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.

5594

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: Federal GC L 1
API Number: 30-045-20327 OCD Permit Number:
U/L or Qtr/Qtr F Section 14 Township 30N Range 11W County: San Juan
Center of Proposed Design: Latitude **36.81512** Longitude **107.96475** NAD: ☐1927 ☒1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

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4.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC (Tank Modification to Existing BGT Permit)
Volume: 95 bbl Type of fluid: Produced water
Tank Construction material: Steel
☒ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other (Double wall/Double Bottom with Leak Detection – Closure Plan Attached)
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☒ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval. **Modification to Existing Permit: Design/Construction Plan (With Fencing) & Operate/Maintain Plan & Closure Plan Attached**

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
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. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
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 search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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

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

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

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

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

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

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, 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 **Method - Confirmation sampling only – Protocols and Procedures included in attached Closure Plan**
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 indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

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

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

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

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

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

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

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.

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

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

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

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

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

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

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

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

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

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

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

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

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

Name (Print): BUDDY SHAW Title: ENVIRONMENTAL COORDINATOR

Signature: Buddy Shaw Date: March 4, 2010

e-mail address: Buddy.shaw@bp.com Telephone: (505) 326-9200

20.
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: [signature] **Approval Date:** 6/2/10

Title: Environ/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 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
Below-Grade Tank Design and Construction Plan

Pursuant to Rule 19.15.17.11 NMAC, BP America Production Company (BP) shall construct a below-grade tank (BGT) or modify an existing permitted BGT with the following requirements. Any deviations from this plan will be addressed on the New Mexico Oil Conservation Division's (NMCOD) form C-144 at the time of submittal.

1) The BGT will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment as to address Subsection A of 19.15.17.11 NMAC.

2) A well sign in compliance with 19.15.3.103 NMAC will be posted at the well site to address, at a minimum, those requirements stipulated in Subsection C of 19.15.17.11 NMAC.

3) BP will fence or enclose its BGTs in a manner that prevents unauthorized access and shall maintain its fence in good repair.

4) BP will fence or enclose a BGT located within 1,000 feet of a permanent residence, school, hospital, institution or church according to the specifications stated in Paragraph 2 of Subsection D, 19.15.17.11 NMAC. At a minimum, a chain link security fence at least six (6) feet in height with at least two (2) strands of barbed wire at the top will be erected. BP will ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.

5) BP is requesting NMOCD's approval for an alternative fence design that provides, at a minimum, equivalent protection to the design specified in Paragraph 3 of Subsection D of 19.15.17.11 NMAC for BGTs beyond the stated distance in paragraph 4 of this document. BP's proposed design for its BGTs will utilize 48" steel mesh field-fence (hogwire) with a metal or steel top rail. Perimeter T-post will be installed roughly every 10 feet.

6) Individual BGT perimeter fencing is not required if an adequate surrounding well site/facility perimeter fence that prevents unauthorized access is currently existing.

7) BP's BGTs will be netted, screened, or enclosed with a steel top with a screened steel hatch as to prevent a hazardous condition to wildlife, including migratory birds (addressing Subsection E of 19.15.17.11 NMAC).

8) The following requirements adhere to Subsection I of 19.15.17.11 NMAC.

   a. BP's BGTs will be constructed of materials resistant to produced water, occidental condensate/hydrocarbon fluids, and damage from sunlight (manufacturer's specification documentation attached).

   b. BP's BGTs shall have a properly constructed earthen foundation consisting of a level base free of rocks, debris, sharp edges, or irregularities as to prevent punctures, cracks or indentations of any liner (if utilized and meet the minimum requirements in Subsection I of 19.15.17.11 NMAC) or BGT bottom.

   c. The BGT will be constructed to prevent surface water run-on by using earthen berms and/or diversion dikes. Overflow will be prevented by use of an electronic high fluid level detector that will automatically engage an electronic shut-off valve when a 1 foot freeboard is reached.

   d. (i) BP may install a BGT according to Subparagraph (a) of Paragraph 4 of Subsection I of 19.15.17.11 NMAC(**see simplistic schematic - bottom of page 1**). The sidewall cellars will typically be earthen or may be fortified with either wooden or steel walls. Any loss of the sidewall structural integrity will be evaluated by the monthly inspection as described in BP's Operating and Maintenance Plan for BGTs and promptly repaired. The BGT will be placed on a PVC liner, with a minimum 6-inch lift, and meet all requirements specified in Subparagraph (a) of Paragraph 4 of Subsection I of 19.15.17.11 NMAC. BP will request NMOCD approval prior to any liner installation described in this paragraph.

   (ii) BP may install a BGT according to Subparagraph (b) of Paragraph 4 of Subsection I of 19.15.17.11 NMAC by installing a double walled/double bottom steel tank with a 2-inch diameter leak detection port (**see simplistic schematic - bottom of page 2**). The leak detection will be monitored according to BP's NMOCD approved Operating and Maintenance Plan for BGTs.

   (iii) BP may install a BGT according to Subparagraph (c) of Paragraph 4 of Subsection I of 19.15.17.11 NMAC. (**see simplistic schematic - bottom of page 3**). This alternative design is simply placement of a BGT within a BGT. The outer BGT will serve as the sidewall, base and leak detection surface to the inner BGT. The inner BGT will be placed on a 6-inch minimum lift.

9) BP's BGTs constructed and installed prior to June 16, 2008 that have the side walls open for visual inspection and are placed upon a geomembrane liner but does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC are not required to equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as the BGT demonstrates integrity. If the existing BGT does not demonstrate integrity, then BP will promptly remove the BGT and retrofit to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC. If BGT closure is indicated, the approved closure plan for the BGT will be implemented. If a spill or release is discovered, the provisions outlined in Rule 19.15.3.116 NMAC will be followed.

10) BP's BGTs constructed and installed prior to June 16, 2008 that do not comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC or do not comply with Paragraph (5) of Subsection I of 19.15.17.11 NMAC will equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it according to BP's NMOCD approved closure plan, within five (5) years after June 16, 2008. If existing BGTs do not demonstrate integrity, BP will promptly remove the BGT and retrofit to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC. If a spill or release is discovered, the provisions outlined in Rule 19.15.3 116 NMAC will be followed.

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico
Below-Grade Tank Operating and Maintenance Plan

Pursuant to Rule 19.15.17.12 NMAC, BP America Production Company (BP) shall maintain and operate a below-grade tank (BGT) with the following requirements. Any deviations from this plan will be addressed with the submittal to the New Mexico Oil Conservation Division's (NMOCD) form C-144 at the time of the BGT permit or modification to an existing permitted BGT application.

1) BP's BGTs will be operated and maintained to promptly identify a release or potential release. BP will use existing automated high fluid level alarms tied to a central dispatch center if a high level (less than 1 foot freeboard) is detected. If such a level is alarmed, discharge to the BGT will be automatically terminated by closing an automatic shut-off valve. A visual inspection of the site will then be conducted to confirm a high fluid level and coordinate removal of BGT liquids, if indicated.

2) BP will not knowingly discharge or store any hazardous waste into a BGT.

3) If a BGT develops a leak, or a release occurs due to mechanical failure or vandalism, or if any penetration for whatever unforeseeable reason of a BGT occurs below the liquid's surface, BP will attempt to 1) evacuate all liquids from the BGT or, at a minimum, above the damage or leak line within 48 hours, 2) notify the NMOCD's District III office within 48 hours of the discovery or within the allowable timeframe stipulated in 19.15.3.116 NMAC and 3) repair the damage or retrofit the BGT as specified within BP's NMOCD approved Design and Construction Plan for BGT's. If remedial actions due to environmental impacts are necessary, the provisions outlined in Rule 19.15.3.116 NMAC will be followed. If BGT closure is required then the approved closure plan for the site will be implemented.

4) BP will install its BGTs following the approved Design and Construction Plan, which fully addresses control of surface water run on and overflow prevention.

5) The following requirements adhere to Subsection D of 19.15.17.12 NMAC.

   a. BP will minimize the potential for a BGT overflow or surface water run-on by following the practices as described in Paragraphs 1 through 5 of this document.
   b. BP will remove any visible or measurable layer of oil from the fluid surface of any of its BGTs.
   c. BP will inspect its BGTs at least monthly. The personnel will conduct a walk-around of the BGT to observe any abnormalities to the daily operation of the BGT. When applicable, monitoring of the BGT's double wall – double bottom inspection port will be conducted using either a measuring stick or an electronic device capable of detecting fluids (specifications will be noted on inspection reports). Personnel will record any BGT integrity deficiencies and report to BP Dispatch Office immediately if an imminent danger to fresh water, public heath, or to the environment is observed. BP will maintain a written record (generally referred to as Green Day reports) of each inspection for at least five (5) years. A draft template inspection sheet is attached.
   d. BP will maintain at a minimum, a one (1) foot freeboard to prevent overtopping of its BGT.

BP AMERICA PRODUCTION COMPANY
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

As stipulated in Rule 19.15.17.13 NMAC, the following information adheres to the requirements established in closing below-grade tanks (BGTs) on BP America Production Company (BP) well sites. This plan will address the standard protocols and procedures for closure of BGTs. If deviations from this plan are necessary, any specific changes will be included with New Mexico Oil Conservation Division (NMOCD) form C-144.

BP shall close its BGTs within the time periods provided in 19.15.13 NMAC, or by an earlier date that the NMOCD requires due to imminent danger to fresh water, public heath or the environment. BP shall close its existing BGTs that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five (5) years after June 16, 2008, if not retrofitted to comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC. BP shall close its permitted BGTs within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC in accordance with this closure plan after receiving NMOCD's division District III office approval.

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

1. BP shall notify the surface owner by certified mail, return receipt requested, that it plans to close a BGT. 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.
2. 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.
3. Remove liquids and sludge from the BGTs prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. A list of BP approved disposal facilities is included at the end of this document.
4. Remove the BGT and dispose of it in a NMOCD's division-approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD's division District III office approves. If a liner is present and must be disposed it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection D of 19.15.9.712 NMAC.
5. Remove any on-site equipment associated with a BGT unless the equipment is required for some other purpose.
6. BP will test the soils beneath the BGTs to determine whether a release has occurred. At a minimum, a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release will be analyzed for BTEX, TPH and chlorides. The testing methods and closure standards for those constituents are 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	100
Chlorides	US EPA Method 300.0 or 4500B	250 or background

Notes: **mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA method that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.**

7. BP will notify the division District III office of its results on form C-141. NMOCD may require additional delineation upon review of the results.
8. If it is determined that a release has occurred, then BP will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

9. If the confirmation sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP will backfill the excavation, with NMOCD's approval, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The NMOCD prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

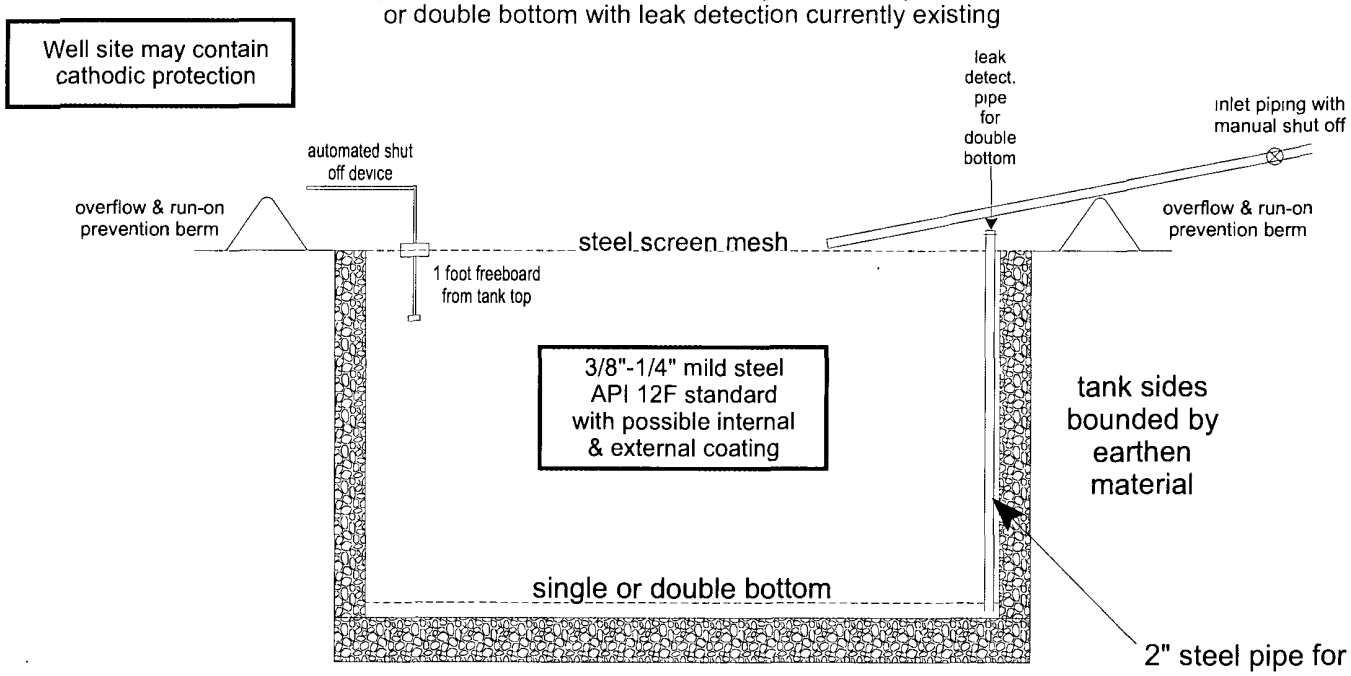
10. Reclamation will follow 19.15.17.13G (1) and (2).
    a. Once the BGT has been approved for closure by NMOCD, the BGT location and all areas associated with the BGT including associated access roads will be reclaimed to a safe and stable condition that blends with the surrounding undisturbed area. It is understood that BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas 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) and (3).
    a. The soil cover for closures where the BGT has been removed or remediated to the NMOCD'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.
    b. 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).
    a. Revegetation of the BGT location and any associated access road(s) will be attempted during the first growing season after closure of the BGT 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.
    b. 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, 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. 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 proof of closure notification (surface owner and NMOCD) sampling analytical reports; information required by 19.15.17 NMAC; a plot plan; details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and photo documentation. 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.

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

SIMPLISTIC SCHEMATIC
OF A MODIFICATION TO AN EXISTING BELOW-GRADE TANK

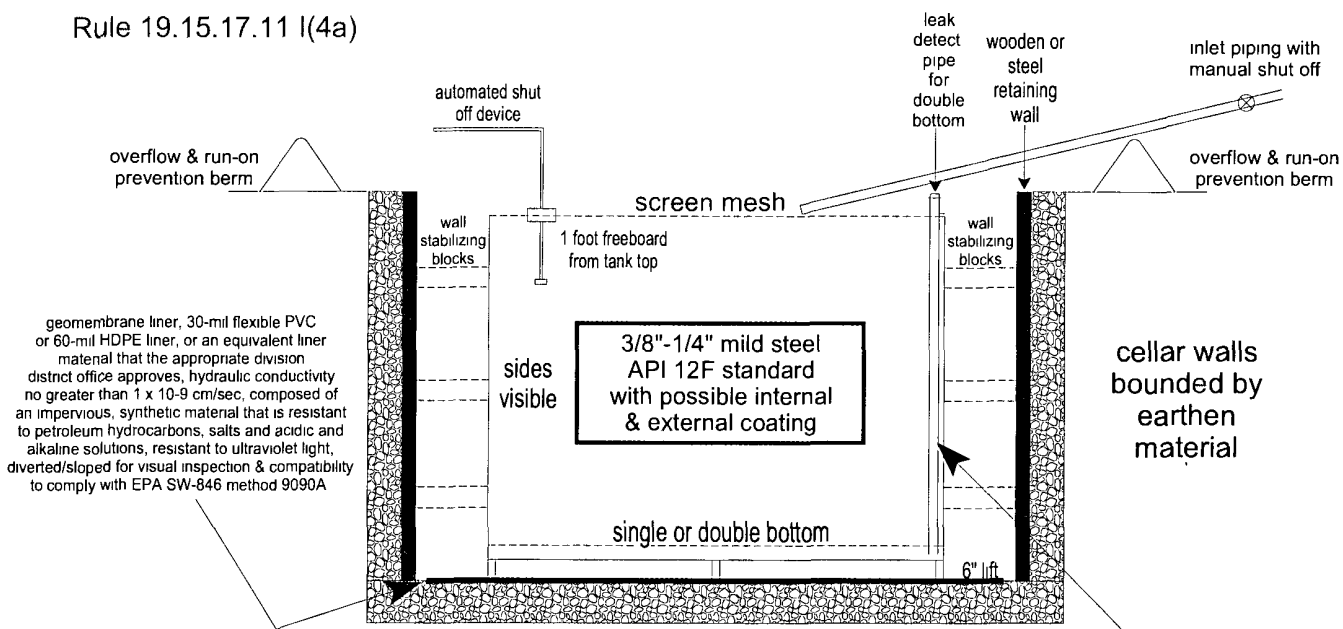
Typical 21/45/95 bbl steel tank: single wall / single bottom
or double bottom with leak detection currently existing



RETROFITTED TO

21/45/95 bbl steel tank: single wall / single bottom or double bottom
with leak detection / visible sides / 6" lift / geomembrane liner

Rule 19.15.17.11 I(4a)



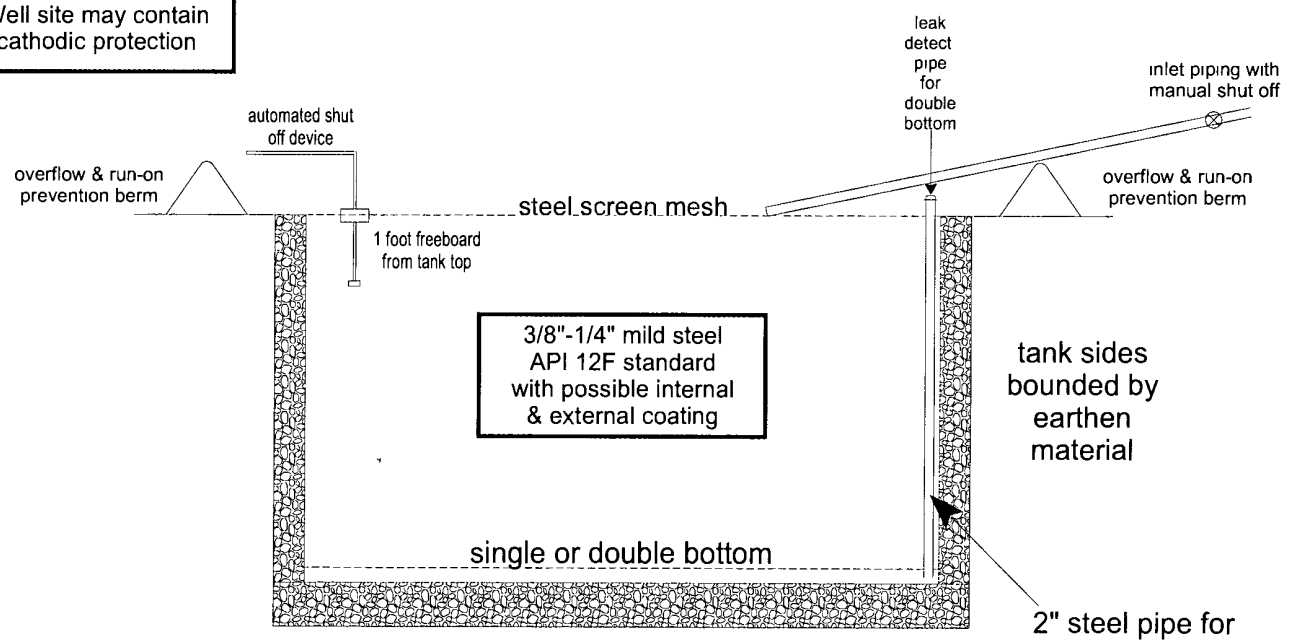
Base foundation will be level and free of rocks to prevent damage to liner.

This schematic is for demonstrative purposes only and is not intended for final specification design. Details into specification requirements should be reference within the Design and Construction (D & C) Plan submitted or any manufacturer's attachment to the D & C Plan.

SIMPLISTIC SCHEMATIC
OF A MODIFICATION TO AN EXISTING BELOW-GRADE TANK

Typical 21/45/95 bbl steel tank: single wall / single bottom
or double bottom with leak detection currently existing

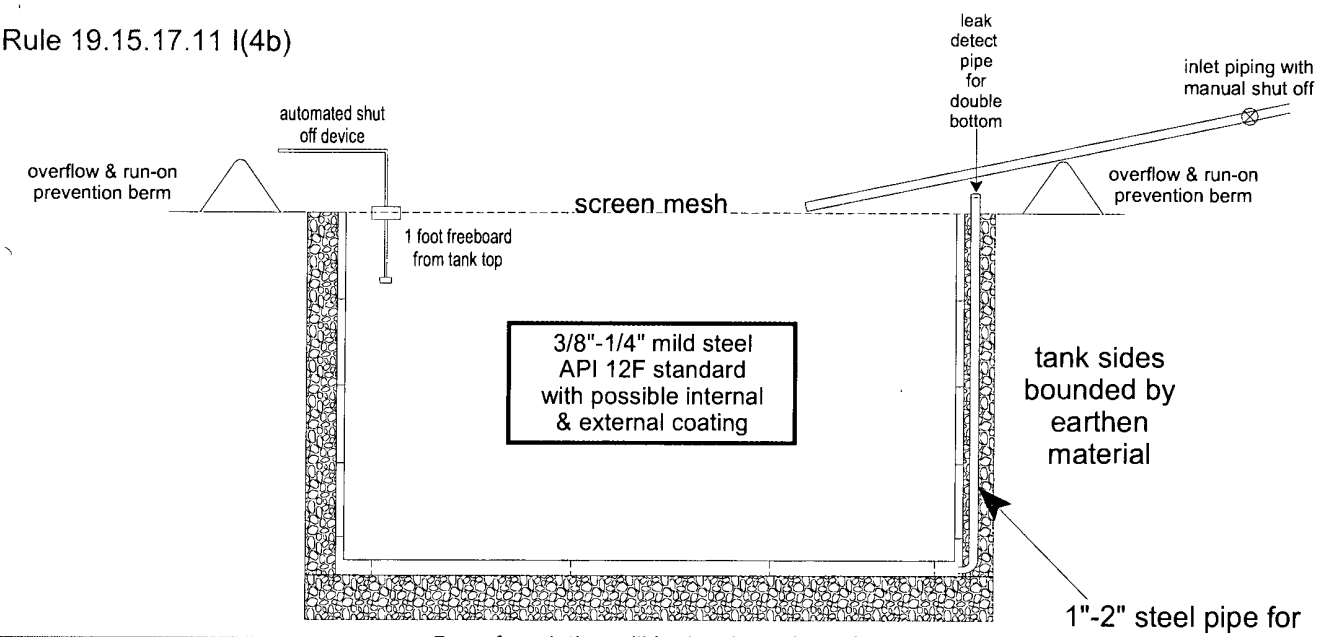
Well site may contain cathodic protection



REPLACED WITH

21/45/95 bbl steel tank: double wall / double bottom
with single or double port leak detection

Rule 19.15.17.11 I(4b)

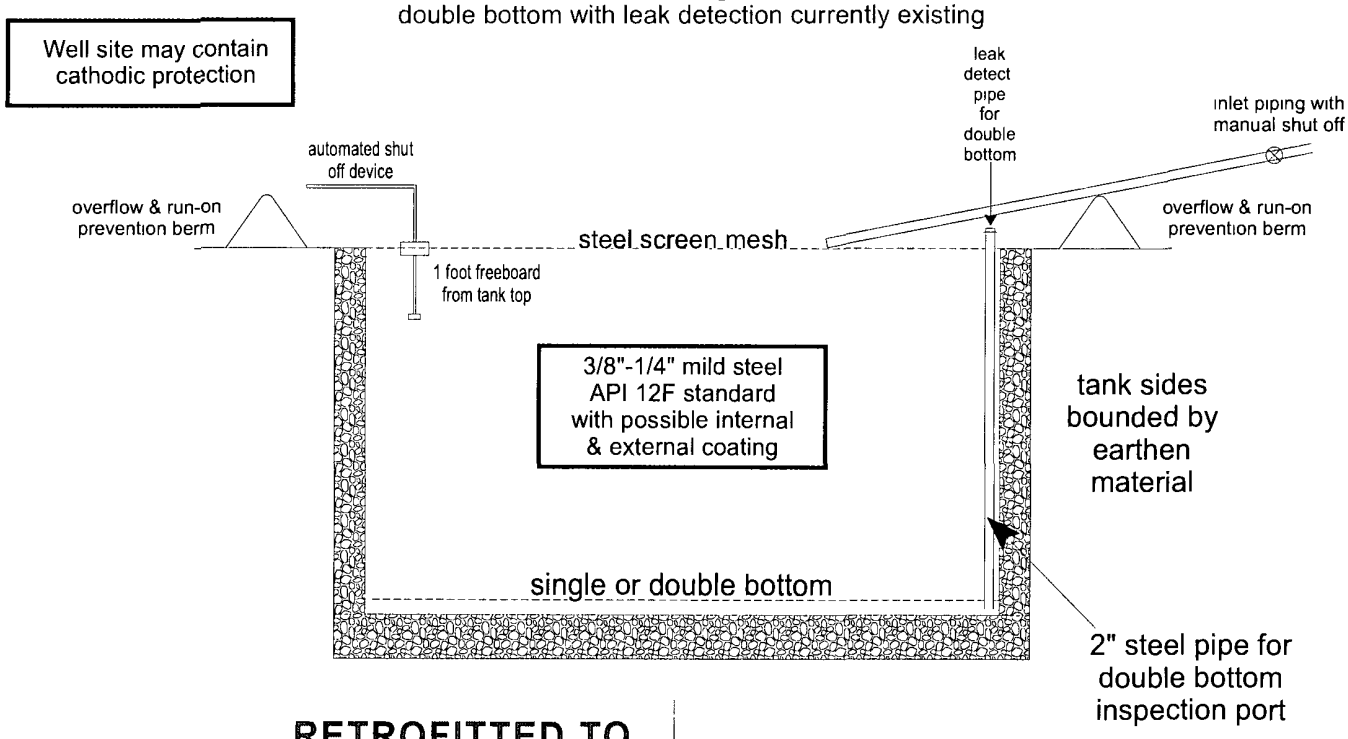


Base foundation will be level and free of rocks to prevent damage to liner.

This schematic is for demonstrative purposes only and is not intended for final specification design. Details into specification requirements should be reference within the Design and Construction (D & C) Plan submitted or any manufacturer's attachment to the D & C Plan.

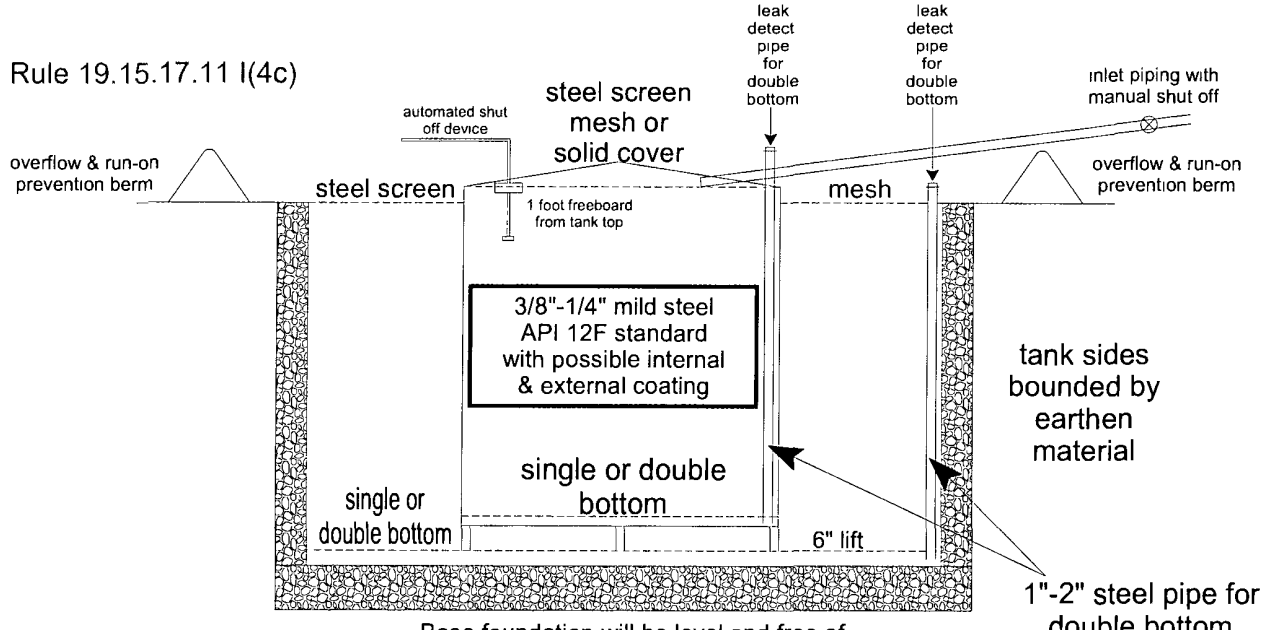
SIMPLISTIC SCHEMATIC
OF A MODIFICATION TO AN EXISTING BELOW-GRADE TANK

Typical 95 bbl steel tank: single wall/single bottom or double bottom with leak detection currently existing



RETROFITTED TO

21/45/50 bbl steel tank: single wall / single bottom or double bottom with leak detection inserted into 95 bbl steel tank: single wall / single bottom or double bottom with leak detection / 6" lift



Base foundation will be level and free of rocks to prevent damage to liner.

This schematic is for demonstrative purposes only and is not intended for final specification design. Details into specification requirements should be reference within the Design and Construction (D & C) Plan submitted or any manufacturer's attachment to the D & C Plan.

General Geology and Hydrology

The San Juan Basin is situated in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes, and hogbacks. Away from major valleys and canyons topographic relief is generally low. Native vegetation is sparse and shrubby. Drainage is mainly by the San Juan River, the only permanent stream in the Navajo Section of the Colorado Plateau; the San Juan River is a tributary of the Colorado River. Major tributaries include the Animas, Chaco, and La Plata Rivers. Flow of the San Juan River across the basin is regulated by the Navajo Dam, located about 30 miles northeast of Farmington, New Mexico. The climate is arid to semiarid with an average annual precipitation of 8–10 in. (Circular 154—Guidebook to coal geology of northwest New Mexico By E. C. Beaumont, J. W. Shomaker, W. J. Stone, and others, 1976). Soils within the basin consist of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impact.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan Basin (Stone, et al., 1983). The San Jose Formation of Eocene age occurs in both New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico border and overlies the Animas Formation in the general area north of the State line. The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and shale. Thickness of the San Jose increases from west to east. Groundwater is associated with alluvial and fluvial sandstone aquifers. The occurrence of groundwater is mainly controlled by distribution of sandstone in the formation. The reported or measured discharge from numerous water wells completed in the formation range from 0.15 to 61 gallons per minute (gpm) and with a median of 5 gpm. Most of wells provide water for livestock and domestic purposes. The formation is suitable for recharge from precipitation due to overlying soils being sandy, highly permeable, and absorbent. Low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the formation by the San Juan River and its main tributaries all tend to reduce the effective recharge to the formation. Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation of Paleocene age are between 0 and 1,000 feet deep in the majority of the basin as well (Stone, et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p).

BP America Production Company

Well Site: Federal GC L #1
API 30-045-20327
(F) Section 14 – T30N – R11W
San Juan County, New Mexico

Site Specific Hydrology Report
(Pursuant to NMAC 19.15.17.9, Subsection B, Paragraph 4)

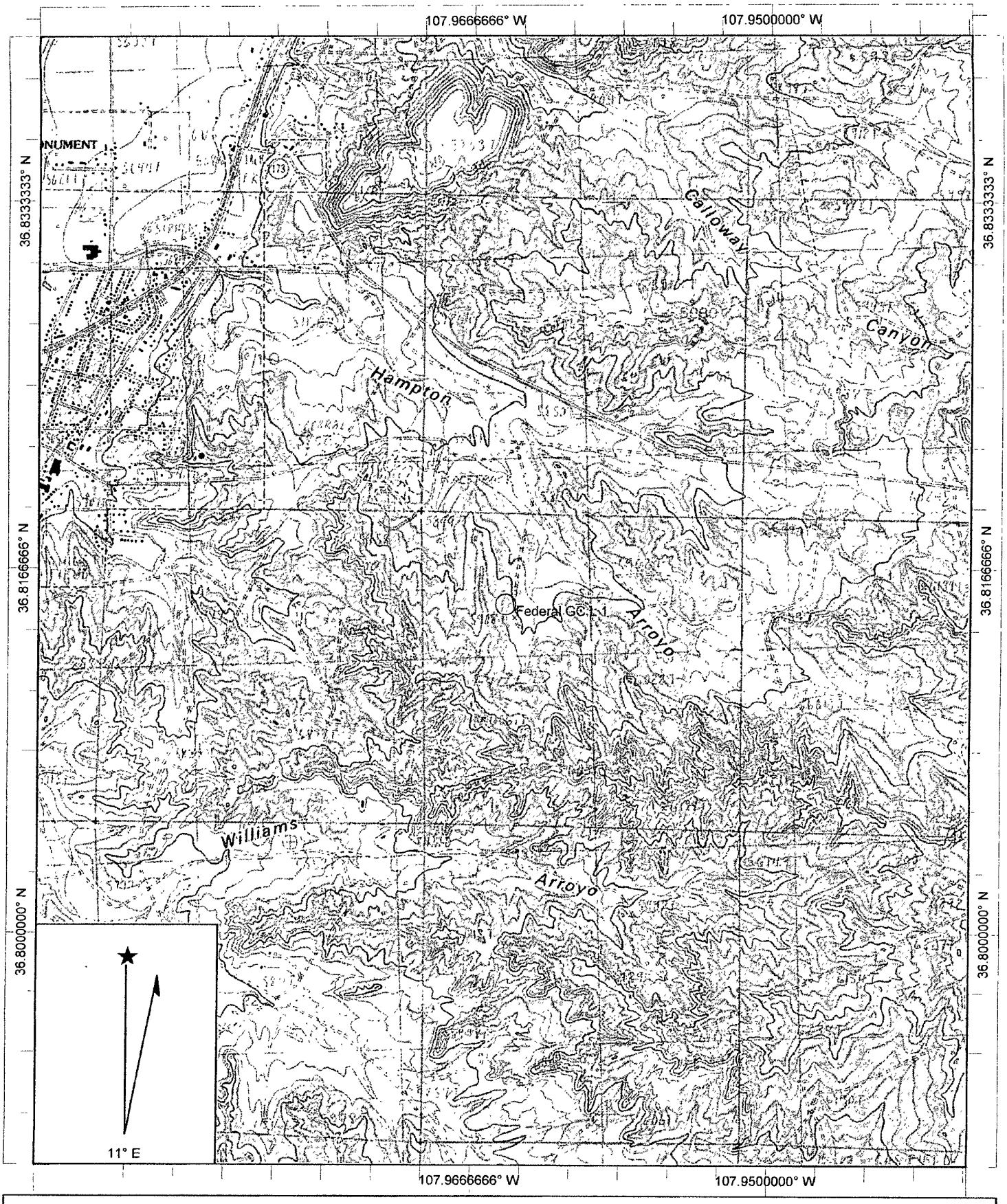
1) Topography: The proposed pit site is located approximately 1 mile East of Aztec, New Mexico. The well pad is relatively flat, with the surrounding area gently sloping towards the north east. Surface drainage is towards the north east, in a direction of an un-named drainage that flows north into the Hampton Arroyo.

2) Soils: Surface soils at the proposed pit site are comprised of a silty sand. The thickness is unknown but is expected to overly a dense sandstone surface that outcrops throughout the region (see Geology, below). West of the site is a bedrock sandstone outcrop.

3) Geology: Review of geologic maps published by the New Mexico Bureau of Geology and Mineral Resources, 2003, indicates the surface outcrop is the Nacimiento formation. This formation is a mix of mudstone and conglomeritic sandstone. The surface elevation at the site is about 5,920 feet.

4) Surface Hydrology: Drainage from the well site is towards the north east, 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.

5) Groundwater Hydrology: Information researched in the New Mexico State Engineers Office did not indicate the presence of water within 100 feet of the ground surface in the area of the proposed BGT modification. The nearest well was listed at 1,153 meters (3,783 feet) south east of the BGT site. Well records indicate the a well drilled near the base of the Hampton Arroyo found groundwater at 52 feet below the surface. The BGT site is about 60 vertical feet above the Hampton Arroyo. Review of Vulnerable Area Maps published by the New Mexico Oil Conservation Division indicates that groundwater is in excess of 100 feet from ground surface.



Name: AZTEC
Date: 3/4/2010
Scale: 1 inch equals 2000 feet

Location: 036.8150952° N 107 9649570° W
Caption: BP - Federal GC L #1
95 BGT Modification Upgrade
36.81512N x 107.96475E

New Mexico Office of the State Engineer
Wells with Well Log Information

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (in feet)

POD Number	Sub basin	Use	County	Source	q 6416	q	q 4	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water
SJ 01294		DOM	SJ	Shallow	3	3	1	13	30N	11W	236802	4078168*	1301	10/24/1980	10/31/1980	11/10/1980	92	52
SJ 01672		DOM	SJ	Shallow		3	1	13	30N	11W	236903	4078269*	1381	04/21/1983	04/23/1983	05/02/1983	180	80
SJ 01693		DOM	SJ	Shallow		3	1	13	30N	11W	236903	4078269*	1381	04/25/1983	05/02/1983	05/13/1983	225	89
SJ 03745 POD1		DOM	SJ	Shallow	2	1	1	13	30N	11W	237015	4078767*	1506	07/29/2006	07/30/2006	08/10/2006	325	150

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 235537.33 **Northing (Y):** 4078474.59 **Radius:** 1610

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion by Location

(with Owner Information)

(acre ft per annum) (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Grant	Source	q q q 6416	4	Sec	Tws	Rng	X	Y	Distance
SJ 02691		DOM	3	DONNA E. HOBBS	SJ	SJ 02691			2 2	4	14	30N	11W	236589	4077990*	1153
SJ 00858		SAN	3	NOEL P. CHANDLER	SJ	SJ 00858				4	10	30N	11W	234726	4079373*	1217
SJ 01294		DOM	3	TIMOTHY DALE REYNOLDS	SJ	SJ 01294		Shallow	3 3	1	13	30N	11W	236802	4078168*	1298
SJ 01672		DOM	3	JAMES R. MEUIR	SJ	SJ 01672		Shallow	3	1	13	30N	11W	236903	4078269*	1379
SJ 01693		DOM	3	RICHARD W. CHARLAND	SJ	SJ 01693		Shallow	3	1	13	30N	11W	236903	4078269*	1379
SJ 01631		DOM	0	JIMMY BAIR	SJ	SJ 01631			1	3	13	30N	11W	236890	4077870*	1477
SJ 03745		DOM	3	J. BURTON EVERETT	SJ	SJ 03745 POD1		Shallow	2 1	1	13	30N	11W	237015	4078767*	1508

Record Count: 7

POD Search:

POD Basin: San Juan

UTMNAD83 Radius Search (in meters):

Easting (X): 235537.33 **Northing (Y):** 4078464.59 **Radius:** 1610

Sorted by: Distance

***UTM location was derived from PLSS - see Help**