

**RECEIVED**

By OCD District 1 at 11:16 am, Jun 23, 2015

**APPROVED**

Conditional

By OCD District 1 at 11:16 am, Jun 23, 2015

Basin Environmental Service Technologies, LLC

**Site Summary & Spill Remediation Plan****1. Ensure BLM approval/concurrence.**

Company: J&amp;J Service, Inc. Address: 8428 W. Sumruld Rd., Lovington, NM 88260 Telephone #: (575)369-9230

Site Name: Jones 34 Federal #1 Battery NMOCD Reference#: 1RP-3636

Surface Owner: R.B. Jones Mineral Owner: U.S. Bureau of Land Management

Unit Letter: "N" (SE/SW) Section: 34 Township: 14S Range: 35E County: Lea GPS Coordinates: 33.055491 N -103.396796 W

Depth to Ground Water: ≈ 50' Distance to Surface Water Body: ☐ <200' ☐ 200' - 1,000' ☒ >1,000'Wellhead Protection Area: <1,000' from Water Source or <200' from Domestic Water Source? ☐ Y ☒ NNMOCD Ranking Score: 20 Soil Remediation Levels (mg/kg): Benzene: 10 BTEX: 50 TPH: ☒ 100 Chloride: ☒ 100☐ 1,000☐ 500☐ 5,000☐ 1,000

Date/Time of Release: 2/20/15, Time Unknown Type of Release: Crude Oil Approximate Volume of Release: 196 bbls

**Background Information:**

During a routine site visit on February 20, 2015, J&J Service, Inc. (J&J) discovered a crude oil release at the Jones 34 Federal #1 Battery. A bull plug from a 2" roll line was found on the ground next to an on-site storage tank. Vandalism is suspected. Approximately one hundred ninety-six barrels (196 bbls) of crude oil were released. During initial response activities, the roll line valve was closed, and the bull plug was replaced. Vacuum trucks were utilized to recover approximately forty barrels (40 bbls) of free-standing liquid, resulting in a net loss of one hundred fifty-six barrels (156 bbls). The release impacted approximately nine thousand, four hundred square feet (9,400 ft<sup>2</sup>) of the tank battery pad and the adjacent pastureland.

The release was reported to the New Mexico Oil Conservation Division's (NMOCD) Hobbs District Office on May 15, 2015, and to the United States Department of the Interior - Bureau of Land Management's (BLM) Carlsbad Field Office on June 1, 2015. The NMOCD "Release Notification & Corrective Action" (Form C-141) is provided as Attachment #1, and the BLM "Major Undesirable Event Reporting Format" (MUE) is provided as Attachment #2. A "Site Location Map" is provided as Attachment #3. General photographs of the release site are provided in Attachment #7.

Initial response and excavation activities were conducted by a contractor that is no longer affiliated with the site. Basin Environmental Service Technologies, LLC (Basin Environmental) was contracted to assume remediation activities on May 12, 2015.

**Summary of Field Activities:**

Following a preliminary site visit on May 12, 2015, Basin Environmental commenced delineation activities at the site on May 18, 2015. A series of nine (9) test trenches (TT-1 through TT-9) were advanced in the excavated area to the hard rock layer running underneath the site, which varies in depth from approximately five (5) to seven feet (7') below ground surface (bgs). The delineation trenches were spaced approximately twenty-five feet (25') apart and were advanced at approximate one-foot (1') vertical intervals. Soil samples were field-screened with a photo-ionization detector (PID), and representative confirmation samples were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH), and/or chloride concentrations using Environmental Protection Agency (EPA) Methods SW 846-8021b, SW 846-8015M, and 4500 Cl-B, respectively. PID readings and olfactory/visual senses indicated additional vertical delineation was required in the area represented by trench TT-9.

On May 19, 2015, three (3) hand-augered soil borings (HA-1 through HA-3) were advanced to investigate the vertical extent of impacted soil inside the tank battery. The soil borings were advanced in six-inch (6") vertical intervals to total depths ranging from approximately three feet (3') bgs in HA-3 to four feet (4') bgs in HA-1 and HA-2. Soil samples were field-screened with a PID, and representative confirmation samples were submitted to the laboratory for analysis of TPH, BTEX, and/or chloride concentrations.

On May 26, 2015, a series of seven (7) test trenches (TT-10 through TT-16) were advanced along the flowpaths of the release to further investigate the horizontal and vertical extent of impacted soil. The trenches were advanced in

**Summary of Field Activities (cont.)**

one-foot (1') to two-foot (2') vertical intervals to total depths ranging from approximately four (4) to ten feet (10') bgs. Trench TT-9 was also reentered and advanced an additional twelve feet (12') to a total depth of approximately eighteen feet (18') bgs. Soil samples were field-screened with a PID, and representative confirmation samples were submitted to the laboratory for analysis of TPH, BTEX, and/or chloride concentrations.

Locations of the test trenches and hand-augered soil borings are depicted in Attachment #4, "Site & Sample Location Map". Laboratory analytical and field-test results are summarized in attachments #5 and #6, respectively, and analytical reports are provided in Attachment #8.

**Proposed Activities:**

- Laboratory analytical results indicate vertical delineation was not achieved in trenches TT-5, TT-7, TT-14, and TT-15 and hand-augered soil borings HA-1 through HA-3. The delineation trenches will be re-entered with a trackhoe and advanced at one (1) to two-foot (2') vertical intervals until PID field readings suggest contaminants of concern are below NMOCD regulatory standards (or to the extent practicable). A representative selection of soil samples will be submitted to the laboratory for confirmatory analyses of BTEX, TPH, and/or chloride concentrations using the EPA laboratory analytical methods described above.
- If vertical delineation cannot be achieved via trenching, upon completion of excavation activities, a drilling rig will be employed to advance one (1) soil boring (PSB-1) midway between the areas represented by trenches TT-5 and TT-7. A second soil boring (PSB-2) will be advanced inside the fenced-in area surrounding the tank battery, midway between the areas represented by hand-augered soil borings HA-1 and HA-2. Should it be determined that groundwater has been impacted, soil boring PSB-1 will be converted to a four-inch (4") monitor well (PMW-1) to facilitate any necessary groundwater remediation activities. Three (3) two-inch (2") diameter monitor wells will be installed approximately one hundred feet (100') up-, down-, and cross-gradient of PMW-1 to evaluate the extent of the dissolved-phase plume.
- The primary excavation will be advanced vertically to the hard rock layer running underneath the site, which is commonly encountered between approximately five (5) and seven feet (7') bgs. To preserve the structural integrity of the on-site storage tanks, excavation inside the fenced-in area around the tank battery will be limited to total depths of approximately six inches (6") to one foot (1') bgs. The excavation in the primary pooling area of the release will be advanced horizontally to the areas represented by delineation trenches TT-1, TT-2, TT-4, TT-6, TT-8, and TT-10. The western extent of the excavation will be limited by the presence of the tank battery and associated pipes, appurtenances, and power lines. The horizontal limits of the excavation(s) along the flow paths of the release will be determined by field-screening and/or utilizing visual/olfactory senses. Soil samples will be collected at approximate ten-foot (10') horizontal intervals from the floors and sidewalls of the excavations and field-screened with a PID. Confirmation soil samples will be collected at approximate twenty-five-foot (25') horizontal intervals and submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations.
- Excavated soil will be stockpiled on-site on six (6) mil polyethylene plastic, pending transfer to an NMOCD-permitted facility for disposal.
- The floor of the excavation(s) will be fitted with a twenty (20) mil, impermeable, polyethylene liner. A cushion of sand will be installed approximately six inches (6") both above and below the liner to protect it during installation and backfilling activities. This engineered control will serve to inhibit vertical migration of contaminants both upward to the vegetative zone and downward to the underlying groundwater. A section of eight-inch (8") PVC conduit will be installed to facilitate advancement of soil boring PSB-1 through the liner at a later date, should it be required. The riser will be fitted with a chemically welded, forty (40) mil boot to preserve the integrity and impermeability of the liner. Following liner installation, the excavation will be backfilled with locally acquired, non-impacted material, compacted, and contoured to fit the surrounding topography.
- Following the proposed remediation activities, an earthen containment berm will be installed around the Jones 34 Federal #1 Tank Battery to mitigate potential releases. The disturbed area in the adjacent pasture will be seeded with a seed mix acceptable to the landowner.

# *Basin Environmental Service Technologies, LLC*

## Environmental Site Summary & Spill Remediation Plan



### Proposed Soil Boring/Monitor Well Locations:

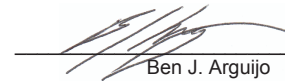
33.055475	N	-103.396393	W
33.055509	N	-103.396443	W
33.055621	N	-103.396711	W
33.055474	N	-103.396067	W
33.055279	N	-103.396067	W

### Name/Description:

PSB-1/PMW-1
PSB-2
PMW-2
PMW-3
PMW-4

### Attachments:

- Attachment #1: Release Notification & Corrective Action (Form C-141)
- Attachment #2: Major Undesirable Event (MUE) Reporting Format
- Attachment #3: Site Location Map
- Attachment #4: Site & Sample Location Map
- Attachment #5: Concentrations of Benzene, BTEX, TPH & Chloride in Soil
- Attachment #6: Field-Test Results
- Attachment #7: Photographs
- Attachment #8: Laboratory Analytical Results

 6/11/2015  
Ben J. Arguijo  
Project Manager

**Attachment #1**

**Release Notification &**

**Corrective Action (Form C-141)**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company: J&J Service, Inc.	Contact: Jerry Carlisle
Address: 8428 W. Sumruld Rd., Lovington, NM 88260	Telephone No.: (575)369-9230
Facility Name: Jones 34 Federal #1 Battery	Facility Type: Exploratory & Production
Surface Owner: R.B. Jones	Mineral Owner: Federal
API No. 30-025-29832	

**LOCATION OF RELEASE**

Unit Letter "N" (SE/SW)	Section 34	Township 14S	Range 35E	Feet from the 720	North/South Line North	Feet from the 465	East/West Line East	County Lea
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Latitude 33.055491° Longitude -103.396796°

**NATURE OF RELEASE**

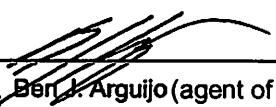
Type of Release Crude oil	Volume of Release 196 bbls	Volume Recovered 40 bbls
Source of Release Bull Plug on 2" Roll Line	Date and Hour of Occurrence 2/20/15, Time Unknown	Date and Hour of Discovery 2/20/15, 19:30
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse	

**HOBBS OCD**  
MAY 15 2015

Describe Cause of Problem and Remedial Action Taken.\*  
During a routine site visit, a bull plug from a 2" roll line was found on the ground next to an on-site storage tank. Vandalism is suspected. During initial response activities, the storage tank was valved off, and the bull plug was replaced.

Describe Area Affected and Cleanup Action Taken.\*  
The release impacted approximately 9,400 sq.ft. of the tank battery pad and the adjacent pasture. Vacuum trucks were utilized to recover free-standing liquid. The affected area will be remediated in accordance with NMOC guidelines.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOC marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOC acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Ben J. Arguijo (agent of J&J Service, Inc.)		Approved by Environmental Specialist:	
Title: Project Manager, Basin Environmental		Approval Date:	Expiration Date:
E-mail Address: bjarguijo@basinenv.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 5/14/2015	Phone: (575)396-2378		

\* Attach Additional Sheets If Necessary

1RP-3636

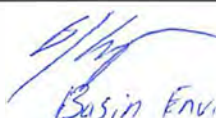
**Attachment #2**

**Major Undesirable Event (MUE)**

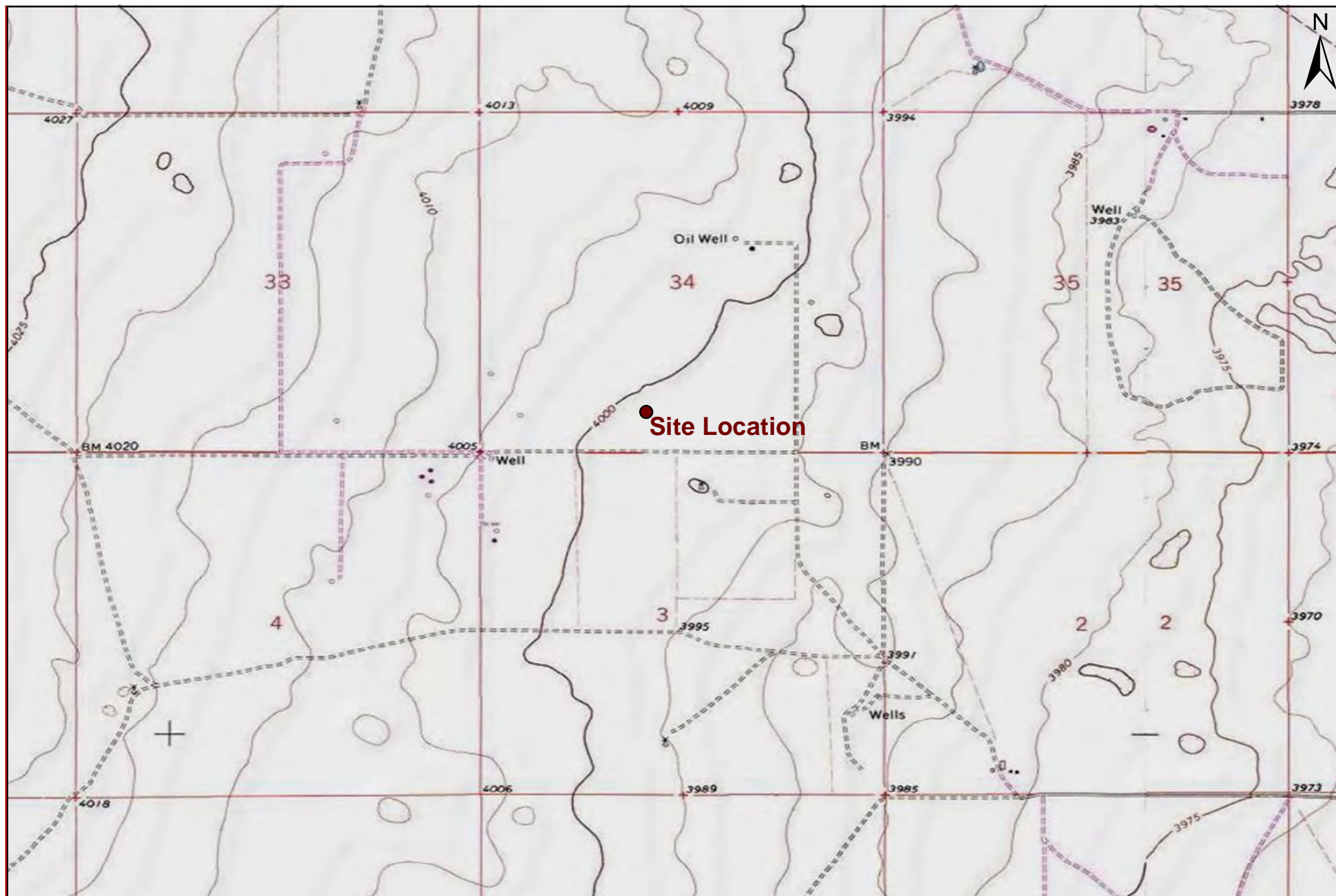
**Reporting Format**

**BUREAU OF LAND MANAGEMENT**  
**WO MAJOR UNDESIRABLE EVENT (MUE) REPORTING FORMAT**

BLM Office Reporting: BLM - Carlsbad, NM, Field Office																		
BLM Employee: Jeffrey Robertson																		
Company Official Reporting to BLM: Ben J. Arguijo (Basin Environmental, as agent of J&J Service, Inc.)																		
Operator: J&J Service, Inc. (Jerry Carlisle, Owner)																		
Date/Time of Occurrence: 2/20/2015, Time Unknown			Date/Time BLM Notified: 6/1/2015, 12:10PM															
Field/Unit Name: Rural Lea County, NM			Lease Number: API #30-025-29832															
State: NM	County: Lea	Twn: 14S	Rng: 35E	Sec: 34	Qtr: SE/SW													
Surface Ownership: (circle one) Federal		Indian	State	FEE														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="3" style="width: 30%;">Type of Event: (circle one)</td> <td style="width: 15%;">Oil Spill</td> <td style="width: 15%;">Oil/Water Spill</td> <td style="width: 15%;">Gas Venting</td> <td style="width: 15%;">Toxic Fluid Spill</td> </tr> <tr> <td>Saltwater Spill</td> <td>Other Spill (Specify)</td> <td>Blowout</td> <td>Fire</td> </tr> <tr> <td>Injury</td> <td>Fatality</td> <td>Property Damage</td> <td>Explosion</td> </tr> </table>						Type of Event: (circle one)	Oil Spill	Oil/Water Spill	Gas Venting	Toxic Fluid Spill	Saltwater Spill	Other Spill (Specify)	Blowout	Fire	Injury	Fatality	Property Damage	Explosion
Type of Event: (circle one)	Oil Spill	Oil/Water Spill	Gas Venting	Toxic Fluid Spill														
	Saltwater Spill	Other Spill (Specify)	Blowout	Fire														
	Injury	Fatality	Property Damage	Explosion														
Nature and Cause of Event: During a routine site visit to the Jones 34 Federal #1 Battery near Lovington, NM, a bull plug from a 2" roll line was found on the ground next to an on-site storage tank. Vandalism is suspected.																		
Environmental Impact: Grass and soil in the adjacent pastureland were affected.																		
Time Required to Control Event (Hours):			Unknown															
Volumes Discharged or Consumed:			196 bbls of crude oil															
Volumes Recovered:			40 bbls of crude oil (net loss 156 bbls)															
Action Taken to Control Event: During initial response activities, the storage tank was valved off, and the bull plug was replaced.																		
Resultant Damage: The release impacted approximately 9,400 sq.ft. of the tank battery pad and the adjacent pasture.																		
Clean-Up Procedures: Vacuum trucks were utilized to recover free-standing liquid. The affected area will be remediated in accordance with NMOCD guidelines.																		
Cause/Extent of Personal Injury: No injuries of personnel, livestock, or wildlife occurred.																		
Agency Notification List: (Federal/State/Local):	Agency Name	Contact Name	Date/Time															
	NMOCD - Hobbs District Office	Kellie Jones	5/15/2015, 1530															
	BLM	Jeffery Robertson	6/1/2015, 12:10PM															
Remarks: Initial response and excavation activities were conducted by a contractor no longer affiliated with the site. Basin Environmental Service Technologies, LLC, was contracted to assume remediation activities on 5/12/2015. Delineation trenches and hand-augered soil borings were advanced on 5/18, 5/19, and 5/26/2015 to assess the horizontal and vertical extent of impacted soil. Upon receipt of laboratory analytical results, a "Spill Remediation Proposal" will be sent to the BLM Carlsbad District Office and NMOCD Hobbs Field Office for review and approval prior to commencement of remediation activities.																		

 6/1/15  
 Basin Environmental





1,000 500 0 1,000 2,000  
 Distance in Feet

**Attachment #3**  
**Site Location Map**  
**J&J Service, Inc.**  
**Jones 34 Federal #1 Battery**  
**Lea County, New Mexico**  
**NMOCD Reference #: 1RP-3636**



Basin Environmental Service Technologies, LLC  
 3100 Plains Hwy.  
 Lovington, NM 88260

Drawn By: BJA      Checked By: BRB

May 22, 2015      Scale: 1" = 2,000'





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**ATTACHMENT #5**  
**CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL**

**J&J SERVICE, INC.**  
**JONES 34 FEDERAL #1 BATTERY**  
**LEA COUNTY, NEW MEXICO**  
**NMOCD REFERENCE #: 1RP-3636**

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	4500 CI-B CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)		
TT-1 @ 1'	1'	5/18/2015	Excavated	-	-	-	-	-	<10.0	37.5	<10.0	37.5	<16.0
TT-1 @ 6'	6'	5/18/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	-
TT-2 @ 2'	2'	5/18/2015	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
TT-3 @ 2'	2'	5/18/2015	Excavated	<0.500	5.63	3.37	29.8	38.8	984	5,800	776	<b>7,560</b>	<16.0
TT-3 @ 4'	4'	5/18/2015	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
TT-3 @ 6'	6'	5/18/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	-
TT-4 @ 1'	1'	5/18/2015	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
TT-4 @ 4'	4'	5/18/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	-
TT-5 @ 2'	2'	5/18/2015	Excavated	-	-	-	-	-	<10.0	231	144	<b>375</b>	-
TT-5 @ 4'	4'	5/18/2015	In-Situ	-	-	-	-	-	<10.0	720	204	<b>924</b>	-
TT-5 @ 5'	5'	5/18/2015	In-Situ	<0.100	<0.100	0.684	2.74	3.43	300	4,030	724	<b>5,054</b>	-
TT-6 @ 1'	1'	5/18/2015	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
TT-6 @ 3'	3'	5/18/2015	Excavated	-	-	-	-	-	<10.0	69.1	48.3	<b>117</b>	16.0
TT-6 @ 7'	7'	5/18/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	-
TT-7 @ 2'	2'	5/18/2015	Excavated	<0.200	1.94	7.25	27.2	36.4	402	2,420	408	<b>3,230</b>	<16.0
TT-7 @ 5'	5'	5/18/2015	In-Situ	-	-	-	-	-	<10.0	59.3	<10.0	59.3	-
TT-7 @ 6'	6'	5/18/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	74.4	10.0	84.4	-
TT-8 @ 1'	1'	5/18/2015	Excavated	-	-	-	-	-	<10.0	22.2	<10.0	22.2	<16.0
TT-8 @ 5'	5'	5/18/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	-
TT-9 @ 2'	2'	5/18/2015	Excavated	<0.050	0.266	0.726	4.44	5.43	88.6	480	62.8	<b>631</b>	-
TT-9 @ 6'	6'	5/18/2015	In-Situ	-	-	-	-	-	<10.0	23.4	<10.0	23.4	-
TT-9 @ 16'	16'	5/26/2015	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
TT-9 @ 18'	18'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	-
TT-10 @ 4'	4'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	16.0
TT-11 @ 2'	2'	5/26/2015	Excavated	-	-	-	-	-	27.0	179	17.4	<b>223</b>	-
TT-11 @ 6'	6'	5/26/2015	In-Situ	-	-	-	-	-	345	728	43.0	<b>1,116</b>	32.0
TT-11 @ 10'	10'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	-
TT-12 @ 2'	2'	5/26/2015	In-Situ	-	-	-	-	-	<10.0	20.8	<10.0	20.8	-
TT-12 @ 6'	6'	5/26/2015	In-Situ	-	-	-	-	-	147	961	141	<b>1,249</b>	80.0
TT-12 @ 8'	8'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	12.7	<10.0	12.7	-
TT-13 @ 2'	2'	5/26/2015	In-Situ	-	-	-	-	-	59.0	686	99.0	<b>844</b>	<16.0
TT-13 @ 8'	8'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
TT-14 @ 2'	2'	5/26/2015	In-Situ	-	-	-	-	-	514	2,290	294	<b>3,098</b>	<16.0
TT-14 @ 8'	8'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	117	26.4	<b>143</b>	-
TT-15 @ 2'	2'	5/26/2015	In-Situ	-	-	-	-	-	<10.0	63.4	<10.0	63.4	-
TT-15 @ 8'	8'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	69.5	13.5	83.0	32.0
TT-16 @ 2'	2'	5/26/2015	In-Situ	-	-	-	-	-	10.3	144	18.0	<b>172</b>	-
TT-16 @ 8'	8'	5/26/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	32.0

**ATTACHMENT #5  
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL**

**J&J SERVICE, INC.  
JONES 34 FEDERAL #1 BATTERY  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE #: 1RP-3636**

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	4500 CI-B CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)		
HA-1 @ 2'	2'	5/19/2015	In-Situ	-	-	-	-	-	<10.0	90.2	62.6	153	-
HA-1 @ 4'	4'	5/19/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	364	211	575	688
HA-2 @ 2'	2'	5/19/2015	In-Situ	-	-	-	-	-	3,270	11,900	2,030	13,930	64.0
HA-2 @ 4'	4'	5/19/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	11.1	207	68.0	275	-
HA-3 @ 1'	1'	5/19/2015	In-Situ	-	-	-	-	-	<10.0	186	25.1	211	-
HA-3 @ 3'	3'	5/19/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	174	1,800	251	2,051	<16.0
<b>NMOCD Recommended Remediation Action Level</b>				<b>10</b>				<b>50</b>				<b>100</b>	<b>250</b>

- = Not analyzed.

**ATTACHMENT #6  
FIELD-TEST RESULTS**

**J&J SERVICE, INC.  
JONES 34 FEDERAL #1 BATTERY  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE #: 1RP-3636**

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	Field Screens	
			PID	CHLORIDE
TT-1 @ 1'	1'	05/18/2015	<b>28.7</b>	-
TT-1 @ 2'	2'	05/18/2015	2.3	-
TT-1 @ 3'	3'	05/18/2015	<b>15.2</b>	-
TT-1 @ 4'	4'	05/18/2015	4.4	<124
TT-1 @ 5'	5'	05/18/2015	3.9	-
TT-1 @ 6'	6'	05/18/2015	3.9	-
TT-2 @ 2'	2'	05/18/2015	1.0	-
TT-2 @ 3'	3'	05/18/2015	0.8	-
TT-2 @ 4'	4'	05/18/2015	0.1	-
TT-3 @ 2'	2'	05/18/2015	<b>2,331</b>	-
TT-3 @ 3'	3'	05/18/2015	<b>2,373</b>	-
TT-3 @ 4'	4'	05/18/2015	<b>203</b>	-
TT-3 @ 5'	5'	05/18/2015	<b>10.2</b>	-
TT-3 @ 6'	6'	05/18/2015	2.8	-
TT-4 @ 1'	1'	05/18/2015	1.9	-
TT-4 @ 2'	2'	05/18/2015	1.5	-
TT-4 @ 3'	3'	05/18/2015	<b>17.8</b>	-
TT-4 @ 4'	4'	05/18/2015	0.7	-
TT-5 @ 2'	2'	05/18/2015	9.2	-
TT-5 @ 3'	3'	05/18/2015	9.2	-
TT-5 @ 4'	4'	05/18/2015	<b>75.1</b>	-
TT-5 @ 5'	5'	05/18/2015	<b>476</b>	-
TT-6 @ 1'	1'	05/18/2015	<b>35.5</b>	-
TT-6 @ 2'	2'	05/18/2015	<b>65.0</b>	-
TT-6 @ 3'	3'	05/18/2015	<b>110</b>	-
TT-6 @ 4'	4'	05/18/2015	<b>43.2</b>	-
TT-6 @ 5'	5'	05/18/2015	6.8	-
TT-6 @ 6'	6'	05/18/2015	<b>67.7</b>	-
TT-6 @ 7'	7'	05/18/2015	1.0	-
TT-7 @ 2'	2'	05/18/2015	<b>3,147</b>	-
TT-7 @ 3'	3'	05/18/2015	<b>1,455</b>	-
TT-7 @ 4'	4'	05/18/2015	<b>66.8</b>	-
TT-7 @ 5'	5'	05/18/2015	<b>42.8</b>	-
TT-7 @ 6'	6'	05/18/2015	<b>462</b>	-

**ATTACHMENT #6  
FIELD-TEST RESULTS**

**J&J SERVICE, INC.  
JONES 34 FEDERAL #1 BATTERY  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE #: 1RP-3636**

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	Field Screens	
			PID	CHLORIDE
TT-8 @ 1'	1'	05/18/2015	<b>209</b>	-
TT-8 @ 2'	2'	05/18/2015	5.6	-
TT-8 @ 3'	3'	05/18/2015	5.9	-
TT-8 @ 4'	4'	05/18/2015	<b>14.0</b>	-
TT-8 @ 5'	5'	05/18/2015	5.0	-
TT-9 @ 2'	2'	05/18/2015	<b>2,777</b>	-
TT-9 @ 3'	3'	05/18/2015	<b>1,472</b>	-
TT-9 @ 4'	4'	05/18/2015	<b>1,478</b>	-
TT-9 @ 5'	5'	05/18/2015	<b>59.6</b>	-
TT-9 @ 6'	6'	05/18/2015	<b>697</b>	-
TT-9 @ 8'	8'	05/26/2015	<b>103</b>	-
TT-9 @ 10'	10'	05/26/2015	<b>35.7</b>	-
TT-9 @ 12'	12'	05/26/2015	9.4	-
TT-9 @ 14'	14'	05/26/2015	<b>12.8</b>	-
TT-9 @ 16'	16'	05/26/2015	<b>162</b>	-
TT-9 @ 18'	18'	05/26/2015	<b>228</b>	-
TT-10 @ 2'	2'	05/26/2015	<b>41.4</b>	-
TT-10 @ 4'	4'	05/26/2015	<b>111</b>	-
TT-11 @ 2'	2'	05/26/2015	<b>1,163</b>	-
TT-11 @ 4'	4'	05/26/2015	<b>1,578</b>	-
TT-11 @ 6'	6'	05/26/2015	<b>1,832</b>	-
TT-11 @ 8'	8'	05/26/2015	<b>75.5</b>	-
TT-11 @ 10'	10'	05/26/2015	<b>84.0</b>	-
TT-12 @ 2'	2'	05/26/2015	<b>248</b>	-
TT-12 @ 4'	4'	05/26/2015	<b>320</b>	-
TT-12 @ 6'	6'	05/26/2015	<b>2,449</b>	-
TT-12 @ 8'	8'	05/26/2015	<b>202</b>	-
TT-13 @ 2'	2'	05/26/2015	<b>1,629</b>	-
TT-13 @ 4'	4'	05/26/2015	<b>682</b>	-
TT-13 @ 6'	6'	05/26/2015	<b>14.8</b>	-
TT-13 @ 8'	8'	05/26/2015	3.6	-
TT-14 @ 2'	2'	05/26/2015	<b>2,096</b>	-
TT-14 @ 4'	4'	05/26/2015	<b>50.9</b>	-
TT-14 @ 6'	6'	05/26/2015	<b>26.2</b>	-
TT-14 @ 8'	8'	05/26/2015	<b>202</b>	-

**ATTACHMENT #6  
FIELD-TEST RESULTS**

**J&J SERVICE, INC.  
JONES 34 FEDERAL #1 BATTERY  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE #: 1RP-3636**

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	Field Screens	
			PID	CHLORIDE
TT-15 @ 2'	2'	05/26/2015	<b>359</b>	-
TT-15 @ 4'	4'	05/26/2015	<b>75.4</b>	-
TT-15 @ 6'	6'	05/26/2015	<b>59.0</b>	-
TT-15 @ 8'	8'	05/26/2015	<b>359</b>	-
TT-16 @ 2'	2'	05/26/2015	<b>761</b>	-
TT-16 @ 4'	4'	05/26/2015	<b>1,981</b>	-
TT-16 @ 6'	6'	05/26/2015	<b>42.2</b>	-
TT-16 @ 8'	8'	05/26/2015	7.0	-
HA-1 @ 2'	2'	05/19/2015	5.6	-
HA-1 @ 3'	3'	05/19/2015	3.3	-
HA-1 @ 4'	4'	05/19/2015	2.1	-
HA-2 @ 2'	2'	05/19/2015	<b>2,543</b>	-
HA-2 @ 3'	3'	05/19/2015	<b>1,220</b>	-
HA-2 @ 4'	4'	05/19/2015	<b>1,236</b>	-
HA-3 @ 1'	1'	05/19/2015	<b>236</b>	-
HA-3 @ 2'	2'	05/19/2015	<b>2,117</b>	-
HA-3 @ 3'	3'	05/19/2015	<b>1,923</b>	-



**Attachment #7**  
**Photographs**



Jones 34 Federal #1 Battery - Release Site (Looking Northwest)



Jones 34 Federal #1 Battery – Point of Release (Looking West)





Jones 34 Federal #1 Battery – Excavation (Looking Southwest)



Jones 34 Federal #1 Battery – Initial Excavation (Looking North)





Jones 34 Federal #1 Battery – Initial Excavation (Looking North)



Jones 34 Federal #1 Battery – Initial Excavation (Looking South)





Jones 34 Federal #1 Battery – Initial Excavation (Looking South-Southwest)



Jones 34 Federal #1 Battery – Initial Excavation (Looking East-Northeast)





Jones 34 Federal #1 Battery - Initial Excavation (Looking East-Southeast)



Jones 34 Federal #1 Battery - Initial Excavation (Looking Southeast)





Jones 34 Federal #1 Battery - Initial Excavation (Looking Northeast)



Jones 34 Federal #1 Battery - Initial Excavation (Secondary Flow Path, Looking Southeast)





Jones 34 Federal #1 Battery - Initial Excavation (Primary Flow Path, Looking Southeast)



Jones 34 Federal #1 Battery - Primary Flow Path (Looking Southeast)





Jones 34 Federal #1 Battery – Terminus of Primary Flow Path (Looking Northwest)



Jones 34 Federal #1 Battery – Delineation Event  
(Looking Northeast; Trench Locations Flagged in Red)



Jones 34 Federal #1 Battery – Advancement of Test Trench TT-8  
(Looking Northwest)

**Attachment #8**

**Laboratory Analytical Reports**



June 05, 2015

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JONES 34 FEDERAL #1 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/29/15 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager



**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-1 @ 1' (H501359-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/01/2015	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
<b>DRO &gt;C10-C28</b>	<b>37.5</b>	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					
Surrogate: 1-Chlorooctane	106 %	47.2-157							
Surrogate: 1-Chlorooctadecane	122 %	52.1-176							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-1 @ 6' (H501359-02)**

BTEx 8021B		mg/kg		Analyzed By: MS				A-01	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/02/2015	ND	1.89	94.3	2.00	3.38	
Toluene*	<0.050	0.050	06/02/2015	ND	1.95	97.6	2.00	2.92	
Ethylbenzene*	<0.050	0.050	06/02/2015	ND	1.81	90.6	2.00	4.06	
Total Xylenes*	<0.150	0.150	06/02/2015	ND	5.33	88.8	6.00	3.79	
Total BTEX	<0.300	0.300	06/02/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 94.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-2 @ 2' (H501359-03)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	106 %	47.2-157							
Surrogate: 1-Chlorooctadecane	120 %	52.1-176							

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-3 @ 2' (H501359-04)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	06/01/2015	ND	1.89	94.3	2.00	3.38	
Toluene*	5.63	0.500	06/01/2015	ND	1.95	97.6	2.00	2.92	
Ethylbenzene*	3.37	0.500	06/01/2015	ND	1.81	90.6	2.00	4.06	
Total Xylenes*	29.8	1.50	06/01/2015	ND	5.33	88.8	6.00	3.79	
Total BTEx	38.8	3.00	06/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/01/2015	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	984	50.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	5800	50.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	776	50.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 172 % 47.2-157

Surrogate: 1-Chlorooctadecane 188 % 52.1-176

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-3 @ 4' (H501359-05)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	99.3 %	47.2-157							
Surrogate: 1-Chlorooctadecane	119 %	52.1-176							

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-3 @ 6' (H501359-06)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38		
Toluene*	<0.050	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92		
Ethylbenzene*	<0.050	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06		
Total Xylenes*	<0.150	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79		
Total BTEX	<0.300	0.300	06/01/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 105 % 47.2-157

Surrogate: 1-Chlorooctadecane 120 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-4 @ 1' (H501359-07)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	105 %	47.2-157							
Surrogate: 1-Chlorooctadecane	120 %	52.1-176							

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Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-4 @ 4' (H501359-08)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38		
Toluene*	<0.050	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92		
Ethylbenzene*	<0.050	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06		
Total Xylenes*	<0.150	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79		
Total BTEX	<0.300	0.300	06/01/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-5 @ 2' (H501359-09)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	231	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	144	10.0	05/30/2015	ND					
Surrogate: 1-Chlorooctane	105 %	47.2-157							
Surrogate: 1-Chlorooctadecane	142 %	52.1-176							

**Sample ID: TT-5 @ 4' (H501359-10)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	720	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	204	10.0	05/30/2015	ND					
Surrogate: 1-Chlorooctane	103 %	47.2-157							
Surrogate: 1-Chlorooctadecane	147 %	52.1-176							

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Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-5 @ 5' (H501359-11)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	06/01/2015	ND	1.89	94.3	2.00	3.38	
Toluene*	<0.100	0.100	06/01/2015	ND	1.95	97.6	2.00	2.92	
Ethylbenzene*	0.684	0.100	06/01/2015	ND	1.81	90.6	2.00	4.06	
Total Xylenes*	2.74	0.300	06/01/2015	ND	5.33	88.8	6.00	3.79	
Total BTX	3.43	0.600	06/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 125 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	300	50.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	4030	50.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	724	50.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 126 % 47.2-157

Surrogate: 1-Chlorooctadecane 174 % 52.1-176

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Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-6 @ 1' (H501359-12)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					
Surrogate: 1-Chlorooctane	107 %	47.2-157							
Surrogate: 1-Chlorooctadecane	125 %	52.1-176							

**Sample ID: TT-6 @ 3' (H501359-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/01/2015	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	69.1	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	48.3	10.0	05/30/2015	ND					
Surrogate: 1-Chlorooctane	102 %	47.2-157							
Surrogate: 1-Chlorooctadecane	123 %	52.1-176							

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Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-6 @ 7' (H501359-14)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38	
Toluene*	<0.050	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92	
Ethylbenzene*	<0.050	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06	
Total Xylenes*	<0.150	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79	
Total BTX	<0.300	0.300	06/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 98.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 112 % 52.1-176

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Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-7 @ 2' (H501359-15)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	06/01/2015	ND	1.89	94.3	2.00	3.38	
<b>Toluene*</b>	<b>1.94</b>	0.200	06/01/2015	ND	1.95	97.6	2.00	2.92	
<b>Ethylbenzene*</b>	<b>7.25</b>	0.200	06/01/2015	ND	1.81	90.6	2.00	4.06	
<b>Total Xylenes*</b>	<b>27.2</b>	0.600	06/01/2015	ND	5.33	88.8	6.00	3.79	
<b>Total BTEX</b>	<b>36.4</b>	1.20	06/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/01/2015	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>402</b>	50.0	05/30/2015	ND	184	92.2	200	2.04	
<b>DRO &gt;C10-C28</b>	<b>2420</b>	50.0	05/30/2015	ND	205	102	200	4.17	
<b>EXT DRO &gt;C28-C35</b>	<b>408</b>	50.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 126 % 47.2-157

Surrogate: 1-Chlorooctadecane 144 % 52.1-176

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Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-7 @ 5' (H501359-16)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
<b>DRO &gt;C10-C28</b>	<b>59.3</b>	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	104 %	47.2-157							
Surrogate: 1-Chlorooctadecane	122 %	52.1-176							

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Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-7 @ 6' (H501359-17)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38		
Toluene*	<0.050	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92		
Ethylbenzene*	<0.050	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06		
Total Xylenes*	<0.150	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79		
Total BTX	<0.300	0.300	06/01/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	74.4	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	10.0	10.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 122 % 52.1-176

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Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-8 @ 1' (H501359-18)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/02/2015	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
<b>DRO &gt;C10-C28</b>	<b>22.2</b>	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					
Surrogate: 1-Chlorooctane	95.6 %	47.2-157							
Surrogate: 1-Chlorooctadecane	117 %	52.1-176							

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-8 @ 5' (H501359-19)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38		
Toluene*	<0.050	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92		
Ethylbenzene*	<0.050	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06		
Total Xylenes*	<0.150	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79		
Total BTX	<0.300	0.300	06/01/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2015	ND	184	92.2	200	2.04	
DRO >C10-C28	<10.0	10.0	05/30/2015	ND	205	102	200	4.17	
EXT DRO >C28-C35	<10.0	10.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 100 % 47.2-157

Surrogate: 1-Chlorooctadecane 114 % 52.1-176

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Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-9 @ 2' (H501359-20)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38	
<b>Toluene*</b>	<b>0.266</b>	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92	
<b>Ethylbenzene*</b>	<b>0.726</b>	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06	
<b>Total Xylenes*</b>	<b>4.44</b>	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79	
<b>Total BTX</b>	<b>5.43</b>	0.300	06/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 125 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/02/2015	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>88.6</b>	10.0	05/30/2015	ND	184	92.2	200	2.04	
<b>DRO &gt;C10-C28</b>	<b>480</b>	10.0	05/30/2015	ND	205	102	200	4.17	
<b>EXT DRO &gt;C28-C35</b>	<b>62.8</b>	10.0	05/30/2015	ND					

Surrogate: 1-Chlorooctane 105 % 47.2-157

Surrogate: 1-Chlorooctadecane 130 % 52.1-176

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**Analytical Results For:**

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P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/18/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-9 @ 6' (H501359-21)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
<b>DRO &gt;C10-C28</b>	<b>23.4</b>	10.0	06/01/2015	ND	192	96.0	200	5.99	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	104 %	47.2-157							
Surrogate: 1-Chlorooctadecane	121 %	52.1-176							

**Sample ID: TT-9 @ 16' (H501359-22)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
DRO >C10-C28	<10.0	10.0	06/01/2015	ND	192	96.0	200	5.99	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	107 %	47.2-157							
Surrogate: 1-Chlorooctadecane	122 %	52.1-176							

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Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-9 @ 18' (H501359-23)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/03/2015	ND	2.10	105	2.00	0.798	
Toluene*	<0.050	0.050	06/03/2015	ND	1.87	93.5	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/03/2015	ND	1.80	90.2	2.00	0.401	
Total Xylenes*	<0.150	0.150	06/03/2015	ND	5.25	87.5	6.00	0.104	
Total BTEx	<0.300	0.300	06/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
DRO >C10-C28	<10.0	10.0	06/01/2015	ND	192	96.0	200	5.99	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 104 % 47.2-157

Surrogate: 1-Chlorooctadecane 121 % 52.1-176

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Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-10 @ 4' (H501359-24)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.10	105	2.00	0.798	
Toluene*	<0.050	0.050	06/04/2015	ND	1.87	93.5	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	1.80	90.2	2.00	0.401	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.25	87.5	6.00	0.104	
Total BTEX	<0.300	0.300	06/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/02/2015	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
DRO >C10-C28	<10.0	10.0	06/01/2015	ND	192	96.0	200	5.99	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-11 @ 2' (H501359-25)**

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	27.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
DRO >C10-C28	179	10.0	06/01/2015	ND	192	96.0	200	5.99	
EXT DRO >C28-C35	17.4	10.0	06/01/2015	ND					
Surrogate: 1-Chlorooctane	100 %	47.2-157							
Surrogate: 1-Chlorooctadecane	122 %	52.1-176							

**Sample ID: TT-11 @ 6' (H501359-26)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/02/2015	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	345	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	728	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	43.0	10.0	06/01/2015	ND					
Surrogate: 1-Chlorooctane	120 %	47.2-157							
Surrogate: 1-Chlorooctadecane	123 %	52.1-176							

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Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-11 @ 10' (H501359-27)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.10	105	2.00	0.798	
Toluene*	<0.050	0.050	06/04/2015	ND	1.87	93.5	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	1.80	90.2	2.00	0.401	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.25	87.5	6.00	0.104	
Total BTEX	<0.300	0.300	06/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	<10.0	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 99.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 116 % 52.1-176

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Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-12 @ 2' (H501359-28)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	20.8	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					
Surrogate: 1-Chlorooctane	96.9 %	47.2-157							
Surrogate: 1-Chlorooctadecane	114 %	52.1-176							

**Sample ID: TT-12 @ 6' (H501359-29)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/02/2015	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	147	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	961	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	141	10.0	06/01/2015	ND					
Surrogate: 1-Chlorooctane	116 %	47.2-157							
Surrogate: 1-Chlorooctadecane	123 %	52.1-176							

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Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-12 @ 8' (H501359-30)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/04/2015	ND	2.10	105	2.00	0.798		
Toluene*	<0.050	0.050	06/04/2015	ND	1.87	93.5	2.00	0.110		
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	1.80	90.2	2.00	0.401		
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.25	87.5	6.00	0.104		
Total BTEX	<0.300	0.300	06/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	176	88.1	200	1.73	
<b>DRO &gt;C10-C28</b>	<b>12.7</b>	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 105 % 47.2-157

Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-13 @ 2' (H501359-31)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/02/2015	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	59.0	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	686	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	99.0	10.0	06/01/2015	ND					
Surrogate: 1-Chlorooctane	108 %	47.2-157							
Surrogate: 1-Chlorooctadecane	125 %	52.1-176							

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**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-13 @ 8' (H501359-32)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.10	105	2.00	0.798	
Toluene*	<0.050	0.050	06/04/2015	ND	1.87	93.5	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	1.80	90.2	2.00	0.401	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.25	87.5	6.00	0.104	
Total BTEx	<0.300	0.300	06/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/02/2015	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	<10.0	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 124 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Basin Environmental Service  
 BEN J. ARGUIJO  
 P.O. Box 301  
 Lovington NM, 88260  
 Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-14 @ 2' (H501359-33)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/02/2015	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	514	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	2290	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	294	10.0	06/01/2015	ND					
Surrogate: 1-Chlorooctane	151 %	47.2-157							
Surrogate: 1-Chlorooctadecane	147 %	52.1-176							

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**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-14 @ 8' (H501359-34)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.10	105	2.00	0.798	
Toluene*	<0.050	0.050	06/04/2015	ND	1.87	93.5	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	1.80	90.2	2.00	0.401	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.25	87.5	6.00	0.104	
Total BTEx	<0.300	0.300	06/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	117	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	26.4	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 104 % 47.2-157

Surrogate: 1-Chlorooctadecane 120 % 52.1-176

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 Lovington NM, 88260  
 Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-15 @ 2' (H501359-35)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	176	88.1	200	1.73	
<b>DRO &gt;C10-C28</b>	<b>63.4</b>	10.0	06/01/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	<10.0	10.0	06/01/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	108 %	47.2-157							
Surrogate: 1-Chlorooctadecane	123 %	52.1-176							

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**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-15 @ 8' (H501359-36)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/04/2015	ND	2.10	105	2.00	0.798		
Toluene*	<0.050	0.050	06/04/2015	ND	1.87	93.5	2.00	0.110		
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	1.80	90.2	2.00	0.401		
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.25	87.5	6.00	0.104		
Total BTEX	<0.300	0.300	06/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/02/2015	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/02/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	69.5	10.0	06/02/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	13.5	10.0	06/02/2015	ND					

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

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**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-16 @ 2' (H501359-37)**

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	10.3	10.0	06/02/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	144	10.0	06/02/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	18.0	10.0	06/02/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	104 %	47.2-157							
Surrogate: 1-Chlorooctadecane	124 %	52.1-176							

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BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/26/2015
Reported:	06/05/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: TT-16 @ 8' (H501359-38)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/04/2015	ND	2.10	105	2.00	0.798		
Toluene*	<0.050	0.050	06/04/2015	ND	1.87	93.5	2.00	0.110		
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	1.80	90.2	2.00	0.401		
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.25	87.5	6.00	0.104		
Total BTEX	<0.300	0.300	06/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/02/2015	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/02/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	<10.0	10.0	06/02/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	<10.0	10.0	06/02/2015	ND					

Surrogate: 1-Chlorooctane 93.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 116 % 52.1-176

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### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
A-01	Original analysis run within hold time, but did not meet QC requirements. Re-analysis run outside EPA recommended hold time of 14 days.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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---

Celey D. Keene, Lab Director/Quality Manager

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 36 of 39

<b>Company Name:</b> Basin Environmental Service Technologies, LLC <b>Project Manager:</b> Ben Arguijo <b>Address:</b> P.O. Box 301 <b>City:</b> Lovington <b>State:</b> NM <b>Zip:</b> 88260 <b>Phone #:</b> (575)396-2378 <b>Fax #:</b> (575)396-1429 <b>Project #:</b> <b>Project Owner:</b> J&J Service, Inc. <b>Project Name:</b> Jones 34 Federal #1 Battery <b>Project Location:</b> Lea Co., NM <b>Sampler Name:</b> L. Noack				<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> Basin Env. <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>		<b>ANALYSIS REQUEST</b>																		
<b>FOR LAB USE ONLY</b>				<b>TPH (8015M)</b> <b>BTEX</b> <b>Chloride</b>																				
<b>Lab I.D.</b> H50B59		<b>Sample I.D.</b>		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	MATRIX WASTEWATER SOIL OIL SLUDGE OTHER:	PRESERV. ACID/BASE: ICE / COOL OTHER:	SAMPLING DATE TIME																	
1		TT-1 @ 1'		G	1	X				X	5/18/15	0900	X											
2		TT-1 @ 6'		G	1	X				X	5/18/15	0920	X	X										
3		TT-2 @ 2'		G	1	X				X	5/18/15	0930	X											
4		TT-3 @ 2'		G	1	X				X	5/18/15	0945	X	X	X									
5		TT-3 @ 4'		G	1	X				X	5/18/15	0950	X											
6		TT-3 @ 6'		G	1	X				X	5/18/15	0955	X	X										
7		TT-4 @ 1'		G	1	X				X	5/18/15	1005	X											
8		TT-4 @ 4'		G	1	X				X	5/18/15	1010	X	X										
9		TT-5 @ 2'		G	1	X				X	5/18/15	1025	X											
10		TT-5 @ 4'		G	1	X				X	5/18/15	1030	X											
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<b>Relinquished By:</b> [Signature]				<b>Date:</b> 5/18/15 <b>Time:</b> 1700		<b>Received By:</b> [Signature]				<b>Phone Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>Fax Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Fax #:</b> <b>REMARKS:</b>														
<b>Relinquished By:</b> [Signature]				<b>Date:</b> 5/19/15 <b>Time:</b> 1330		<b>Received By:</b> Jodi Benson																		
<b>Delivered By: (Circle One)</b> Sampler - UPS - Bus - Other:				5.20c		<b>Sample Condition</b> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No				<b>CHECKED BY:</b> [Signature]														
Please e-mail results to pm@basinenv.com & paul@muthig-env.com																								



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> Basin Environmental Service Technologies, LLC				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																								
<b>Project Manager:</b> Ben Arguijo				<b>P.O. #:</b>																												
<b>Address:</b> P.O. Box 301				<b>Company:</b> Basin Env.																												
<b>City:</b> Lovington <b>State:</b> NM <b>Zip:</b> 88260				<b>Attn:</b>																												
<b>Phone #:</b> (575)396-2378 <b>Fax #:</b> (575)396-1429				<b>Address:</b>																												
<b>Project #:</b> <b>Project Owner:</b> J&J Service, Inc.				<b>City:</b>																												
<b>Project Name:</b> Jones 34 Federal #1 Battery				<b>State:</b> <b>Zip:</b>																												
<b>Project Location:</b> Lea Co., NM				<b>Phone #:</b>																												
<b>Sampler Name:</b> L. Noack				<b>Fax #:</b>																												
FOR LAB USE ONLY				(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.	SAMPLING		TPH (8015M)	BTEX	Chloride																
Lab I.D.	Sample I.D.					WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE: ICE / COOL OTHER :																					
H501359																																
11	TT-5 @ 5'	G	1	X							X		5/18/15				1035	X	X													
12	TT-6 @ 1'	G	1	X							X		5/18/15				1055	X														
13	TT-6 @ 3'	G	1	X							X		5/18/15				1100	X		X												
14	TT-6 @ 7'	G	1	X							X		5/18/15				1110	X	X													
15	TT-7 @ 2'	G	1	X							X		5/18/15				1125	X	X	X												
16	TT-7 @ 5'	G	1	X							X		5/18/15				1135	X														
17	TT-7 @ 6'	G	1	X							X		5/18/15				1140	X	X													
18	TT-8 @ 1'	G	1	X							X		5/18/15	1150	X		X															
19	TT-8 @ 5'	G	1	X							X		5/18/15	1200	X	X																
20	TT-9 @ 2'	G	1	X							X		5/18/15	1245	X	X	X															

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<b>Relinquished By:</b> 		Date: 5/18/15	<b>Received By:</b> 		<b>Phone Result:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    Add'l Phone #:		
<b>Time:</b> 1:00			<b>Time:</b> 1:30		<b>Fax Result:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    Add'l Fax #:		
<b>Relinquished By:</b> 		Date: 5/29/15	<b>Received By:</b> 		<b>REMARKS:</b>		
<b>Time:</b> 1:30			<b>Time:</b> 1:30				
<b>Delivered By: (Circle One)</b> Sampler - UPS - Bus - Other:		Date: 5.20c		<b>Sample Condition</b> Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>CHECKED BY:</b> (Initials) 	

Please e-mail results to pm@basinenv.com & paul@muthig-env.com





101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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<b>BILL TO</b>						<b>ANALYSIS REQUEST</b>																			
Company Name: Basin Environmental Service Technologies, LLC Project Manager: Ben Arguijo Address: P.O. Box 301 City: Lovington State: NM Zip: 88260 Phone #: (575)396-2378 Fax #: (575)396-1429 Project #: Project Owner: J&J Service, Inc. Project Name: Jones 34 Federal #1 Battery Project Location: Lea Co., NM Sampler Name: L. Noack						P.O. #:  Company: Basin Env. Attn: Address: City: State: Zip: Phone #: Fax #:																			
						TPH (8015M)		BTEX		Chloride															
												<b>BTEX Added 6/3/15</b>													
FOR LAB USE ONLY		Lab I.D.		Sample I.D.		(G/RAB OR (C))OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING															
				GROUNDEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME												
				X					X			5/18/15	1300	X											
				X					X			5/26/15	0840	X											
				X					X			5/26/15	0915	X	X										
				X					X			5/26/15	0930	X	X	X									
				X					X			5/26/15	0945	X											
				X					X			5/26/15	0955	X	X	X									
				X					X			5/26/15	1010	X	X										
				X					X			5/26/15	1020	X											
				X					X			5/26/15	1030	X	X	X									
				X					X			5/26/15	1040	X	X										

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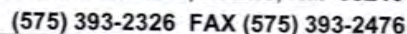
Relinquished By: [Signature]		Date: 5/18/15	Received By: [Signature]	Time: 1700	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:
Relinquished By: [Signature]		Date: 5/29/15	Received By: [Signature]	Time: 1330	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: [Initials]	REMARKS:
Please e-mail results to pm@basinenv.com & paul@muthig-env.com					

FORM-006  
Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

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## Page 39 of 39

Page 4 of 4

June 03, 2015

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JONES 34 FEDERAL #1 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/29/15 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/19/2015
Reported:	06/03/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: HA-1 @ 2' (H501360-01)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
<b>DRO &gt;C10-C28</b>	<b>90.2</b>	10.0	06/01/2015	ND	192	96.0	200	5.99	
<b>EXT DRO &gt;C28-C35</b>	<b>62.6</b>	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 96.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 125 % 52.1-176

**Sample ID: HA-1 @ 4' (H501360-02)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38	
Toluene*	<0.050	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92	
Ethylbenzene*	<0.050	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06	
Total Xylenes*	<0.150	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79	
Total BTX	<0.300	0.300	06/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>688</b>	16.0	06/02/2015	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/19/2015
Reported:	06/03/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: HA-1 @ 4' (H501360-02)**

TPH 8015M	mg/kg	Analyzed By: MS						S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
<b>DRO &gt;C10-C28</b>	<b>364</b>	10.0	06/01/2015	ND	192	96.0	200	5.99	
<b>EXT DRO &gt;C28-C35</b>	<b>211</b>	10.0	06/01/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	146 %	47.2-157							
Surrogate: 1-Chlorooctadecane	188 %	52.1-176							

**Sample ID: HA-2 @ 2' (H501360-03)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	06/02/2015	ND	416	104	400	3.92	
TPH 8015M	mg/kg	Analyzed By: MS						S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>3270</b>	100	06/01/2015	ND	177	88.4	200	2.82	
<b>DRO &gt;C10-C28</b>	<b>11900</b>	100	06/01/2015	ND	192	96.0	200	5.99	
<b>EXT DRO &gt;C28-C35</b>	<b>2030</b>	100	06/01/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	247 %	47.2-157							
Surrogate: 1-Chlorooctadecane	287 %	52.1-176							

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Basin Environmental Service  
 BEN J. ARGUIJO  
 P.O. Box 301  
 Lovington NM, 88260  
 Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/19/2015
Reported:	06/03/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: HA-2 @ 4' (H501360-04)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/01/2015	ND	1.89	94.3	2.00	3.38		
Toluene*	<0.050	0.050	06/01/2015	ND	1.95	97.6	2.00	2.92		
Ethylbenzene*	<0.050	0.050	06/01/2015	ND	1.81	90.6	2.00	4.06		
Total Xylenes*	<0.150	0.150	06/01/2015	ND	5.33	88.8	6.00	3.79		
Total BTEx	<0.300	0.300	06/01/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	11.1	10.0	06/01/2015	ND	177	88.4	200	2.82	
DRO >C10-C28	207	10.0	06/01/2015	ND	192	96.0	200	5.99	
EXT DRO >C28-C35	68.0	10.0	06/01/2015	ND					

Surrogate: 1-Chlorooctane 92.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/19/2015
Reported:	06/03/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: HA-3 @ 1' (H501360-05)**

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2015	ND	177	88.4	200	2.82	
<b>DRO &gt;C10-C28</b>	<b>186</b>	10.0	06/01/2015	ND	192	96.0	200	5.99	
<b>EXT DRO &gt;C28-C35</b>	<b>25.1</b>	10.0	06/01/2015	ND					
<hr/>									
Surrogate: 1-Chlorooctane	92.5 %	47.2-157							
Surrogate: 1-Chlorooctadecane	114 %	52.1-176							

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Basin Environmental Service  
BEN J. ARGUIJO  
P.O. Box 301  
Lovington NM, 88260  
Fax To: (575) 396-1429

Received:	05/29/2015	Sampling Date:	05/19/2015
Reported:	06/03/2015	Sampling Type:	Soil
Project Name:	JONES 34 FEDERAL #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: HA-3 @ 3' (H501360-06)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	06/01/2015	ND	1.89	94.3	2.00	3.38		
Toluene*	<0.500	0.500	06/01/2015	ND	1.95	97.6	2.00	2.92		
Ethylbenzene*	<0.500	0.500	06/01/2015	ND	1.81	90.6	2.00	4.06		
Total Xylenes*	<1.50	1.50	06/01/2015	ND	5.33	88.8	6.00	3.79		
Total BTEx	<3.00	3.00	06/01/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 131 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/02/2015	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	174	50.0	06/02/2015	ND	176	88.1	200	1.73	
DRO >C10-C28	1800	50.0	06/02/2015	ND	192	95.9	200	3.50	
EXT DRO >C28-C35	251	50.0	06/02/2015	ND					

Surrogate: 1-Chlorooctane 111 % 47.2-157

Surrogate: 1-Chlorooctadecane 134 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

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---

Celey D. Keene, Lab Director/Quality Manager



# **CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

## **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

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<b>Company Name:</b> Basin Environmental Service Technologies, LLC <b>Project Manager:</b> Ben Arguijo <b>Address:</b> P.O. Box 301 <b>City:</b> Lovington <b>State:</b> NM <b>Zip:</b> 88260 <b>Phone #:</b> (575)396-2378 <b>Fax #:</b> (575)396-1429 <b>Project #:</b> <b>Project Owner:</b> J&J Service, Inc. <b>Project Name:</b> Jones 34 Federal #1 Battery <b>Project Location:</b> Lea Co., NM <b>Sampler Name:</b> C. Fisher				<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> Basin Env. <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>				<b>ANALYSIS REQUEST</b>																																					
								TPH (8015M) BTEX Chloride																																					
FOR LAB USE ONLY						MATRIX		PRESERV.		SAMPLING																																			
Lab I.D.		Sample I.D.		(GRAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME																	
H501360																																													
1		HA-1 @ 2'		G		1		X												X						5/19/15		0900		X															
2		HA-1 @ 4'		G		1		X												X						5/19/15		0910		X		X													
3		HA-2 @ 2'		G		1		X												X						5/19/15		0910		X		X													
4		HA-2 @ 4'		G		1		X												X						5/19/15		0915		X		X													
5		HA-3 @ 1'		G		1		X												X						5/19/15		1015		X															
6		HA-3 @ 3'		G		1		X												X						5/19/15		1020		X		X													

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<b>Relinquished By:</b> Cameron Fisher <b>Relinquished By:</b> [Signature]		<b>Date:</b> 5/19/15 <b>Time:</b> 1700 <b>Date:</b> 5/29/15 <b>Time:</b> 1330		<b>Received By:</b> [Signature] <b>Received By:</b> Jodi Hinson		<b>Phone Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>Fax Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Fax #:</b> <b>REMARKS:</b> Please e-mail results to pm@basinenv.com & paul@muthig-env.com	
<b>Delivered By: (Circle One)</b> Sampler - UPS - Bus - Other:		5.20		<b>Sample Condition</b> Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>CHECKED BY:</b> (Initials) [Signature]	