

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 Resources

Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

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

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

2042

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.

| | | |
|--|--------------------------------|---|
| Operator: <u>Burlington Resources Oil & Gas Company, LP</u> | | OGRID#: <u>14538</u> |
| Address: <u>PO Box 4289, Farmington, NM 87499</u> | | |
| Facility or well name: <u>McDurmitt 1N</u> | | |
| API Number: <u>30-045-34526</u> | OCD Permit Number: _____ | |
| U/L or Qtr/Qtr: <u>C(NENW)</u> | Section: <u>6</u> | Township: <u>31N</u> Range: <u>12W</u> County: <u>San Juan</u> |
| Center of Proposed Design: Latitude: <u>36.93231' N</u> | Longitude: <u>108.13696' W</u> | NAD: <input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983 |
| Surface Owner: <input type="checkbox"/> Federal <input type="checkbox"/> State <input checked="" type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment | | |

| | |
|--|--|
| <input type="checkbox"/> Pit: Subsection F or G of 19.15.17.11 NMAC | |
| Temporary. <input type="checkbox"/> Drilling <input type="checkbox"/> Workover | |
| <input type="checkbox"/> Permanent <input type="checkbox"/> Emergency <input type="checkbox"/> Cavitation <input type="checkbox"/> P&A | |
| <input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> String-Reinforced | |
| Liner Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____ | Volume: _____ bbl Dimensions L _____ x W _____ x D _____ |

| | |
|---|--|
| <input type="checkbox"/> Closed-loop System: Subsection H of 19.15.17.11 NMAC | |
| Type of Operation. <input type="checkbox"/> P&A <input type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) | |
| <input type="checkbox"/> Drying Pad <input type="checkbox"/> Above Ground Steel Tanks <input type="checkbox"/> Haul-off Bins <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVD <input type="checkbox"/> Other _____ | |
| Liner Seams. <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____ | |

| | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Below-grade tank: Subsection I of 19.15.17.11 NMAC | |
| Volume <u>120</u> bbl | Type of fluid: <u>Produced Water</u> |
| Tank Construction material: <u>Metal</u> | |
| <input type="checkbox"/> Secondary containment with leak detection <input checked="" type="checkbox"/> Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off | |
| <input type="checkbox"/> Visible sidewalls and liner <input type="checkbox"/> Visible sidewalls only <input type="checkbox"/> Other _____ | |
| Liner Type: Thickness <u>45</u> mil <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input checked="" type="checkbox"/> Other <u>LLDPE</u> | |

| |
|--|
| <input type="checkbox"/> Alternative Method: |
| Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|---|--|---|--|--|---|--|---|---|--|---|---|---|---|---|---|---|--|---|
| 6 | <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 checked="" type="checkbox"/> Alternate. Please specify <u>4' hogwire fence with a single strand of barbed wire on top.</u></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 checked="" 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: 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.</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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No | <p>Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended</p> <p>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <p>Within 500 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <p>Within the area overlying a subsurface mine.</p> <p>- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <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 checked="" type="checkbox"/> No | <p>Within a 100-year floodplain</p> <p>- FEMA map</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <p>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p> | <input type="checkbox"/> Yes <input checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | |
| <p>Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended</p> <p>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | |
| <p>Within 500 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | |
| <p>Within the area overlying a subsurface mine.</p> <p>- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | |
| <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 checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | |
| <p>Within a 100-year floodplain</p> <p>- FEMA map</p> | <input type="checkbox"/> Yes <input checked="" 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
☒ 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 _____

12

Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API _____

☐ Previously Approved Operating and Maintenance Plan API _____

13

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (I) 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)

15

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

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

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 operations?

☐ 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

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

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

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

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17 11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

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

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

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15 17.13 NMAC

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

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

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

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17.13 NMAC

19

Operator Application Certification:

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

Name (Print): Crystal Tafoya Title: Regulatory Technician
 Signature: *Crystal Tafoya* Date: 10/20/08
 e-mail address: crystal.tafoya@conocophillips.com Telephone: 505-326-9837

20

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

OCD Representative Signature: *Bob Bell* Approval Date: 10/19/09

Title: Enviro/Spec OCD Permit Number: _____

21

Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: _____

22

Closure Method:

- ☐ Waste Excavation and Removal ☐ On-site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain _____

23

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

- ☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

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

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24

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

- ☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ 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: _____ Longitude: _____ NAD ☐ 1927 ☐ 1983

25

Operator Closure Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 12W Section: 6,5,7,8

NAD27 ☒ X ☐ Y Zone: ☒ Search Radius:

County: ☒ Basins: ☒ Number: Suffix:

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

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

WATER COLUMN REPORT 10/06/2008

(quarters are 1-NW 2-NE 3-SW 4-SE)

(quarters are biggest to smallest)

| POD Number | Twp | Range | Sec | q | q | q | Zone | X | Y | Depth Well | Depth Water | Water Column |
|------------|-----|-------|-----|---|---|---|------|---|---|------------|-------------|--------------|
| SJ 02904 | 31N | 12W | 05 | 4 | 4 | 1 | | | | 325 | 142 | 183 |

Records Count: 1

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 32N Range: 12W Sections: 31,32

NAD27 ☐ No ☒ Yes Zone: ☐ Search Radius:

County: ☐ Basins: ☐ Number: Suffix:

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

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

WATER COLUMN REPORT 10/06/2008

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

(quarters are biggest to smallest)

| POD Number | Twp | Rng | Sec | q | q | q | Zone | X | Y | Depth Well | Depth Water | Water Column |
|------------|-----|-----|-----|---|---|---|------|---|---|---------------|----------------|-----------------|
|------------|-----|-----|-----|---|---|---|------|---|---|---------------|----------------|-----------------|

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 32N Range: 13W Section: 36

NAD83 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

WATER COLUMN REPORT 10/06/2008

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

(quarters are biggest to smallest)

| POD Number | Twp | Range | Sec | Q | Q | Q | Zone | X | Y | Depth Well | Depth Water | Water Column |
|------------|-----|-------|-----|---|---|---|------|---|---|---------------|----------------|-----------------|
|------------|-----|-------|-----|---|---|---|------|---|---|---------------|----------------|-----------------|

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 13W Sections: 1,2,12

NAD27: ☒ X: ☐ Y: ☐ Zone: ☒ Search Radius:

County: ☒ Basin: ☒ Number: Suffix:

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

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

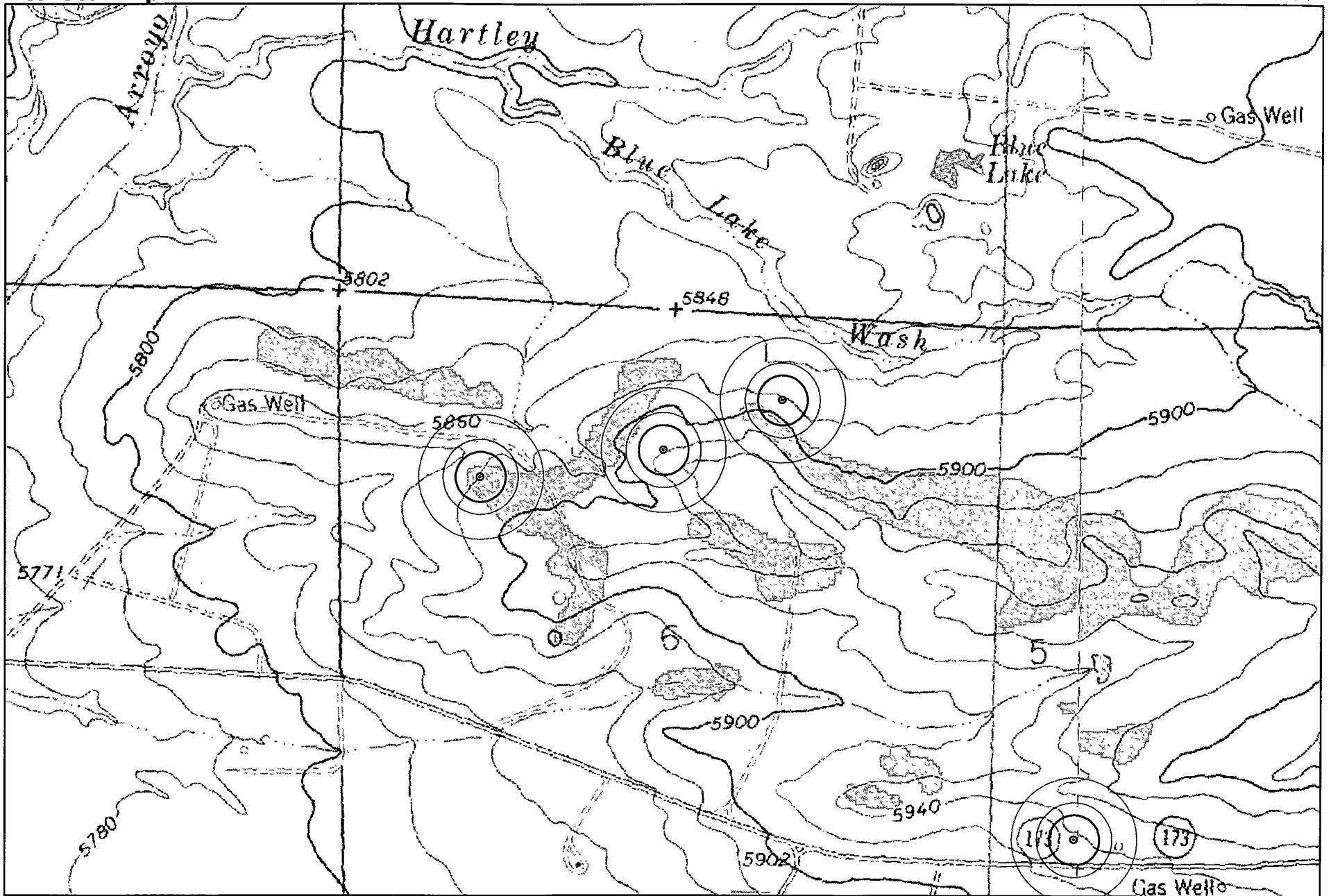
WATER COLUMN REPORT 10/06/2008

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

(quarters are biggest to smallest)

| POD Number | Twp | Rng | Sec | q | q | q | Zone | X | Y | Well | Depth Water | Water Column |
|------------|-----|-----|-----|---|---|---|------|---|---|------|-------------|--------------|
| SJ 02590 | 31N | 13W | 02 | 1 | 2 | 3 | | | | 114 | 00 | 14 |
| SJ 00835 | 31N | 13W | 02 | 2 | 3 | 4 | | | | 54 | 19 | 1 |

Record Count: 2



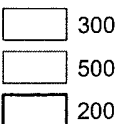
Data Source
Aerial flown locally Sedgewick in 2005.
Wetlands Data Aquired from U.S Fish
and Wildlife [Http://wetlandswms er.usgs.gov](http://wetlandswms.er.usgs.gov)
USGS Topo



COPCathodic



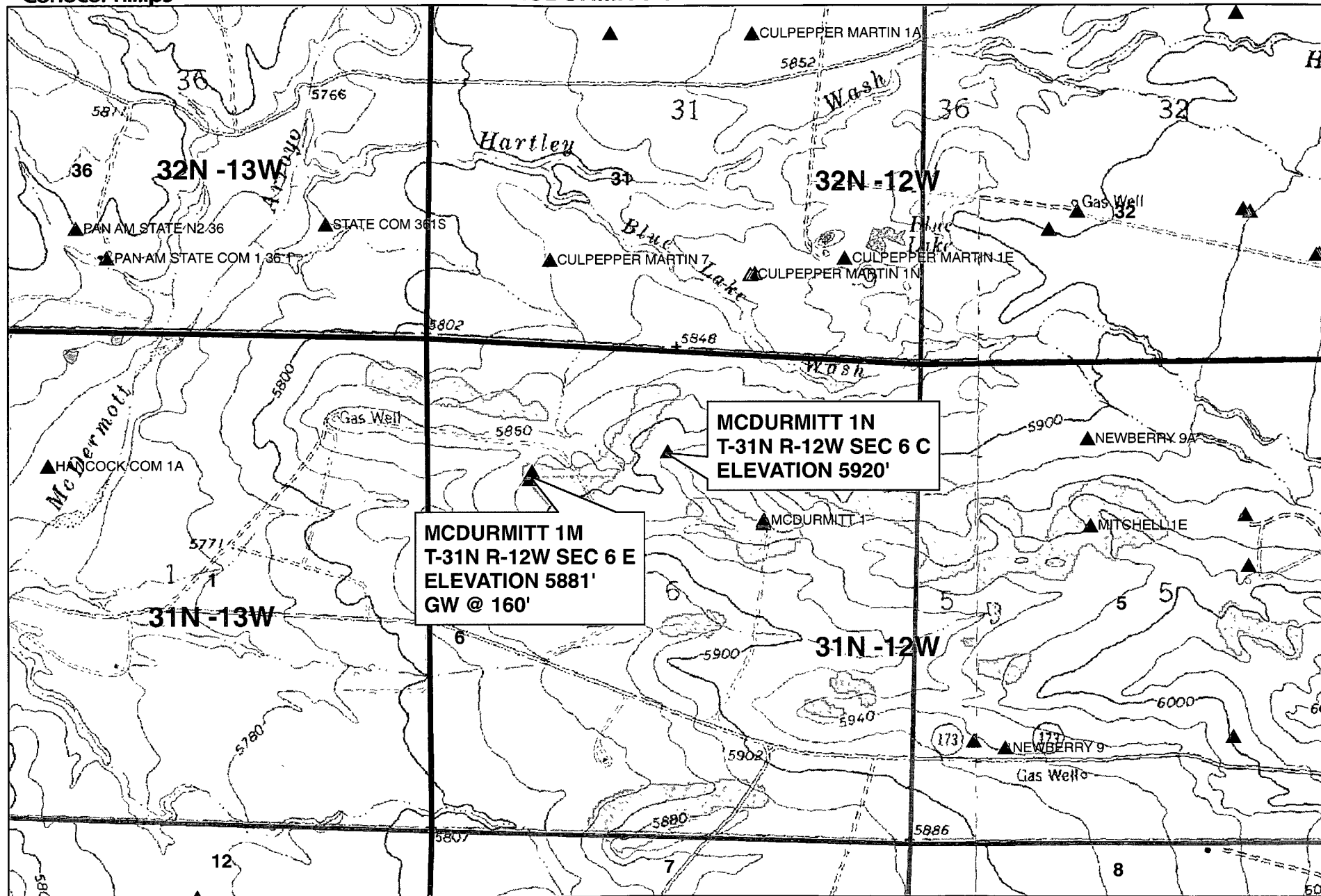
iWaters



Wetlands
City Limits

1:12,000

NAD_1983_SP_
NM West_FIPS_
3003
Sep 22, 2008



Data Source
Aerial flown locally Sedgewick in 2005.
Wetlands Data Aquired from U.S. Fish
and Wildlife [Http://wetlandswms.er.usgs.gov](http://wetlandswms.er.usgs.gov)
USGS Topo

iWaters
 SEC
 QTR-QTR
 QTR-QTR-QTR

Wetlands
 City Limits

iWaters
 COP
 JoinedDSM-Hydro 9-5-08

0 600 1,200 Feet
1:16,182

NAD_1983_SP_
NM West_FIPS_
3003

1659

E

30-045-26257

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit E Sec. 6 Twp 31 Rng 12

Name of Well/Wells or Pipeline Serviced McDURMITT #1M

cps 1990w

Elevation 5881' Completion Date 9/1/88 Total Depth 360' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used
N/A

Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 160' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 340', 305', 295', 285', 275', 265', 255', 240', 225', 200'

Depths vent pipes placed: 360'

Vent pipe perforations: 260'

Remarks: gb #1

RECEIVED

MAY 31 1991

OIL CON. DIV
DIST

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: ☐ OIL WELL ☒ GAS WELL ☐ DRY ☐ Other **RECEIVED**
2. TYPE OF COMPLETION: ☒ NEW WELL ☐ WORK OVER ☐ DEEP EN ☐ PLUG BACK ☐ DIFF REPAIR ☐ Other

3. NAME OF OPERATOR: El Paso Natural Gas Company

4. ADDRESS OF OPERATOR: P. O. Box 4289, Farmington, NM 87499

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements):
At surface 1450'N, 1100'W
At top prod. interval reported below
At total depth

6. PERMIT NO.: 1450-1985
7. DATE INSLED: 1/6/86

8. DATE SPUNDED: 11-7-85
9. DATE T.D. REACHED: 11-20-85
10. DATE COMPL. (Ready to prod.): 12-18-85
11. ELEVATION (OP. H.B. RT. CR. ETC.): 5881' GL
12. ELEV. CASINGHEAD: 5881'

13. TOTAL DEPTH, MD & TVD: 6931'
14. PLUG BACK T.D., MD & TVD: 6920'
15. IF MULTIPLE COMPL., HOW MANY?: Two
16. INTERVALS DRILLED BY: Rotary
17. ROTARY TOOLS: No
18. CABLE TOOLS: No

19. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD):
4582-4922' (Blanco Mesa Verde)
20. WAS DIRECTIONAL SURVEY MADE: No

21. TYPE ELECTRIC AND OTHER LOGS RUN: Correlation Gamma-Ray Log; Temp. Log; Ind. Log; Dual Ind. Log; Formation Density-Comp. NL; Temp S.
22. WAS WELL COR.: No

| 23. CASING RECORD (Report all strings set in well) | | | | | |
|--|-----------------|----------------|-----------|------------------|---------------|
| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD | AMOUNT FILLED |
| 9 5/8" | 32.3# | 341' | 12 1/4" | 224 cu ft | |
| 7" | 23.0# | 4150' | 8 3/4" | 1257 cu ft | |

| 24. LINER RECORD | | | | | 25. TUBING RECORD | | |
|------------------|----------|-------------|---------------|-------------|-------------------|----------------|-----------------|
| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
| 4 1/2" | 3982' | 6928' | 534 cu ft | | 2 3/8" | 3972' | |
| | | | | | 1 1/2" | 6899' | |

26. PERFORATION RECORD (Interval, size and number): Pressure test to 4000 psi-ok. Perf'd (DK) 6774, 6776, 6778, 6780, 6782, 6784, 6786, 6788, 6790, 6792, 6794, 6796, 6798, 6849, 6852, 6855, 6858, 6871, 6874, 6877, 6880, 6893, 6896, 6899, 6902 w/1 SPZ.
2nd stage (MV Lower Pt) 4723, 4742, 4758, 4766, 4768, 4770, 4772, 4774, 4776, 4778, 4780, 4782, 4784, 4786, 4788, 4790, 4792, 4794, 4796, 4798, 4800, 4802, 4804, 4806, 4808, 4810, 4812, 4814, 4816, 4818, 4820, 4822, 4824, 4826, 4828, 4830, 4832, 4834, 4836, 4838, 4840, 4842, 4844, 4846, 4848, 4850, 4852, 4854, 4856, 4858, 4860, 4862, 4864, 4866, 4868, 4870, 4872, 4874, 4876, 4878, 4880, 4882, 4884, 4886, 4888, 4890, 4892, 4894, 4896, 4898, 4900, 4902, 4904, 4906, 4908, 4910, 4912, 4914, 4916, 4918, 4920, 4922, 4924, 4926, 4928, 4930, 4932, 4934, 4936, 4938, 4940, 4942, 4944, 4946, 4948, 4950, 4952, 4954, 4956, 4958, 4960, 4962, 4964, 4966, 4968, 4970, 4972, 4974, 4976, 4978, 4980, 4982, 4984, 4986, 4988, 4990, 4992, 4994, 4996, 4998, 5000.

* Continued Perf's listed on back pg. 1
27. PRODUCTION 4582-4702' 38,000# 20/40 sand & 87,330 gal
28. PRODUCTION 4702-4922' 72,000# 20/40 sand & 94,960 gal
29. PRODUCTION 4922-5000' 72,000# 20/40 sand & 94,960 gal

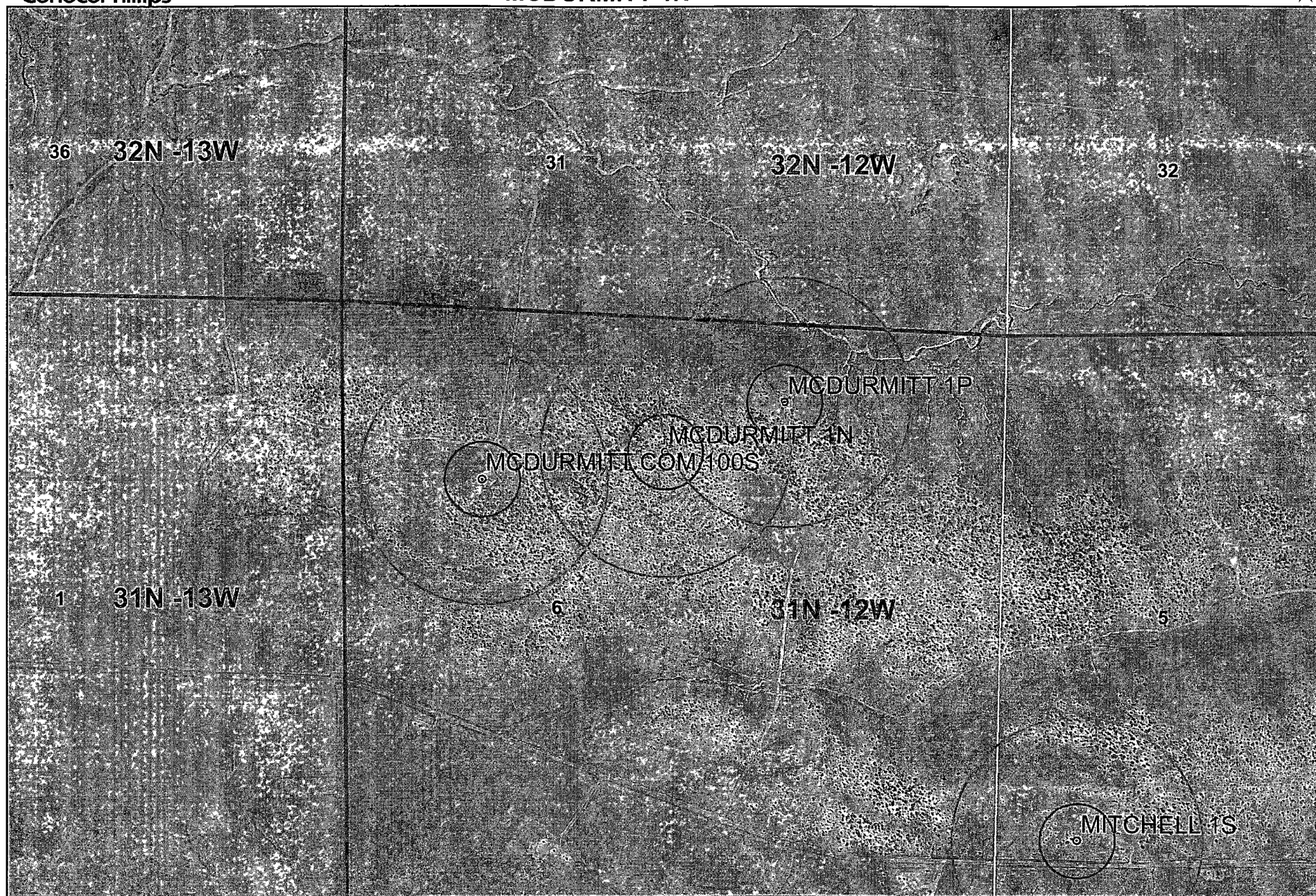
| 30. DATE FIRST PRODUCTION | | 31. PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | | | | 32. WELL STATUS (Producing, Shut-in) | |
|---------------------------|-----------------|--|-------------------------|----------|-----------|--------------------------------------|-------------------------|
| 11-30-85 | | Flowing | | | | Shut in | |
| DATE OF TEST | HOURS TESTED | CHOKE SIZE | PROD'Y. FOR TEST PERIOD | OIL—BBL. | GAS—MCF | WATER—BBL. | GAS-OIL RATIO |
| 12-18-85 | SI 14 Days | 3/4" | | 0 | 478 MCF/D | 0 | 0 |
| FLOW. TUBING PRESS. | CASING PRESSURE | CALCULATED 24-HOUR RATE | PROD'Y. FOR TEST PERIOD | OIL—BBL. | GAS—MCF | WATER—BBL. | OIL GRAVITY-API (CORR.) |
| SI 924 | SI 930 | | | 0 | 3852 | 0 | 0 |

33. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Shut in to be Sold
34. TEST WITNESSED BY: Don Norton

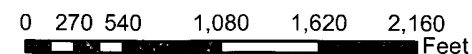
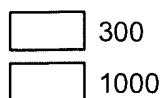
35. LIST OF ATTACHMENTS: Temp Survey
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED: [Signature] TITLE: Drilling Clerk
DATE: 12-31-85
FARMINGTON RESOURCE AREA

*(See Instructions and Spaces for Additional Data on Reverse Side)



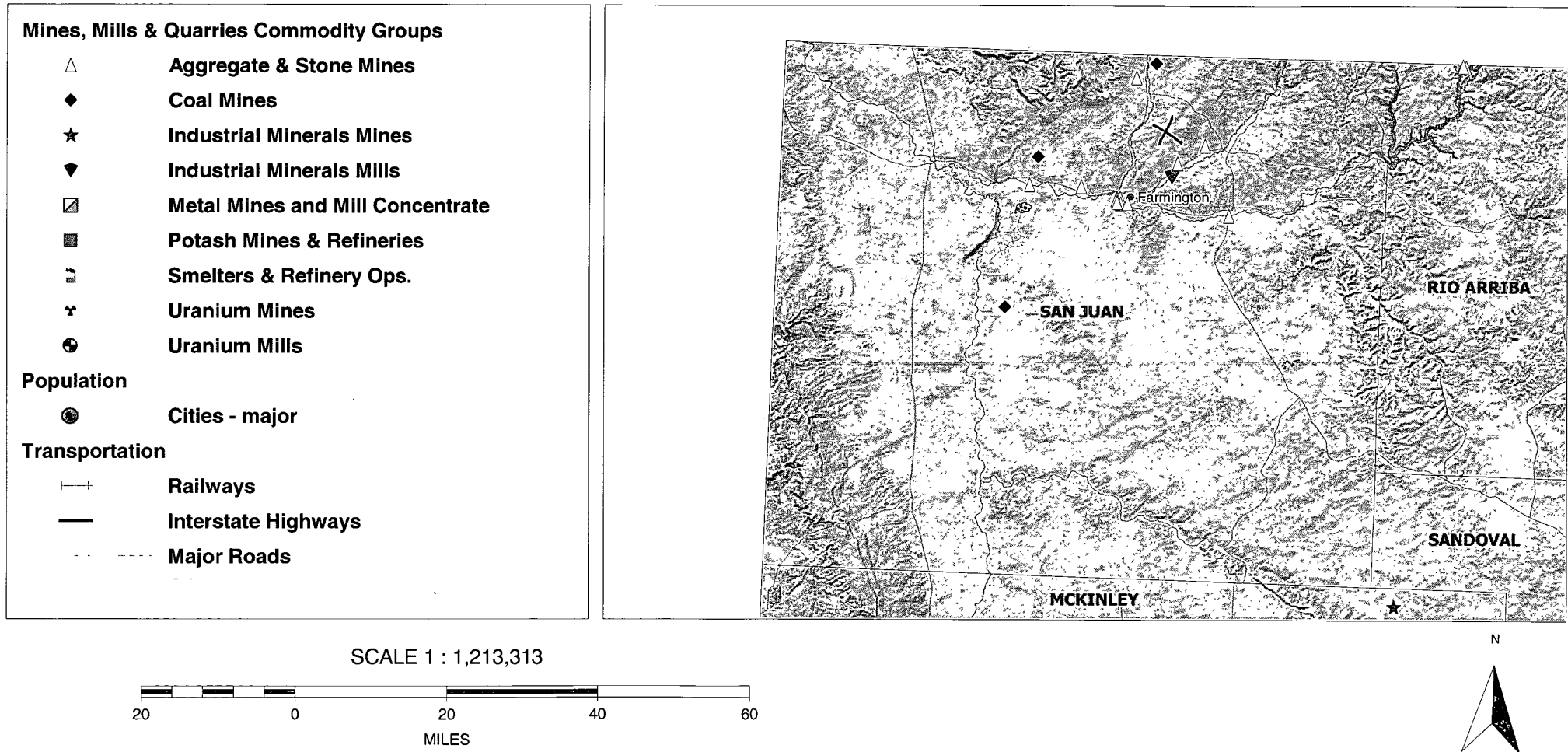
Data Source
Aerial flown locally Sedgewick in 2005.
Wetlands Data Acquired from U.S. Fish
and Wildlife [Http://wetlandswms.er.usgs.gov](http://wetlandswms.er.usgs.gov)
USGS Topo

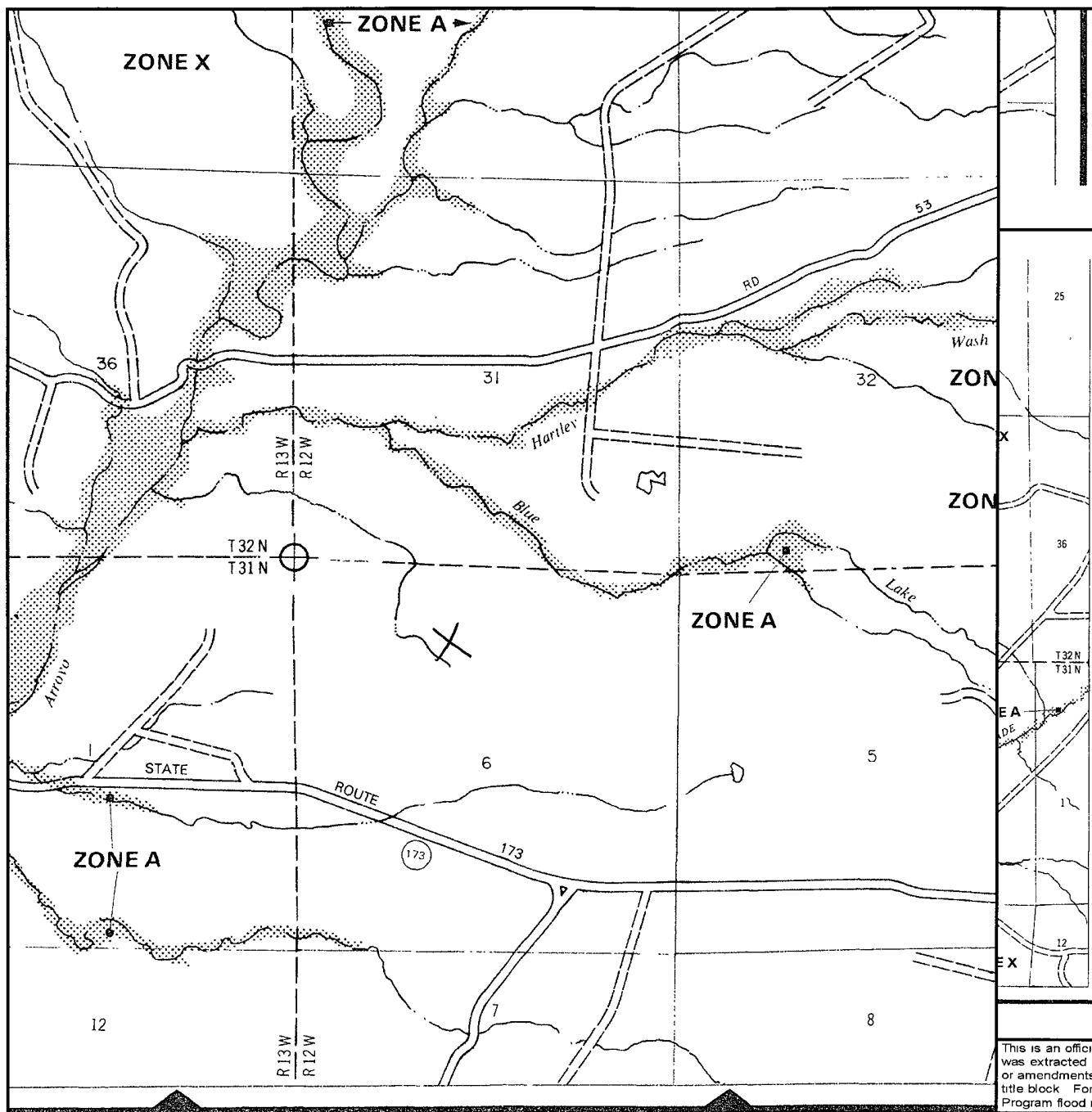


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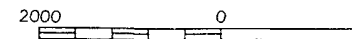
NAD_1983_SP_
NM West_FIPS_
3003
Sep 23, 2008

McDermitt 1N Mines, Mills and Quarries Web Map





APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY,
NEW MEXICO
UNINCORPORATED AREAS

PANEL 125 OF 1450
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER
350064 0125 B

EFFECTIVE DATE:
AUGUST 4, 1988



Federal Emergency Management Agency

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

Hydrogeological Report for McDermitt 1N

Regional Geological context:

The Nacimiento Formation is of Paleocene age (Baltz, 1967, p. 35). It crops out in a broad band inside the southern and western margins of the central basin and in a narrow band along the west face of the Nacimiento Uplift. The Nacimiento is a nonresistant unit and typically erodes to low, rounded hills or forms badland topography.

The Nacimiento Formation occurs in approximately only the southern two-thirds of the San Juan Basin where it conformably overlies and intertongues with the Ojo Alamo Sandstone (Fassett, 1974, p. 229). The Nacimiento Formation grades laterally into the main part of the Animas Formation (Fassett and Hinds, 1971, p. 34); thus, in this area, the two formations occupy the same stratigraphic interval.

Strata of the Nacimiento Formation were deposited in lakebeds in the central basin area with lesser deposition in stream channels (Brimhall, 1973, p. 201). In general, the Nacimiento consists of drab, interbedded black and gray shale with discontinuous, white, medium- to very coarse grained arkosic sandstone (Stone et al., 1983, p.30). Stone et al. indicated that the formation may contain more sandstone than commonly reported because some investigators assume the slope-forming strata in the unit area shales, whereas in many places the strata actually are poorly consolidated sandstones. Total thickness of the Nacimiento Formation ranges from about 500 to 1,300 feet. The unit generally thickens from the basin margins toward the basin center (Steven et al., 1974). The sandstone deposits within the Nacimiento Formation are much thinner than the total thickness of the formation because their environment of deposition was localized stream channels (Brimhall, 1973, p. 201). The thickness of the combined San Jose, Animas, and Nacimiento Formations ranges from 500 to more than 3,500 feet.

Hydraulic Properties:

Reported well yields for 53 wells completed in either the Animas or Nacimiento Formations range from 2 to 90 gallons per minute and the median yield is 7.5 gallons per minute. The primary use of water from Nacimiento and Animas Formations is domestic and livestock supplies. There are no known aquifer tests for the Animas or Nacimiento Formations, but specific capacities reported for six wells range from 0.24 to 2.30 gallons per minute per foot of drawdown (Levings et al., 1990).

The Animas and Nacimiento Formations are in many ways hydrologically similar to the San Jose Formation because sands in both units produce approximately the same quantities of water. However, the greater percentage of fine materials in the Animas and Nacimiento Formations may restrict downward vertical leakage to the Ojo Alamo Sandstone or Kirtland Shale. The poorly cemented fine material is highly erodible, forms a badland terrain, and supports only spotty vegetation. These conditions are more conducive to runoff than retention of precipitation.

References:

Baltz, E.H., 1967, Stratigraphy and regional tectonic implications of part of Upper Cretaceous rocks, east-central San Juan Basin, New Mexico: USGS Professional Paper

552, 101 p.

Brimhall, R.M., 1973, Ground-water hydrology of Tertiary rocks of the San Juan Basin, New Mexico, in Fassett, J.E., ed., Cretaceous and Tertiary rocks of the Southern Colorado Plateau: Four Corners Geological Society Memoir, p. 197-207.

Fassett, J.E., 1974, Cretaceous and Tertiary rocks of the eastern San Juan Basin, New Mexico and Colorado, in Guidebook of Ghost Ranch, central-northern New Mexico: New Mexico Geological Society, 25th Field Conference, p. 225-230.

Fassett, J.E., and Hinds, J.S., 1971, Geology and fuel resources of the Fruitland Formation and Kirtland Shale of the San Juan Basin, New Mexico and Colorado: USGS Professional Paper 676, 76 p.

Levings, G.W., Craig, S.d., Dam, W.L., Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan structural basin, New Mexico, Colorado, Arizona, and Utah: USGS Hydrologic Investigations Atlas HA-720-A, 2 sheets.

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6.

Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The McDurmitt 1N is not located in an unstable area. The location is not over a mine and is not on the side of a hill as indicated on the Mines, Mills and Quarries Map and Topographic Map. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map. The location is not within a 100-year floodplain area as indicated on the FEMA Map. The Cathodic well data from the McDurmitt 1M has an elevation of 5881' and groundwater depth of 160'. The subject well has an elevation of 5920' which is greater than the McDurmitt 1M, therefore the groundwater depth is greater than 100'. There are no iWATERS data points located in the area as indicated on the TOPO Map. The Cathodic data provided the indication of groundwater depth is greater than 100'. The hydro geologic analysis indicates the groundwater depth and the Nacimiento formation will create a stable area for this new location.

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|---------------------------|--|---|--|---|--------------------|
| *API Number | | *Pool Code | | *Pool Name BASIN DAKOTA/BLANCO MESAVERDE | |
| *Property Code A722347 | | *Property Name McDURMITT | | | *Well Number 1N |
| *GRID No. | | *Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP | | | *Elevation 5920 |

¹⁰ Surface Location

| | | | | | | | | | |
|--------------------|--------------|------------------|---------------|---------|-----------------------|---------------------------|-----------------------|------------------------|--------------------|
| UL or lot no. C | Section 6 | Township 31-N | Range 12-W | Lot Idn | Feet from the 1115 | North/South line NORTH | Feet from the 2585 | East/West line WEST | County 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 |
| *Dedicated Acres 312.76 (N/2) | | *Joint or Infill | | *Consolidation Code | | *Order No. | | | |

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

16

| | | | |
|--|---|---|-------|
| FD. 3 1/4" BC. 1951 B.L.M. LOT 4 | S 87-13-16 E 2642.37' (M) LOT 3 | FD. 3 1/4" BC. 1951 B.L.M. LOT 2 | LOT 1 |
| 2585' | | | |
| N 00-38-23 E 2640.26' (M) LOT 5 | | USA NM-019413 LAT: 36.93231° N. (NAD 83) LONG: 108.13696° W. (NAD 83) LAT: 36°55.9388' N. (NAD 27) LONG: 108°08.1800' W. (NAD 27) | |
| FD. 3 1/4" BC. 1951 B.L.M. LOT 6 | | 6 | |
| LOT 7 | | | |

17 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

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.

SEPTEMBER 10, 2007

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number

Burlington Resources Oil & Gas Company, LP
San Juan Basin
Below Grade Tank Design and Construction

In accordance with NMAC 19.15.17 the following information describes the design and construction of below grade tanks on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all below grade tanks (BGT). A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

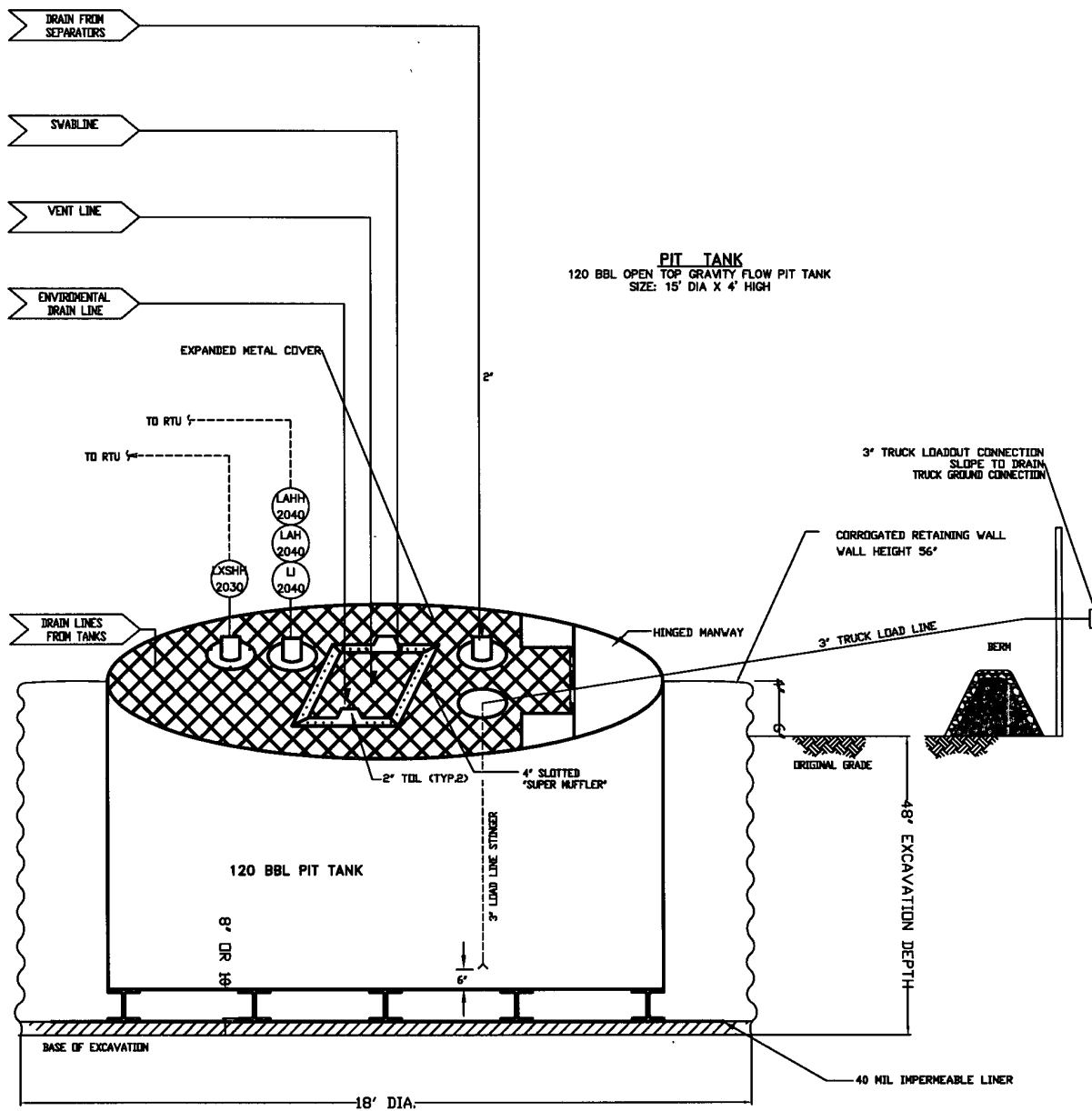
1. BR will design and construct a properly sized and approved BGT which will contain liquids and should prevent contamination of fresh water to protect the public health and environment.
2. BR will sign the well location in compliance with 19.15.3.103 NMAC.
3. BR shall construct fencing around the BGT using 4 foot hog wire fencing topped with two strands of barbed wire, or with a pipe top rail. A six foot chain link fence topped with three strands of barbed wire will be use if the well location is within 1000 feet of permanent residence, school, hospital, institution or church.
4. BR will construct a screened, expanded metal covering, on the top of the BGT.
5. BR shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.
6. The BR below-grade tank system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom.
7. BR shall construct a below-grade tank to prevent overflow and the collection of surface water run-on.
8. BR will construct and use a below-grade tank that does not have double walls. The below-grade tank's side walls will be open for visual inspection for leaks, the below-grade tank's bottom is elevated a minimum of six inches above the underlying ground surface and the below-grade tank is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
9. BR has equipped the below-grade tanks with the ability to detect high level in the tank and provide alarm notification and shutdown process streams into the tank. Once high level is detected RTU logic closes the inlet separator sales valve and does not permit vent valve to open. This shutdown of the sales valve and gagging of the vent valves prevents any hydrocarbon process streams from entering the pit tank once a high level is detected. Furthermore, an electronic page is sent to the BR MSO for that well site and to the designated contract "Water-Hauling" Company indicating a high level and that action must be taken to address this alarm. The environmental drain line from BR's compressor skid under normal operating conditions is in the open position. The environmental

drain line is in place to capture any collected rain water or spilled lubricants from our compressor skids. The swab drain line is a manually operated drain and by normal operating procedures is in the closed position. The tank drain line is also a manually operated drain and during normal operations it is in the closed position.

10. The geomembrane liner consists of a 45-mil flexible LLDPE material manufactured by Raven Industries as DURA-SKRIM J-45 which includes a 20 year warranty provided by said manufacturer. This product provides a level of UV and harsh weather conditions protection. It is rated to a Low temperature impact failure of -94°F. It exceeds ASTM D3083 standard by 10%. It is typically used in Brine Pond, Oilfield Pit liner and other industrial applications. The manufacture specific sheet is attached.
11. The general specification for design and construction are attached in the BR document.

MANUAL OPERATIONS
 PRODUCTION TANKS DRAINLINE
 SWABLINE DRAIN LINE
 ENVIRONMENTAL DRAIN LINE
 FROM COMPRESSOR SKID

AUTOMATED OPERATION
 VENT VALVE DRAIN LINE
 DUMP LINE FROM SEPARATORS



ConocoPhillips
 San Juan Business Unit

DURA-SKRIM®

J30, J36 & J45

| PROPERTIES | TEST METHOD | J30BB | | J36BB | | J45BB | |
|--|-------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | Min Roll Averages | Typical Roll Averages | Min. Roll Averages | Typical Roll Averages | Min Roll Averages | Typical Roll Averages |
| Appearance | | Black/Black | | Black/Black | | Black/Black | |
| Thickness | ASTM D 5199 | 27 mil | 30 mil | 32 mil | 36 mil | 40 mil | 45 mil |
| Weight Lbs Per MSF (oz/yd ²) | ASTM D 5261 | 126 lbs (18.14) | 140 lbs (20.16) | 151 lbs (21.74) | 168 lbs (24.19) | 189 lbs (27.21) | 210 lbs (30.24) |
| Construction | | **Extrusion laminated with encapsulated tri-directional scrim reinforcement | | | | | |
| Ply Adhesion | ASTM D 413 | 16 lbs | 20 lbs | 19 lbs | 24 lbs | 25 lbs | 31 lbs |
| 1" Tensile Strength | ASTM D 7003 | 88 lbf MD 63 lbf DD | 110 lbf MD 79 lbf DD | 90 lbf MD 70 lbf DD | 113 lbf MD 87 lbf DD | 110 lbf MD 84 lbf DD | 138 lbf MD 105 lbf DD |
| 1" Tensile Elongation @ Break % (Film Break) | ASTM D 7003 | 550 MD 550 DD | 750 MD 750 DD | 550 MD 550 DD | 750 MD 750 DD | 550 MD 550 DD | 750 MD 750 DD |
| 1" Tensile Elongation @ Peak % (Scrim Break) | ASTM D 7003 | 20 MD 20 DD | 33 MD 33 DD | 20 MD 20 DD | 30 MD 31DD | 20 MD 20 DD | 36 MD 36 DD |
| Tongue Tear Strength | ASTM D 5884 | 75 lbf MD 75 lbf DD | 97 lbf MD 90 lbf DD | 75 lbf MD 75 lbf DD | 104 lbf MD 92 lbf DD | 100 lbf MD 100 lbf DD | 117 lbf MD 118 lbf DD |
| Grab Tensile | ASTM D 7004 | 180 lbf MD 180 lbf DD | 218 lbf MD 210 lbf DD | 180 lbf MD 180 lbf DD | 222 lbf MD 223 lbf DD | 220 lbf MD 220 lbf DD | 257 lbf MD 258 lbf DD |
| Trapezoid Tear | ASTM D 4533 | 120 lbf MD 120 lbf DD | 146 lbf MD 141 lbf DD | 130 lbf MD 130 lbf DD | 189 lbf MD 172 lbf DD | 160 lbf MD 160 lbf DD | 193 lbf MD 191 lbf DD |
| Dimensional Stability | ASTM D 1204 | <1 | <0.5 | <1 | <0.5 | <1 | <0.5 |
| Puncture Resistance | ASTM D 4833 | 50 lbf | 64 lbf | 65 lbf | 83 lbf | 80 lbf | 99 lbf |
| Maximum Use Temperature | | 180° F | 180° F | 180° F | 180° F | 180° F | 180° F |
| Minimum Use Temperature | | -70° F | -70° F | -70° F | -70° F | -70° F | -70° F |

MD = Machine Direction
DD = Diagonal Directions



Note: Minimum Roll Averages are set to take into account product variability in addition to testing variability between laboratories.

*Dimensional Stability Maximum Value

**DURA-SKRIM J30BB, J36BB & J45BB are a four layer reinforced laminate containing no adhesives. The outer layers consist of a high strength polyethylene film manufactured using virgin grade resins and stabilizers for UV resistance in exposed applications. DURA-SKRIM J30BB, J36BB & J45BB are reinforced with a 1300 denier (minimum) tri-directional scrim reinforcement.

Note: RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO. no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

PLANT LOCATION

Sioux Falls, South Dakota

SALES OFFICE

P.O. Box 5107
Sioux Falls, SD 57117-5107
(605) 335-0174
(605) 331-0333 FAX
800-635-3456



08/06

Burlington Resources Oil & Gas Company, LP
San Juan Basin
Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of Below Grade Tank (BGT) on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all BGT. A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

1. BR will operate and maintain a BGT to contain liquids and solids and maintain the integrity of the liner, liner system and secondary containment system to prevent contamination of fresh water and protect public health and environment.
2. BR will not discharge into or store any hazardous waste in the BGT.
3. BR shall operate and install the below-grade tank to prevent the collection of surface water run-on. BR shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.
4. BR shall continuously remove any visible or measurable layer of oil from the fluid surface of a below-grade tank in an effort to prevent significant accumulation of oil overtime.
5. BR shall inspect the below-grade tank at least monthly and maintain a written record of each inspection for five years.
6. BR shall maintain adequate freeboard to prevent overtopping of the below-grade tank.
7. If a leak develops below the liquid's level, BR shall remove all liquids within 48 hours and repair the damage or replace the below-grade tank. BR shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. BR shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.

**Burlington Resources Oil & Gas Company, LP
San Juan Basin
Below Grade Tank Closure Plan**

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of Below Grade Tanks (BGTs) on Burlington Resources Oil & Gas Company, LP locations hereinafter known as BR locations. This is BR's standard procedure for all BGTs. A separate plan will be submitted for any BGT which does not conform to this plan.

General Requirements:

1. BR shall close a below-grade tank within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
2. BR shall close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation. The closure report will be filed on C-144
3. BR shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011). The liner will be disposed of at the San Juan County Landfill located on CR 3100.
4. BR will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. Documentation of how the below-grade tank was disposed of or recycled will be provided in the closure report.
5. If there is any on-site equipment associated with a below-grade tank, then BR shall remove the equipment, unless the equipment is required for some other purpose.
6. BR shall test the soils beneath the below-grade tank to determine whether a release has occurred. BR shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. BR shall notify the division of its results on form C-141.
7. If BR or the division determines that a release has occurred, then BR shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

8. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then BR shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.
9. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week 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.
10. The surface owner shall be notified of BR's closing of the below-grade tank prior to closure as per the approved closure plan via certified mail, return receipt requested.
11. 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 place 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.
12. 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 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.
13. 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.
14. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
 - Soil Backfilling and Cover Installation
 - Re-vegetation application rates and seeding techniques
 - Photo documentation of the site reclamation
 - Confirmation Sampling Results
 - Proof of closure notice