

District I

1625 N French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S St Francis Dr., Santa Fe, NM 87505

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

Form C-144

July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

5511 Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

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

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

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

1
Operator: **Burlington Resources Oil & Gas Company, LP** OGRID#: **14538**
 Address: **P.O. Box 4289, Farmington, NM 87499**
 Facility or well name: **Howell 12**
 API Number: **30-045-34476** OCD Permit Number _____
 U/L or Qtr/Qtr: **I(NE/SE)** Section: **34** Township: **28N** Range: **8W** County: **San Juan**
 Center of Proposed Design: Latitude: **36.6159** °N Longitude: **107.66195** °W 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 **4400** bbl Dimensions L **65'** x W **45'** x D **10'**

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 ☐ PVD ☐ 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.

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6	<p>Fencing: Subsection D of 19 15 17 11 NMAC (<i>Applies to permanent pit, 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 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>Netting: 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 (<i>If netting or screening is not physically feasible</i>)</p>																				
8	<p>Signs: Subsection C of 19 15 17 11 NMAC</p> <p><input 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>Administrative Approvals and Exceptions:</p> <p>Justifications and/or demonstrations of equivalency are required Please refer to 19 15 17 NMAC for guidance</p> <p><i>Please check a box if one or more of the following is requested, if not leave blank:</i></p> <p><input type="checkbox"/> Administrative approval(s) Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration of approval. (Fencing/BGT Liner)</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>Siting Criteria (regarding permitting) 19.15 17 10 NMAC</p> <p><i>Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.</i></p> <table style="width: 100%;"> <tr> <td style="width: 80%;"> <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;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, 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;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <p>(<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;"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA </td> </tr> <tr> <td> <p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <p>(<i>Applied to permanent pits</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> </td> <td style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA </td> </tr> <tr> <td> <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;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <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;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <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;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <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;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within an unstable area.</p> <p>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society, Topographic map</p> </td> <td style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within a 100-year floodplain</p> <p>- FEMA map</p> </td> <td style="text-align: right;"> <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 watercourse, 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.</p> <p>(<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.</p> <p>(<i>Applied 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. 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<p>Within an unstable area.</p> <p>- Engineering measures incorporated into the design; NM Bureau of Geology & 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 _____ or Permit _____

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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 NMAC
- ☐ 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 _____
- ☐ Previously Approved Operating and Maintenance Plan API _____

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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 H₂S, 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
- ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

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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

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 # _____

Disposal Facility Name: _____ Disposal Facility Permit # _____

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

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

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

☐ Soil Backfill and Cover Design Specification - 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

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

☐ N/A

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

☐ N/A

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

☐ N/A

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

☐ 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 the 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

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

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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) _____ Title _____
 Signature _____ Date _____
 e-mail address _____ Telephone _____

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OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)**OCD Representative Signature:** [Signature] **Approval Date:** 9/14/2011**Title:** Compliance **OCD/Permit Number:** _____

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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:** July 9, 2008

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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 _____

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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

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Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☒ Proof of Closure Notice (surface owner and division)
☒ Proof of Deed Notice (required for on-site closure)
☒ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (if applicable)
☐ 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. 36.615978 °N Longitude 107.66222 °W NAD ☐ 1927 ☒ 1983

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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) Ethel Tally Title Staff Regulatory Technician
 Signature [Signature] Date 3/11/2010
 e-mail address ethel.tally@conocophillips.com Telephone 505/599-4027

**Burlington Resources Oil Gas Company, LP
San Juan Basin
Closure Report**

Lease Name: Howell 12

API No.: 30-045-34476

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure of the temporary pit referenced above. All proper documentation regarding closure activities is being included with the C-144. The temporary pit for this location was constructed and location drilled before June 16, 2008 (effective date for Rule 19.15.17). While closure of the temporary pit did fall within the rule some dates for submittals are after the rig release date.

- Details on Capping and Covering, where applicable **(See report)**
- Plot Plan (Pit Diagram) **(Included as an attachment)**
- Inspection Reports **(Included as an attachment)**
- Sampling Results **(Included as an attachment)**
- C-105 **(Included as an attachment)**
- Copy of Deed Notice will be filed with County Clerk **(Not required on Federal, State, or Tribal land as stated by FAQ dated October 30, 2008)**

General Plan:

1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves.

All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B).

2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.

The pit was closed using onsite burial.

3. The surface owner shall be notified of BR's closing of the temporary pit as per the approved closure plan using certified mail, return receipt requested.

The closure process notification to the landowner was sent via email. (See Attached)(Well located on Federal Land, certified mail is not required for Federal Land per BLM/OCD MOU.)

4. Within 6 months of the Rig Off status occurring BR will ensure that temporary pits are closed, re-contoured, and reseeded.

Provision 4 of the closure plan requirements were not met due to rig move off date as noted on C-105 which was prior to pit rule change. Burlington will ensure compliance with this rule in the future.

5. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
 - i. Operator's name
 - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

Notification is attached.

6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility.

Liner of temporary pit was removed above "mud level" after stabilization. Removal of the liner consisted of manually cutting liner at mud level and removing all remaining liner. Care was taken to remove "ALL" of the liner i.e., edges of liner entrenched or buried. All excessive liner was disposed of at a licensed disposal facility, (San Juan County Landfill).

7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.

Burlington mixed the Pit contents with non-waste containing, earthen material in order to achieve the solidification process. The solidification process was accomplished by using a combination of natural drying and mechanically mixing. Pit contents were mixed with non-waste, earthen material to a consistency that is deemed as safe and stable. The mixing ratio consisted of approximately 3 parts clean soil to 1 part pit contents.

8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

A five point composite sample was taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). (Sample results attached).

Components	Tests Method	Limit (mg/Kg)	Results
Benzene	EPA SW-846 8021B or 8260B	0.2	1.2 ug/kg
BTEX	EPA SW-846 8021B or 8260B	50	17.3 ug/kG
TPH	EPA SW-846 418.1	2500	1350mg/kg
GRO/DRO	EPA SW-846 8015M	500	7.2 mg/Kg
Chlorides	EPA 300.1	1000/500	207 mg/L

9. Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. If standard testing fails BR will dig and haul all contents pursuant to 19.15.17.13.i.a. After doing such, confirmation sampling will be conducted to ensure a release has not occurred.

The pit material passed solidification and testing standards. The pit area was then backfilled with compacted, non-waste containing, earthen material. More than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

10. During the stabilization process if the liner is ripped by equipment the Aztec OCD office will be notified within 48 hours and the liner will be repaired if possible. If the liner can not be repaired then all contents will be excavated and removed.

The integrity of the liner was not damaged in the pit closure process.

11. Dig and Haul Material will be transported to the Envirotech Land Farm located 16 miles south of Bloomfield on Angel Peak Road, CR 7175. Permit # NM010011

Dig and Haul was not required.

12. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The pit area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping included drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final re-contour has a uniform appearance with smooth surface, fitting the natural landscape.

13. Notification will be sent to OCD when the reclaimed area is seeded.

Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

14. BR shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Provision 14 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

15. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

Provision 15 was accomplished by installing a steel marker in the temporary pit, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial. The marker is flush with the ground to allow access of the active well pad and for safety concerns. The top of the marker contains a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate contains the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the following operator's information at the time of all wells on the pad are abandoned. The riser will be labeled: BR, BLM, Howell 12, UL-I, Sec. 34, T 28N, R 8W, API # 30-045-34476.

Tally, Ethel

From: Tafoya, Crystal
Sent: Wednesday, March 04, 2009 11:07 AM
To: Sessions, Tamra D
Subject: FW: OCD Pit Closure Notification

From: Tafoya, Crystal
Sent: Thursday, July 10, 2008 8:16 AM
To: 'mark_kelly@nm.blm.gov'
Subject: OCD Pit Closure Notification

The following temporary pits will be closed on-site. The new OCD Pit Rule 17 requires the surface owner be notified. Please feel free to contact me at any time if you have any questions. Thank you!

Allison Unit 2B
Allison Unit 40N
Angel Peak B 27E
Ballard 11F
Cain 725S
Canyon Largo Unit 250N
Canyon Largo Unit 279E
Canyon Largo Unit 288E
Canyon largo Unit 297E
Canyon Largo Unit 465E
Carson SRC 4E
Day B 4P
Day B 5A
East 17S
EPNG A 1B
EPNG B 1M
Federal A 1E
Filan 5M
Filan 5N
Fogelson 4 100
Fogelson 4 100S
Grambling C 202S
Hagood 19
Hamner 9S
Hardie 4P
Hare 295
Heaton Com 100
Helms Federal 1G
~~Howell 12~~
Huerfanito Unit 103F
Huerfanito Unit 29S
Huerfanito Unit 39S
Huerfanito Unit 47S
Huerfanito Unit 50E
Huerfanito Unit 75E
Huerfanito Unit 83E
Huerfanito Unit 87E
Huerfanito Unit 90E
Huerfanito Unit 90M

District II
1301 W Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rd. Aztec, NM 87410

District IV
1220 S St Francis Dr., Santa Fe, NM 87505

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code 71629 / 72359	*Pool Name BASIN FRUITLAND COAL / BLANCO PICTURED CLIFFS	
*Property Code	*Property Name HOWELL			*Well Number 12
*OGRID No 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP			*Elevation 6270'

¹⁰ Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	34	28N	8W		1760	SOUTH	770	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 301.04 Acres (S/2) - FC 151.44 Acres (SE/4) - PC	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

5280.00

16

2640.00'

2640.00'

1320.00'

1133.22'

34

1870'

745'

770'

1760'

1320.00'

1193.94'

5280.00'

LEASE
SF-078566-A

LOT 1

LOT 2

LOT 3

LOT 4

LAT: 36°36'95.34"N
LONG: 107°39'68.01"W
DATUM: NAD27

LAT: 36°6'15.90"N
LONG: 107°66'19.5"W
DATUM: NAD83

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OPERATOR CERTIFICATION

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

Signature _____ Date _____
Virgil E. Chavez

Printed Name _____


18

SURVEYOR CERTIFICATION

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

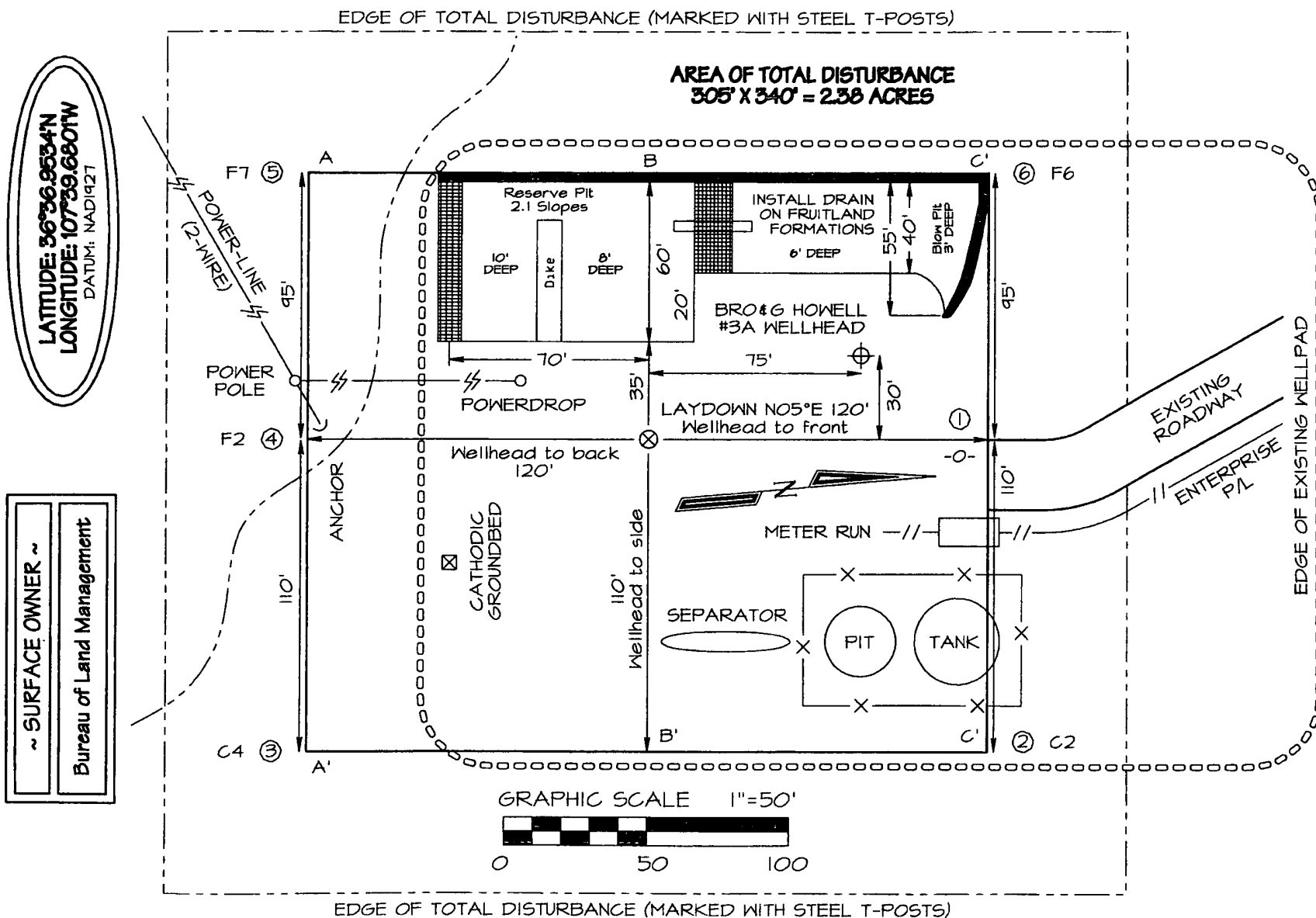
Survey Date AUGUST 15, 2007

Signature and Seal of Professional Surveyor _____



JASON C. EDWARDS
Certificate Number 15269

BURLINGTON RESOURCES OIL & GAS COMPANY HOWELL #12
1760' FSL & 770' FEL, SECTION 34, T28N, R8W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6270'



NCE SURVEYS IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: ConococPhillips
Sample ID: Howell #12
Laboratory Number: 46277
Chain of Custody No: 4481
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

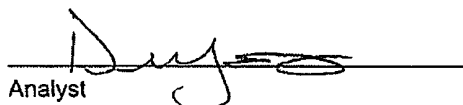
Project #: 96052-0026
Date Reported: 07-15-08
Date Sampled: 07-08-08
Date Received: 07-09-08
Date Extracted: 07-14-08
Date Analyzed: 07-15-08
Analysis Requested: 8015 TPH

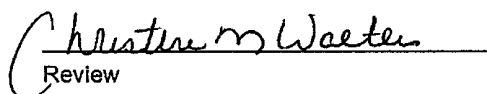
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	7.2	0.1
Total Petroleum Hydrocarbons	7.2	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Drilling Pit Sample.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	ConococPhillips	Project #:	96052-0026
Sample ID:	Howell #12 Background	Date Reported:	07-15-08
Laboratory Number:	46278	Date Sampled:	07-08-08
Chain of Custody No:	4481	Date Received:	07-09-08
Sample Matrix:	Soil	Date Extracted:	07-14-08
Preservative:	Cool	Date Analyzed:	07-15-08
Condition:	Intact	Analysis Requested:	8015 TPH

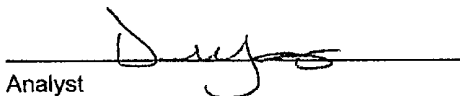
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

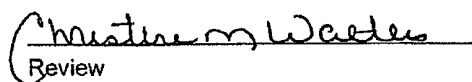
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Drilling Pit Sample.**

Analyst



Review



EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-15-08 QA/QC	Date Reported:	07-15-08
Laboratory Number:	46256	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-15-08
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	1.0123E+003	1.0127E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0050E+003	1.0054E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	11.0	10.9	0.9%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	243	97.2%	75 - 125%
Diesel Range C10 - C28	11.0	250	259	99.2%	75 - 125%

ND - Parameter not detected at the stated detection limit.

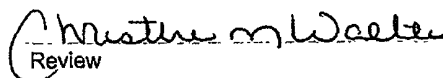
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 46256 - 46257, 46273 - 46278, and 46377 - 46378.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-0026
Sample ID:	Howell #12	Date Reported:	07-16-08
Laboratory Number:	46277	Date Sampled:	07-08-08
Chain of Custody:	4481	Date Received:	07-09-08
Sample Matrix:	Soil	Date Analyzed:	07-15-08
Preservative:	Cool	Date Extracted:	07-14-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1.2	0.9
Toluene	4.1	1.0
Ethylbenzene	2.5	1.0
p,m-Xylene	7.5	1.2
o-Xylene	2.0	0.9
Total BTEX	17.3	

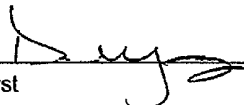
ND - Parameter not detected at the stated detection limit.

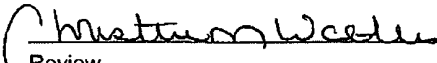
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Drilling Pit Sample.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-0026
Sample ID:	Howell #12 Background	Date Reported:	07-16-08
Laboratory Number:	46278	Date Sampled:	07-08-08
Chain of Custody:	4481	Date Received:	07-09-08
Sample Matrix:	Soil	Date Analyzed:	07-15-08
Preservative:	Cool	Date Extracted:	07-14-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	ND	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	ND	1.2
o-Xylene	ND	0.9
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Drilling Pit Sample.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 07-15-BT QA/QC
Laboratory Number: 46254
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 07-16-08
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 07-15-08
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept Range: 0 - 15%			
Benzene	1.4558E+007	1.4587E+007	0.2%	ND	0.1
Toluene	9.9191E+006	9.9390E+006	0.2%	ND	0.1
Ethylbenzene	7.4164E+006	7.4312E+006	0.2%	ND	0.1
p,m-Xylene	1.8962E+007	1.9000E+007	0.2%	ND	0.1
o-Xylene	7.2244E+006	7.2389E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect Limit
Benzene	1.0	1.1	10.0%	0 - 30%	0.9
Toluene	2.2	2.0	9.1%	0 - 30%	1.0
Ethylbenzene	1.6	1.7	6.3%	0 - 30%	1.0
p,m-Xylene	1.9	1.8	5.3%	0 - 30%	1.2
o-Xylene	1.3	1.2	7.7%	0 - 30%	0.9

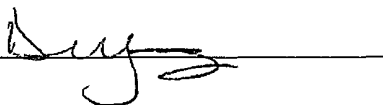
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	1.0	50.0	50.4	98.8%	39 - 150
Toluene	2.2	50.0	51.6	98.9%	46 - 148
Ethylbenzene	1.6	50.0	51.0	98.8%	32 - 160
p,m-Xylene	1.9	100	101	99.4%	46 - 148
o-Xylene	1.3	50.0	50.7	98.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

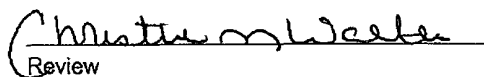
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 46254 - 46257 and 46273 - 46278.

Analyst



Review



Client:	ConocoPhillips	Project #:	96052-0026
Sample ID:	Howell #12	Date Reported:	07-11-08
Laboratory Number:	46277	Date Sampled:	07-08-08
Chain of Custody:	4481	Date Received:	07-09-08
Sample Matrix:	Soil	Date Analyzed:	07-09-08
Preservative:	Cool	Date Digested:	07-09-08
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.136	0.001	5.0
Barium	60.7	0.001	100
Cadmium	0.001	0.001	1.0
Chromium	0.207	0.001	5.0
Lead	0.407	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.069	0.001	1.0
Silver	0.001	0.001	5.0

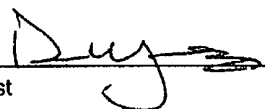
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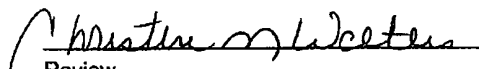
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: **Drilling Pit Sample.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	ConocoPhillips	Project #:	96052-0026
Sample ID:	Howell #12 Background	Date Reported:	07-11-08
Laboratory Number:	46278	Date Sampled:	07-08-08
Chain of Custody:	4481	Date Received:	07-09-08
Sample Matrix:	Soil	Date Analyzed:	07-09-08
Preservative:	Cool	Date Digested:	07-09-08
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.125	0.001	5.0
Barium	13.7	0.001	100
Cadmium	0.003	0.001	1.0
Chromium	0.176	0.001	5.0
Lead	0.508	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.064	0.001	1.0
Silver	0.008	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Drilling Pit Sample.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	QA/QC
Sample ID:	07-09 TM QA/QC	Date Reported:	07-11-08
Laboratory Number:	46273	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	07-09-08
Condition:	N/A	Date Digested:	07-09-08

Blank & Duplicate Conc. (mg/Kg)	Instrument Blank (mg/Kg)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	0.131	0.129	0.8%	0% - 30%
Barium	ND	ND	0.001	8.56	8.84	3.2%	0% - 30%
Cadmium	ND	ND	0.001	0.007	0.007	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.383	0.409	6.8%	0% - 30%
Lead	ND	ND	0.001	0.234	0.243	3.7%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.098	0.090	7.8%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

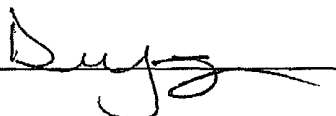
Spike Conc. (mg/Kg)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.250	0.131	0.332	87.3%	80% - 120%
Barium	0.500	8.56	9.21	102%	80% - 120%
Cadmium	0.250	0.007	0.231	89.9%	80% - 120%
Chromium	0.500	0.383	0.750	84.9%	80% - 120%
Lead	0.500	0.234	0.76	103%	80% - 120%
Mercury	0.100	ND	0.097	97.3%	80% - 120%
Selenium	0.100	0.098	0.204	103%	80% - 120%
Silver	0.100	ND	0.093	92.9%	80% - 120%

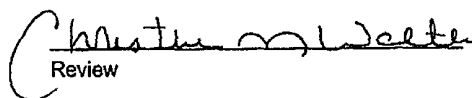
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 46273 - 46278.

Analyst 

Review 

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW


CATION / ANION ANALYSIS

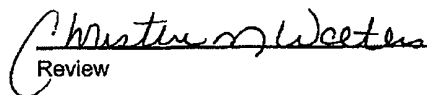
Client:	ConocoPhillips	Project #:	96052-0026
Sample ID:	Howell #12	Date Reported:	07-15-08
Laboratory Number:	46277	Date Sampled:	07-08-08
Chain of Custody:	4481	Date Received:	07-09-08
Sample Matrix:	Soil Extract	Date Extracted:	07-09-08
Preservative:	Cool	Date Analyzed:	07-10-08
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	7.41	s.u		
Conductivity @ 25° C	1,460	umhos/cm		
Total Dissolved Solids @ 180C	860	mg/L		
Total Dissolved Solids (Calc)	803	mg/L		
SAR	4.6	ratio		
Total Alkalinity as CaCO3	44.0	mg/L		
Total Hardness as CaCO3	152	mg/L		
Bicarbonate as HCO3	44.0	mg/L	0.72	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.01	mg/L	0.00	meq/L
Nitrite Nitrogen	0.001	mg/L	0.00	meq/L
Chloride	207	mg/L	5.84	meq/L
Fluoride	0.521	mg/L	0.03	meq/L
Phosphate	0.400	mg/L	0.01	meq/L
Sulfate	381	mg/L	7.93	meq/L
Iron	0.027	mg/L	0.00	meq/L
Calcium	40.0	mg/L	2.00	meq/L
Magnesium	12.6	mg/L	1.04	meq/L
Potassium	6.18	mg/L	0.16	meq/L
Sodium	129	mg/L	5.61	meq/L
Cations			8.80	meq/L
Anions			14.53	meq/L
Cation/Anion Difference			39.43%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **Drilling Pit Sample.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	ConocoPhillips	Project #:	96052-0026
Sample ID:	Howell #12 Background	Date Reported:	07-15-08
Laboratory Number:	46278	Date Sampled:	07-08-08
Chain of Custody:	4481	Date Received:	07-09-08
Sample Matrix:	Soil Extract	Date Extracted:	07-09-08
Preservative:	Cool	Date Analyzed:	07-10-08
Condition:	Intact		

Parameter	Analytical Result	Units
pH	7.25	s.u.
Conductivity @ 25° C	5,580	umhos/cm
Total Dissolved Solids @ 180C	2,770	mg/L
Total Dissolved Solids (Calc)	3,234	mg/L
SAR	17.1	ratio
Total Alkalinity as CaCO3	42.0	mg/L
Total Hardness as CaCO3	472	mg/L

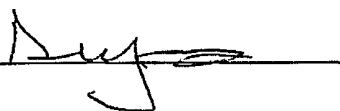
Bicarbonate as HCO3	42.0	mg/L	0.69	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.81	mg/L	0.03	meq/L
Nitrite Nitrogen	0.007	mg/L	0.00	meq/L
Chloride	81.7	mg/L	2.30	meq/L
Fluoride	0.478	mg/L	0.03	meq/L
Phosphate	1.20	mg/L	0.04	meq/L
Sulfate	2,100	mg/L	43.72	meq/L
Iron	0.003	mg/L	0.00	meq/L
Calcium	121	mg/L	6.04	meq/L
Magnesium	41.3	mg/L	3.40	meq/L
Potassium	4.87	mg/L	0.12	meq/L
Sodium	856	mg/L	37.24	meq/L

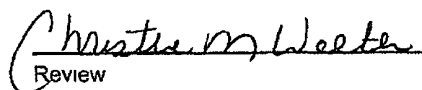
Cations	46.80	meq/L
Anions	46.81	meq/L

Cation/Anion Difference 0.02%

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Drilling Pit Sample.

Analyst 

Review 



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: Burlington
Sample No.: 1
Sample ID: 5 pt Composite
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 92115-1184
Date Reported: 2/17/2010
Date Sampled: 2/2/2010
Date Analyzed: 2/2/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	1,350	5.0
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ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Howell #12**

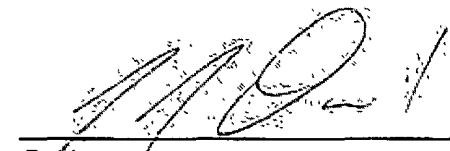
Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Joshua M Kirchner

Printed



Review

James McDaniel

Printed

Submit To Appropriate District Office Two Copies District I 1625 N French Dr., Hobbs, NM 88240 District II 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S St Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 July 17, 2008								
		1. WELL API NO. 30-045-34476								
		2 Type of Lease <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> FED/INDIAN								
		3 State Oil & Gas Lease No Federal USA SF-078566-A								
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
4. Reason for filing <input type="checkbox"/> COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) <input checked="" type="checkbox"/> C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13 K NMAC)		5 Lease Name or Unit Agreement Name Howell								
		6 Well Number 12								
7 Type of Completion <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER										
8. Name of Operator Burlington Resources Oil Gas Company, LP		9 OGRID 14538								
10 Address of Operator		11 Pool name or Wildcat								
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:										
BH:										
13 Date Spudded	14 Date T.D Reached	15 Date Rig Released 3/26/2008		16 Date Completed (Ready to Produce)			17 Elevations (DF and RKB, RT, GR, etc)			
18 Total Measured Depth of Well		19 Plug Back Measured Depth		20 Was Directional Survey Made?			21 Type Electric and Other Logs Run			
22 Producing Interval(s), of this completion - Top, Bottom, Name										
23 CASING RECORD (Report all strings set in well)										
CASING SIZE		WEIGHT LB /FT		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED
24. LINER RECORD						25 TUBING RECORD				
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN		SIZE	DEPTH SET	PACKER SET		
26 Perforation record (interval, size, and number)						27 ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.				
						DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED		
28 PRODUCTION										
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)					Well Status (Prod. or Shut-in)			
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl	Gas - Oil Ratio			
Flow Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API - (Corr)				
29 Disposition of Gas (Sold, used for fuel, vented, etc)							30 Test Witnessed By			
31 List Attachments										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit										
33 If an on-site burial was used at the well, report the exact location of the on-site burial										
Latitude 36 615978°N Longitude 107 6622°W NAD <input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983										
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief										
Signature <i>Ethel Tally</i>			Printed Name Ethel Tally			Title: Staff Regulatory Technician			Date: 3/1/2010	
E-mail Address ethel.tally@conocophillips.com										

ConocoPhillips

Pit Closure Form:

Date: 7/9/08

Well Name: Howell #12

Footages: 1760' FSL 770' FEL Unit Letter: I

Section: 34, T-28 -N, R-8 -W, County: San Juan State: New Mexico

Pit Closure Date: 7/9/08

Contractor Closing Pit: ACE Services

Johnny McDonald 7/9/08
Construction Inspector Name Date ConocoPhillips

Johnny McDonald
signature

Tally, Ethel

From: Swenson, Kathy A
Sent: Thursday, July 03, 2008 11:36 AM
To: 'Brandon.Powell@state.nm.us'; 'Mark Kelly'; 'Sherrie Landon'; 'Robert Switzer'
Cc: 'McDonald,Johnny'; 'acedragline@yahoo.com'; Blair, Maxwell O; Blakley, Maclovvia; Clark, Joan E; Farrell, Juanita R; Finkler, Jane; Maxwell, Mary A (SOS Staffing Services, Inc.); McWilliams, Peggy L; Seabolt, Elmo F
Subject: Clean Up Notice: Howell #12
Importance: High
Attachments: Howell 12.pdf

Ace Services will move a tractor to the **Howell #12** on **Monday, July 7, 2008** to start the reclamation process. Please contact Johnny McDonald (215-2861) if you have any questions or need additional information.

Network #: 10207251 (hBR - NANN) BLM surface/BLM minerals

API: 30-045-34476



Howell 12.pdf
(184 KB)

Kathy Swenson

ConocoPhillips - SJBU

Construction Technician-Project Development Team

Farmington, NM 87401

505 324 6127(office) 505.599.4062(fax)

[Kathy A Swenson@conocophillips.com](mailto:Kathy.A.Swenson@conocophillips.com)

ConocoPhillips

Reclamation Form:

Date: 7/30/08

Well Name: Howell #12

Footages: 1760' FSL 770' FEL Unit Letter: I

Section: 34, T- 28 -N, R- 8 -W, County: San Juan State: New Mexico

Reclamation Contractor: ACE Services

Reclamation Date: 7/9/08

Road Completion Date: 7/10/08

Seeding Date: 7/24/08

Johnny McDonald 7/30/08
Construction Inspector Name Date ConocoPhillips

Johnny McDonald
Signature

Revised 3/12/08



WELL PAD SAFETY AND ENVIRONMENTAL CHECK LIST

[illegible]