

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144
July 21, 2008

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

**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: BP AMERICA PRODUCTION COMPANY	OGRID #: 778
Address: 200 ENERGY COURT, FARMINGTON, NM 87410	
Facility or well name: KOCH LS 001M	RCUD AUG 4 '08
API Number: 3004533817	OCD Permit Number: OIL CONS. DIV. DIST. 3
U/L or Qtr/Qtr A Section 3 Township 30.0N Range 10W County: San Juan	
Center of Proposed Design: Latitude 36.84565 Longitude -107.86439 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	

2.	
<input checked="" 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 checked="" type="checkbox"/> P&A	
<input checked="" type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness 20 mil <input checked="" type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
<input type="checkbox"/> String-Reinforced	
Liner Seams: <input checked="" type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____ Volume: 900 bbl Dimensions: L 35 x W 35 x D 8	

3.	
<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"/> PVC <input type="checkbox"/> Other _____	
Liner Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____	

4.	
<input type="checkbox"/> Below-grade tank: Subsection I of 19.15.17.11 NMAC	
Volume: _____ bbl Type of fluid: _____	
Tank Construction material: _____	
<input type="checkbox"/> Secondary containment with leak detection <input 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 _____ mil <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	

5.	
<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 pits, temporary pits, and below-grade tanks</i>)</p> <p><input type="checkbox"/> Chain link, six feet in height, two strands of barbed wire at top (<i>Required if located within 1000 feet of a permanent residence, school, hospital, institution or church</i>)</p> <p><input 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>Hogwire fencing as per Design Plan</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 type="checkbox"/> Screen <input type="checkbox"/> Netting <input type="checkbox"/> Other _____</p> <p><input type="checkbox"/> Monthly inspections (If netting or screening is not physically feasible)</p>																				
8.	<p>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>Please check a box if one or more of the following is requested, if not leave blank:</p> <p><input checked="" type="checkbox"/> Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval. (Fencing in Design Plan)</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>Instructions: <i>The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.</i></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 85%; vertical-align: top;"> <p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <p>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p> </td> <td style="width: 15%; text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</p> <p>- Topographic map; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.</p> <p>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</p> <p>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 500 feet of a wetland.</p> <p>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within the area overlying a subsurface mine.</p> <p>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within an unstable area.</p> <p>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map</p> </td> <td style="text-align: center; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within a 100-year floodplain.</p> <p>- FEMA map</p> </td> <td style="text-align: center; vertical-align: top;"> <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 significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</p> <p>- Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input 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. (<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. (<i>Applies to permanent pits</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input 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																				
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<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input 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. (<i>Applies to permanent pits</i>)</p> <p>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input 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																				
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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 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 NMAC
- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

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

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including 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 Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

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

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____
 Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

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

☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map, Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

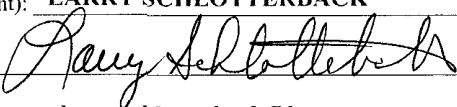
18.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

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

Name (Print): LARRY SCHLOTTERBACKTitle: ENVIRONMENTAL COORDINATORSignature: Date: AUGUST 4, 2008e-mail address: larry.schlotterback@bp.comTelephone: (505) 326-9200

20.

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

OCD Representative Signature: Approval Date: 8-19-08Title: EnviroSpec

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

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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

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

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

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

24.

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

- ☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ 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: _____

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico

Temporary Pit General Design and Construction Plan

Pursuant to Rule 19.15.17.11 NMAC, BP America Production (BP) shall construct a temporary pit with the following guidelines. Any deviations from this plan will be addressed with the submittal of Form C-144 at the time of the pit permit application.

- A). The pit will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment.
- B). Prior to constructing a pit, top soil will be stripped for use as a final cover or fill at the time of closure.
- C). An upright sign, not less than 12" x 24" with lettering not less than 2" height will be placed on the fence surrounding the pit. Alternatively, a well sign in compliance with 19.15.3.103 NMAC will be posted at the well site. The sign will give BP's name, location by quarter-quarter or unit letter, section, township and range, and emergency phone numbers.
- D). A fence will be constructed in a manner that prevents unauthorized access and kept in good repair. During well rig operations the fencing adjacent to the rig may be opened.
- E). The pit will be designed to ensure the confinement of liquids and prevent unauthorized releases. The base will be firm and unyielding, smooth and free of rocks, debris, sharp edges or irregularities. The pit will be constructed with a minimum 2:1 horizontal to vertical slope on all sidewalls. Adequate soil will be used to hold the anchor trench, prevent water run-on and prevent sidewall failure. Pit lining will be installed in a manner that avoids excessive stress-strain.
- F). The pit will be lined with a 20-mil string reinforced LLDPE or equivalent liner, composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner shall be resistant to ultraviolet light and comply with EPA-846 Method 9090A.
- G). Liner orientation shall be placed to minimize seams and up and down, not across, slope. Factory welded seams will be used where possible. Prior to field seaming, liners will be overlapped by four to six inches and oriented parallel to the line of maximum slope. Only qualified personnel will perform field seaming.
- H). Construction will avoid excessive stress-strain on the liner.
- I). If protuberances or localized stress-strain may be present, a geotextile will be placed below the liner to protect it's integrity.
- J). An anchor trench of at least 18" depth, filled with compacted dirt, will be used to hold the liner edges.
- K). Operations will be conducted to protect the liner from any fluid force into and suction out of the pit that could result in mechanical damage.
- L). The pit will be designed with a small surface berm to prevent surface water run-on. During well rig operations a certain area of the pit may allow run-on of fluid from circulation or flow of the well.
- M). The pit volume shall not exceed 10 acre-feet, including freeboard.
- N). Certain parts of the pit may remain unlined, pursuant to Rule 19.15.17.11 F 11 NMAC, to allow well venting, flaring or blowing.
- O). Freestanding liquids will not be allowed to remain on any unlined portion of the temporary pit.

BP AMERICA PRODUCTION COMPANY
San Juan Basin in Northwest New Mexico
Temporary Pit General Operating and Maintenance Plan

Pursuant to Rule 19.15.17.12 NMAC, BP America Production shall maintain and operate a temporary pit with the following guidelines. Any deviations from this plan will be addressed with the submittal of Form C-144 at the time of the pit permit application.

- A). The pit will be operated and maintained to contain liquids and prevent contamination of fresh water, protect public health and the environment.
- B). Well workover fluids will be re-used, recycled or disposed in a manner to protect fresh water, public health and the environment. Disposal is addressed in the "Closure Plan" for the site.
- C). No hazardous waste will be discharged or stored in the temporary pit. Only fluids generated during the well work process will be placed in the pit. The pit will remain free of solid waste or debris.
- D). If the pit develops a leak or if the liner is penetrated, including the freeboard portion of the pit, all liquids above the failure will be removed within 48 hours. The NMOCD Aztec District office will be notified within 48 hours and the liner will be either repaired or replaced.
- E). The pit liner will be protected from damage during fluid placement into or removal from by use of mud pit slides, headers or a manifold system.
- F). The pit will be operated with a small surface berm to prevent surface water run-on. During well rig operations a certain area of the pit may allow run-on of fluid from circulation or flow of the well.
- G). An oil absorbent boom will be maintained on site for removal of any oil from the pit surface.
- H). A minimum of 2 feet of freeboard will be maintained in the pit.
- I). The pit will be inspected at least daily while the rig is on site. Thereafter, the pit will be inspected at least weekly as long as fluids remain in the pit. An inspection log will be maintained, and will be submitted to the NMOCD Aztec District office when the pit is closed.
- J). All free liquids will be removed from the pit within 30 days from the date that the rig is released. The date of the rig release will be noted on Form C-103 or Form C-105.
- K). Free liquids will be removed from a pit used for cavitation within 48 hours after completing cavitation. BP may request additional time to remove liquids if it is not feasible to access the location for 48 hours.

BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

TEMPORARY PIT GENERAL CLOSURE PLAN

As stipulated in Rule 19.15.17.13 NMAC, the following information adheres to the requirements established in closing temporary pits (drilling and workover pits) on BP America Production Company (BP) well sites. This plan will address the standard protocols and procedures for closure of temporary pits. If deviations from this plan are necessary, any specific changes will be included with NMOCD Form C-144.

BP shall close its temporary pit(s) within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health or the environment. BP shall close any other permitted temporary pit within six months from the date that BP releases the drilling or workover rig. The date of the drilling or workover rig's release will be noted on either form C-105 or C-103 upon well or workover completion. It is understood that the division District III office in Aztec, New Mexico may grant an extension not to exceed three months. All necessary documentation to achieve closure will be as directed on NMOCD's form C-144.

The following outline addresses all requirements for closure of BP's temporary pits;

1. Removal of all liquids from the pit prior to closure and dispose of the liquids in a NMOCD division-approved facility or recycle, reuse or reclaim the liquids in a manner that the division District III office approves. A list of proposed, authorized and permitted disposal sites is included at the end of this plan.
2. BP's first option for closure will be on-site burial. BP shall demonstrate and comply with the siting requirements in Subsection C of 19.15.17.10 NMAC and the closure requirements and standards of Subsection F of 19.15.17.13 NMAC. If the site requirements dictate otherwise, waste excavation and removal (See item 7, below) will be implemented. Otherwise, an alternative method (presented to the environmental bureau in Santa Fe) may be presented to NMOCD for approval.
3. Notification to the surface owner by certified mail, with return receipt request, will be given prior to BP's intent on conducting, with NMOCD's pre-approval, on-site closure. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is understood to demonstrate compliance with this requirement.
4. In addition, notification will also be given to the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the well name and number to be closed, legal description utilizing unit letter, section, township, range, and API number.
5. Prior to in place closing an existing temporary pit, stabilization or solidification of its contents to a bearing capacity sufficient to support the pit's final cover will be completed. A mixture with soil or other material will not exceed a mixing ratio of 3:1, soil or other material to contents.
6. The pit content will be sampled by collecting, at a minimum, a five (5) point composite and adhering to 19.15.17.13F (2c or 2d). Based on the site criteria applied to the pit location, the following constituents will be analyzed by a qualified laboratory.

Constituents	Testing Method	Closure Standards (mg/Kg)
Benzene	US EPA Method SW-846 8021B or 8260B	0.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50
TPH	US EPA Method SW-846 418.1	2,500
TPH	US EPA Method SW-846 8015M (GRO + DRO Combined Fraction)	500
Chlorides	US EPA Method 300.1	1,000 (gw >100')

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons, gw = groundwater, 50-100 or >100 = depths (in feet) below the bottom of the buried waste.

It is understood that BP has the option to collect a 5 point composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed the closure limits. If however the pit contents collected prior to treatment or stabilization exceed the specified concentrations limits, then a second 5 point composite sample of the contents after treatment or stabilization will be collected to demonstrate that the contents do not exceed those limits.

7. If waste excavation and removal is performed, BP will follow 19.15.17.13B (1). This will include (a) excavation of all pit contents and, if applicable, synthetic liners and transferring those materials to a NMOCD approved facility, and (b) testing the soils below the temporary pit to determine whether a release has occurred. At a minimum, a 5 point composite soil sample will be collected and tested as follows:

Constituents	Testing Method	Closure Standards (mg/Kg)
Benzene	US EPA Method SW-846 8021B or 8260B	0.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50
TPH	US EPA Method SW-846 418.1	2,500
TPH	US EPA Method SW-846 8015M (GRO + DRO Combined Fraction)	500
Chlorides	US EPA Method 300.1	1,000 (gw >100')

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons, gw = groundwater, 50-100 or >100 = depths (in feet) below the bottom of the buried waste.

It is understood that BP has the option to collect a 5 point composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed the closure limits. If however the pit contents collected prior to treatment or stabilization exceed the specified concentrations limits, then a second 5 point composite sample of the contents after treatment or stabilization will be collected to demonstrate that the contents do not exceed those limits.

8. Within 60 days of closure completion, submittal of a closure report on NMOCD's form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; a plot plan; and details on back-filling, capping and covering, where and if applicable, will be furnished. BP will certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan. BP will also provide a plat of the pit location on form C-105 within 60 days of closing the pit.
9. Upon closure of a temporary pit, BP shall cover the geomembrane lined, filled, temporary pit with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.
10. Reclamation will follow 19.15.17.13G (1) and (2).
- Once closure has been achieved for the temporary pit, the pit location and any associated access road(s) will be reclaimed to a safe and stable condition that blends with the surrounding undisturbed area. The impacted surface area will be substantially restored to the condition that existed prior to operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, recontour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.
11. Soil cover will follow 19.15.17.13H (1), (2), and (3).
- The soil cover for closures where the pit contents has been removed or remediated to the division's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
 - The soil cover for burial-in-place shall consist of a minimum of four feet of compacted, non-waste containing, earthen material. The soil cover shall include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. In addition, the soil cover will be constructed to the site's existing grade and all possible efforts will be conducted to prevent ponding of water and erosion of the cover material.
12. Revegetation will follow 19.15.17.13I (1), (2), (3), (4) and (5).
- Revegetation of the pit location and any associated access road(s) will be attempted during the first growing season after closure of the pit with seeding or planting of the disturbed areas. Seeding will be accomplished by tilling/plowing on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
 - Seeding or planting will be repeated until it successfully achieves the required vegetative cover.

- c. When conditions are not favorable for the establishment of vegetation, such as periods of drought, it is understood that the division may allow sufficient time to delay seeding or planting until soil moisture conditions become favorable. In addition, the division may require BP to use additional cultural techniques such as mulching, fertilizing, irrigating, fencing or other practices.
 - d. Notification will be given to the division District III office when seeding or planting has been successfully achieved.
- 13. The temporary pit will be located with a steel marker, no less than four (4) inches in diameter, cemented in a hole three (3) feet deep at the center of the on-site burial location at the time of abandonment of all wells on the well pad. The marker will be flush with the ground surface 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 include a welded steel 12-inch square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four (4) foot steel riser will be threaded into the top of the collar marker and welded around the base with BP's name, well name and number, legal designation with unit letter, section, township range, and on-site burial label (i.e. temporary pit marker). The marker designation and label will be welded, stamped or otherwise permanently engraved into the metal of the steel marker. Permanent structures over the on-site burial will be prohibited without the division District III office's written approval. No person shall remove the on-site burial marker without the division's written permission.
 - a. The exact location of the on-site burial will be reported on NMOCD's form C-105.
 - b. A deed notice identifying the exact location of the on-site burial will be filed with the county clerk, located in Aztec, NM.
 - c. BP may request a modification to the marker, if, necessary activities and/or safety concerns develop in future efforts to increase production or during final plug and abandonment of the well itself. BP will adhere to the requirements of such a request as specified within 19.15.17.15A (1) NMAC.

Proposed waste disposal sites:

BP Crouch Mesa Landfarm, Permit NM-02-003
JFJ Landfarm, Permit NM-01-010(B)
Basin Disposal, Permit NM-01-0005
BP Operated E.E. Elliott SWD #1, API 30-045-27799
BP Operated 13 GCU SWD #1, API 30-045-28601
BP Operated GCU 259 SWD, API 30-045-20006
BP Operated GCU 306 SWD, API 30-045-24286
BP Operated GCU 307 SWD, API 30-045-24248
BP Operated GCU 328 SWD, API 30-045-24735
BP Operated Pritchard SWD #1, API 30-045-28351

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

August 4, 2008

BP America Production Company

Koch LS # 8M

API 30-045-33817

(A) Section 3 – T30N – R10W

San Juan County, New Mexico

Hydrogeologic Data

(Pursuant to NMAC 19.15.17.9, Subsection B, Paragraph 4)

1) Topography: The well site is located approximately seven and one half (7.5) miles east-northeast of Aztec, New Mexico. The proposed temporary (wash) pit is located on a flat portion, southwest of the well head position at an elevation of about 6,296 feet above sea level. Regionally the site is located in a narrow valley between sandstone benches located northeast and southwest. These sandstone benches exhibit steep sided cliffs that extent approximately 30-70 feet higher than the well pad. The wash drainage has an approximate width of 13 feet and is located approximately 200 feet northeast of the pit location. This drainage is ephemeral and flows in a northwesterly direction.

2) Soils: Surface soil at the proposed pit site is comprised mostly of a silty sand. The thickness of this soil is unknown but likely extends vertically to sandstone at an unknown depth (see Geology, below).

3) Geology: Review of geologic maps published by the New Mexico Bureau of Geology and Mineral Resources, 2003, indicates the outcrop at the site is the Nacimiento Formation of Paleocene age. This formation is described as a gray and brown shale and tan, medium grained and conglomeratic sandstone with a thickness as much as 240 meters. Its origin developed from fluvial and lacustrine type environments.

4) Surface Hydrology: Drainage from the proposed pit site is towards the northeast, based on surface topography. Visual inspection of the site did not present evidence that historical precipitation had made erosional channels that would harm the integrity of the pit site should a storm event occur while the pit is in use. Characteristics of the aquifer, including parameters such as transmissivity, porosity or permeability, are not pertinent to this data inquiry. In addition, no new manmade ponds, ditches, or any other surface depressions for surface water accumulation purposes were observed in the immediate vicinity.

5) Groundwater Hydrology: As described above, the pit site is at an elevation of 6,296 feet. Review of topographic sheets indicating estimated depths to groundwater, prepared by the New Mexico Oil Conservation Division outlining vulnerable and expanded vulnerable areas of the San Juan Basin, suggests that groundwater at the site may be as shallow as 60 feet below the ground surface. Inspection of data on file with the Office of State Engineer shows a nearby water well, located up gradient, approximately 1,300 feet southeast of the site at a surface elevation of about 6,360 feet. Groundwater depth was recorded at 306 feet or an elevation of about 6,054 feet. Based on this data, the base of the proposed pit would be in excess of 200 feet from groundwater. This groundwater would be expected to flow toward the well site in a northwesterly direction.

6) Ground Stability: The well pad and proposed pit site is located on silty sand soils. Visual inspection of the site did not show any faulting, fracturing, sink holes or erosional features that would indicate an unstable area. The site appears to be stable.

7) Wetlands, FEMA Flood Zones, and Mines: U.S. Fish and Wildlife Wetlands Maps, FEMA FIRM Flood Zone Maps and New Mexico Office of Mines, Mills and Quarry maps were reviewed to identify any such zones in the area of the proposed pit. No such wetlands, flood zones or mines/mills/quarry's were identified within the NMOCD stipulated distances from the site. Maps of the data search are attached.

8) Private residences, wells, springs, schools, hospitals, institutions, churches: The site was inspected for evidences of buildings, wells, etc. and no such structures were evident within three hundred (300) foot radius of the site. The NM Office of State Engineer records were reviewed for well data. No such data was found within one thousand (1,000) feet of the site (records search attached).



New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 10W Sections: 2,3

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

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 08/03/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
SJ	30N	10W	02				2	306	500	403
SJ	30N	10W	03				1	70	70	70

Record Count: 3

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 10W Sections: 2,3

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

WATER COLUMN REPORT 08/03/2008

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

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water (in feet) Column
<u>SJ 00050</u>	30N	10W	02	1	3	2				520	306	214
<u>SJ 03460</u>	30N	10W	02	1	3	2				520	500	20
<u>SJ 03230</u>	30N	10W	03	1	2	1				120	70	50

Record Count: 3

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 10W Sections: 34,35

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

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 08/03/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
SJ	31N	10W	34				4	65	200	127
SJ	31N	10W	35				5	137	317	244

Record Count: 9

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

Township: 31N Range: 10W Sections: 34,35

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

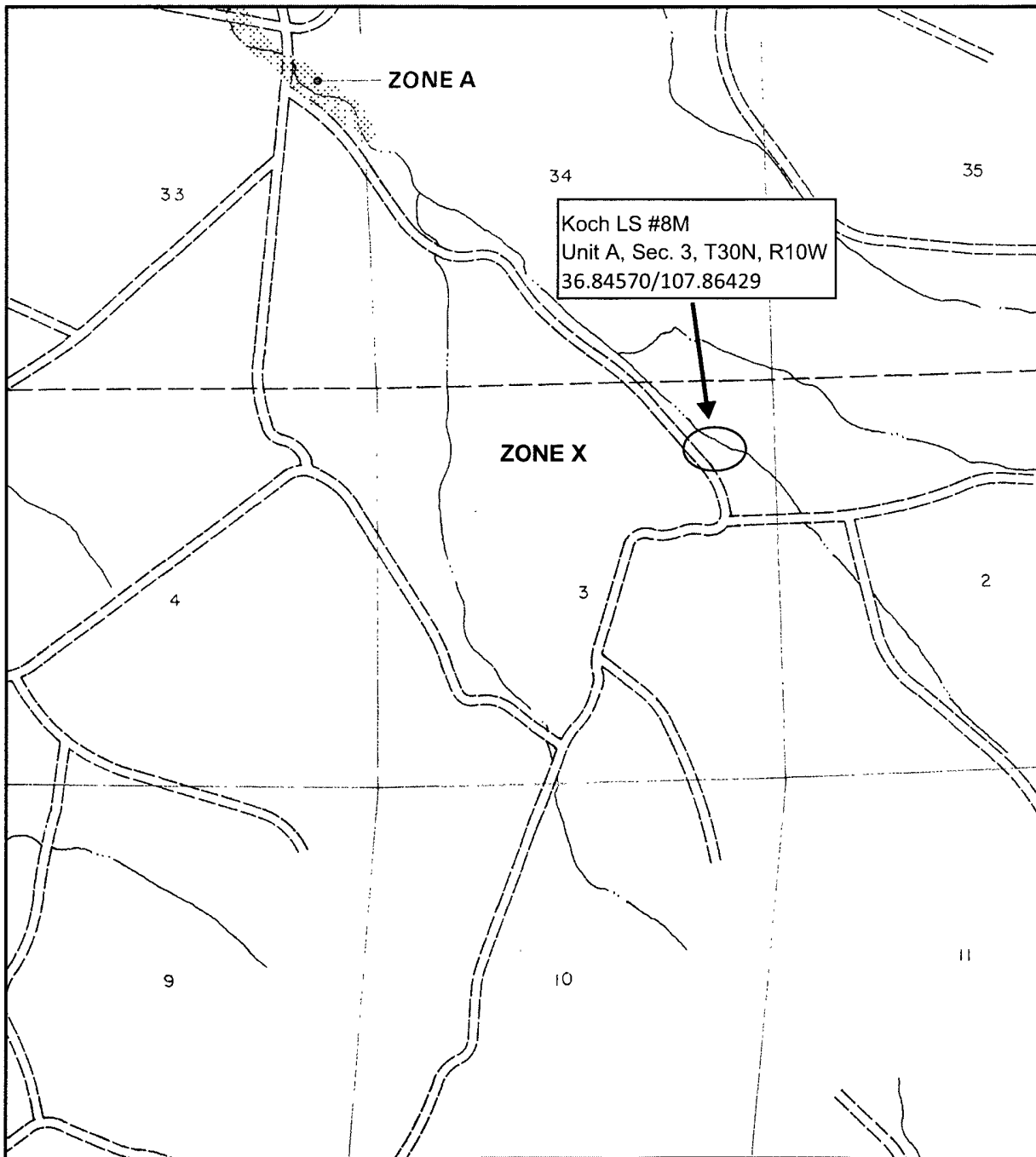
Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic ☒ All

WATER COLUMN REPORT 08/03/2008

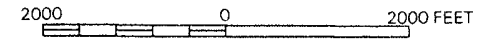
(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water (in feet) Column
SJ 00981	31N	10W	34	2	1					164	118	46
SJ 01480	31N	10W	34	2	1					245	125	120
SJ 03624	31N	10W	34	2	1	2				165	65	100
SJ 03387	31N	10W	34	2	2	1				250	200	50
SJ 03728 POD1	31N	10W	35	1	3	3				365	230	135
SJ 03545	31N	10W	35	1	4	3				455	317	138
SJ 03571	31N	10W	35	1	4	4				250		
SJ 03544	31N	10W	35	1	4	4				325	220	105
SJ 03576	31N	10W	35	2	3	3				450	137	313
SJ 03570	31N	10W	35	2	4	4				250		
SJ 03554	31N	10W	35	4	2	1				454	317	137

Record Count: 11



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY,
NEW MEXICO
UNINCORPORATED AREAS

PANEL 350 OF 1450
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER
350064 0350 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

Definitions of FEMA Flood Zone Designations

Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

Moderate to Low Risk Areas

In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones:

ZONE	DESCRIPTION
B, C, and X	Areas outside the 1-percent annual chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones.

High Risk Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones.
AE, A1-A30	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.

High Risk - Coastal Areas

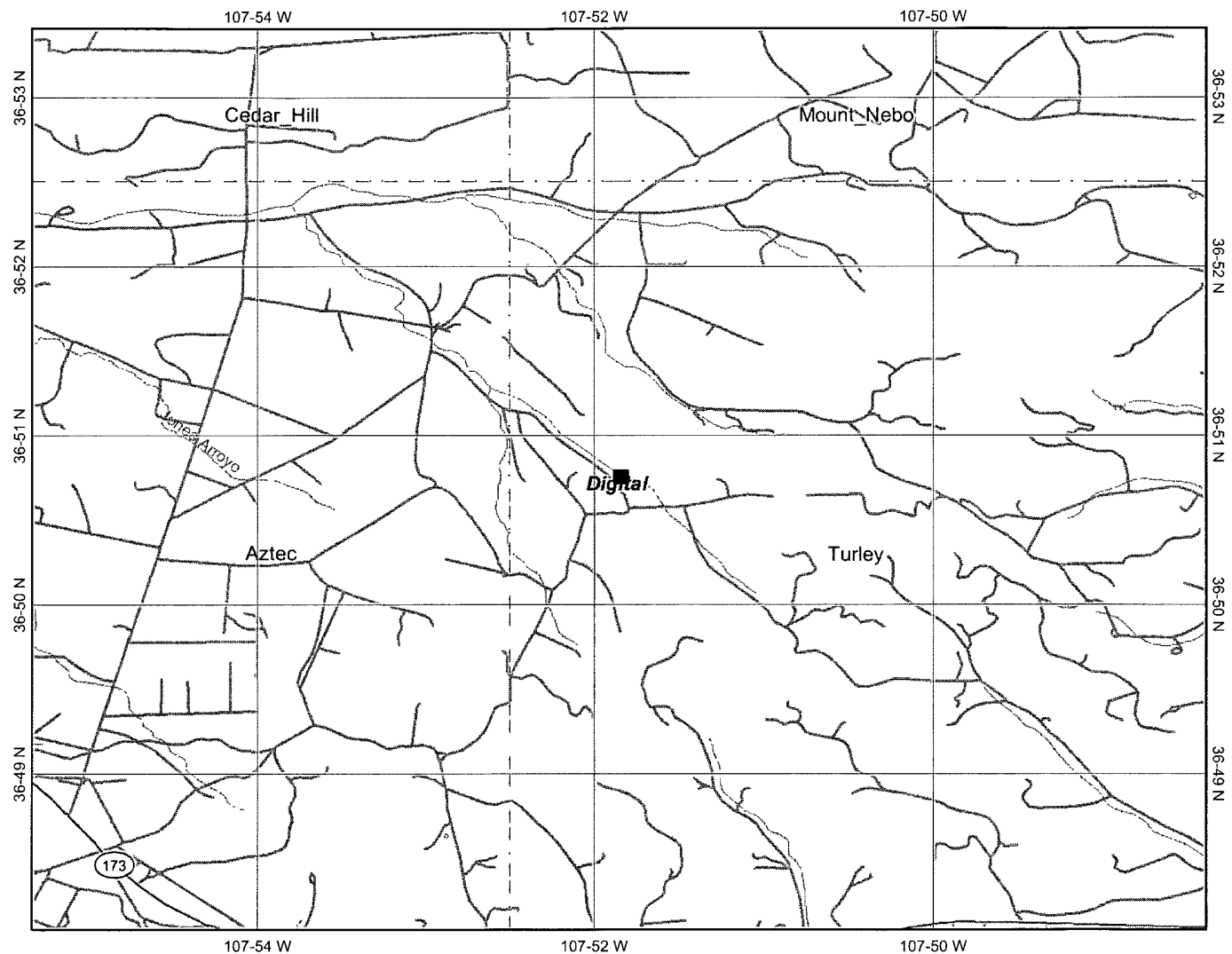
In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
V	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
VE, V1 - 30	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

Undetermined Risk Areas

ZONE	DESCRIPTION
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

BP - Koch LS #8M



Legend

- Interstate Major Roads
- Other Road
- Interstate
- State highway
- US highway
- Roads
- Cities
- USGS Quad Index 24K
- Lower 48 Wetland Polygons
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Lower 48 Available Wetland Data
- Non-Digital
- Digital
- No Data
- Scan
- NHD Streams
- Counties 100K
- South America
- North America



Scale: 1:69,091

Location at Map center: 36° 50' 45" N, 107° 51' 51" W

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes: Unit A, Sec 3, T30N, R10W

San Juan Co, NM

BP - Koch LS #8M Mines, Mills, Quarries Web Map

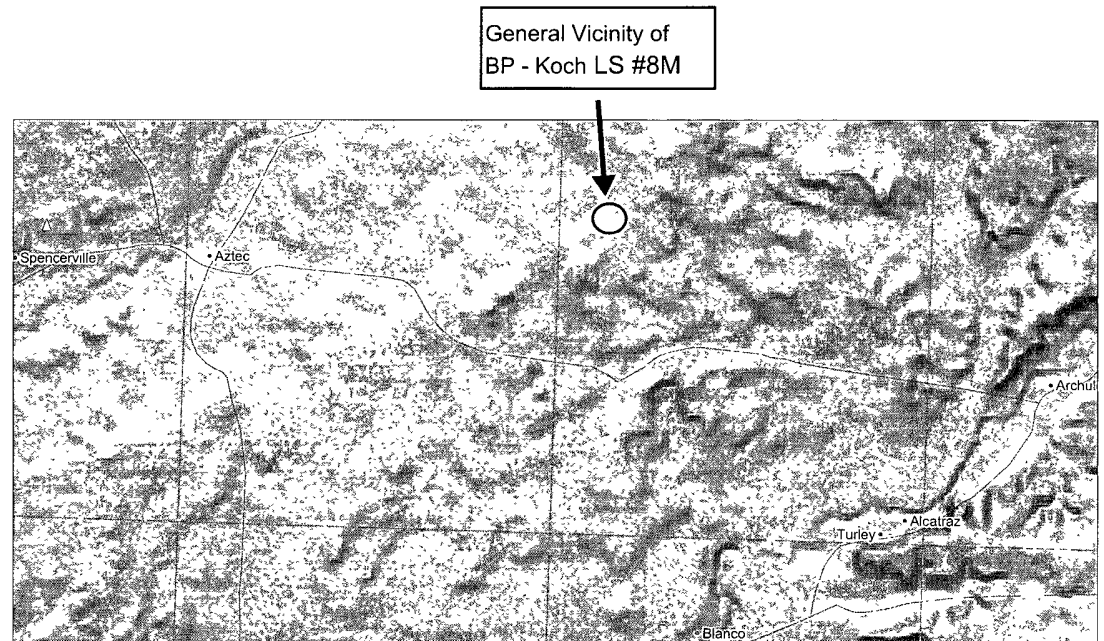
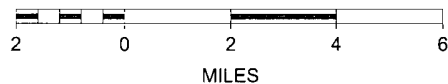
Mines, Mills & Quarries Commodity Groups

-  Aggregate & Stone Mines
-  Coal Mines
-  Industrial Minerals Mines
-  Industrial Minerals Mills
-  Metal Mines and Mill Concentrate
-  Potash Mines & Refineries
-  Smelters & Refinery Ops.
-  Uranium Mines
-  Uranium Mills

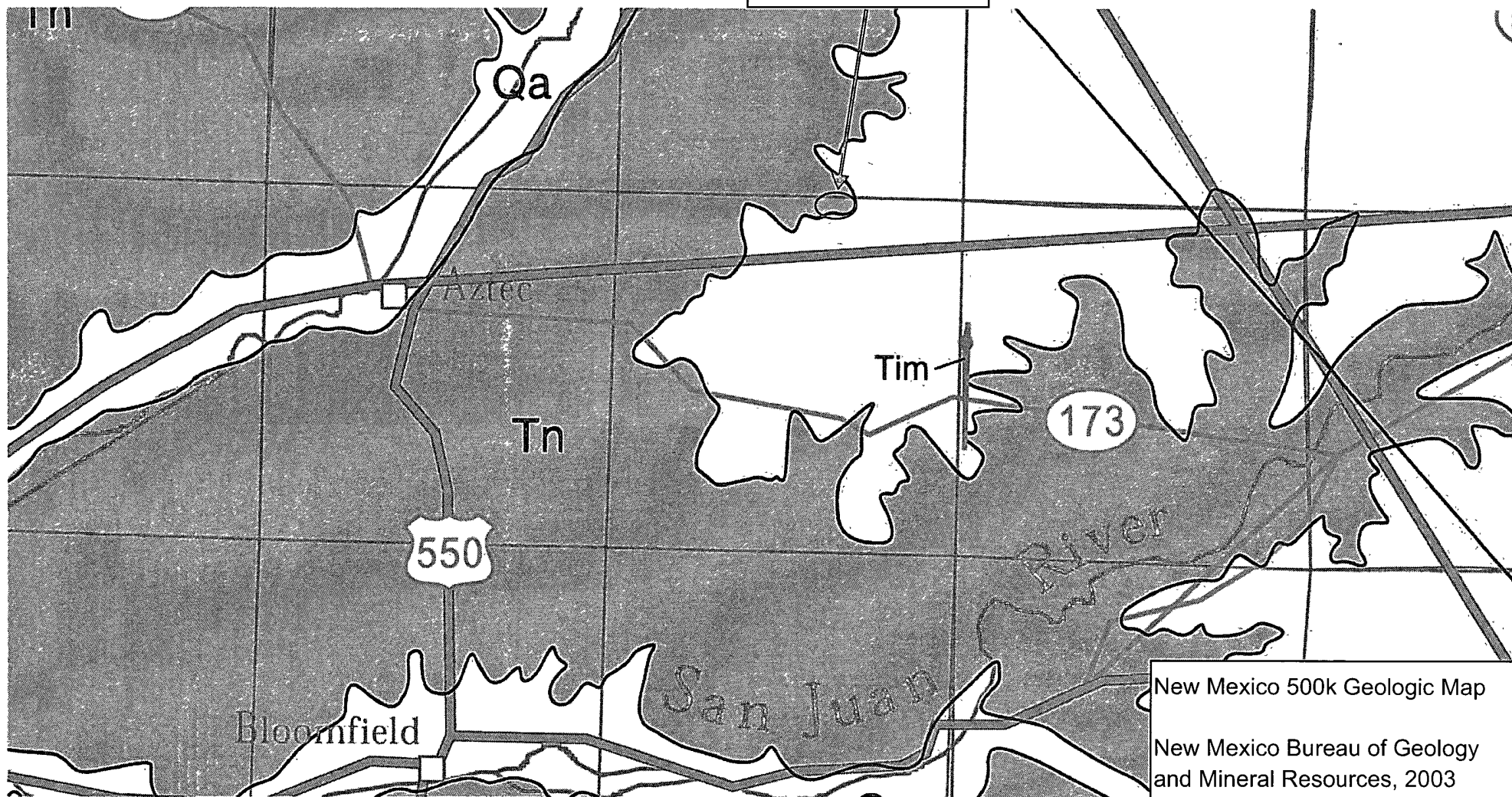
Mines, Mills & Quarries Status

-  Active Mining

SCALE 1 : 213,752



General Vicinity of
BP - Koch LS #8M



New Mexico 500k Geologic Map

New Mexico Bureau of Geology
and Mineral Resources, 2003



FIGURE 1

1 DEGREES = 364,567.20 FEET

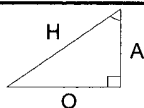
$$\frac{0.0001 \text{ DEG}}{3645672 \text{ FT.}} = \frac{X/Y \text{ DEG.}}{\text{KNOWN FT.}}$$

X INCREASES TO LEFT
Y DECREASES TO BOTTOM

$\sin \theta = \text{OPPOSITE/HYPOTHEUSE}$

$\cos \theta = \text{ADJACENT/HYPOTHEUSE}$

$\tan \theta = \text{OPPOSITE/ADJACENT}$



PIT & MARKER PLACEMENT(S) LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (GPS, TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS) ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

1 INCH = 30 FT.

0 30 60 FT.



RECORDED
X = 107.86430 DEG.
Y = 36.84573 DEG.

NMOCD DATA
X = 107.86434 DEG.
Y = 36.84568 DEG.

WELL
HEAD

PROPOSED
WASH PIT LOC.
~ 45 FT., S50W

28.925442 FT.

34.472000 FT.

CALCULATED
X = 107.86439 DEG.
Y = 36.84565 DEG.

BP AMERICA PRODUCTION CO.
Koch LS 8M
NE 1/4 NE 1/4 SEC 3, T30N, R10W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199





PROJECT: PERMIT INFO.
DRAWN BY: NJV
FILENAME: Koch LS 8M GPS & D-B-2.SKF
DATE: 08-04-08 NJV

**SITE
MAP**
07/08

BP - KOCH LS # 8M

Section Schematic

gas well / water well locations

T31N, R10W	33	34	35 	
T30N, R10W	4	 	 2	
	9	10	11	

NOTES : - Water well locations estimated from N. M. Office of the State Engineer 's POD Reports & Downloads .

9 - SECTION NUMBER

 - WELL SITE LOCATION

 - WATER WELL LOCATION



BP America Production Company
200 Energy Court
Farmington, NM 87401
Phone: (505) 326-9200

August 1, 2008

Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

RE: Notice of Proposed Below Grade Tank Construction
Koch LS 1M
Unit A, Section 3, Township 30N, Range 10W

Dear Mr. Mark Kelly:

In regards to the captioned subject and requirements of the new NMOCD pit rule, this letter is notification that BP America Production Company is planning to install a Below Grade Tank (BGT) that will be used for daily operations on this location.

Should you have any questions, please feel free to contact me at 326-9425 in our Farmington office.

Sincerely,

Larry Schlotterback
Field Environmental Coordinator