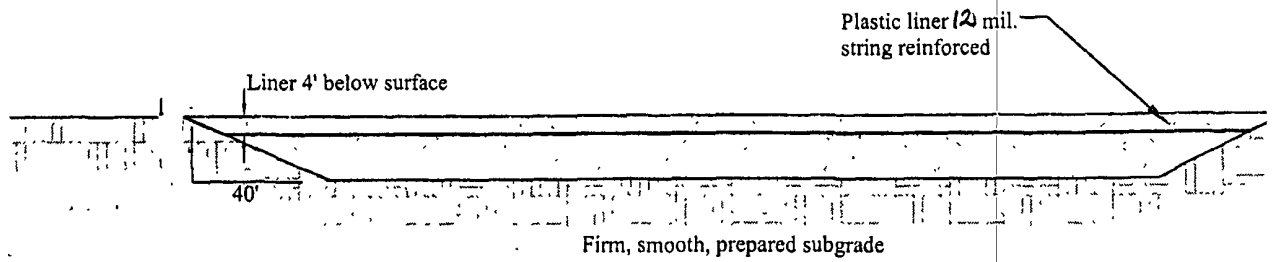
If you should have and questions or concerns, please feel to contact Charles Martin of Mewbourne Oil Company at 575-441-2081 or Shelly J. Tucker of Talon/LPE at 575-706-7234 with any questions or concerns.

Sincerely,



Shelly J. Tucker  
Project Manager  
Talon/LPE

/sjt



## Site Detail

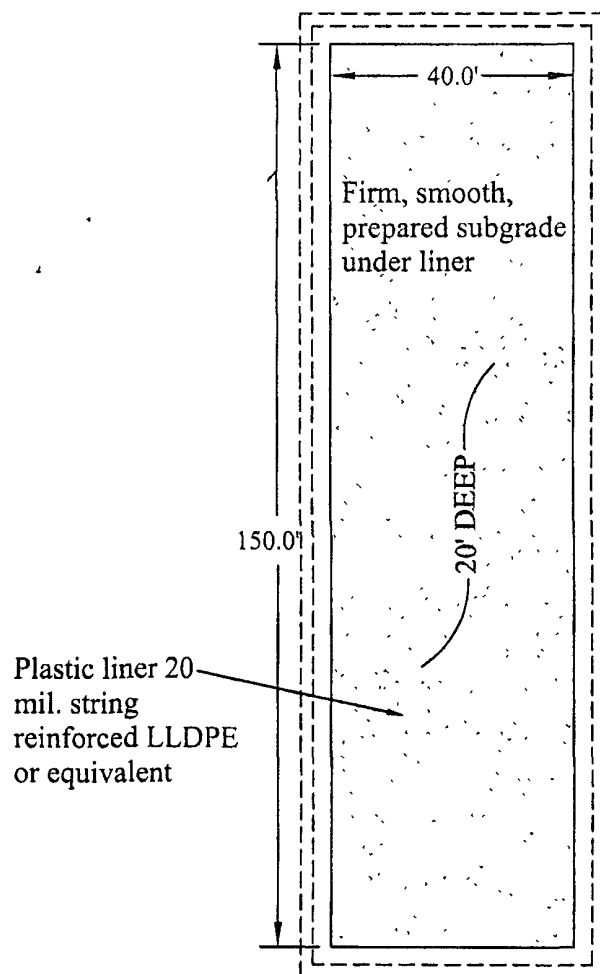


Date: 07/22/2008

Scale: Not To Scale

Drawn By: SJA

Mewbourne Oil Co  
Bradley 6 Fed  
Eddy County, Nev  
Pit Liner Deta



## Site Overhead View



Date: 07/22/2008

Scale: Not To Scale

Drawn By: SJA

Mewbourne Oil Co.  
Bradley 6 Fed.  
Eddy County, Nev  
Pit Liner Site

**New Mexico Office of the State Engineer  
POD Reports and Downloads**

Township: 19S Range: 30E Sections.

NAD27 X: Y: Zone: ☐ Search Radius:

County: ☐ Basin: ☐ Number: Suffix:

Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic ☒ All

☐ POD / Surface Data Report

☐ Avg Depth to Water Report

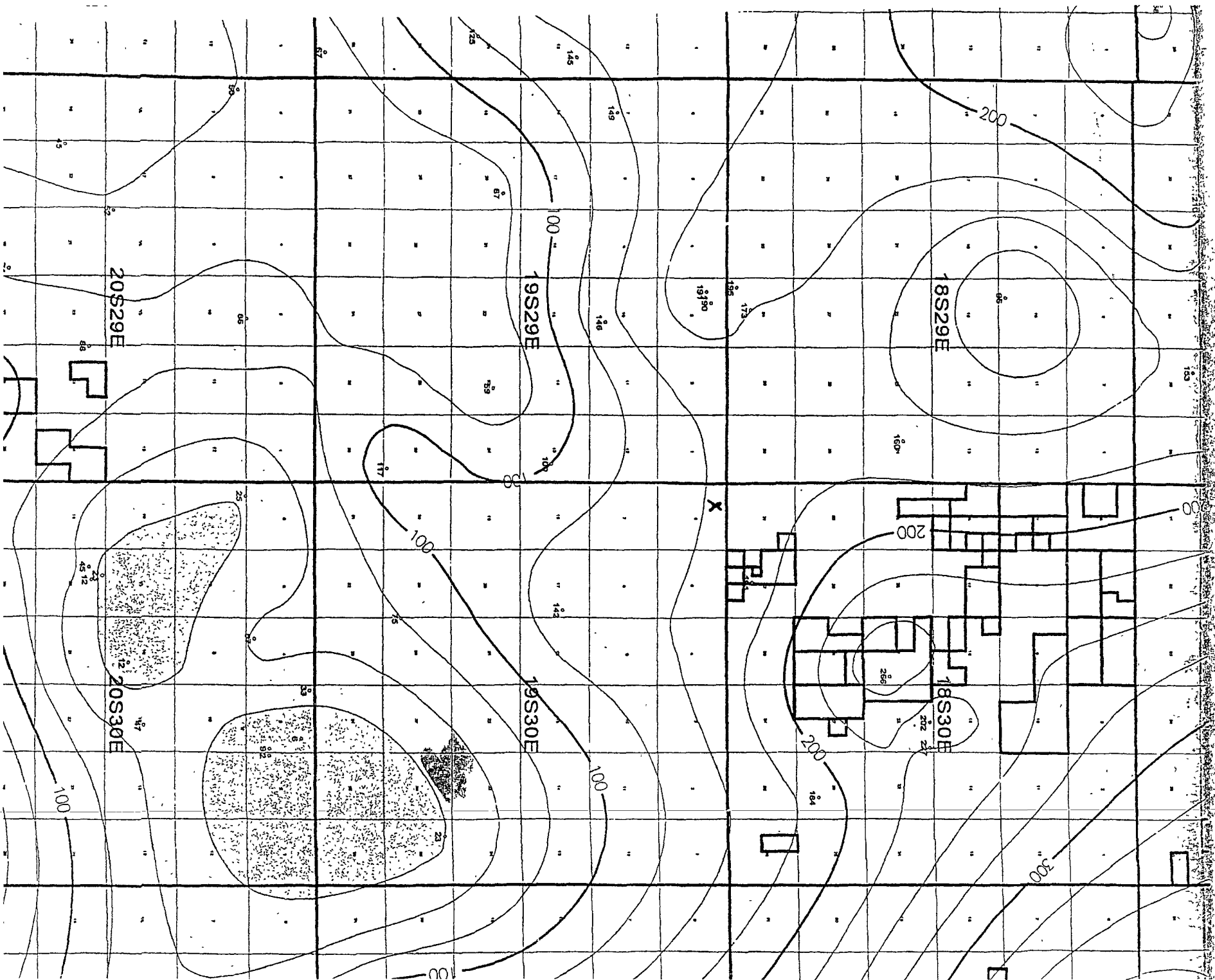
☐ Water Column Report

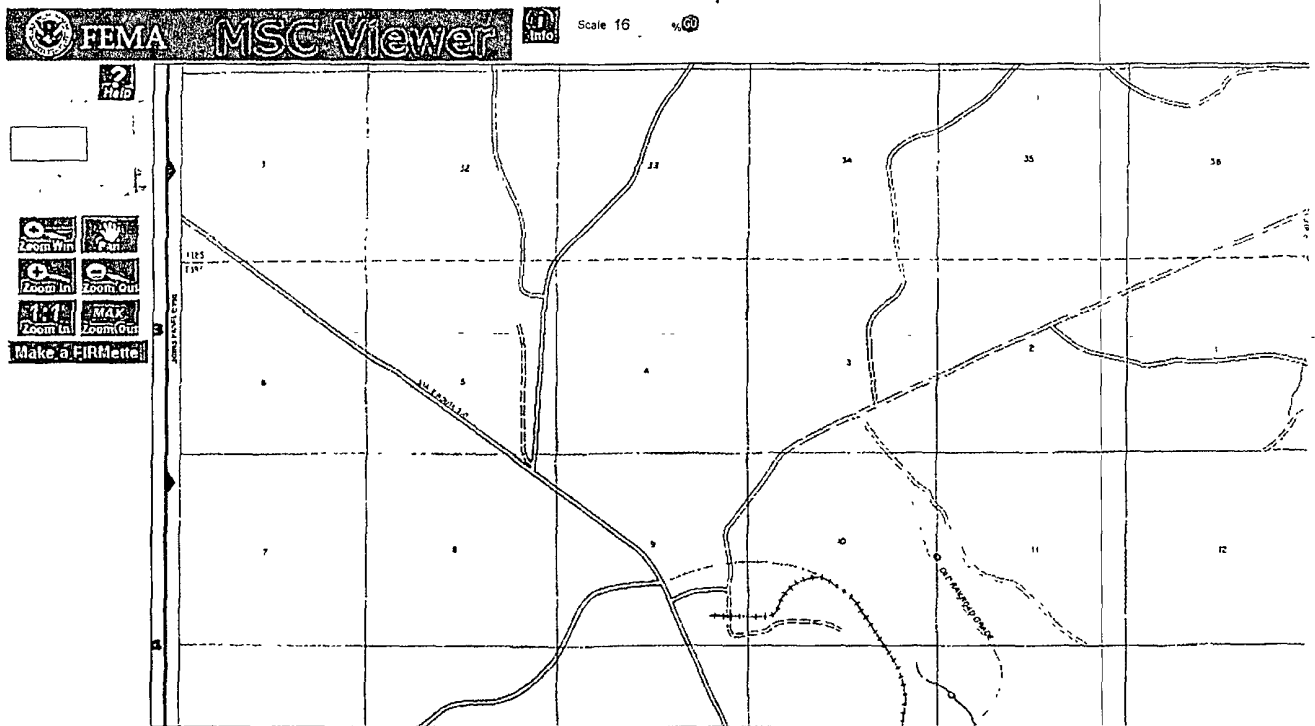
**WATER COLUMN REPORT 07/28/2008**

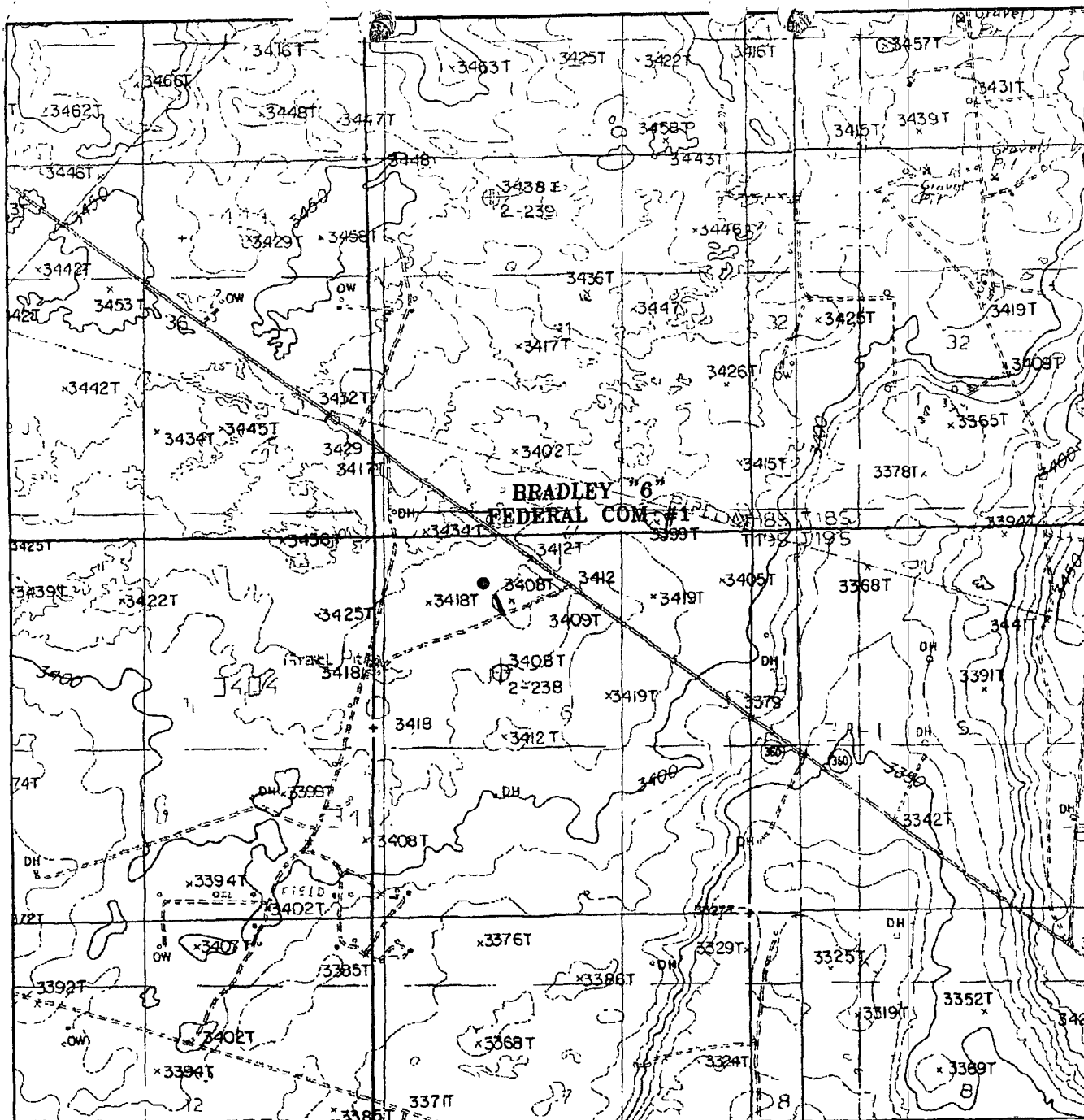
(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water (in feet) Column
CP 00822	19S	30E	15	4	4					90		
CP 00823	19S	30E	17	3	1					120		
CP 00824	19S	30E	20	1	4					70		
CP 00825	19S	30E	28	4	3					100		
CP 00522	19S	30E	30	3						120	90	30
CP 00742	19S	30E	31	3	1	3				223	115	108
CP 00828	19S	30E	35	1	1					90		
CP 00827	19S	30E	35	3	3					100		

Record Count: 8







**BRADLEY "6" FEDERAL COM #1**  
 Located 660' FNL and 1500' FWL  
 Section 6, Township 19 South, Range 30 East,  
 N.M.P.M., Eddy County, New Mexico.

*Exhibit 3*

**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: 18497T JMS

Survey Date: 08-24-2007

Scale: 1" = 2000'

Date: 08-29-2007

**MEWBOURNE**  
**OIL CO.**



[Contact Us](#) | [Download Soils Data](#) | [Archived Soil Surveys](#) | [Preferences](#) | [Logout](#) | [Help](#)

A A A

[Area of Interest \(AOI\)](#)[Soil Map](#)[Soil Data Explorer](#)[Shopping Cart](#)

## Quick Navigation

## Navigate By...

Address

State and County

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

View

State New Mexico

Principal Meridian New Mexico Principal

View Meridian Map

Section 6

Township 19

☐ North☒ South

Range 30

☒ East☐ WestShow Public  
Land Survey  
Layer in Map

View

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

## Area of Interest Interactive Map

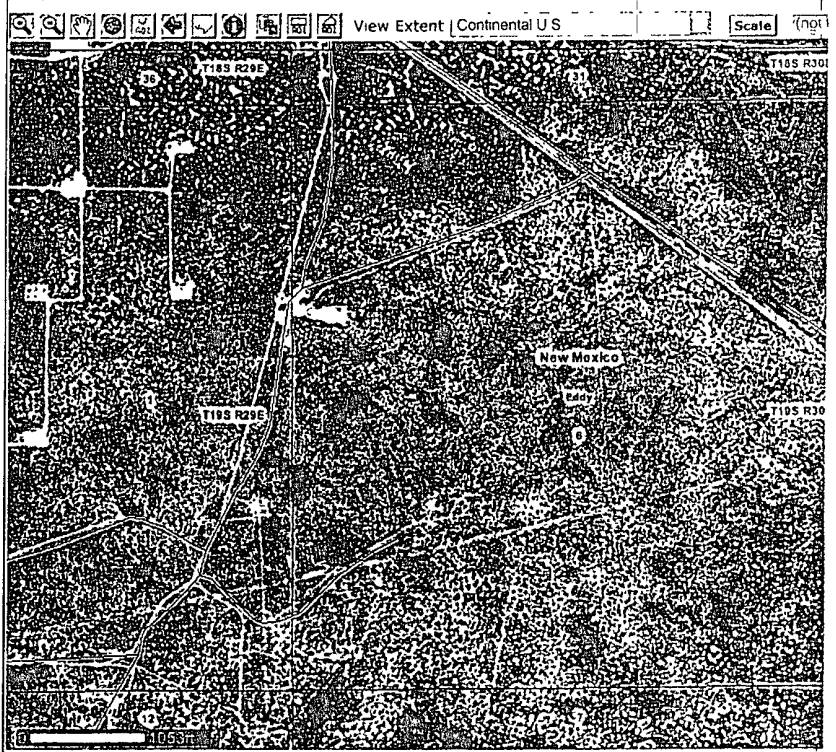


EXHIBIT "A"  
CASE 9316  
ORDER R-111-P

CONSOLIDATED LAND DESCRIPTION OF THE KNOWN POTASH  
LEASING AREA, AS OF FEBRUARY 3, 1988

EDDY COUNTY, NEW MEXICO

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM

Section 10: SE/4 SE/4  
Section 11: S/2 SW/4  
Section 13: W/2 SW/4 and SE/4 SW/4  
Section 14: W/2 NE/4, NW/4 and S/2  
Section 15: E/2 NE/4, SE/4 SW/4 and SE/4  
Section 22: N/2, N/2 SW/4, SE/4 SW/4 and SE/4  
Section 23: All  
Section 24: N/2 NW/4, SW/4 NW/4 and NW/4 SW/4  
Section 26: NE/4, N/2 NW/4 and SE/4 NW/4  
Section 27: N/2 NE/4 and NE/4 NW/4

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM

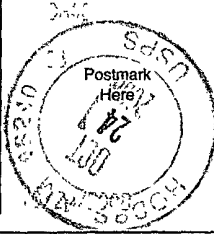
Section 11: SE/4 SE/4  
Section 12: SE/4 NE/4 and S/2  
Section 13: All  
Section 14: NE/4, SE/4 NW/4 and S/2  
Section 15: SE/4 SE/4  
Section 22: NE/4, E/2 W/2 and SE/4  
Section 23: All  
Section 24: All  
Section 25: NW/4 NW/4  
Section 26: N/2 NE/4 and NW/4  
Section 27: NE/4 and E/2 NW/4

TOWNSHIP 19 SOUTH, RANGE 30 EAST, NMPM

Section 2: SW/4  
Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4  
Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2  
Section 5: Lots 1, 2, and 3, S/2 NE/4, S/2 NW/4 and S/2  
Section 6: S/2 SE/4 and NE/4 SE/4  
Sections 7 to 10 inclusive  
Section 11: S/2 NE/4, NW/4 NW/4 and S/2  
Section 12: NE/4, S/2 NW/4 and S/2  
Section 13: NE/4, W/2, N/2 SE/4 and SW/4 SE/4  
Sections 14 to 18 inclusive  
Section 19: Lots 1, 2, and 3, NE/4, E/2 NW/4, NE/4 SW/4, E/2 SE/4 and NW/4 SE/4  
Sections 20 to 23 inclusive  
Section 24: NW/4. NW/4 SW/4 and S/2 SW/4

7008 1140 0001 3070 7973

U.S. Postal Service <sup>TM</sup>	
CERTIFIED MAIL <sup>TM</sup> RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at <a href="http://www.usps.com">www.usps.com</a>	
OFFICIAL USE	
Postage	\$ 96.72
Certified Fee	2.70
Return Receipt Fee (Endorsement Required)	25.00
Restricted Delivery Fee (Endorsement Required)	10.00
Total Postage & Fees	\$ 134.42



Sent To: Jim. Ames Bureau of Land Mgmt.	
Street, Apt No, or PO Box No 602 E. Green St.	
City, State, ZIP+4 Portland, NM 88240	

PS Form 3800, August 2006 See Reverse for Instructions

# TRACE ANALYSIS, INC.

8201 Apple Valley Road, Suite 100, Lubbock, Texas 79424-1295  
 806-799-2200  
 5001 13th Street, Suite 100, El Paso, Texas 79902-4242  
 915-799-1200  
 1000 Main Street, Suite 100, Midland, Texas 79701-4242  
 806-799-1200

## 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: August 18, 2008

Work Order: 8081522



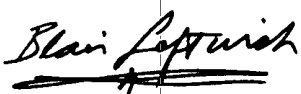
Project Location: Sec 6, T19S-R30E, Eddy Co., NM  
 Project Name: Bradley 6 Fed. Com #1  
 Project Number: Bradley 6 Fed. Com. #1

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
170811	Duck Pond Comp.	soil	2008-08-14	15 00	2008-08-15

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 14 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 Bradley 6 Fed Com. #1 were received by TraceAnalysis, Inc on 2008-08-15 and assigned to work order 8081522. Samples for work order 8081522 were received intact at a temperature of 22.1 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 8081522 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.

Report Date: August 18, 2008  
Bradley 6 Fed. Com #1

Work Order: 8081522  
Bradley 6 Fed Com. #1

Page Number: 4 of 14  
Sec 6, T19S-R30E, Eddy Co., NM

## Analytical Report

### Sample: 170811 - Duck Pond Comp.

Laboratory: Lubbock

Analysis: BTEX

QC Batch: 51491

Prep Batch: 44147

Analytical Method: S 8021B

Date Analyzed: 2008-08-15

Sample Preparation: 2008-08-15

Prep Method: S 5035

Analyzed By: ER

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)		1.27	mg/Kg	1	1.00	127	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.27	mg/Kg	1	1.00	127	54.4 - 176.2

### Sample: 170811 - Duck Pond Comp.

Laboratory: Lubbock

Analysis: Chloride (Titration)

QC Batch: 51523

Prep Batch: 44183

Analytical Method: SM 4500-Cl B

Date Analyzed: 2008-08-18

Sample Preparation: 2008-08-18

Prep Method: N/A

Analyzed By: RD

Prepared By: RD

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		152	mg/Kg	10	3.25

### Sample: 170811 - Duck Pond Comp.

Laboratory: Lubbock

Analysis: TPH 418.1

QC Batch: 51513

Prep Batch: 44170

Analytical Method: E 418.1

Date Analyzed: 2008-08-18

Sample Preparation: 2008-08-18

Prep Method: N/A

Analyzed By: CM

Prepared By: CM

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

Report Date. August 18, 2008  
Bradley 6 Fed. Com #1

Work Order: 8081522  
Bradley 6 Fed. Com #1

Page Number. 5 of 14  
Sec. 6, T19S-R30E, Eddy Co., NM

**Sample: 170811 - Duck Pond Comp.**

Laboratory	Lubbock	Analytical Method:	Mod 8015B	Prep Method:	N/A
Analysis	TPH DRO	Date Analyzed:	2008-08-15	Analyzed By.	MN
QC Batch	51508	Sample Preparation.	2008-08-15	Prepared By	MN
Prep Batch.	44162				

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	49.5 - 185

**Sample: 170811 - Duck Pond Comp.**

Laboratory:	Lubbock	Analytical Method:	S 8015B	Prep Method	S 5035
Analysis:	TPH GRO	Date Analyzed	2008-08-15	Analyzed By.	ER
QC Batch:	51493	Sample Preparation	2008-08-15	Prepared By	ER
Prep Batch:	44147				

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)		1.38	mg/Kg	1	1.00	138	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.49	mg/Kg	1	1.00	149	45.6 - 214.7

**Method Blank (1) QC Batch 51491**

QC Batch:	51491	Date Analyzed	2008-08-15	Analyzed By.	ER
Prep Batch.	44147	QC Preparation	2008-08-15	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



Report Date. August 18, 2008  
Bradley 6 Fed. Com. #1

Work Order: 8081522  
Bradley 6 Fed. Com. #1

Page Number. 6 of 14  
Sec. 6, T19S-R30E, Eddy Co, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.916	mg/Kg	1	1.00	92	69.3 - 110.2
4-Bromofluorobenzene (4-BFB)		0.711	mg/Kg	1	1.00	71	24.4 - 114.6

**Method Blank (1)**      QC Batch 51493

QC Batch 51493  
Prep Batch 44147

Date Analyzed: 2008-08-15  
QC Preparation: 2008-08-15

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)		0.998	mg/Kg	1	1.00	100	83.3 - 108.5
4-Bromofluorobenzene (4-BFB)		0.841	mg/Kg	1	1.00	84	34.5 - 105.8

**Method Blank (1)**      QC Batch: 51508

QC Batch 51508  
Prep Batch: 44162

Date Analyzed: 2008-08-15  
QC Preparation: 2008-08-15

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		89.3	mg/Kg	1	100	89	49.5 - 185

**Method Blank (1)**      QC Batch: 51513

QC Batch 51513  
Prep Batch: 44170

Date Analyzed: 2008-08-18  
QC Preparation: 2008-08-18

Analyzed By: CM  
Prepared By: CM

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

Report Date August 18, 2008  
Bradley 6 Fed. Com. #1

Work Order: 8081522  
Bradley 6 Fed. Com. #1

Page Number 7 of 14  
Sec. 6, T19S-R30E, Eddy Co, NM

**Method Blank (1) QC Batch 51523**

QC Batch 51523  
Prep Batch 44183

Date Analyzed: 2008-08-18  
QC Preparation: 2008-08-18

Analyzed By: RD  
Prepared By: RD

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

**Laboratory Control Spike (LCS-1)**

QC Batch: 51491  
Prep Batch: 44147

Date Analyzed: 2008-08-15  
QC Preparation: 2008-08-15

Analyzed By: ER  
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.900	mg/Kg	1	1.00	<0.00347	90	80.5 - 115.5
Toluene	0.935	mg/Kg	1	1.00	<0.00525	94	80 - 114.7
Ethylbenzene	0.936	mg/Kg	1	1.00	<0.00607	94	77.1 - 114.2
Xylene	2.82	mg/Kg	1	3.00	<0.00724	94	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	0.909	mg/Kg	1	1.00	<0.00347	91	80.5 - 115.5	1	20
Toluene	0.928	mg/Kg	1	1.00	<0.00525	93	80 - 114.7	1	20
Ethylbenzene	0.943	mg/Kg	1	1.00	<0.00607	94	77.1 - 114.2	1	20
Xylene	2.84	mg/Kg	1	3.00	<0.00724	95	77.6 - 114.5	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.889	0.912	mg/Kg	1	1.00	89	91	74.2 - 114.7
4-Bromofluorobenzene (4-BFB)	0.868	0.869	mg/Kg	1	1.00	87	87	69.7 - 118.7

**Laboratory Control Spike (LCS-1)**

QC Batch: 51493  
Prep Batch: 44147

Date Analyzed: 2008-08-15  
QC Preparation: 2008-08-15

Analyzed By: ER  
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.47	mg/Kg	1	10.0	<0.144	95	73.1 - 114.7

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

Report Date August 18, 2008  
Bradley 6 Fed. Com. #1

Work Order: 8081522  
Bradley 6 Fed. Com #1

Page Number 8 of 14  
Sec 6, T19S-R30E, Eddy Co, NM

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
GRO	10 0	mg/Kg	1	10 0	<0.144	100	73.1 - 114 7	6	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.918	0.899	mg/Kg	1	1 00	92	90	77.4 - 111.4
4-Bromofluorobenzene (4-BFB)	0.992	0.999	mg/Kg	1	1 00	99	100	70.3 - 116 1

#### Laboratory Control Spike (LCS-1)

QC Batch: 51508  
Prep Batch 44162

Date Analyzed: 2008-08-15  
QC Preparation 2008-08-15

Analyzed By MN  
Prepared By MN

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
DRO	300	mg/Kg	1	250	7 75	117	73.9 - 138

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	293	mg/Kg	1	250	7 75	114	73.9 - 138	2	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec Limit
n-Triacontane	70 4	103	mg/Kg	1	100	70	103	49 5 - 185

#### Laboratory Control Spike (LCS-1)

QC Batch: 51513  
Prep Batch. 44170

Date Analyzed: 2008-08-18  
QC Preparation: 2008-08-18

Analyzed By CM  
Prepared By. CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	199	mg/Kg	1	250	<1 06	80	75.5 - 136

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC	207	mg/Kg	1	250	<1 06	83	75.5 - 136	4	20

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

Report Date: August 18, 2008  
Bradley 6 Fed. Com. #1

Work Order 8081522  
Bradley 6 Fed Com #1

Page Number. 9 of 14  
Sec. 6, T19S-R30E, Eddy Co, NM

### Laboratory Control Spike (LCS-1)

QC Batch 51523  
Prep Batch: 44183

Date Analyzed: 2008-08-18  
QC Preparation: 2008-08-18

Analyzed By: RD  
Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
Chloride	98.2	mg/Kg	1	100	<1.80	98	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	98.7	mg/Kg	1	100	<1.80	99	96.5 - 104.4	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. 170786

QC Batch: 51491  
Prep Batch: 44147

Date Analyzed: 2008-08-15  
QC Preparation: 2008-08-15

Analyzed By: ER  
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
Benzene	1.23	mg/Kg	2	1.00	<0.00694	123	42.9 - 130.7
Toluene	1.33	mg/Kg	2	1.00	<0.0105	133	46.9 - 135.4
Ethylbenzene	1.38	mg/Kg	2	1.00	<0.0121	138	48.3 - 149.3
Xylene	4.18	mg/Kg	2	3.00	<0.0145	139	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	<sup>1</sup> 1.38	mg/Kg	2	1.00	<0.00694	138	42.9 - 130.7	12	20
Toluene	<sup>2</sup> 1.50	mg/Kg	2	1.00	<0.0105	150	46.9 - 135.4	12	20
Ethylbenzene	<sup>3</sup> 1.58	mg/Kg	2	1.00	<0.0121	158	48.3 - 149.3	14	20
Xylene	<sup>4</sup> 4.78	mg/Kg	2	3.00	<0.0145	159	48.8 - 150.9	13	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)	<sup>5 6</sup> 1.33	1.50	mg/Kg	2	1	133	150	63.2 - 128.3

*continued*

<sup>1</sup>Matrix spike recovery out of control limits. Use LCS/LCSD to demonstrate analysis is under control

<sup>2</sup>Matrix spike recovery out of control limits. Use LCS/LCSD to demonstrate analysis is under control

<sup>3</sup>Matrix spike recovery out of control limits. Use LCS/LCSD to demonstrate analysis is under control

<sup>4</sup>Matrix spike recovery out of control limits. Use LCS/LCSD to demonstrate analysis is under control

<sup>5</sup>Matrix spike recovery out of control limits. Use LCS/LCSD to demonstrate analysis is under control

<sup>6</sup>Matrix spike recovery out of control limits. Use LCS/LCSD to demonstrate analysis is under control.

Report Date August 18, 2008  
Bradley 6 Fed. Com. #1

Work Order. 8081522  
Bradley 6 Fed. Com #1

Page Number 10 of 14  
Sec. 6, T19S-R30E, Eddy Co., NM

matrix spikes continued ..

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	1 35	1 48	mg/Kg	2	1	135	148	61.5 - 161 2

**Matrix Spike (MS-1)** Spiked Sample. 170835

QC Batch: 51493  
Prep Batch. 44147

Date Analyzed: 2008-08-15  
QC Preparation. 2008-08-15

Analyzed By ER  
Prepared By. ER

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
GRO	9.96	mg/Kg	20	10 0	<2 88	100	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	RPD Limit
GRO	11.8	mg/Kg	20	10 0	<2 88	118	48.9 - 155.8	17	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	1.48	mg/Kg	20	1	136	148	41.8 - 145 4
4-Bromofluorobenzene (4-BFB)	1.12	1 19	mg/Kg	20	1	112	119	50.3 - 197.8

**Matrix Spike (MS-1)** Spiked Sample: 170811

QC Batch 51508  
Prep Batch 44162

Date Analyzed: 2008-08-15  
QC Preparation. 2008-08-15

Analyzed By MN  
Prepared By MN

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
DRO	<sup>8</sup> 340	mg/Kg	1	250	<6.77	136	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	RPD Limit
DRO	<sup>9</sup> 396	mg/Kg	1	250	<6 77	158	50.7 - 134	15	20

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

<sup>7</sup>Matrix spike recovery out of control limits Use LCS/LCSD to demonstrate analysis is under control

<sup>8</sup>Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control

<sup>9</sup>Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control.

Report Date. August 18, 2008  
Bradley 6 Fed. Com #1

Work Order: 8081522  
Bradley 6 Fed Com #1

Page Number 11 of 14  
Sec 6, T19S-R30E, Eddy Co., NM

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec	MSD Rec.	Rec Limit
n-Triacontane	112	126	mg/Kg	1	100	112	126	49.5 - 185

**Matrix Spike (MS-1)** Spiked Sample 170811

QC Batch 51513 Date Analyzed 2008-08-18 Analyzed By: CM  
Prep Batch 44170 QC Preparation. 2008-08-18 Prepared By: CM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	370	mg/Kg	1	250	77	117	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	382	mg/Kg	1	250	77	122	10 - 354	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 170837

QC Batch 51523 Date Analyzed 2008-08-18 Analyzed By: RD  
Prep Batch: 44183 QC Preparation: 2008-08-18 Prepared By: RD

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	1850	mg/Kg	100	500	1268 29	116	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	<sup>10</sup> 2050	mg/Kg	100	500	1268 29	156	74.7 - 123 2	10	20

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

**Standard (ICV-1)**

QC Batch 51491 Date Analyzed 2008-08-15 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 0941	94	85 - 115	2008-08-15

*continued ...*

<sup>10</sup>Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control

Report Date. August 18, 2008  
Bradley 6 Fed Com #1

Work Order. 8081522  
Bradley 6 Fed Com #1

Page Number 12 of 14  
Sec. 6, T19S-R30E, Eddy Co., NM

*standard continued .*

Param	Flag	Units	ICVs True Conc	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/Kg	0 100	0.0979	98	85 - 115	2008-08-15
Ethylbenzene		mg/Kg	0.100	0 0989	99	85 - 115	2008-08-15
Xylene		mg/Kg	0.300	0.299	100	85 - 115	2008-08-15

**Standard (CCV-1)**

QC Batch 51491                      Date Analyzed 2008-08-15                      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 0847	85	85 - 115	2008-08-15
Toluene		mg/Kg	0.100	0 0885	88	85 - 115	2008-08-15
Ethylbenzene		mg/Kg	0 100	0.0876	88	85 - 115	2008-08-15
Xylene		mg/Kg	0.300	0 264	88	85 - 115	2008-08-15

**Standard (ICV-1)**

QC Batch 51493                      Date Analyzed 2008-08-15                      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	0 995	99	85 - 115	2008-08-15

**Standard (CCV-1)**

QC Batch: 51493                      Date Analyzed 2008-08-15                      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	0 881	88	85 - 115	2008-08-15

**Standard (ICV-1)**

QC Batch. 51508                      Date Analyzed 2008-08-15                      Analyzed By. MN

Report Date: August 18, 2008  
Bradley 6 Fed Com. #1

Work Order: 8081522  
Bradley 6 Fed. Com. #1

Page Number: 13 of 14  
Sec. 6, T19S-R30E, Eddy Co, NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	251	100	85 - 115	2008-08-15

**Standard (CCV-1)**

QC Batch 51508 Date Analyzed 2008-08-15 Analyzed By: MN

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	280	112	85 - 115	2008-08-15

**Standard (ICV-1)**

QC Batch: 51513 Date Analyzed: 2008-08-18 Analyzed By: CM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	88.1	88	80 - 120	2008-08-18

**Standard (CCV-1)**

QC Batch: 51513 Date Analyzed: 2008-08-18 Analyzed By: CM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	96.4	96	80 - 120	2008-08-18

**Standard (ICV-1)**

QC Batch. 51523 Date Analyzed 2008-08-18 Analyzed By: RD

Param	Flag	Units	ICVs True Conc	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2008-08-18

**Standard (CCV-1)**

QC Batch. 51523 Date Analyzed. 2008-08-18 Analyzed By: RD



Report Date. August 18, 2008  
Bradley 6 Fed Com. #1

Work Order: 8081522  
Bradley 6 Fed. Com #1

Page Number 14 of 14  
Sec. 6, T19S-R30E, Eddy Co , NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.7	100	85 - 115	2008-08-18



LAB Order ID # 8081822

Page of

# TraceAnalysis, Inc.

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

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

email lab@traceanalysis.com

Company Name: <u>City of Dimmitt</u>		Phone #: <u>806-647-4492</u>																									
Address (Street, City, Zip): <u>PO Box 146 Dimmitt TX 79027</u>		Fax #: <u>806-647-8662</u>																									
Contact Person: <u>Juan Alvarez</u>		E-mail:																									
Invoice to:																											
(If different from above)																											
Project #:		Project Name:																									
Project Location (including state): <u>3rd level</u>		Sampler Signature: <u>[Signature]</u>																									
LAB #	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX	PRESERVATIVE METHOD	SAMPLING	DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418 1 / TX1005 / TX1005 EX(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg	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	PCBs 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold

## ANALYSIS REQUEST (Circle or Specify Method No.)

### REMARKS:

### LAB USE ONLY

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

Relinquished by: <u>[Signature]</u>	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:
Relinquished by: <u>[Signature]</u>	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:
Relinquished by: <u>[Signature]</u>	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:

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

Carrier # Cemp

ORIGINAL COPY

# TRACE ANALYSIS, INC.

6001 American Avenue, Suite 300 Lubbock, Texas 79424 • 806 • 793 • 1246 FAX 806 • 794 • 1138  
100 East Sunset Road, Suite 100 El Paso, Texas 79901 • 915 • 388 • 7443 FAX 915 • 388 • 2344  
5702 East 9th Street, Suite A Midland, Texas 79701 • 432 • 685 • 0034 FAX 432 • 685 • 0113  
6001 American Avenue, Suite 300 El Paso, Texas 79901 • 915 • 388 • 7443 FAX 915 • 388 • 2344

## 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: August 21, 2008

Work Order: 8081911



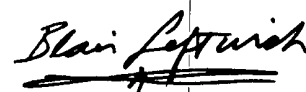
Project Location Eddy County, NM  
Project Name Bradley 6 Fed. #1  
Project Number MEWBOU027PIT

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
171024	Floor beneath Burial Cell	soil	2008-08-15	12:00	2008-08-19

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 13 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc

A handwritten signature in black ink, reading "Blair Leftwich". The signature is written in a cursive style and is positioned above a horizontal line.

Dr. Blair Leftwich, Director

#### Standard Flags

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

## Case Narrative

Samples for project Bradley 6 Fed #1 were received by TraceAnalysis, Inc. on 2008-08-19 and assigned to work order 8081911. Samples for work order 8081911 were received intact at a temperature of 11.0 deg. C.

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

Test	Method
BTEX	S 8021B
Chloride (Titration)	SM 4500-Cl B
Total BTEX	S 8021B
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 8081911 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.

Report Date: August 21, 2008  
MEWBOU027PIT

Work Order: 8081911  
Bradley 6 Fed #1

Page Number: 4 of 13  
Eddy County, NM

## Analytical Report

### Sample: 171024 - Floor beneath Burial Cell

Laboratory	Lubbock	Analytical Method:	S 8021B	Prep Method:	S 5035
Analysis	BTEX, Total BTEX	Date Analyzed:	2008-08-19	Analyzed By:	ER
QC Batch	51585	Sample Preparation:	2008-08-19	Prepared By:	ER
Prep Batch	44233				

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
Total BTEX		<0.0600	mg/Kg	1	0.0600

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.12	mg/Kg	1	1.00	112	59 - 136
4-Bromofluorobenzene (4-BFB)		1.27	mg/Kg	1	1.00	127	54 - 176

### Sample: 171024 - Floor beneath Burial Cell

Laboratory	Lubbock	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis	Chloride (Titration)	Date Analyzed:	2008-08-20	Analyzed By:	RD
QC Batch:	51624	Sample Preparation:	2008-08-20	Prepared By:	RD
Prep Batch:	44263				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		94.6	mg/Kg	10	3 - 25

### Sample: 171024 - Floor beneath Burial Cell

Laboratory	Lubbock	Analytical Method:	E 418 1	Prep Method:	N/A
Analysis	TPH 418 1	Date Analyzed:	2008-08-20	Analyzed By:	CM
QC Batch	51600	Sample Preparation:	2008-08-20	Prepared By:	CM
Prep Batch	44246				

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

Report Date. August 21, 2008  
MEWBOU027PIT

Work Order: 8081911  
Bradley 6 Fed. #1

Page Number 5 of 13  
Eddy County, NM

**Sample: 171024 - Floor beneath Burial Cell**

Laboratory	Lubbock	Analytical Method.	Mod. 8015B	Prep Method.	N/A
Analysis	TPH DRO	Date Analyzed.	2008-08-20	Analyzed By.	MN
QC Batch.	51638	Sample Preparation	2008-08-19	Prepared By.	MN
Prep Batch	44276				

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	1	158	mg/Kg	1	100	158	57.5 - 139

**Sample: 171024 - Floor beneath Burial Cell**

Laboratory.	Lubbock	Analytical Method.	S 8015B	Prep Method	S 5035
Analysis.	TPH GRO	Date Analyzed:	2008-08-19	Analyzed By.	ER
QC Batch:	51586	Sample Preparation.	2008-08-19	Prepared By	ER
Prep Batch.	44233				

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 26	mg/Kg	1	1.00	126	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: 51585

QC Batch	51585	Date Analyzed.	2008-08-19	Analyzed By	ER
Prep Batch.	44233	QC Preparation	2008-08-19	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

<sup>1</sup> High surrogate recovery. Sample non-detect, result bias high



Report Date. August 21, 2008  
MEWBOU027PIT

Work Order 8081911  
Bradley 6 Fed. #1

Page Number. 6 of 13  
Eddy County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.861	mg/Kg	1	1.00	86	69.3 - 110.2
4-Bromofluorobenzene (4-BFB)		0.650	mg/Kg	1	1.00	65	24.4 - 114.6

**Method Blank (1)** QC Batch. 51586

QC Batch 51586 Date Analyzed. 2008-08-19 Analyzed By ER  
Prep Batch 44233 QC Preparation 2008-08-19 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)		0.992	mg/Kg	1	1.00	99	83.3 - 108.5
4-Bromofluorobenzene (4-BFB)		0.768	mg/Kg	1	1.00	77	34.5 - 105.8

**Method Blank (1)** QC Batch. 51600

QC Batch. 51600 Date Analyzed 2008-08-20 Analyzed By CM  
Prep Batch 44246 QC Preparation. 2008-08-20 Prepared By CM

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

**Method Blank (1)** QC Batch: 51624

QC Batch 51624 Date Analyzed 2008-08-20 Analyzed By. RD  
Prep Batch: 44263 QC Preparation 2008-08-20 Prepared By RD

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

**Method Blank (1)** QC Batch. 51638

QC Batch. 51638 Date Analyzed: 2008-08-20 Analyzed By: MN  
Prep Batch 44276 QC Preparation. 2008-08-19 Prepared By. MN

Report Date August 21, 2008  
MEWBOU027PIT

Work Order: 8081911  
Bradley 6 Fed. #1

Page Number 7 of 13  
Eddy County, NM

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		128	mg/Kg	1	100	128	72.4 - 150

#### Laboratory Control Spike (LCS-1)

QC Batch: 51585  
Prep Batch: 44233

Date Analyzed: 2008-08-19  
QC Preparation: 2008-08-19

Analyzed By: ER  
Prepared By: ER

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
Benzene	0.853	mg/Kg	1	1.00	<0.00347	85	80.5 - 115.5
Toluene	0.870	mg/Kg	1	1.00	<0.00525	87	80 - 114.7
Ethylbenzene	0.856	mg/Kg	1	1.00	<0.00607	86	77.1 - 114.2
Xylene	2.56	mg/Kg	1	3.00	<0.00724	85	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	0.858	mg/Kg	1	1.00	<0.00347	86	80.5 - 115.5	1	20
Toluene	0.869	mg/Kg	1	1.00	<0.00525	87	80 - 114.7	0	20
Ethylbenzene	0.849	mg/Kg	1	1.00	<0.00607	85	77.1 - 114.2	1	20
Xylene	2.54	mg/Kg	1	3.00	<0.00724	85	77.6 - 114.5	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec	Rec. Limit
Trifluorotoluene (TFT)	0.849	0.859	mg/Kg	1	1.00	85	86	74.2 - 114.7
4-Bromofluorobenzene (4-BFB)	0.829	0.827	mg/Kg	1	1.00	83	83	69.7 - 118.7

#### Laboratory Control Spike (LCS-1)

QC Batch: 51586  
Prep Batch: 44233

Date Analyzed: 2008-08-19  
QC Preparation: 2008-08-19

Analyzed By: ER  
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
GRO	8.76	mg/Kg	1	10.0	<0.144	88	73.1 - 114.7

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

Report Date: August 21, 2008  
MEWB0U027PIT

Work Order: 8081911  
Bradley 6 Fed. #1

Page Number. 8 of 13  
Eddy County, NM

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	10.4	mg/Kg	1	10.0	<0.144	104	73.1 - 114.7	17	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)	0.938	0.972	mg/Kg	1	1.00	94	97	77.4 - 111.4
4-Bromofluorobenzene (4-BFB)	0.918	0.896	mg/Kg	1	1.00	92	90	70.3 - 116.1

#### Laboratory Control Spike (LCS-1)

QC Batch: 51600  
Prep Batch: 44246

Date Analyzed: 2008-08-20  
QC Preparation: 2008-08-20

Analyzed By: CM  
Prepared By: CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
TRPHC	225	mg/Kg	1	250	<1.06	90	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	236	mg/Kg	1	250	<1.06	94	75.5 - 136	5	20

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

#### Laboratory Control Spike (LCS-1)

QC Batch: 51624  
Prep Batch: 44263

Date Analyzed: 2008-08-20  
QC Preparation: 2008-08-20

Analyzed By: RD  
Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.9	mg/Kg	1	100	<1.80	98	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	99.2	mg/Kg	1	100	<1.80	99	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: 51638  
Prep Batch: 44276

Date Analyzed: 2008-08-20  
QC Preparation: 2008-08-19

Analyzed By: MN  
Prepared By: MN

Report Date. August 21, 2008  
MEWB0U027PIT

Work Order 8081911  
Bradley 6 Fed. #1

Page Number: 9 of 13  
Eddy County, NM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
DRO	258	mg/Kg	1	250	<14.5	103	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	262	mg/Kg	1	250	<14.5	105	73.4 - 123	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	110	112	mg/Kg	1	100	110	112	57.5 - 139

**Matrix Spike (MS-1)** Spiked Sample: 171024

QC Batch: 51585  
Prep Batch: 44233

Date Analyzed: 2008-08-19  
QC Preparation: 2008-08-19

Analyzed By: ER  
Prepared By: ER

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
Benzene	1.13	mg/Kg	1	1.00	<0.00347	113	42.9 - 130.7
Toluene	1.20	mg/Kg	1	1.00	<0.00525	120	46.9 - 135.4
Ethylbenzene	1.27	mg/Kg	1	1.00	<0.00607	127	48.3 - 149.3
Xylene	3.87	mg/Kg	1	3.00	<0.00724	129	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	1.10	mg/Kg	1	1.00	<0.00347	110	42.9 - 130.7	3	20
Toluene	1.17	mg/Kg	1	1.00	<0.00525	117	46.9 - 135.4	2	20
Ethylbenzene	1.22	mg/Kg	1	1.00	<0.00607	122	48.3 - 149.3	4	20
Xylene	3.69	mg/Kg	1	3.00	<0.00724	123	48.8 - 150.9	5	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)	1.24	1.22	mg/Kg	1	1	124	122	63.2 - 128.3
4-Bromofluorobenzene (4-BFB)	1.29	1.25	mg/Kg	1	1	129	125	61.5 - 161.2

**Matrix Spike (MS-1)** Spiked Sample: 170991

QC Batch: 51586  
Prep Batch: 44233

Date Analyzed: 2008-08-19  
QC Preparation: 2008-08-19

Analyzed By: ER  
Prepared By: ER

Report Date August 21, 2008  
MEWBOU027PIT

Work Order: 8081911  
Bradley 6 Fed. #1

Page Number. 10 of 13  
Eddy County, NM

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	12.6	mg/Kg	1	10.0	0.15	124	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	12.7	mg/Kg	1	10.0	0.15	126	48.9 - 155.8	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.24	1.13	mg/Kg	1	1	124	113	41.8 - 145.4
4-Bromofluorobenzene (4-BFB)	1.44	1.36	mg/Kg	1	1	144	136	50.3 - 197.8

**Matrix Spike (MS-1)** Spiked Sample 171024

QC Batch: 51600  
Prep Batch 44246

Date Analyzed: 2008-08-20  
QC Preparation: 2008-08-20

Analyzed By: CM  
Prepared By: CM

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	483	mg/Kg	1	250	<1.06	193	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	480	mg/Kg	1	250	<1.06	192	10 - 354	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. 171024

QC Batch. 51624  
Prep Batch 44263

Date Analyzed: 2008-08-20  
QC Preparation 2008-08-20

Analyzed By: RD  
Prepared By: RD

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
Chloride	<sup>2</sup> 739	mg/Kg	10	500	94.59	129	74.7 - 123.2

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

*continued . .*

<sup>2</sup>Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control

Report Date. August 21, 2008  
MEWBOU027PIT

Work Order: 8081911  
Bradley 6 Fed. #1

Page Number. 11 of 13  
Eddy County, NM

matrix spikes continued ...

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	<sup>3</sup> 792	mg/Kg	10	500	94 59	139	74.7 - 123 2	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 171024

QC Batch: 51638 Date Analyzed. 2008-08-20 Analyzed By MN  
Prep Batch. 44276 QC Preparation 2008-08-19 Prepared By MN

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
DRO	325	mg/Kg	1	250	<14 5	130	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	304	mg/Kg	1	250	<14.5	122	0 - 197	7	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	<sup>4 5</sup> 163	155	mg/Kg	1	100	163	155	57.5 - 139

#### Standard (ICV-1)

QC Batch. 51585 Date Analyzed. 2008-08-19 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 0863	86	85 - 115	2008-08-19
Toluene		mg/Kg	0.100	0 0878	88	85 - 115	2008-08-19
Ethylbenzene		mg/Kg	0.100	0.0853	85	85 - 115	2008-08-19
Xylene		mg/Kg	0.300	0.256	85	85 - 115	2008-08-19

<sup>3</sup>Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control

<sup>4</sup>Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control

<sup>5</sup>Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control.

Report Date: August 21, 2008  
MEWBOU027PIT

Work Order 8081911  
Bradley 6 Fed #1

Page Number 12 of 13  
Eddy County, NM

**Standard (CCV-1)**

QC Batch: 51585

Date Analyzed: 2008-08-19

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	0.0878	88	85 - 115	2008-08-19
Toluene		mg/Kg	0.100	0.0893	89	85 - 115	2008-08-19
Ethylbenzene		mg/Kg	0.100	0.0865	86	85 - 115	2008-08-19
Xylene		mg/Kg	0.300	0.259	86	85 - 115	2008-08-19

**Standard (ICV-1)**

QC Batch: 51586

Date Analyzed: 2008-08-19

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	0.891	89	85 - 115	2008-08-19

**Standard (CCV-1)**

QC Batch: 51586

Date Analyzed: 2008-08-19

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	0.846	85	85 - 115	2008-08-19

**Standard (ICV-1)**

QC Batch: 51600

Date Analyzed: 2008-08-20

Analyzed By: CM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	90.8	91	80 - 120	2008-08-20

**Standard (CCV-1)**

QC Batch: 51600

Date Analyzed: 2008-08-20

Analyzed By: CM

Report Date. August 21, 2008  
MEWBOU027PIT

Work Order: 8081911  
Bradley 6 Fed. #1

Page Number. 13 of 13  
Eddy County, NM

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	90.4	90	80 - 120	2008-08-20

**Standard (ICV-1)**

QC Batch. 51624

Date Analyzed. 2008-08-20

Analyzed By. RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.0	99	85 - 115	2008-08-20

**Standard (CCV-1)**

QC Batch 51624

Date Analyzed: 2008-08-20

Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2008-08-20

**Standard (ICV-1)**

QC Batch. 51638

Date Analyzed 2008-08-20

Analyzed By: MN

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	266	106	85 - 115	2008-08-20

**Standard (CCV-1)**

QC Batch. 51638

Date Analyzed: 2008-08-20

Analyzed By MN

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	264	106	85 - 115	2008-08-20



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

Company Name: Talon UPE Phone #  
Address: (Street, City, Zip) 318 E Taylor Hobbs NM 88401 Fax #  
Contact Person: Sherry Tucker E-mail: Sherry  
Invoice to: Murburne  
(If different from above)  
Project #: Murburne 027PIT Project Name: Braden 6 Fed #1  
Project Location (including state): Sampler Signature

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

[illegible]

Relinquished by: <u>Demetrius Talon</u>	Company: <u>Talon</u>	Date: <u>8/18/08</u>	Time: <u>11:00</u>	Received by: <u>UPS</u>	Company: <u>UPS</u>	Date: <u>8/18/08</u>	Time: <u>11:00</u>	Temp °C: <u></u>	<b>LAB USE ONLY</b> Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Headspace <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA Log-In/Review <input type="checkbox"/>	<b>REMARKS:</b>  <input type="checkbox"/> Dry Weight Basis Required <input type="checkbox"/> TRRP Report Required <input type="checkbox"/> Check If Special Reporting Limits Are Needed
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:		
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:		

Carrier # WPS J1839783613 (2cc)

# TRACE ANALYSIS, INC.

1801 West 10th Street, Suite 100 • Lubbock, TX 79409 • 806-761-1111 • Fax 806-761-1112  
 2701 East 10th Street, Suite 100 • El Paso, TX 79902 • 915-761-1111 • Fax 915-761-1112  
 5502 West 10th Street, Suite 100 • Midland, TX 79701 • 409-631-1111 • Fax 409-631-1112  
 1000 West 10th Street, Suite 100 • North Texas • 972-211-1111 • Fax 972-211-1112

## 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: August 27, 2008

Work Order: 8081912



Project Location: Eddy County, NM  
 Project Name: Bradley 6 Fed. #1  
 Project Number: MEWBOU027PIT

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
171025	Insitu Contents	soil	2008-08-18	10.30	2008-08-19

### Comment(s)

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 37 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For morganic analyses, the term MQL should actually read PQL.*

### Standard Flags

- U** - Not detected The analyte is not detected above the SDL.
- J** - Estimated The analyte is positively identified and the value is approximated between the SDL and MQL
- B** - The sample contains less than ten times the concentration found in the method blank
- JB** - The analyte is positively identified and the value is approximated between the SDL and MQL.  
The sample contains less than ten times the concentration found in the method blank  
The result should be considered non-detect to the SDL

A handwritten signature in black ink, reading "Blair Leftwich". The signature is written in a cursive style with a horizontal line underneath.

---

Dr. Blair Leftwich, Director

## Case Narrative

Samples for project Bradley 6 Fed. #1 were received by TraceAnalysis, Inc. on 2008-08-19 and assigned to work order 8081912. Samples for work order 8081912 were received intact at a temperature of 11.0 deg. C.

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

Test	Method
Chloride (IC)	E 300 0
Paint Filter	N/A
SPLP Ag	S 6010B
SPLP As	S 6010B
SPLP Ba	S 6010B
SPLP BTEX by 8260	S 8260B
SPLP Cd	S 6010B
SPLP Cl	E 300.0
SPLP Cr	S 6010B
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

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 8081912 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: 171025 - Insitu Contents

Laboratory. Lubbock  
Analysis. Chloride (IC) Analytical Method E 300.0 Prep Method. N/A  
QC Batch. 51597 Date Analyzed 2008-08-20 Analyzed By RD  
Prep Batch. 44245 Sample Preparation. 2008-08-19 Prepared By: RD

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		1400	1400	<17.6	mg/Kg	50	17.6	1	0.3527

### Sample: 171025 - Insitu Contents

Laboratory. Lubbock  
Analysis. Paint Filter Analytical Method. N/A Prep Method. N/A  
QC Batch. 51704 Date Analyzed 2008-08-21 Analyzed By. SS  
Prep Batch. 44331 Sample Preparation. 2008-08-21 Prepared By SS

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Paint Filter		0.00	0.00	0.00		1	0.00		

### Sample: 171025 - Insitu Contents

Laboratory. Lubbock  
Analysis. SPLP Ag Analytical Method: S 6010B Prep Method. SPLP 1312  
QC Batch. 51658 Date Analyzed: 2008-08-21 Analyzed By. RR  
Prep Batch. 44269 SPLP Extraction. 2008-08-20 Prepared By KV  
Sample Preparation 2008-08-21 Prepared By: KV

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
SPLP Silver	U	<0.00210	<0.00300	<0.00210	mg/L	1	0.00210	0.003	0.0021

### Sample: 171025 - Insitu Contents

Laboratory. Lubbock  
Analysis. SPLP As Analytical Method. S 6010B Prep Method. SPLP 1312  
QC Batch. 51658 Date Analyzed: 2008-08-21 Analyzed By. RR  
Prep Batch. 44269 SPLP Extraction 2008-08-20 Prepared By KV  
Sample Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Arsenic	U	<0.00430	<0.0100	<0.00430	mg/L	1	0.00430	0.01	0.0043

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock  
 Analysis: SPLP Ba Analytical Method: S 6010B Prep Method: SPLP 1312  
 QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
 Prep Batch: 44269 SPLP Extraction: 2008-08-20 Prepared By: KV  
 Sample Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Barium		0.121	0.121	<0.00170	mg/L	1	0.00170	0.1	0.0017

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock  
 Analysis: SPLP Cd Analytical Method: S 6010B Prep Method: SPLP 1312  
 QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
 Prep Batch: 44269 SPLP Extraction: 2008-08-20 Prepared By: KV  
 Sample Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Cadmium	U	<0.00140	<0.00500	<0.00140	mg/L	1	0.00140	0.005	0.0014

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock  
 Analysis: SPLP Cl Analytical Method: E 300.0 Prep Method: SPLP 1312  
 QC Batch: 51714 Date Analyzed: 2008-08-22 Analyzed By: RD  
 Prep Batch: 44341 SPLP Extraction: 2008-08-20 Prepared By: RD  
 Sample Preparation: 2008-08-22 Prepared By: RD

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Chloride		99.7	99.7	<3.42	mg/L	25	3.42	0.5	0.137

**Sample: 171025 - Insitu Contents**

Report Date August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed. #1

Page Number: 6 of 37  
Eddy County, NM

Laboratory: Lubbock  
Analysis: SPLP Cr  
QC Batch: 51658  
Prep Batch: 44269

Analytical Method: S 6010B  
Date Analyzed: 2008-08-21  
SPLP Extraction: 2008-08-20  
Sample Preparation: 2008-08-21

Prep Method: SPLP 1312  
Analyzed By: RR  
Prepared By: KV  
Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Chromium	U	<0.000900	<0.00500	<0.000900	mg/L	1	0.000900	0.005	0.0009

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock  
Analysis: SPLP Cyanide  
QC Batch: 51705  
Prep Batch: 44332

Analytical Method: SM 4500-CN C,E  
Date Analyzed: 2008-08-21  
SPLP Extraction: 2008-08-20  
Sample Preparation: 2008-08-21

Prep Method: SPLP 1312  
Analyzed By: SS  
Prepared By: SS  
Prepared By: SS

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Cyanide	U	<1.94	<2.00	<1.94	mg/Kg	1	1.94	2	1.94

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock  
Analysis: SPLP Fluoride  
QC Batch: 51714  
Prep Batch: 44341

Analytical Method: E 300.0  
Date Analyzed: 2008-08-22  
SPLP Extraction: 2008-08-20  
Sample Preparation: 2008-08-22

Prep Method: SPLP 1312  
Analyzed By: RD  
Prepared By: RD  
Prepared By: RD

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Fluoride	U	<0.444	<1.00	<0.444	mg/L	5	0.444	0.2	0.0889

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock  
Analysis: SPLP Hg  
QC Batch: 51649  
Prep Batch: 44279

Analytical Method: S 7470A  
Date Analyzed: 2008-08-21  
Sample Preparation: 2008-08-21

Prep Method: N/A  
Analyzed By: KV  
Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
SPLP Mercury	U	<0.0000336	<0.000200	<0 0000336	mg/L	1	0.0000336	0.0002	3 36e-05

**Sample: 171025 - Insitu Contents**

Laboratory	Lubbock								
Analysis	SPLP NO3 (IC)		Analytical Method:	E 300.0		Prep Method	SPLP 1312		
QC Batch	51714		Date Analyzed	2008-08-22		Analyzed By:	RD		
Prep Batch	44341		SPLP Extraction:	2008-08-20		Prepared By:	RD		
			Sample Preparation	2008-08-22		Prepared By:	RD		

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	U	<0 350	<1.00	<0.350	mg/L	5	0 350	0 2	0.07

**Sample: 171025 - Insitu Contents**

Laboratory	Lubbock						
Analysis:	SPLP PAH		Analytical Method:	S 8270C		Prep Method.	SPLP 1312
QC Batch.	51663		Date Analyzed	2008-08-25		Analyzed By	DS
Prep Batch	44297		SPLP Extraction:	2008-08-22		Prepared By:	DS
			Sample Preparation	2008-08-23		Prepared By.	DS

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Naphthalene	U	<0.0000853	<0 000200	<0.0000853	mg/L	1	0.0000853	0.0002	8 53e-05
Acenaphthylene	U	<0.0000768	<0.000200	<0.0000768	mg/L	1	0 0000768	0 0002	7.68e-05
Acenaphthene	U	<0.000103	<0.000200	<0.000103	mg/L	1	0 000103	0 0002	0 0001028
Dibenzofuran	U	<0.000200	<0 000200	<0.000200	mg/L	1	0.000200	0.0002	0.0002
Fluorene	U	<0.0000861	<0.000200	<0.0000861	mg/L	1	0 0000861	0 0002	8.61e-05
Anthracene	U	<0.000170	<0.000200	<0.000170	mg/L	1	0 000170	0.0002	0.00017
Phenanthrene	U	<0 0000884	<0.000200	<0.0000884	mg/L	1	0.0000884	0 0002	8.84e-05
Fluoranthene	U	<0.0000969	<0 000200	<0.0000969	mg/L	1	0 0000969	0 0002	9.69e-05
Pyrene	U	<0 0000855	<0 000200	<0.0000855	mg/L	1	0 0000855	0.0002	8.55e-05
Benzo(a)anthracene	U	<0.0000703	<0.000200	<0.0000703	mg/L	1	0 0000703	0.0002	7.03e-05
Chrysene	U	<0.000113	<0.000200	<0.000113	mg/L	1	0 000113	0.0002	0 0001129
Benzo(b)fluoranthene	U	<0 000134	<0 000200	<0.000134	mg/L	1	0 000134	0.0002	0 0001343
Benzo(k)fluoranthene	U	<0 000227	<0.000200	<0.000227	mg/L	1	0.000227	0.0002	0 000227
Benzo(a)pyrene	U	<0.000200	<0.000200	<0.000200	mg/L	1	0.000200	0.0002	0.0002
Indeno(1,2,3-cd)pyrene	U	<0.000253	<0.000200	<0.000253	mg/L	1	0 000253	0.0002	0 000253
Dibenzo(a,h)anthracene	U	<0 000180	<0 000200	<0.000180	mg/L	1	0 000180	0.0002	0.00018
Benzo(g,h,i)perylene	U	<0 000158	<0.000200	<0.000158	mg/L	1	0 000158	0.0002	0.000158



Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl		0.0477	mg/L	1	0.0800	60	37.4 - 123
Nitrobenzene-d5		0.0454	mg/L	1	0.0800	57	34.3 - 130
Terphenyl-d14		0.0720	mg/L	1	0.0800	90	10 - 252

**Sample: 171025 - Insitu Contents**

Laboratory:	Lubbock						
Analysis:	SPLP Pb	Analytical Method:	S 6010B	Prep Method:	SPLP 1312		
QC Batch:	51658	Date Analyzed:	2008-08-21	Analyzed By:	RR		
Prep Batch:	44269	SPLP Extraction:	2008-08-20	Prepared By:	KV		
		Sample Preparation:	2008-08-21	Prepared By:	KV		

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
SPLP Lead	U	<0.00320	<0.0100	<0.00320	mg/L	1	0.00320	0.01	0.0032

**Sample: 171025 - Insitu Contents**

Laboratory:	Lubbock						
Analysis:	SPLP PCB	Analytical Method:	S 8082	Prep Method:	SPLP 1312		
QC Batch:	51822	Date Analyzed:	2008-08-26	Analyzed By:	TG		
Prep Batch:	44447	SPLP Extraction:	2008-08-24	Prepared By:	TG		
		Sample Preparation:	2008-08-26	Prepared By:	TG		

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Aroclor 1016 (PCB-1016)	U	<0.000122	<0.000500	<0.000122	mg/L	1	0.000122	0.0005	0.0001223
Aroclor 1221 (PCB-1221)	U	<0.000118	<0.000500	<0.000118	mg/L	1	0.000118	0.0005	0.0001176
Aroclor 1232 (PCB-1232)	U	<0.0000459	<0.000500	<0.0000459	mg/L	1	0.0000459	0.0005	4.59e-05
Aroclor 1242 (PCB-1242)	U	<0.000125	<0.000500	<0.000125	mg/L	1	0.000125	0.0005	0.0001252
Aroclor 1248 (PCB-1248)	U	<0.0000546	<0.000500	<0.0000546	mg/L	1	0.0000546	0.0005	5.46e-05
Aroclor 1254 (PCB-1254)	U	<0.0000569	<0.000500	<0.0000569	mg/L	1	0.0000569	0.0005	5.69e-05
Aroclor 1260 (PCB-1260)	U	<0.0000331	<0.000500	<0.0000331	mg/L	1	0.0000331	0.0005	3.31e-05
Aroclor 1268 (PCB-1268)	U	<0.0000282	<0.000500	<0.0000282	mg/L	1	0.0000282	0.0005	2.82e-05

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.000526	mg/L	1	0.000500	105	10 - 128

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock

Analysis	SPLP Se	Analytical Method:	S 6010B	Prep Method	SPLP 1312
QC Batch:	51658	Date Analyzed:	2008-08-21	Analyzed By:	RR
Prep Batch:	44269	SPLP Extraction:	2008-08-20	Prepared By:	KV
		Sample Preparation	2008-08-21	Prepared By:	KV

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
SPLP Selenium	U	<0.0131	<0.0500	<0.0131	mg/L	1	0.0131	0.05	0.0131

**Sample: 171025 - Insitu Contents**

Laboratory	Lubbock				
Analysis	SPLP U	Analytical Method:	S 6010B	Prep Method.	SPLP 1312
QC Batch:	51658	Date Analyzed:	2008-08-21	Analyzed By:	RR
Prep Batch	44269	SPLP Extraction:	2008-08-20	Prepared By	KV
		Sample Preparation	2008-08-21	Prepared By	KV

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
SPLP U	U	<0.0105	<0.0500	<0.0105	mg/L	1	0.0105	0.05	0.0105

**Sample: 171025 - Insitu Contents**

Laboratory	Lubbock				
Analysis	SPLP Volatiles	Analytical Method:	S 8260B	Prep Method.	SPLP 1312
QC Batch:	51703	Date Analyzed:	2008-08-20	Analyzed By:	JG
Prep Batch	44330	SPLP Extraction:	2008-08-21	Prepared By	JG
		Sample Preparation:	2008-08-20	Prepared By	JG

Parameter	Flag	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Vinyl Chloride	U	<0.135	<1.00	<0.135	µg/L	1	0.135	1	0.135
1,1-Dichloroethene	U	<0.136	<1.00	<0.136	µg/L	1	0.136	1	0.136
Methylene chloride	J	<b>3.41</b>	<5.00	<0.649	µg/L	1	0.649	5	0.649
1,1-Dichloroethane	U	<0.0600	<1.00	<0.0600	µg/L	1	0.0600	1	0.06
1,2-Dichloroethane (EDC)	U	<0.113	<1.00	<0.113	µg/L	1	0.113	1	0.113
Chloroform	U	<0.141	<1.00	<0.141	µg/L	1	0.141	1	0.141
1,1,1-Trichloroethane	U	<0.116	<1.00	<0.116	µg/L	1	0.116	1	0.116
Benzene	J	<b>0.470</b>	<1.00	<0.146	µg/L	1	0.146	1	0.146
Carbon Tetrachloride	U	<0.0790	<1.00	<0.0790	µg/L	1	0.0790	1	0.079
Trichloroethene (TCE)	U	<0.117	<1.00	<0.117	µg/L	1	0.117	1	0.117
Toluene		<b>1.57</b>	<b>1.57</b>	<0.0600	µg/L	1	0.0600	1	0.06
1,1,2-Trichloroethane	U	<0.135	<1.00	<0.135	µg/L	1	0.135	1	0.135
1,2-Dibromoethane (EDB)	U	<0.0700	<1.00	<0.0700	µg/L	1	0.0700	1	0.07

*continued*

sample 171025 continued

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Tetrachloroethene (PCE)	U	<0.270	<1.00	<0.270	µg/L	1	0.270	1	0.27
Ethylbenzene	J	0.750	<1.00	<0.0360	µg/L	1	0.0360	1	0.036
m,p-Xylene		4.25	4.25	<0.0940	µg/L	1	0.0940	1	0.094
o-Xylene		1.39	1.39	<0.0960	µg/L	1	0.0960	1	0.096
1,1,2,2-Tetrachloroethane	U	<0.125	<1.00	<0.125	µg/L	1	0.125	1	0.125

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		46.1	µg/L	1	50.0	92	70 - 130
Toluene-d8		49.5	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		50.8	µg/L	1	50.0	102	70 - 130

**Sample: 171025 - Insitu Contents**

Laboratory: Lubbock  
 Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
 QC Batch: 51600      Date Analyzed: 2008-08-20      Analyzed By: CM  
 Prep Batch: 44246      Sample Preparation: 2008-08-20      Prepared By: CM

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
TRPHC		39.9	39.9	<1.06	mg/Kg	1	1.06	10	1.0568

**Method Blank (1)**

QC Batch: 51597      Date Analyzed: 2008-08-20      Analyzed By: RD  
 Prep Batch: 44245      QC Preparation: 2008-08-19      Prepared By: RD

Parameter	Flag	Result	Units	Reporting Limits
Chloride		<0.353	mg/Kg	0.3527

**Method Blank (1)**

QC Batch: 51600      Date Analyzed: 2008-08-20      Analyzed By: CM  
 Prep Batch: 44246      QC Preparation: 2008-08-20      Prepared By: CM

Report Date. August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed. #1

Page Number 11 of 37  
Eddy County, NM

Parameter	Flag	Result	Units	Reporting Limits
TRPHC		<1.06	mg/Kg	1.0568

**Method Blank (1)**

QC Batch 51649 Date Analyzed 2008-08-21 Analyzed By: KV  
Prep Batch 44279 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Mercury		<0.0000336	mg/L	3.36e-05

**Method Blank (1)**

QC Batch 51658 Date Analyzed 2008-08-21 Analyzed By: RR  
Prep Batch 44269 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Cadmium		<0.00140	mg/L	0.0014

**Method Blank (1)**

QC Batch 51658 Date Analyzed 2008-08-21 Analyzed By: RR  
Prep Batch 44269 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Lead		<0.00320	mg/L	0.0032

**Method Blank (1)**

QC Batch 51658 Date Analyzed 2008-08-21 Analyzed By: RR  
Prep Batch 44269 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Selenium		<0.0131	mg/L	0.0131

Report Date: August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed. #1

Page Number 12 of 37  
Eddy County, NM

**Method Blank (1)**

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Arsenic		<0.00430	mg/L	0.0043

**Method Blank (1)**

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Barium		<0.00170	mg/L	0.0017

**Method Blank (1)**

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Chromium		<0.000900	mg/L	0.0009

**Method Blank (1)**

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
SPLP Silver		<0.00210	mg/L	0.0021

**Method Blank (1)**

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Report Date August 27, 2008  
MEWBOU027PIT

Work Order. 8081912  
Bradley 6 Fed #1

Page Number 13 of 37  
Eddy County, NM

Parameter	Flag	Result	Units	Reporting Limits
SPLP U		<0.0105	mg/L	0.0105

**Method Blank (1)**

QC Batch. 51663  
Prep Batch. 44297

Date Analyzed. 2008-08-25  
QC Preparation: 2008-08-23

Analyzed By. DS  
Prepared By. DS

Parameter	Flag	Result	Units	Reporting Limits
Naphthalene		<0.0000853	mg/L	8.53e-05
Acenaphthylene		<0.0000768	mg/L	7.68e-05
Acenaphthene		<0.000103	mg/L	0.0001028
Dibenzofuran		<0.000200	mg/L	0.0002
Fluorene		<0.0000861	mg/L	8.61e-05
Anthracene		<0.000170	mg/L	0.00017
Phenanthrene		<0.0000884	mg/L	8.84e-05
Fluoranthene		<0.0000969	mg/L	9.69e-05
Pyrene		<0.0000855	mg/L	8.55e-05
Benzo(a)anthracene		<0.0000703	mg/L	7.03e-05
Chrysene		<0.000113	mg/L	0.0001129
Benzo(b)fluoranthene		<0.000134	mg/L	0.0001343
Benzo(k)fluoranthene		<0.000227	mg/L	0.000227
Benzo(a)pyrene		<0.000200	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000253	mg/L	0.000253
Dibenzo(a,h)anthracene		<0.000180	mg/L	0.00018
Benzo(g,h,i)perylene		<0.000158	mg/L	0.000158

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl		0.0554	mg/L	1	0.0800	69	10 - 146
Nitrobenzene-d5		0.0599	mg/L	1	0.0800	75	10 - 141
Terphenyl-d14		0.0723	mg/L	1	0.0800	90	10 - 266

**Method Blank (1)**

QC Batch 51703  
Prep Batch: 44330

Date Analyzed 2008-08-20  
QC Preparation: 2008-08-21

Analyzed By. JG  
Prepared By: JG

Parameter	Flag	Result	Units	Reporting Limits
Vinyl Chloride		<0.135	µg/L	0.135
1,1-Dichloroethene		<0.136	µg/L	0.136
Methylene chloride		<0.649	µg/L	0.649
1,1-Dichloroethane		<0.0600	µg/L	0.06
1,2-Dichloroethane (EDC)		<0.113	µg/L	0.113

*continued*

*method blank continued*

Parameter	Flag	Result	Units	Reporting Limits
Chloroform		<0.141	µg/L	0.141
1,1,1-Trichloroethane		<0.116	µg/L	0.116
Benzene		<0.146	µg/L	0.146
Carbon Tetrachloride		<0.0790	µg/L	0.079
Trichloroethene (TCE)		<0.117	µg/L	0.117
Toluene		<0.0600	µg/L	0.06
1,1,2-Trichloroethane		<0.135	µg/L	0.135
1,2-Dibromoethane (EDB)		<0.0700	µg/L	0.07
Tetrachloroethene (PCE)		<0.270	µg/L	0.27
Ethylbenzene		<0.0360	µg/L	0.036
m,p-Xylene		<0.0940	µg/L	0.094
o-Xylene		<0.0960	µg/L	0.096
1,1,2,2-Tetrachloroethane		<0.125	µg/L	0.125

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.3	µg/L	1	50.0	97	70 - 130
Toluene-d8		49.6	µg/L	1	50.0	99	70 - 130
4-Bromofluorobenzene (4-BFB)		48.4	µg/L	1	50.0	97	70 - 130

**Method Blank (1)**

QC Batch: 51705      Date Analyzed: 2008-08-21      Analyzed By: SS  
Prep Batch: 44332      QC Preparation: 2008-08-21      Prepared By: SS

Parameter	Flag	Result	Units	Reporting Limits
SPLP Cyanide		<1.94	mg/Kg	1.94

**Method Blank (1)**

QC Batch: 51714      Date Analyzed: 2008-08-22      Analyzed By: RD  
Prep Batch: 44341      QC Preparation: 2008-08-22      Prepared By: RD

Parameter	Flag	Result	Units	Reporting Limits
Nitrate-N		<0.0700	mg/L	0.07

**Method Blank (1)**

QC Batch: 51714      Date Analyzed: 2008-08-22      Analyzed By: RD  
Prep Batch: 44341      QC Preparation: 2008-08-22      Prepared By: RD

Report Date August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed #1

Page Number. 15 of 37  
Eddy County, NM

Parameter	Flag	Result	Units	Reporting Limits
SPLP Chloride		<0.137	mg/L	0 137

**Method Blank (1)**

QC Batch: 51714 Date Analyzed: 2008-08-22 Analyzed By: RD  
Prep Batch: 44341 QC Preparation: 2008-08-22 Prepared By: RD

Parameter	Flag	Result	Units	Reporting Limits
SPLP Fluoride		<0.0889	mg/L	0 0889

**Method Blank (1)**

QC Batch: 51822 Date Analyzed: 2008-08-26 Analyzed By: TG  
Prep Batch: 44447 QC Preparation: 2008-08-26 Prepared By: TG

Parameter	Flag	Result	Units	Reporting Limits
Aroclor 1016 (PCB-1016)		<0.000122	mg/L	0 0001223
Aroclor 1221 (PCB-1221)		<0.000118	mg/L	0 0001176
Aroclor 1232 (PCB-1232)		<0 0000459	mg/L	4 59e-05
Aroclor 1242 (PCB-1242)		<0.000125	mg/L	0.0001252
Aroclor 1248 (PCB-1248)		<0 0000546	mg/L	5 46e-05
Aroclor 1254 (PCB-1254)		<0 0000569	mg/L	5.69e-05
Aroclor 1260 (PCB-1260)		<0.0000331	mg/L	3 31e-05
Aroclor 1268 (PCB-1268)		<0.0000282	mg/L	2.82e-05

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.000329	mg/L	1	0.000500	66	10 - 128

**Duplicate (1)**

QC Batch: 51704 Date Analyzed: 2008-08-21 Analyzed By: SS  
Prep Batch: 44331 QC Preparation: 2008-08-21 Prepared By: SS

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Paint Filter	PASS	PASS		1	0	0



**Laboratory Control Spike (LCS-1)**

QC Batch 51597  
Prep Batch: 44245

Date Analyzed: 2008-08-20  
QC Preparation: 2008-08-19

Analyzed By: RD  
Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
Chloride	11.9	mg/Kg	1	12.5	<0.353	95	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
Chloride	11.7	mg/Kg	1	12.5	<0.353	94	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: 51600  
Prep Batch: 44246

Date Analyzed: 2008-08-20  
QC Preparation: 2008-08-20

Analyzed By: CM  
Prepared By: CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
TRPHC	225	mg/Kg	1	250	<1.06	90	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	236	mg/Kg	1	250	<1.06	94	75.5 - 136	5	20

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

**Laboratory Control Spike (LCS-1)**

QC Batch 51649  
Prep Batch: 44279

Date Analyzed: 2008-08-21  
QC Preparation: 2008-08-21

Analyzed By: KV  
Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
SPLP Mercury	0.00475	mg/L	1	0.00500	<0.0000336	95	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	0.00499	mg/L	1	0.00500	<0.0000336	100	80 - 120	5	20

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

**Laboratory Control Spike (LCS-1)**

QC Batch 51658 Date Analyzed 2008-08-21 Analyzed By: RR  
Prep Batch 44269 QC Preparation: 2008-08-21 Prepared By: KV

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
SPLP Cadmium	0.230	mg/L	1	0.250	<0.00140	92	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	0.236	mg/L	1	0.250	<0.00140	94	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 51658 Date Analyzed 2008-08-21 Analyzed By: RR  
Prep Batch 44269 QC Preparation: 2008-08-21 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Lead	0.463	mg/L	1	0.500	<0.00320	93	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	0.478	mg/L	1	0.500	<0.00320	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 51658 Date Analyzed 2008-08-21 Analyzed By: RR  
Prep Batch 44269 QC Preparation: 2008-08-21 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Selenium	0.434	mg/L	1	0.500	<0.0131	87	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	0.436	mg/L	1	0.500	<0.0131	87	85 - 115	0	20

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

**Laboratory Control Spike (LCS-1)**

QC Batch: 51658  
Prep Batch: 44269

Date Analyzed: 2008-08-21  
QC Preparation: 2008-08-21

Analyzed By: RR  
Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
SPLP Arsenic	0.458	mg/L	1	0.500	<0.00430	92	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	0.476	mg/L	1	0.500	<0.00430	95	85 - 115	4	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: 51658  
Prep Batch: 44269

Date Analyzed: 2008-08-21  
QC Preparation: 2008-08-21

Analyzed By: RR  
Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
SPLP Barium	0.933	mg/L	1	1.00	<0.00170	93	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	0.965	mg/L	1	1.00	<0.00170	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: 51658  
Prep Batch: 44269

Date Analyzed: 2008-08-21  
QC Preparation: 2008-08-21

Analyzed By: RR  
Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
SPLP Chromium	0.0952	mg/L	1	0.100	<0.000900	95	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
SPLP Chromium	0.0970	mg/L	1	0.100	<0.000900	97	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. 51658 Date Analyzed 2008-08-21 Analyzed By. RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By. KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
SPLP Silver	0 119	mg/L	1	0.125	<0.00210	95	85 - 115

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

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
SPLP Silver	0 120	mg/L	1	0.125	<0.00210	96	85 - 115	1	20

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

**Laboratory Control Spike (LCS-1)**

QC Batch. 51658 Date Analyzed 2008-08-21 Analyzed By. RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By. KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP U	0.497	mg/L	1	0.500	<0.0105	99	90 - 110

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
SPLP U	0 481	mg/L	1	0.500	<0.0105	96	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. 51663 Date Analyzed. 2008-08-25 Analyzed By DS  
Prep Batch: 44297 QC Preparation: 2008-08-23 Prepared By. DS

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
Naphthalene	0 0378	mg/L	1	0.0800	<0 0000853	47	10 - 141
Acenaphthylene	0 0432	mg/L	1	0 0800	<0 0000768	54	10 - 152
Acenaphthene	0 0413	mg/L	1	0 0800	<0.000103	52	10 - 151
Dibenzofuran	0 0421	mg/L	1	0 0800	<0.000200	53	10 - 148
Fluorene	0.0455	mg/L	1	0.0800	<0 0000861	57	10 - 172
Anthracene	0.0544	mg/L	1	0.0800	<0.000170	68	19 6 - 172
Phenanthrene	0 0480	mg/L	1	0.0800	<0.0000884	60	22 5 - 172
Fluoranthene	0 0602	mg/L	1	0.0800	<0.0000969	75	17.3 - 187
Pyrene	0.0629	mg/L	1	0.0800	<0.0000855	79	14 9 - 199

continued ..

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzo(a)anthracene	0.0632	mg/L	1	0.0800	<0.0000703	79	19.4 - 185
Chrysene	0.0618	mg/L	1	0.0800	<0.000113	77	18.4 - 188
Benzo(b)fluoranthene	0.0682	mg/L	1	0.0800	<0.000134	85	10 - 193
Benzo(k)fluoranthene	0.0838	mg/L	1	0.0800	<0.000227	105	27.8 - 196
Benzo(a)pyrene	0.0792	mg/L	1	0.0800	<0.000200	99	12.4 - 205
Indeno(1,2,3-cd)pyrene	0.0839	mg/L	1	0.0800	<0.000253	105	10 - 198
Dibenzo(a,h)anthracene	0.0800	mg/L	1	0.0800	<0.000180	100	10 - 172
Benzo(g,h,i)perylene	0.0801	mg/L	1	0.0800	<0.000158	100	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	0.0355	mg/L	1	0.0800	<0.0000853	44	10 - 141	6	20
Acenaphthylene	0.0414	mg/L	1	0.0800	<0.0000768	52	10 - 152	4	20
Acenaphthene	0.0392	mg/L	1	0.0800	<0.000103	49	10 - 151	5	20
Dibenzofuran	0.0398	mg/L	1	0.0800	<0.000200	50	10 - 148	6	20
Fluorene	0.0422	mg/L	1	0.0800	<0.0000861	53	10 - 172	8	20
Anthracene	0.0520	mg/L	1	0.0800	<0.000170	65	19.6 - 172	4	20
Phenanthrene	0.0458	mg/L	1	0.0800	<0.0000884	57	22.5 - 172	5	20
Fluoranthene	0.0580	mg/L	1	0.0800	<0.0000969	72	17.3 - 187	4	20
Pyrene	0.0598	mg/L	1	0.0800	<0.0000855	75	14.9 - 199	5	20
Benzo(a)anthracene	0.0599	mg/L	1	0.0800	<0.0000703	75	19.4 - 185	5	20
Chrysene	0.0586	mg/L	1	0.0800	<0.000113	73	18.4 - 188	5	20
Benzo(b)fluoranthene	0.0663	mg/L	1	0.0800	<0.000134	83	10 - 193	3	20
Benzo(k)fluoranthene	0.0794	mg/L	1	0.0800	<0.000227	99	27.8 - 196	5	20
Benzo(a)pyrene	0.0763	mg/L	1	0.0800	<0.000200	95	12.4 - 205	4	20
Indeno(1,2,3-cd)pyrene	0.0803	mg/L	1	0.0800	<0.000253	100	10 - 198	4	20
Dibenzo(a,h)anthracene	0.0771	mg/L	1	0.0800	<0.000180	96	10 - 172	4	20
Benzo(g,h,i)perylene	0.0754	mg/L	1	0.0800	<0.000158	94	10 - 186	6	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	0.0377	0.0358	mg/L	1	0.0800	47	45	10 - 165
Nitrobenzene-d5	0.0429	0.0408	mg/L	1	0.0800	54	51	10 - 157
Terphenyl-d14	0.0741	0.0704	mg/L	1	0.0800	93	88	10 - 220

#### Laboratory Control Spike (LCS-1)

QC Batch 51703  
Prep Batch 44330

Date Analyzed 2008-08-20  
QC Preparation 2008-08-21

Analyzed By: JG  
Prepared By: JG

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
1,1-Dichloroethene	48.9	µg/L	1	50.0	<0.136	98	70 - 130

continued

control spikes continued ...

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	49.4	µg/L	1	50.0	<0.146	99	70 - 130
Trichloroethene (TCE)	63.6	µg/L	1	50.0	<0.117	127	70 - 130
Toluene	50.0	µg/L	1	50.0	<0.0600	100	70 - 130
Chlorobenzene	50.2	µg/L	1	50.0	<0.0540	100	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	48.4	µg/L	1	50.0	<0.136	97	70 - 130	1	
Benzene	49.1	µg/L	1	50.0	<0.146	98	70 - 130	1	
Trichloroethene (TCE)	63.9	µg/L	1	50.0	<0.117	128	70 - 130	0	
Toluene	49.7	µg/L	1	50.0	<0.0600	99	70 - 130	1	
Chlorobenzene	49.8	µg/L	1	50.0	<0.0540	100	70 - 130	1	

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	46.0	46.4	µg/L	1	50.0	92	93	70 - 130
Toluene-d8	49.6	49.8	µg/L	1	50.0	99	100	70 - 130
4-Bromofluorobenzene (4-BFB)	50.3	49.8	µg/L	1	50.0	101	100	70 - 130

#### Laboratory Control Spike (LCS-1)

QC Batch: 51705  
Prep Batch: 44332

Date Analyzed: 2008-08-21  
QC Preparation: 2008-08-21

Analyzed By: SS  
Prepared By: SS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cyanide	11.9	mg/Kg	1	12.0	<1.94	99	-

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	11.8	mg/Kg	1	12.0	<1.94	98	-	1	

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: 51714  
Prep Batch: 44341

Date Analyzed: 2008-08-22  
QC Preparation: 2008-08-22

Analyzed By: RD  
Prepared By: RD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	2.56	mg/L	1	2.50	<0.0700	102	90 - 110

Report Date. August 27, 2008  
MEWBOU027PIT

Work Order. 8081912  
Bradley 6 Fed #1

Page Number 22 of 37  
Eddy County, NM

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

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N	2.54	mg/L	1	2.50	<0.0700	102	90 - 110	1	20

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

#### Laboratory Control Spike (LCS-1)

QC Batch 51714  
Prep Batch 44341

Date Analyzed: 2008-08-22  
QC Preparation: 2008-08-22

Analyzed By RD  
Prepared By. RD

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

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

Param	LCS 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	0	20

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

#### Laboratory Control Spike (LCS-1)

QC Batch: 51714  
Prep Batch 44341

Date Analyzed: 2008-08-22  
QC Preparation: 2008-08-22

Analyzed By: RD  
Prepared By. RD

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Fluoride	2.25	mg/L	1	2.50	<0.0889	90	90 - 110

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

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
SPLP Fluoride	2.28	mg/L	1	2.50	<0.0889	91	90 - 110	1	20

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

#### Laboratory Control Spike (LCS-1)

QC Batch: 51822  
Prep Batch. 44447

Date Analyzed: 2008-08-26  
QC Preparation: 2008-08-26

Analyzed By: TG  
Prepared By. TG

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
Aroclor 1260 (PCB-1260)	0.00155	mg/L	1	0.00200	<0.0000331	78	10 - 128

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

Report Date: August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed. #1

Page Number: 23 of 37  
Eddy County, NM

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Aroclor 1260 (PCB-1260)	0.00156	mg/L	1	0.00200	<0.0000331	78	10 - 128	1	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Deca chlorobiphenyl	0.000324	0.000322	mg/L	1	0 000500	65	64	10 - 128

**Matrix Spike (MS-1)** Spiked Sample: 170511

QC Batch. 51597 Date Analyzed. 2008-08-20 Analyzed By RD  
Prep Batch: 44245 QC Preparation: 2008-08-19 Prepared By. RD

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10000	mg/Kg	500	6250	4018.87	96	68.7 - 119

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	9850	mg/Kg	500	6250	4018.87	93	68.7 - 119	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: 171024

QC Batch. 51600 Date Analyzed 2008-08-20 Analyzed By. CM  
Prep Batch 44246 QC Preparation 2008-08-20 Prepared By: CM

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	483	mg/Kg	1	250	<1.06	193	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	480	mg/Kg	1	250	<1.06	192	10 - 354	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: 171025

QC Batch. 51649 Date Analyzed: 2008-08-21 Analyzed By KV  
Prep Batch 44279 QC Preparation: 2008-08-21 Prepared By. KV



Report Date. August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed #1

Page Number: 24 of 37  
Eddy County, NM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Mercury	0.00497	mg/L	1	0.00500	<0.0000336	99	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	0.00495	mg/L	1	0.00500	<0.0000336	99	80 - 120	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 171025

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Cadmium	0.248	mg/L	1	0.250	<0.00140	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 Cadmium	0.248	mg/L	1	0.250	<0.00140	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: 171025

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Lead	0.456	mg/L	1	0.500	<0.00320	91	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	0.448	mg/L	1	0.500	<0.00320	90	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. 171025

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Report Date August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed #1

Page Number. 25 of 37  
Eddy County, NM

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
SPLP Selenium	0.462	mg/L	1	0.500	<0.0131	92	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	0.421	mg/L	1	0.500	<0.0131	84	75 - 125	9	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 171025

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Arsenic	0.513	mg/L	1	0.500	<0.00430	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 Arsenic	0.509	mg/L	1	0.500	<0.00430	102	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: 171025

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
SPLP Barium	1.09	mg/L	1	1.00	0.121	97	75 - 125

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
SPLP Barium	1.09	mg/L	1	1.00	0.121	97	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. 171025

QC Batch: 51658 Date Analyzed: 2008-08-21 Analyzed By: RR  
Prep Batch: 44269 QC Preparation: 2008-08-21 Prepared By: KV

Report Date August 27, 2008  
MEWBOU027PIT

Work Order 8081912  
Bradley 6 Fed. #1

Page Number. 26 of 37  
Eddy County, NM

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
SPLP Chromium	0.102	mg/L	1	0.100	<0.000900	102	75 - 125

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
SPLP Chromium	0.103	mg/L	1	0.100	<0.000900	103	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. 171025

QC Batch 51658  
Prep Batch 44269

Date Analyzed: 2008-08-21  
QC Preparation 2008-08-21

Analyzed By: RR  
Prepared By: KV

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Silver	0.123	mg/L	1	0.125	<0.00210	98	75 - 125

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
SPLP Silver	0.122	mg/L	1	0.125	<0.00210	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. 171025

QC Batch. 51658  
Prep Batch: 44269

Date Analyzed: 2008-08-21  
QC Preparation: 2008-08-21

Analyzed By: RR  
Prepared By: KV

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
SPLP U	0.535	mg/L	1	0.500	<0.0105	107	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	0.537	mg/L	1	0.500	<0.0105	107	90 - 110	0	

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

**Matrix Spike (MS-1)** Spiked Sample. 171025

QC Batch: 51663  
Prep Batch: 44297

Date Analyzed: 2008-08-25  
QC Preparation: 2008-08-23

Analyzed By: DS  
Prepared By: DS

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0316	mg/L	1	0.0800	<0.0000853	40	16.3 - 89.3
Acenaphthylene	0.0445	mg/L	1	0.0800	<0.0000768	56	13.9 - 103
Acenaphthene	0.0432	mg/L	1	0.0800	<0.000103	54	12.4 - 101
Dibenzofuran	0.0456	mg/L	1	0.0800	<0.000200	57	10 - 106
Fluorene	0.0511	mg/L	1	0.0800	<0.0000861	64	10 - 110
Anthracene	0.0565	mg/L	1	0.0800	<0.000170	71	18.8 - 121
Phenanthrene	0.0549	mg/L	1	0.0800	<0.0000884	69	20.6 - 118
Fluoranthene	0.0616	mg/L	1	0.0800	<0.0000969	77	19.1 - 133
Pyrene	0.0622	mg/L	1	0.0800	<0.0000855	78	10 - 192
Benzo(a)anthracene	0.0605	mg/L	1	0.0800	<0.0000703	76	10 - 143
Chrysene	0.0635	mg/L	1	0.0800	<0.000113	79	10 - 179
Benzo(b)fluoranthene	0.0603	mg/L	1	0.0800	<0.000134	75	10 - 141
Benzo(k)fluoranthene	0.0741	mg/L	1	0.0800	<0.000227	93	10 - 157
Benzo(a)pyrene	0.0685	mg/L	1	0.0800	<0.000200	86	10 - 146
Indeno(1,2,3-cd)pyrene	0.0736	mg/L	1	0.0800	<0.000253	92	10 - 147
Dibenzo(a,h)anthracene	0.0708	mg/L	1	0.0800	<0.000180	88	10 - 160
Benzo(g,h,i)perylene	0.0701	mg/L	1	0.0800	<0.000158	88	13.8 - 132

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
Naphthalene	0.0316	mg/L	1	0.0800	<0.0000853	40	16.3 - 89.3	0	20
Acenaphthylene	0.0452	mg/L	1	0.0800	<0.0000768	56	13.9 - 103	2	20
Acenaphthene	0.0436	mg/L	1	0.0800	<0.000103	54	12.4 - 101	1	20
Dibenzofuran	0.0463	mg/L	1	0.0800	<0.000200	58	10 - 106	2	20
Fluorene	0.0529	mg/L	1	0.0800	<0.0000861	66	10 - 110	4	20
Anthracene	0.0573	mg/L	1	0.0800	<0.000170	72	18.8 - 121	1	20
Phenanthrene	0.0551	mg/L	1	0.0800	<0.0000884	69	20.6 - 118	0	20
Fluoranthene	0.0621	mg/L	1	0.0800	<0.0000969	78	19.1 - 133	1	20
Pyrene	0.0634	mg/L	1	0.0800	<0.0000855	79	10 - 192	2	20
Benzo(a)anthracene	0.0614	mg/L	1	0.0800	<0.0000703	77	10 - 143	2	20
Chrysene	0.0645	mg/L	1	0.0800	<0.000113	81	10 - 179	2	20
Benzo(b)fluoranthene	0.0607	mg/L	1	0.0800	<0.000134	76	10 - 141	1	20
Benzo(k)fluoranthene	0.0736	mg/L	1	0.0800	<0.000227	92	10 - 157	1	20
Benzo(a)pyrene	0.0685	mg/L	1	0.0800	<0.000200	86	10 - 146	0	20
Indeno(1,2,3-cd)pyrene	0.0739	mg/L	1	0.0800	<0.000253	92	10 - 147	0	20
Dibenzo(a,h)anthracene	0.0701	mg/L	1	0.0800	<0.000180	88	10 - 160	1	20
Benzo(g,h,i)perylene	0.0696	mg/L	1	0.0800	<0.000158	87	13.8 - 132	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil	Spike Amount	MS Rec.	MSD Rec	Rec. Limit
2-Fluorobiphenyl	0.0354	0.0355	mg/L	1	0.08	44	44	10 - 94.8
Nitrobenzene-d5	0.0329	0.0328	mg/L	1	0.08	41	41	10 - 110
Terphenyl-d14	0.0670	0.0676	mg/L	1	0.08	84	84	10 - 114

**Matrix Spike (MS-1)** Spiked Sample. 171025

QC Batch: 51705  
Prep Batch: 44332

Date Analyzed: 2008-08-21  
QC Preparation: 2008-08-21

Analyzed By: SS  
Prepared By: SS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
SPLP Cyanide	11.1	mg/Kg	1	12.0	<1.94	92	-

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	10.8	mg/Kg	1	12.0	<1.94	90	-	3	

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

**Matrix Spike (MS-1)** Spiked Sample: 171025

QC Batch: 51714  
Prep Batch: 44341

Date Analyzed: 2008-08-22  
QC Preparation: 2008-08-22

Analyzed By: RD  
Prepared By: RD

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
Nitrate-N	71.7	mg/L	25	62.5	<1.75	115	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	58.8	mg/L	25	62.5	<1.75	94	73.6 - 122	20	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 171025

QC Batch: 51714  
Prep Batch: 44341

Date Analyzed: 2008-08-22  
QC Preparation: 2008-08-22

Analyzed By: RD  
Prepared By: RD

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
SPLP Chloride	409	mg/L	25	312	99.6929	99	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	393	mg/L	25	312	99.6929	94	49.8 - 149	4	20

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

Report Date: August 27, 2008  
MEWBOU027PIT

Work Order. 8081912  
Bradley 6 Fed. #1

Page Number 29 of 37  
Eddy County, NM

**Matrix Spike (MS-1)** Spiked Sample 171025

QC Batch. 51714 Date Analyzed. 2008-08-22 Analyzed By RD  
Prep Batch 44341 QC Preparation: 2008-08-22 Prepared By. RD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Fluoride	53.1	mg/L	25	62.5	<2 22	85	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	53.6	mg/L	25	62.5	<2.22	86	63.5 - 127	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 51597 Date Analyzed 2008-08-20 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.7	94	90 - 110	2008-08-20

**Standard (CCV-1)**

QC Batch. 51597 Date Analyzed: 2008-08-20 Analyzed By. RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.5	92	90 - 110	2008-08-20

**Standard (ICV-1)**

QC Batch 51600 Date Analyzed 2008-08-20 Analyzed By. CM

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	90.8	91	80 - 120	2008-08-20

**Standard (CCV-1)**

QC Batch: 51600 Date Analyzed. 2008-08-20 Analyzed By: CM

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	90.4	90	80 - 120	2008-08-20

**Standard (ICV-1)**

QC Batch 51649 Date Analyzed: 2008-08-21 Analyzed By KV

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Mercury		mg/L	0.00500	0.00493	99	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch 51649 Date Analyzed: 2008-08-21 Analyzed By KV

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Mercury		mg/L	0.00500	0.00516	103	80 - 120	2008-08-21

**Standard (ICV-1)**

QC Batch 51658 Date Analyzed: 2008-08-21 Analyzed By RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cadmium		mg/L	1.00	0.981	98	90 - 110	2008-08-21

**Standard (ICV-1)**

QC Batch 51658 Date Analyzed: 2008-08-21 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	0.985	98	90 - 110	2008-08-21

**Standard (ICV-1)**

QC Batch 51658 Date Analyzed: 2008-08-21 Analyzed By RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Selenium		mg/L	1.00	0.972	97	90 - 110	2008-08-21

**Standard (ICV-1)**

QC Batch: 51658                      Date Analyzed: 2008-08-21                      Analyzed By: RR

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Arsenic		mg/L	1.00	0.989	99	90 - 110	2008-08-21

**Standard (ICV-1)**

QC Batch: 51658                      Date Analyzed 2008-08-21                      Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Barium		mg/L	1.00	0.989	99	90 - 110	2008-08-21

**Standard (ICV-1)**

QC Batch 51658                      Date Analyzed. 2008-08-21                      Analyzed By RR

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chromium		mg/L	1.00	0.982	98	90 - 110	2008-08-21

**Standard (ICV-1)**

QC Batch 51658                      Date Analyzed: 2008-08-21                      Analyzed By: RR

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Silver		mg/L	0.125	0.124	99	90 - 110	2008-08-21

**Standard (ICV-1)**

QC Batch. 51658                      Date Analyzed. 2008-08-21                      Analyzed By. RR



Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP U		mg/L	1.00	1.02	102	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch. 51658 Date Analyzed: 2008-08-21 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Cadmium		mg/L	1 00	0 967	97	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch 51658 Date Analyzed. 2008-08-21 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	0.968	97	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch 51658 Date Analyzed: 2008-08-21 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Selenium		mg/L	1.00	0 985	98	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch: 51658 Date Analyzed 2008-08-21 Analyzed By: RR

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Arsenic		mg/L	1 00	0.986	99	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch 51658 Date Analyzed. 2008-08-21 Analyzed By: RR

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Barium		mg/L	1.00	0.983	98	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch 51658 Date Analyzed. 2008-08-21 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chromium		mg/L	1.00	0.978	98	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch: 51658 Date Analyzed 2008-08-21 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	0.123	98	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch: 51658 Date Analyzed 2008-08-21 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	0.982	98	90 - 110	2008-08-21

**Standard (CCV-1)**

QC Batch. 51663 Date Analyzed. 2008-08-25 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	56.5	94	80 - 120	2008-08-25
Acenaphthylene		mg/L	60.0	58.8	98	80 - 120	2008-08-25
Acenaphthene		mg/L	60.0	57.7	96	80 - 120	2008-08-25
Dibenzofuran		mg/L	60.0	59.5	99	80 - 120	2008-08-25
Fluorene		mg/L	60.0	62.7	104	80 - 120	2008-08-25
Anthracene		mg/L	60.0	58.0	97	80 - 120	2008-08-25
Phenanthrene		mg/L	60.0	57.2	95	80 - 120	2008-08-25
Fluoranthene		mg/L	60.0	57.9	96	80 - 120	2008-08-25
Pyrene		mg/L	60.0	59.4	99	80 - 120	2008-08-25

continued

standard continued .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)anthracene		mg/L	60.0	55.8	93	80 - 120	2008-08-25
Chrysene		mg/L	60.0	58.5	98	80 - 120	2008-08-25
Benzo(b)fluoranthene		mg/L	60.0	55.9	93	80 - 120	2008-08-25
Benzo(k)fluoranthene		mg/L	60.0	64.6	108	80 - 120	2008-08-25
Benzo(a)pyrene		mg/L	60.0	58.7	98	80 - 120	2008-08-25
Indeno(1,2,3-cd)pyrene		mg/L	60.0	66.3	110	80 - 120	2008-08-25
Dibenzo(a,h)anthracene		mg/L	60.0	66.2	110	80 - 120	2008-08-25
Benzo(g,h,i)perylene		mg/L	60.0	63.2	105	80 - 120	2008-08-25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorobiphenyl		57.4	mg/L	1	60.0	96	80 - 120
Nitrobenzene-d5		58.8	mg/L	1	60.0	98	80 - 120
Terphenyl-d14		58.4	mg/L	1	60.0	97	80 - 120

#### Standard (CCV-1)

QC Batch 51703 Date Analyzed 2008-08-20 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride	<sup>1</sup>	µg/L	50.0	38.5	77	80 - 120	2008-08-20
1,1-Dichloroethene		µg/L	50.0	45.1	90	80 - 120	2008-08-20
Chloroform		µg/L	50.0	45.1	90	80 - 120	2008-08-20
1,2-Dichloropropane		µg/L	50.0	48.0	96	80 - 120	2008-08-20
Toluene		µg/L	50.0	47.6	95	80 - 120	2008-08-20
Chlorobenzene		µg/L	50.0	48.1	96	80 - 120	2008-08-20
Ethylbenzene		µg/L	50.0	50.2	100	80 - 120	2008-08-20

#### Standard (CCV-2)

QC Batch 51703 Date Analyzed: 2008-08-20 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	39.8	80	80 - 120	2008-08-20
1,1-Dichloroethene		µg/L	50.0	49.7	99	80 - 120	2008-08-20
Chloroform		µg/L	50.0	44.9	90	80 - 120	2008-08-20
1,2-Dichloropropane		µg/L	50.0	48.1	96	80 - 120	2008-08-20
Toluene		µg/L	50.0	48.8	98	80 - 120	2008-08-20
Chlorobenzene		µg/L	50.0	49.0	98	80 - 120	2008-08-20

continued .

<sup>1</sup>Vinyl Chloride outside of control limits on CCV(ICV). CCV(ICV) component average is 91 which is within acceptable range This is acceptable by Method 8000

Report Date: August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed #1

Page Number: 35 of 37  
Eddy County, NM

*standard continued .*

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		µg/L	50.0	50.6	101	80 - 120	2008-08-20

**Standard (ICV-1)**

QC Batch: 51705                      Date Analyzed: 2008-08-21                      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	-	2008-08-21

**Standard (CCV-1)**

QC Batch: 51705                      Date Analyzed: 2008-08-21                      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	-	2008-08-21

**Standard (ICV-1)**

QC Batch: 51714                      Date Analyzed: 2008-08-22                      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	2.60	104	90 - 110	2008-08-22

**Standard (ICV-1)**

QC Batch: 51714                      Date Analyzed: 2008-08-22                      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	11.9	95	90 - 110	2008-08-22

**Standard (ICV-1)**

QC Batch: 51714                      Date Analyzed: 2008-08-22                      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	2.25	90	90 - 110	2008-08-22

**Standard (CCV-1)**

QC Batch: 51714 Date Analyzed: 2008-08-22 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	2.54	102	90 - 110	2008-08-22

**Standard (CCV-1)**

QC Batch: 51714 Date Analyzed: 2008-08-22 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	11.9	95	90 - 110	2008-08-22

**Standard (CCV-1)**

QC Batch: 51714 Date Analyzed: 2008-08-22 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	2.25	90	90 - 110	2008-08-22

**Standard (ICV-1)**

QC Batch: 51822 Date Analyzed: 2008-08-26 Analyzed By: TG

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	0.366	92	85 - 115	2008-08-26
Aroclor 1254 (PCB-1254)		mg/L	0.400	0.381	95	85 - 115	2008-08-26
Aroclor 1260 (PCB-1260)		mg/L	0.400	0.339	85	85 - 115	2008-08-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Deca chlorobiphenyl		0.112	mg/L	1	0.100	112	85 - 115

Report Date: August 27, 2008  
MEWBOU027PIT

Work Order: 8081912  
Bradley 6 Fed #1

Page Number. 37 of 37  
Eddy County, NM

**Standard (CCV-1)**

QC Batch. 51822

Date Analyzed. 2008-08-26

Analyzed By. TG

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	0.444	111	85 - 115	2008-08-26
Aroclor 1254 (PCB-1254)		mg/L	0.400	0.396	99	85 - 115	2008-08-26
Aroclor 1260 (PCB-1260)		mg/L	0.400	0.347	87	85 - 115	2008-08-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Deca chlorobiphenyl		0.112	mg/L	1	0.100	112	85 - 115

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

ANALYSIS REQUEST (Circle or Specify Method No.)					
PH 4181 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					
PCBs 8082 / 608					
Pesticides 8081A / 608					
BOD, TSS, pH					
Moisture Content					
+ <del>8260B</del> METHOD 1312 Attached <del>and</del> SEP					
X C1"					
Deco					
24 hr Rush					
Turn Around Time if different from standard					

**LAB USE ONLY**

Intact ☒ Y / N

Headspace ☒ Y / N / NA

Log-in-Review \_\_\_\_\_

**REMARKS:**

Please See Blair

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

UPS 518 3978361.3

# TRACE ANALYSIS, INC.

6110 W. 10th St. Suite 100 Lubbock, Texas 79409-1001 Phone: 806-796-1111 Fax: 806-796-1112  
 1100 N. 10th St. Suite 100 El Paso, Texas 79902-1001 Phone: 915-771-0111 Fax: 915-771-0112  
 6110 W. 10th St. Suite 100 Midland, Texas 79701-1001 Phone: 409-796-1111 Fax: 409-796-1112  
 1100 N. 10th St. Suite 100 Kansas City, Missouri 64108-1001 Phone: 816-771-0111 Fax: 816-771-0112

## 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 9, 2008

Work Order: 8082927



Project Location. Eddy County, NM  
 Project Name. Bradley 6 Fed #1  
 Project Number MEWBOU027PIT

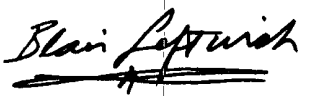
Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
172379	BH-1	soil	2008-08-27	11 20	2008-08-29
172380	BH-2	soil	2008-08-27	11 28	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 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 Bradley 6 Fed. #1 were received by TraceAnalysis, Inc. on 2008-08-29 and assigned to work order 8082927. Samples for work order 8082927 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
MTBE	S 8021B
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 8082927 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

Report Date: September 9, 2008  
MEWBOU027PIT

Work Order 8082927  
Bradley 6 Fed. #1

Page Number. 4 of 15  
Eddy County, NM

## Analytical Report

### Sample: 172379 - BH-1

Laboratory: Lubbock

Analysis: BTEX

QC Batch: 51972

Prep Batch: 44568

Analytical Method: S 8021B

Date Analyzed: 2008-09-02

Sample Preparation: 2008-09-02

Prep Method: S 5035

Analyzed By: ER

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)		1.24	mg/Kg	1	1.00	124	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.22	mg/Kg	1	1.00	122	54.4 - 176.2

### Sample: 172379 - BH-1

Laboratory: Lubbock

Analysis: Chloride (Titration)

QC Batch: 52179

Prep Batch: 44743

Analytical Method: SM 4500-Cl B

Date Analyzed: 2008-09-09

Sample Preparation: 2008-09-08

Prep Method: N/A

Analyzed By: RG

Prepared By: RG

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		518	mg/Kg	10	3.25

### Sample: 172379 - BH-1

Laboratory: Lubbock

Analysis: TPH 418.1

QC Batch: 51953

Prep Batch: 44548

Analytical Method: E 418.1

Date Analyzed: 2008-09-02

Sample Preparation: 2008-09-02

Prep Method: N/A

Analyzed By: CM

Prepared By: CM

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

Report Date September 9, 2008  
MEWBOU027PIT

Work Order. 8082927  
Bradley 6 Fed. #1

Page Number: 5 of 15  
Eddy County, NM

**Sample: 172379 - 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	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		117	mg/Kg	1	100	117	49.5 - 185

**Sample: 172379 - 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	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)		1.21	mg/Kg	1	1.00	121	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.41	mg/Kg	1	1.00	141	45.6 - 214.7

**Sample: 172380 - BH-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	RL Result	Units	Dilution	RL
MTBE		<0.0100	mg/Kg	1	0.0100
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

Report Date. September 9, 2008  
MEWBOU027PIT

Work Order. 8082927  
Bradley 6 Fed #1

Page Number. 6 of 15  
Eddy County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	1	1.45	mg/Kg	1	1.00	145	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.41	mg/Kg	1	1.00	141	54.4 - 176.2

**Sample: 172380 - BH-2**

Laboratory	Lubbock	Analytical Method:	E 418 1	Prep Method	N/A
Analysis:	TPH 418 1	Date Analyzed	2008-09-02	Analyzed By:	CM
QC Batch	51953	Sample Preparation:	2008-09-02	Prepared By:	CM
Prep Batch:	44548				

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

**Sample: 172380 - BH-2**

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		110	mg/Kg	1	100	110	49.5 - 185

**Sample: 172380 - BH-2**

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

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

<sup>1</sup>High surrogate recovery. Sample non-detect, result bias high.

Report Date: September 9, 2008  
MEWBOU027PIT

Work Order 8082927  
Bradley 6 Fed. #1

Page Number. 7 of 15  
Eddy County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.41	mg/Kg	1	1.00	141	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.63	mg/Kg	1	1.00	163	45.6 - 214.7

**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

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

**Method Blank (1)**      QC Batch: 51972

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

Parameter	Flag	MDL Result	Units	RL
MTBE		<0.00260	mg/Kg	0.01
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      Date Analyzed: 2008-09-02      Analyzed By: ER  
Prep Batch: 44568      QC Preparation: 2008-09-02      Prepared By: ER

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

Report Date. September 9, 2008  
MEWBOU027PIT

Work Order. 8082927  
Bradley 6 Fed #1

Page Number 8 of 15  
Eddy County, NM

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 Date Analyzed: 2008-09-02 Analyzed By: MN  
Prep Batch: 44578 QC Preparation: 2008-09-02 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: 52179

QC Batch: 52179 Date Analyzed: 2008-09-09 Analyzed By: RG  
Prep Batch: 44743 QC Preparation: 2008-09-08 Prepared By: RG

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

**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.

Report Date September 9, 2008  
MEWBOU027PIT

Work Order 8082927  
Bradley 6 Fed. #1

Page Number. 9 of 15  
Eddy County, NM

# Laboratory Control Spike (LCS-1)

QC Batch. 51972  
Prep Batch 44568

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

Analyzed By. ER  
Prepared By ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
MTBE	0.991	mg/Kg	1	1.00	<0.00260	99	77.5 - 118.4
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
MTBE	1.01	mg/Kg	1	1.00	<0.00260	101	77.5 - 118.4	2	20
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

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  
Prep Batch 44568

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

Analyzed By ER  
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.

continued ..



Report Date September 9, 2008  
MEWBOU027PIT

Work Order. 8082927  
Bradley 6 Fed. #1

Page Number 10 of 15  
Eddy County, NM

*control spikes continued ...*

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec	LCSD Rec.	Rec Limit
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  
Prep Batch: 44578

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

Analyzed By: MN  
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: 52179  
Prep Batch: 44743

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

Analyzed By: RG  
Prepared By: RG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.3	mg/Kg	1	100	<1.80	98	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	99.0	mg/Kg	1	100	<1.80	99	96.5 - 104.4	1	20

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

Report Date. September 9, 2008  
MEWBOU027PIT

Work Order 8082927  
Bradley 6 Fed #1

Page Number: 11 of 15  
Eddy County, NM

**Matrix Spike (MS-1)** Spiked Sample. 172380

QC Batch 51953  
Prep Batch 44548

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

Analyzed By: CM  
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  
Prep Batch: 44568

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

Analyzed By: ER  
Prepared By: ER

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
MTBE	1.24	mg/Kg	1	1.00	<0.00260	124	10.4 - 161.1
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
MTBE	1.12	mg/Kg	1	1.00	<0.00260	112	10.4 - 161.1	10	20
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

Report Date September 9, 2008  
MEWBOU027PIT

Work Order 8082927  
Bradley 6 Fed #1

Page Number: 12 of 15  
Eddy County, NM

**Matrix Spike (MS-1)** Spiked Sample 172376

QC Batch: 51974  
Prep Batch: 44568

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

Analyzed By: ER  
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  
Prep Batch: 44578

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

Analyzed By: MN  
Prepared By: MN

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	<sup>2</sup> 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	<sup>3</sup> 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	<sup>4 5</sup> 335	349	mg/Kg	1	100	335	349	49.5 - 185

<sup>2</sup>Matrix spike recovery out of control limits due to peak interference Use LCS/LCSD to demonstrate analysis is under control.

<sup>3</sup>Matrix spike recovery out of control limits due to peak interference Use LCS/LCSD to demonstrate analysis is under control

<sup>4</sup>Matrix spike recovery out of control limits due to peak interference Use LCS/LCSD to demonstrate analysis is under control

<sup>5</sup>Matrix spike recovery out of control limits due to peak interference Use LCS/LCSD to demonstrate analysis is under control

Report Date September 9, 2008  
MEWBOU027PIT

Work Order. 8082927  
Bradley 6 Fed #1

Page Number. 13 of 15  
Eddy County, NM

**Matrix Spike (MS-1)** Spiked Sample 172380

QC Batch: 52179  
Prep Batch: 44743

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	576	mg/Kg	10	500	103.65	94	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	608	mg/Kg	10	500	103.65	101	74.7 - 123.2	5	20

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

**Standard (ICV-1)**

QC Batch: 51953

Date Analyzed. 2008-09-02

Analyzed By CM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	97.1	97	80 - 120	2008-09-02

**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 (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
MTBE		mg/Kg	0.100	0.103	103	85 - 115	2008-09-02
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

Report Date September 9, 2008  
MEWBOU027PIT

Work Order: 8082927  
Bradley 6 Fed. #1

Page Number: 14 of 15  
Eddy County, NM

**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
MTBE		mg/Kg	0 100	0.0927	93	85 - 115	2008-09-02
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

Report Date: September 9, 2008  
MEWBOU027PIT

Work Order: 8082927  
Bradley 6 Fed. #1

Page Number: 15 of 15  
Eddy County, NM

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 (ICV-1)**

QC Batch: 52179

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	99.6	100	85 - 115	2008-09-09

**Standard (CCV-1)**

QC Batch: 52179

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	100	100	85 - 115	2008-09-09

# TraceAnalysis, Inc.

email: [lab@traceanalysis.com](mailto: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 A  
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) 201-5200  
Fax: (817) 560-4336

Company Name: **TALON/LPE** Phone #: **432 238-6382**

Address: (Street, City, Zip) **318 E Taylor Hobbs NM 88240** Fax #:

Contact Person: **ER Taylor** E-mail:

Invoice to:

(If different from above) **NEW BOURNE OIL**

Project #: **NEWBOU027A1T** Project Name: **BRADLEY 6 FED COM #1**

Project Location (including state): **DOUG COUNTY NM** Sampler Signature: **ER**

**ANALYSIS REQUEST**  
(Circle or Spec Method No.)

[illegible]

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
EL-2	TARON	8/29	1045	[Signature]	[Signature]	8/29	1045	
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
[Signature]	[Signature]	8/29	1400	[Signature]	[Signature]	8/29	1400	
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
[Signature]	[Signature]	8/29	1400	[Signature]	[Signature]	8/29	1400	2.8°

**LAB USE ONLY**

Intact Y/N

Headspace Y / M / NA

Log-in-Review

## REMARKS:

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

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

Carrier #

