### Jones, Brad A., EMNRD

From:

Cathy Smith [CSmith@huntingtonenergy.com]

Sent:

Wednesday, February 15, 2012 9:11 AM

To:

Jones, Brad A., EMNRD

Subject: Attachments:

BLM C144 Permit to Operate Approval List 2\_15\_12 (b).xlsx BLM C144 Permit to Operate Approval List 2\_15\_12 (b).xlsx

Brad,

Attached is a list of 14 wells for approval to operate BGT's. We are seeking C-144 approval for the permits to operate. The BGTs will be upgraded to meet the new NMOCD standards. I will send additional BGT approvals later this month.

I will be out of the office February 16 - 22. I will be checking my emails from home when I get a chance. If you have any problems, just send me an email & I will get back to you as soon as I can.

Thank you!

Cathy Smith Huntington Energy, L.L.C. 908 N.W. 71<sup>st</sup> St. Oklahoma City, OK 73116 (405) 840-9876 ext. 129

# HUNTINGTON ENERGY, L.L.C. BGT APPLICATION LIST

| WELL |                              | # <u>10</u>  | Ξ | LOCATION              | ON                    |          | VINIO BUILLIONO BUILLIA | A EMICO                  | 5 |
|------|------------------------------|--------------|---|-----------------------|-----------------------|----------|-------------------------|--------------------------|---|
|      |                              |              | 3 | SEC/1 OWINSOIP/ DANGE | Cabaloor              | LAIIIOUE | LONGII ODE              | 2 0000                   | 0 |
| ட    | CANYON LARGO UNIT 128        | 30-039-05620 | Σ | M SW/4 SEC 6-24N-6W   | 840' FSL & 840' FWL   | 36.33636 | -107.51503 F            | -107.51503 RIO ARRIBA NM | 5 |
| ட    | CANYON LARGO UNIT NP 182     | 30-039-23550 | ۵ | SE/4 SEC 2-24N-7W     | 790' FSL & 790' FEL   | 36.33653 | -107.53854 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ᄔ    | CANYON LARGO UNIT 303        | 30-039-22685 | 0 | SE/4 SEC 5-24N-6W     | 790' FSL & 1850' FEL  | 36.33659 | -107.48839 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| u.   | CANYON LARGO UNIT 304        | 30-039-22687 | ပ | NW/4 SEC 11-24N-6W    | 790' FNL & 1850' FWL  | 36.33217 | -107.43991 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ட    | <b>CANYON LARGO UNIT 306</b> | 30-039-23083 | ᅩ | SW/4 SEC 11-24N-6W    | 1850' FSL & 2150' FWL | 36.32500 | -107.43890 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ட    | <b>CANYON LARGO UNIT 308</b> | 30-039-23650 | Q | NE/4 SEC 5-24N-6W     | 2010' FNL & 1720' FEL | 36.34363 | -107.48804 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ட    | <b>CANYON LARGO UNIT 332</b> | 30-039-23326 | 4 | SEC 1-24N-7W          | 970' FNL & 960' FEL   | 36.34691 | -107.52109 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ட    | CANYON LARGO UNIT 333        | 30-039-23346 | ш | SEC 1-24N-7W          | 2060' FNL & 990' FWL  | 36.34401 | -107.53249 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ш    | CANYON LARGO UNIT 337        | 30-039-23399 | _ | SEC 5-24N-6W          | 1630' FSL & 790' FWL  | 36.33896 | -107.49745 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ш    | <b>CANYON LARGO UNIT 338</b> | 30-039-23401 | 7 | SEC 6-24N-6W          | 1910' FSL & 1670' FEL | 36.33957 | -107.50577 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ட    | CANYON LARGO UNIT 339        | 30-039-23400 | ပ | SEC 6-24N-6W          | 790' FNL & 1690' FWL  | 36.34740 | -107.51207 RIO ARRIBA   | IIO ARRIBA NM            | 5 |
| ட    | CANYON LARGO UNIT 340        | 30-039-23402 | _ | SEC 1-24N-7W          | 1850' FSL & 990' FEL  | 36.33913 | -107.52124 RIO ARRIBA   | NO ARRIBA NM             | 5 |
| ட    | <b>CANYON LARGO UNIT 341</b> | 30-039-23403 | Z | SEC 1-24N-7W          | 990' FSL & 1850' FWL  | 36.33693 | -107.52957 RIO ARRIBA   | IIO ARRIBA NM            | 5 |
| ட    | CANYON LARGO UNIT NP 347     | 30-039-23575 | I | NE/SE, SEC 1-24N-7W   | 2645' FNL & 690' FEL  | 36.34277 | -107.51962 RIO ARRIBA   | NO ARRIBA NM             | V |

| No. 19  |
|---|
| District I  |
| 1625 N. French Dr., Hobbs, NM 88240                   |
| District II   |
| 1301 W. Grand Avenue, Artesia, NM 88210               |
| District III<br>1000 Rio Brazos Raad Azes, MM 87440 F |
| 1000 Rio Brazos Road, Azteg, NM 87410                 |
| District IV   |
| 1220 S. St. Francis Dr., Santa Fe, NM 87505           |
| 2009 MAY 29 AM 11 20                                  |
| PARA 1 MILL CO 1811 TT 52                             |

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

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:Huntington Energy, L.L.C OGRID #:208706   |
| Address:908 N.W. 71 <sup>st</sup> St., Oklahoma City, OK 73116   |
| Facility or well name:Canyon Largo Unit #339   |
| API Number:30-039-23400 OCD Permit Number:   |
| U/L or Qtr/QtrC_ Section6 Township24N Range6W County:Rio Arriba  |
| Center of Proposed Design: Latitude36.34740 Longitude107.51207 NAD: □1927 ☑ 1983   |
| Surface Owner:  Federal  State  Tribal Trust or Indian Allotment   |
| 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  |
| Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D  |
| 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 |
| 4.  M Polony guada tanks. Subsection Lef 10.15.17.11 NMAC  |
| Mark   Subsection I of 19.15.17.11 NMAC  |
| Volume:30_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   |

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

Liner type: Thickness

| 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 specify4' hogwire fence with a single strand of barbed wire on top   |                             |  |  |  |  |  |
| 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. C.  |                             |  |  |  |  |  |
| 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  |                             |  |  |  |  |  |
| Signed in compliance with 15.15.5.105 NWAC   |                             |  |  |  |  |  |
| 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 of the Santa Fe En | office for                  |  |  |  |  |  |
| consideration of approval.  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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying the same of th | priate district<br>pproval. |  |  |  |  |  |
| 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<br>☐ 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)   | ☐ Yes ☐ No<br>☑ NA          |  |  |  |  |  |
| - 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 search; Visual inspection (certification) of the proposed site   |                             |  |  |  |  |  |
| 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                  |  |  |  |  |  |

| 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   |
|--|
| <ul> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>□ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>□ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>□ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC</li> <li>and 19.15.17.13 NMAC</li> </ul>   |
| Previously Approved Design (attach copy of design) API Number: or Permit Number:   |
| 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)  |
|  |
| 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   |
| 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)  |
| Naste 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 G of 19.15.17.13 NMAC   |

| 16. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel T<br>Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling<br>facilities are required.   |  |                       |
|--|--|-----------------------|
| •  | al Facility Permit Number:   |                       |
|  | al Facility Permit Number:   |                       |
| Will any of the proposed closed-loop system operations and associated activities occur on  Yes (If yes, please provide the information below)  No  | or in areas that will not be used for future services.   | vice and operations?  |
| Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specifications based upon the appropriate require Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.  Site Reclamation Plan - based upon the appropriate requirements of Subsection G or  | 15.17.13 NMAC  | C                     |
| 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 provided below. Requests regarding changes to certain siting criteria may require admit considered an exception which must be submitted to the Santa Fe Environmental Burea demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guid  | nistrative approval from the appropriate dist<br>u office for consideration of approval. Justi   | rict office or may be |
| 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 obtain  | ed from nearby wells   | ☐ Yes ☐ No<br>☐ 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 obtain  | ed from nearby wells   | ☐ Yes ☐ No<br>☐ 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 obtain   | ed from nearby wells   | ☐ Yes ☐ No<br>☐ NA    |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site  | watercourse or lakebed, sinkhole, or playa   | ☐ Yes ☐ No            |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in exis  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | tence at the time of initial application.  | ☐ Yes ☐ No            |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than fi watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in - NM Office of the State Engineer - iWATERS database; Visual inspection (certification)   | n existence at the time of initial application.  | ☐ Yes ☐ No            |
| Within incorporated municipal boundaries or within a defined municipal fresh water well fadopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtain   |  | ☐ Yes ☐ No            |
| Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspec   | ction (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 M   | ineral Division  | ☐ Yes ☐ No            |
| <ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Min Society; Topographic map</li> </ul>   | neral Resources; USGS; NM Geological   | ☐ Yes ☐ No            |
| Within a 100-year floodplain FEMA map  |  | ☐ Yes ☐ No            |
| On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the follow by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirement Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirement Waste Material Sampling Plan - based upon the appropriate requirements of Subsection Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cutt Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of | ats of 19.15.17.10 NMAC tion F of 19.15.17.13 NMAC te requirements of 19.15.17.11 NMAC sed upon the appropriate requirements of 19. NMAC ats of Subsection F of 19.15.17.13 NMAC tion F of 19.15.17.13 NMAC ings or in case on-site closure standards cann 15.17.13 NMAC 15.17.13 NMAC | 15.17.11 NMAC         |
|  |  |                       |

| ·  |
|--|
| 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):Catherine Smith Title:Regulatory  |
| Signature: Date: 5/6/2009  |
| e-mail address:csmith@huntingtonenergy.comTelephone:405-840-9876   |
| OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  |
| OCD Representative Signature: Approval Date: 7/15/12   |
| Title: Environment at Engineer OCD Permit Number:  |
| 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 |
| 25.  |
| Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.  |
| Name (Print): Title:   |
| Signature: Date:   |

e-mail address:\_

Telephone: \_

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

| A .  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Township: 24N Range: 06W Sections:   |  |  |  |  |  |  |  |
| NAD27 X: Y: Zone: Search Radius:   |  |  |  |  |  |  |  |
| County: Basin: Number: Suffix:   |  |  |  |  |  |  |  |
| Owner Name: (First) (Last) C Non-Domestic C Domestic C All   |  |  |  |  |  |  |  |
| POD / Surface Data Report Avg Depth to Water Report Water Column Report  |  |  |  |  |  |  |  |
| Clear Form IWATERS Menu Help   |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| WATER COLUMN REPORT 04/09/2009   |  |  |  |  |  |  |  |
| (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 Well Water (in feet)  SJ 00681 14 24N 06W 24 4 3 |  |  |  |  |  |  |  |

Record Count: 1

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

| 1 02 110pol 8 MIL 2 0 111100000  |
|--|
| Township: 24N Range: 06W Sections:                                     |
| NAD27 X: Y: Zone: Search Radius:                                       |
| County: Basin: Number: Suffix:   |
| Owner Name: (First) (Last) C Non-Domestic C Domestic C All             |
| POD//Surface Data Report Avg Depth to Water Report Water Column Report |
| Clear Form   IWATERS Menu Help   |
|  |

AVERAGE DEPTH OF WATER REPORT 04/09/2009

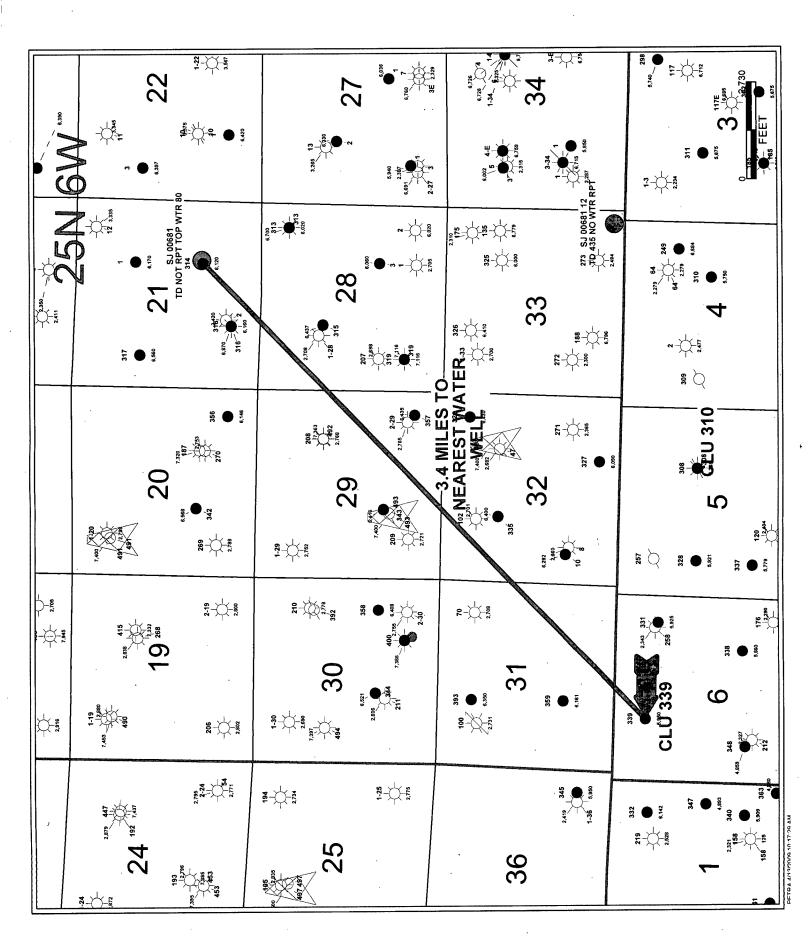
(Depth Water in Feet) Bsn Tws Rng Sec Zone X Y Wells Min Max Avg

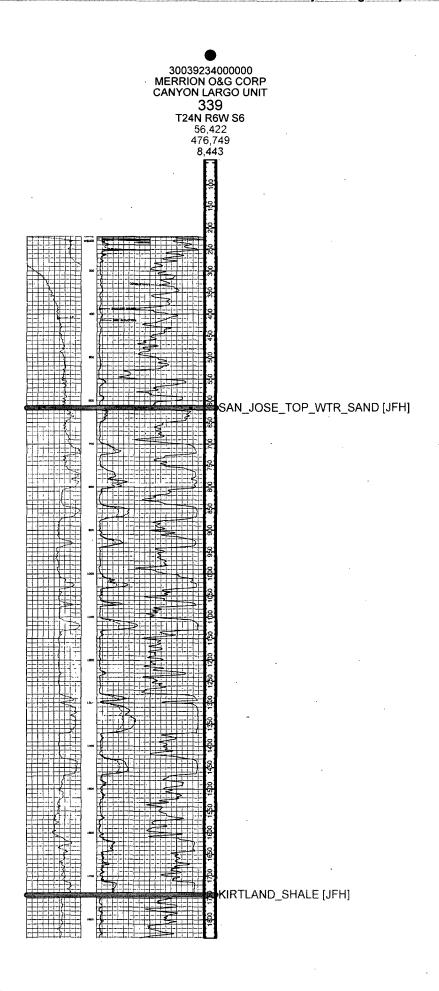
No Records found, try again

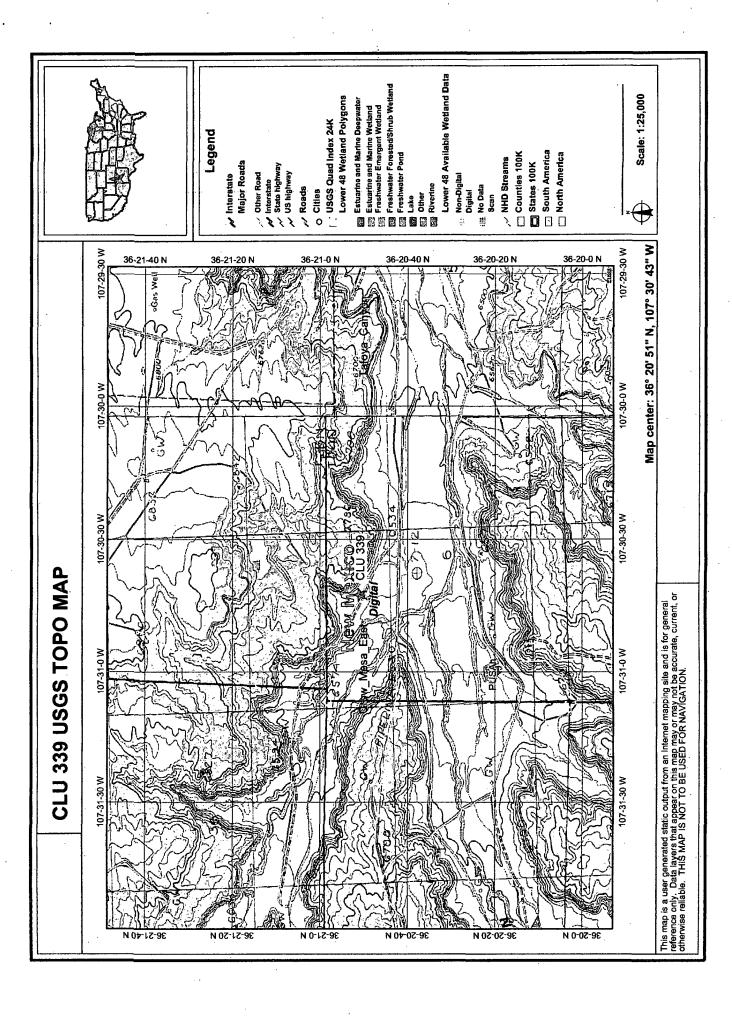
### New Mexico Office of the State Engineer POD Reports and Downloads

|   |   |                |                                  | POD Reports   | and Downloads     |                   |   |   |   |  |
|---|---|----------------|----------------------------------|---|-------------------|-------------------|---|---|---|--|
|   |   | A              | Township                         | p: 24N Range: 06W Sec   | tions:            |                   |   | **************************************  | 1401 ph/s pp/(pl-sablefores) 1901 fear-sidensee | manual ma |
| NAD27 X: Zone: Search Radius:   |   |                |                                  |   |                   |                   |   |   |   |  |
| County: Basin: Number: Suffix:  |   |                |                                  |   |                   |                   |   |   |   |  |
| Owner Name: (First) (Last) C Non-Domestic C Domestic All                |   |                |                                  |   |                   |                   |   |   |   |  |
|   |   |                | POD//Surface Da                  | nta Report Avg Dep  | h to Water Report | Water Column      | Report                                  |   |   |  |
|   |   |                |                                  | Clear Form  | ATERS Menu : He   | <b>P</b>          |   |   |   |  |
|   | *************************************** | 44*** <u>4</u> |                                  | no Action Control of the Control of |                   |                   | *************************************** | *************************************** |   | *  |
| POD / SURFACE DATA REPORT 04/09/2009 (quarters are 1=NW 2=NE 3=SW 4=SE) |   |                |                                  |   |                   |                   |   |   |   |  |
| : -: -:   |   | ft per ann     |                                  |   |                   | ggest to smallest |   |   |   | in Meters)   |
| DB File Nbr   | Use                                     | Diversion      |                                  | POD Number  |                   | s Rng Secqqq      | Zone                                    | X Y                                     | UTM_Zone  | Easting 1  |
| SJ 00202  | OFM                                     | 10             | BURLINGTON RESOURCES OF          |   | Shallow 24        |                   |   |   | 13  | 281366   |
| SJ 00681  | STK                                     |                | HOMER C. BERRY                   | SJ 00681 36   | 24                |                   |   |   | 13  | 280965   |
| SJ 00681 13   | STK                                     | 4.839          | HOMER C. BERRY                   | SJ 00681 13<br>SJ 00681 14  | 24<br>24          |                   |   |   | 13  | 280886<br>282864   |
| SJ 00681 14<br>SJ 00681 16  | IRR                                     | 80             | HOMER C. BERRY                   |   | 24                |                   |   |   | 13<br>13  | 274606   |
|   | STK                                     | 24.195         | HOMER C. BERRY                   |   |                   | -                 |   |   |   |  |
| SJ 00681 17<br>SJ 00681 20  | STK                                     | 8              | HOMER C. BERRY                   |   | 24<br>24          |                   |   |   | 13  | 278397   |
|   | STK                                     | 30             | HOMER C. BERRY                   | SJ 00681 20<br>SJ 00681 21  | 24                |                   |   |   | 13<br>13  | 280321<br>280965   |
| SJ 00681 21<br>SJ 00681 22  |   | 24.195         | HOMER C. BERRY                   |   | 24                |                   |   |   | 13  | 281665   |
| SJ 00681 22<br>SJ 00681 23  | STK                                     | 12.9<br>16.13  | HOMER C. BERRY<br>HOMER C. BERRY | SJ 00681 22<br>SJ 00681 23  | 24                |                   |   |   | 13  | 283251   |
|   | STK                                     |                |                                  | SJ 00681 25   | 24                |                   |   |   | 13  | 282645   |
|   | IRR                                     | 3              | HOMER C. BERRY<br>HOMER C. BERRY |   | 24                |                   |   |   | 13  | 283065   |
| SJ 00681 29<br>SJ 00681 3   | -                                       | 300            | HOMER C. BERRY                   |   | 24                |                   |   |   | 13  | 277280   |
| SJ 00681 30   | STK                                     | 4.839          | HOMER C. BERRY                   | <u>\$J 00681 3</u><br>\$J 00681 30  | 24                |                   |   | •                                       | 13  | 280338   |
|   | STK                                     | 420            | HOMER C. BERRY                   | SJ 00681 32   |                   |                   |   |   | 13  | 280965   |
|   | STK                                     | 48             |                                  |   | 24                |                   |   |   | 13  | 282952   |
|   | IRR                                     | . 32           | HOMER C BERRY                    |   |                   |                   |   |   | 13  | 280606   |
|   | STK                                     | 16             | HOMER C. BERRY                   |   | 24                |                   |   |   | 13  | 280965,  |
| SJ 00681 36<br>SJ 00681 4   | STK                                     | 48<br>9.678    | HOMER C. BERRY<br>HOMER C. BERRY | SJ 00681 36<br>SJ 00681 4   | 24                |                   |   |   | 13  | 273955   |
| 50 00001 4  | Αις.                                    | 9.678          | HOMER C. DERRI                   | 50 UU661 4  |                   | 4 000 10 0 1 0    |   |   | 13  | 213333   |

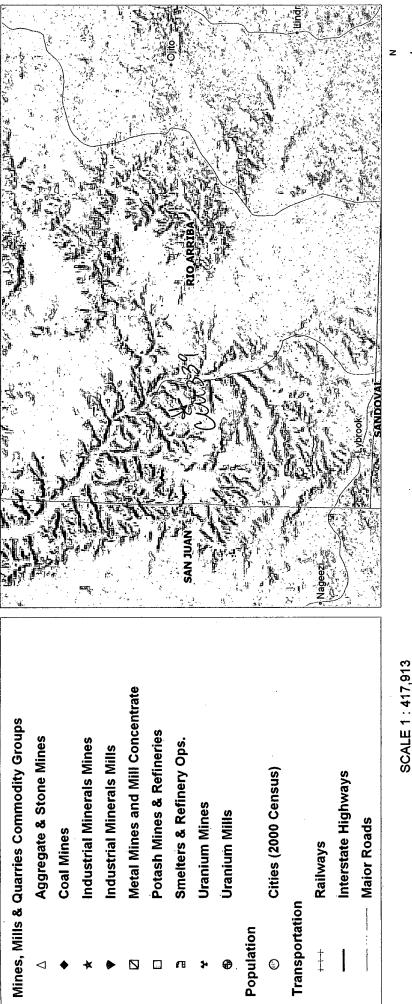
Record Count: 21



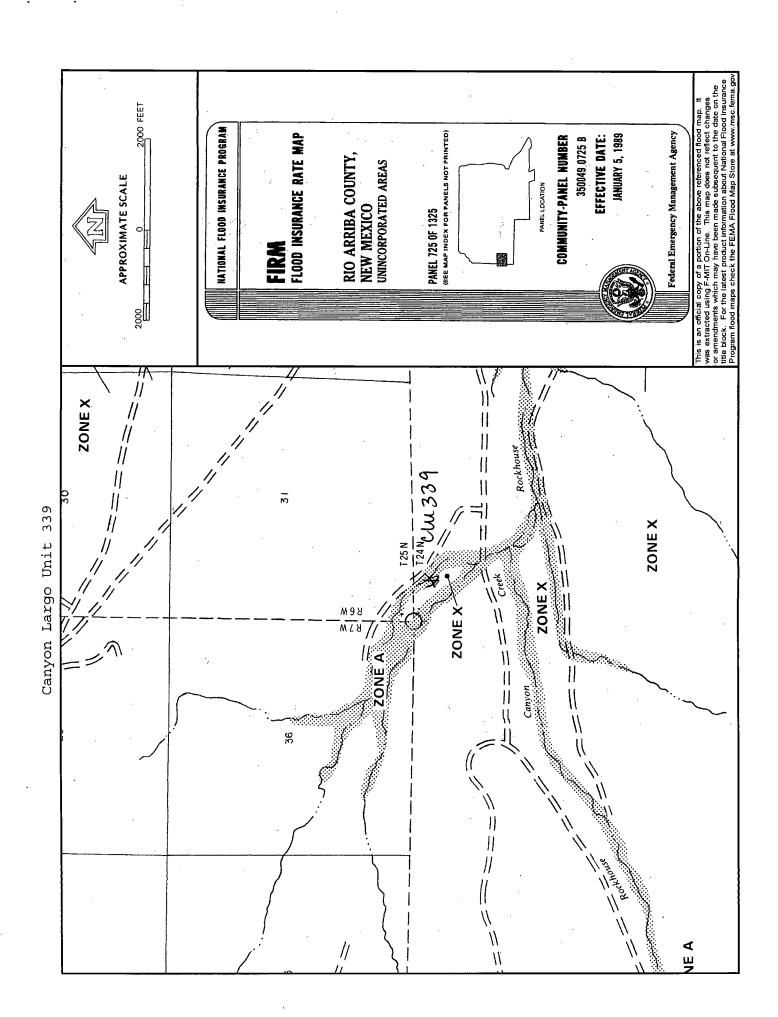




# Canyon Largo Unit 339 Mines, Mills and Quarries Web Map







### Hydrogeological Report for Canyon Largo Unit #339

### **Regional Hydrogeolocial Context:**

The San Jose Formation of Eocene age occurs in 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 State line and overlies the Animas Formation in the area generally 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 variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin). Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al., 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use.

The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily absorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.

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.

### **CLU 339**

Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The subject well is not located in an unstable area. Visual inspection has been performed (see attached siting checklist): location is not within 300' of flowing watercourse or 200' from any other water course or lake bed; not within 300' of any permanent residence, school, institution; not within 500' of any private water well or spring. The topographic map confirms visual inspection of water course. FEMA Map confirms the location is not within a 100 year floodplain. The location is not over a mine and is not on the side of a hill, as indicated on the Mines, Mills and Quarries Map. iWaters search indicates the closest water column is Sec 24-24N-R6W SESW # SJ00681-14, Irrigation well, TD 127'. The closest water well is 3.4 miles, SJ 00681, Sec 21-25N-6W, 80'. Huntington Energy CLU 339 reported the top of San Jose water sand at 610', as demonstrated on attached log.

### HUNTINGTON ENERGY, L.L.C.

### BELOW GRADE TANK SITING/VISUAL INSPECTION CHECKLIST

Well Name: CLU 339

Legal Location: SEC 6, T24N R6W

Date of Inspection: 4-2-09

Sitting Personnel: David Morales

### I observed the following:

|    |  | Yes | <u>No</u> |
|----|--|-----|-----------|
| A. | 300 ft from flowing watercourse  |     | X         |
| B. | 200 ft from any water course or lake bed   |     | X         |
| C. | 300 ft from permanent resident, school, or institution   |     | X         |
| D. | 500 ft from private fresh water well or spring used by less than 5 households for domestic or stock watering purposes. | ·   | X         |
| E. | 1000 ft from any other fresh water well or spring  |     | X         |
| F. | Incorporated municipal boundaries or within a defined municipal fresh water well field.                                |     | X         |
| G. | Area overlaying a sub-surface mine   |     | X         |
| H. | Unstable area  |     | X         |
| I. | 100 year flood plain   |     | X         |

### OIL CONSERVATION DIVISION

## STATE OF NEW MEXICO RGY AIR MINERALS DEPARTMENT

### P. O. BOX 2048 SANTA FE, NEW MEXICO 87501

Form C-107 Revised 10-1

All distances must be few the cuter houndaries of the Section.

| •  | All distan                                      | ces must be fr  | om the cuts                       | t howderire                                | rf the Secti   | m.  |  |
|--|---|---|-----------------------------------|--|--|---|--|
| Operator MERRION OIL &   | GAS CORPORATION                                 |   | Lease<br>CANY                     | ON LARGO                                   | un IT  |   | Well No. 339   |
| Unit Letter Secti  |   | M   | Ronge                             | 6w   | County   | Arriba  |  |
| Actual Footage Location of 790   | North   |   | 1690                              |  |  | West  |  |
| Ground Level Elev:<br>6564   | Producing Formation Gallup                      | line and  | Poei                              | s Fork Ga                                  | llup   | West  | Dedicated Acreager   |
| 1. Outline the acr   |   | •   | •                                 | • -  |  |   |  |
| dated by community of this form if necessity of the community of the commu | No If answer is to?' list the owners a essary.) | n, force-pool  "yes," type o  nd tract deso well until al | ing. etc? of consolications v     | lation<br>which have a                     | ctually be   | en consolic   | dated. (Use reverse side of mmunitization, unitization, n approved by the Commis-  |
| 100.   |   |   | . 1                               |  |  |   | CERTIFICATION  |
| 1690'  <br>  | 4301  |   | 1                                 |  |  | tained h  | certify that the information con-<br>erein is true and complete to the<br>my knowledge and belief.   |
| SF 078874  | Sec.  |   | FEB28                             | VED  | νΤ   | Position<br>Operati<br>Company  | ons Manager Oil & Gas Corp.  |
| <br>   |   | 6   | <br>                              |  |  | shown or<br>mates of<br>spader my<br>de true  | r certify that the well location in this plat was plotted from field rectual surveys made by me or respervision, and that the same and correct to the best of my me and belief.  |
| <br> <br> <br> <br> <br>   |   |   | MAR<br>OIL ¢                      | 3 0 1984<br>ON. DIV<br>IST. 3              | The state of the s | Date Surve  Decem  Registered and  Fred  Certificate  | ber 29. 1983 Professional Engineer ad Surveyor.  |
|  |   | BUREAU FARMIN   | PEB 2 8  OF LANGE  OTON RICE  MAR | 1984  500000000000000000000000000000000000 | NT A   | Name Steve S Position Operati Company Merrion Date 1/12/84  I hereby shown or mores of wander my de true knowled  Date Surve Registedod and Fred. | erein is true and complete to my knowledge and belief.  Dunn  Ons Manager  Oil & Gas Corp.  Certify that the well lace this plat was plotted from actual surveys made by my supervision, and that the sand correct to the best of ge and belief.  By Kerry Jr.  By Kerry Jr. |

# Huntington Energy, L.L.C. Below Grade Tank Design and Construction San Juan Basin

The design and construction requirements for below-grade tanks include the general provisions of Paragraphs A, C, D, and E of 19.15.17.11 NMAC and the specific requirements of Paragraph I of 19.15.17.11 NMAC. In accordance with Section 11 of 19.15.17 NMAC, the following include all of the appropriate provisions for the design and construction of below grade tanks (BGT) on Huntington Energy, L.L.C. (HE) locations.

### General Plan:

- 1. HE will design and construct a BGT to contain liquids and to prevent contamination of fresh water and protect the public health and environment.
- 2. Huntington Energy, L.L.C. (HE) shall have signs at the sites as per 19.15.16.8 NMAC of which an existing well is the same operator-Huntington Energy. The sign shall provide the following: Operator's name, location of site by quarter-quarter or unit letter, section, township and range, and emergency numbers. If in case the Below Grade Tank (BGT) does not co-exist with an existing well, the sign shall comply with subsection C of 19.15.17.11 NMAC.
- 3. HE shall fence the BGT in a manner that prevents unauthorized access and shall maintain the fence in good repair. We shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.
  - HE shall construct fencing around the BGT using 4' hogwire fencing topped with two strands of barbed wire, or with a pipe top rail- an alternative to the requirements as set out by Subsection D of 19.15.17.11 and should provide long term protection and less maintenance. A six foot chain link fence topped with three strands of barbed wire will be used if the well location is within 1000' of a permanent residence, school, hospital, institution, or church.
- 4. HE will construct an expanded metal covering on the top of the BGT.
- 5. HE shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and damage from sunlight.
- 6. HE will construct a properly constructed foundation consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges, or irregularities to prevent the liner's rupture or tear. Once the hole is constructed with a backhoe and firmed, shovels are used to smooth and remove all rocks, debris, or edges that might rupture the liner. In addition, I-beams placed below the tank are wrapped with 60 mil HPDE material to prevent any punctures of liner.
- 7. HE shall construct a BGT to prevent overflow and the collection of surface water run-on by constructing an inner crib, which the height extends above ground level by 6" preventing water from entering. The BGT is also elevated 6" above ground level as well. The berm, which is constructed approximately 3' tall by 5' wide for containment and any fluids entering outside of the fenced area. Auto shut-off controls are installed using a radar that is set at 14" of freeboard. When water level reaches that point, a signal is sent

and sends an alarm to the pumper. If 10" of freeboard is reached, a signal is sent to a valve which shuts the gas line on discharge of separator. This in turn causes a pressure increase to 200 psi, which closes the motor valve on the inlet side of the separator, shutting the well down. A manual valve is also placed on the 2" line from separator to BGT shutting off any water to BGT.

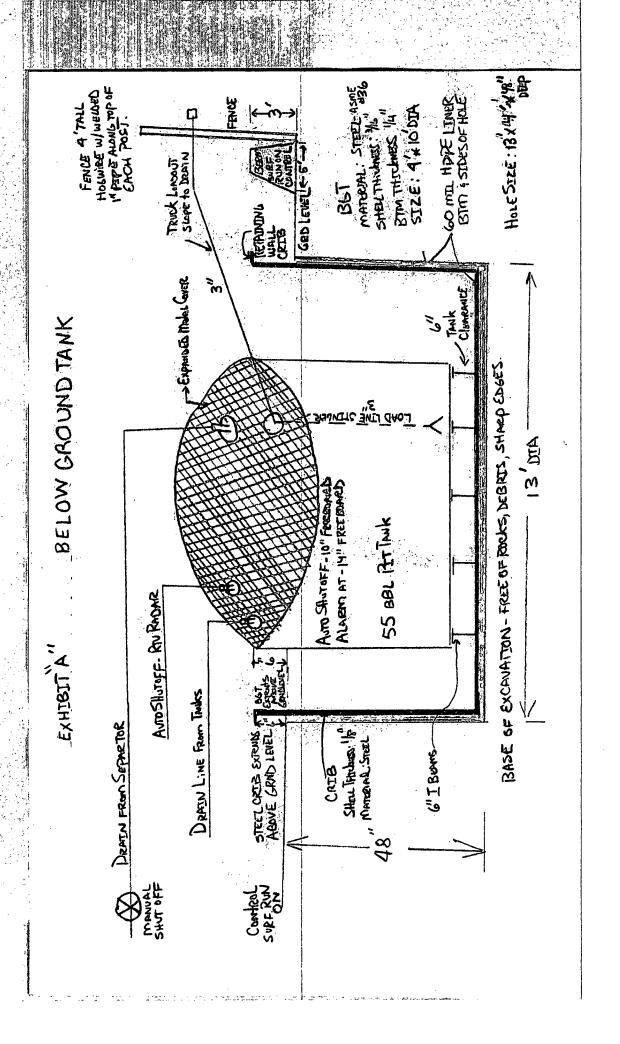
8. HE will construct a BGT system employing an external crib that stands between the wall of the foundation of the hole and the BGT. The crib will be placed on top of the 60 mil liner and will extend 6" above ground level. It is made of steel with a grey coating. The BGT side walls will be visible and open for visual inspection. Dirt is placed outside of crib filling void. (Liner is extended to ground level on outside of crib.)

The BGT will be steel and elevated 6" above underlying ground surface using 6" I-Beam (I-Beams wrapped to prevent edges from rupturing the liner), which elevates the BGT 6" above ground level to prevent surface run-on.

- 9. HE shall equip below-grade tanks designed in this manner with a properly operating automatic high-level shut-off control device and manual controls to prevent overflows. Auto shut-off controls are installed using a radar that is set at 14" of freeboard and when water level reaches that point, a signal is sent and it in turns sends an alarm to the pumper. If 10" of freeboard is reached, a signal is sent to a valve which shuts the gas line on discharge of separator. This in turn causes a pressure increase to 200 psi which closes the motor valve on the inlet side of separator shutting the well down. A manual valve is also placed on the 2" line from separator to BGT shutting off any water to BGT.
- 10. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A.

HE will demonstrate to the NMOCD that the liner complies with the specifications within Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from the NMOCD prior to the installation of the new design.

11. HE BGT's constructed and installed prior to June 16, 2008, that do not comply with 19.15.17.11 NMAC Paragraph 1-4 of Subsection I, shall be equipped or retrofitted or closed within 5 years after June 16, 2008. If the existing BGT does not demonstrate integrity, the BGT will be removed and a BGT that meets criteria set forth by Paragraphs 1 thru 4 of Subsection I of 19.15.17.11 NMAC will be installed.



60 mil HOPE



Table 1.1: Minimum Values for Smooth Black-Surfaced HDPE Geomembranes

| TEBTED PROPERTY                                   | TEST METHOD                      | PREGUENCY      | MINIMUM VALUE     |                        |                           |                |  |
|---|----------------------------------|----------------|-------------------|------------------------|---------------------------|----------------|--|
| Product Gode                                      |                                  |                | HDE<br>0304000    | HDE                    | MDE.                      | HIDE           | A CALDINGS   |
| Tricimes;(тижнит чистер) mil (mm)                 | ASTM D 5199                      | Every roll     | 30 (0.75)         | 40 (1.00)              | 80 (1,50)                 | 80 (2.00)      | 100015   |
| Lowest individual reading (-10%)                  |                                  |                | 27 (0.69)         | (19.0) 36              | 54 (1.40)                 | 72 (1.80)      | 747 (J. 30)  |
| Density, g/cm                                     | ASTM D 1505                      | 200,000 %      | 0.84              | 0.94                   | 0.94                      | 0.94           | Compression of the   |
| Tensile Properties (each timedion)                | ASTM D 6893, Type IV             | 20,000 в       |                   |                        |                           | <u> </u>       |  |
| Strength at Bredik, Iblin (N/mm)                  | Dumbell, 2 tpm                   |                | 114 (20)          | 152 (27)               | 228 (40)                  | 30-4 (53)      | Digity Hilling   |
| Strangth at Yield, Refr (N/mm)                    |                                  |                | 83 (11)           | B4 (15)                | 126 (22)                  | 158 (29)       | The same   |
| Elongation at Break, %                            | G.L. 2.0 in (51 mm)              | 1              | 700               | 700                    | 7700                      | 700            | 177-167  |
| Elongation at Yield, %                            | G.L. 1.3 in (33 mm)              |                | 12                | 12                     | 12                        | 52             | 1.2.   |
| Tear Reststance, & (N)                            | ASTM D 1004                      | 46,000 lb      | 21 (93)           | 28 (125)               | 42 (187)                  | 59 (249)       | Prop Propries  |
| Puncture Remetence, fb (N)                        | ASTM D 4533                      | 45,000 lb      | 54 (240)          | 72 (3220)              | 106 (480)                 | 144 (843)      | rise (mail   |
| Certion Black Content, N                          | ASTM D 16031/4218                | 20,000 to      | 2.0               | 20                     | 20                        | 2.0            | The state of the s |
| Carbon Black Dispension                           | ASTM D 5595                      | 45,000 tb      | + Note 1          | + Note 1               | + Note 1                  | + Nake 1       | is the same  |
| Noticined Constant Tennile Load, IV               | ASTM D S307; Appendix            | 200,000 Њ      | 300               | 300                    | 300                       | 300            | Wife)  |
| REFERENCE PROPERTY                                | FREQUENCY                        | Y ANIMON YALUE |                   |                        |                           |                |  |
| Discrime induction Time, min                      | ASTM D 3895, 200° C;<br>0_ 1 atm | 200,000 to     | >100              | >100                   | >100                      | >100           | and make the first many of the first many  |
| Roll Langth <sup>(1)</sup> (approximate), fi (ni) |                                  |                | 1,120 (341)       | 570 (2 <del>0</del> 5) | 560 (171)                 | 430 (131)      | (1994)   |
| toli Widin <sup>(1)</sup> , fl (m)                |                                  |                | 22.5 (6.9)        | 22.5 (5.9)             | 22.5 (6.P)                | 22.5 (8.9)     | and Car  |
| Roll Ares, fit (M²)                               |                                  |                | 25,200<br>(2,341) | 18,575<br>(1,819)      | 12, <b>600</b><br>(1,171) | 9,676<br>(500) |  |

### ----

- +Noter1: Dispersion only applies to near sphenosi aggromorates, 9 of 10 views shall be Category 1 or 2. No grore than 1 view from Category 3.
- GSG HD is available in role weighing about 3,900 lb (1,769 kg)
- AT GSS permandrames have demandrial stability of £2% when heated with ASTM D-1204, and LTB of <-77° C when heated with ASTM D-746.
- " (Don't send and widths twee a interance of a 1%).
- "Modified

# Huntington Energy, L.L.C. Below Grade Tank Operational Plan San Juan Basin

The operation requirements for below-grade tanks include the general provisions of Paragraph A of 19.15.17.12 NMAC and the specific requirements of Paragraph E of 9.15.17.12 NMAC.

### General Plan:

- 1. HE will operate and maintain a BGT to contain liquids and solids and prevent contamination of fresh water and protect public health and environment. Maintaining and operating all equipment in a satisfactory working order is accomplished by daily and monthly inspections to assure all systems are performing. These inspections should include: operations of equipment-functioning properly, observance of any surface runon, checking for visible leaks, assure correct freeboard of liquids in BGT, berms integrity is good, fencing in compliance, assure no oil sludge, miscellaneous, expanded metal cover integrity is good, and all signs are in order.
- 2. HE shall construct a BGT to prevent overflow and the collection of surface water run-on by constructing an inner crib which the height extends above ground level by 6" preventing water from entering. The BGT is also elevated 6" above ground level as well as the berm constructed approximately 3' tall by approximately 5' wide for containment and any fluids entering outside of fenced area. Auto shut-off controls are installed using a radar that is set at 14" of freeboard and when water level reaches that point, a signal is sent and it in turns sends an alarm to the pumper. If 10" of freeboard is reached, a signal is sent to a valve which shuts the gas line on discharge of separator. This in turn causes a pressure increase to 200 psi which closes the motor valve on the inlet side of separator shutting the well down. A manual valve is also placed on the 2" line from separator to BGT shutting off any water to BGT.

Each lease operator gets a daily report containing water levels in each location. If auto shut-off control shuts well in, well is not opened until sufficient freeboard is reestablished and no alarms are activated. HE will maintain a 14" freeboard policy for alarm notification and a complete shut down when freeboard reaches 10" from top of BGT.

Berms will be maintained at 5' wide and 3' tall to assure prevention of surface run on and containment.

- 3. HE shall continuously remove any visible or measurable layer of oil from the fluid surface of a below-grade tank in an effort to prevent significant accumulation of oil over time.
- 4. HE monthly inspection report involves both lease operator and foreman reviewing each report monthly to assure integrity of the BGT system. This includes equipment functioning correctly, observance of any surface run-on, spills, or leak detection, check freeboard of liquids in BGT, berm integrity, all fencing in good condition, all gates in working condition, expanded metal cover in good condition, remove any visible layer of sludge from fluid level in tank, and document review on monthly gauge sheet of each

BGT system. If any issue arises, immediate action should commence to repair or replace in order to prevent any contamination of fresh water and protect public health and the environment.

- 5. If a BGT develops a leak, or if any penetration of the pit liner or BGT occurs below the liquid's surface, HE will remove all liquid above the damage or leak line within 48 hours. HE will notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the pit liner or BGT.
  - Existing BGT's installed prior to June 16, 2008, shall comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC. If existing BGT does not meet standards, HE will retrofit, remove or replace as per approved Exhibit "A" Design Drawing.
- 6. HE Operations Plan specifies that the auto shut-off system will send an alarm to HE lease operator and foremen when the freeboard liquid level is 14" from the top of BGT and the auto system will shut in system at 10" of freeboard. A manual valve is in place for complete shut down if needed.
- 7. HE standard operating procedures will comply with Subsection A of 19.15.17.12 NMAC in accordance with the following requirements:
  - 1) Operate and maintain BGT to contain liquids and maintain integrity of the liner, liner system and secondary containment (crib) to prevent contamination of fresh water and protect public health and environment. Daily and written monthly reviews will be executed to assure system is maintained and complies with all Division rules. Records will be kept a minimum of 5 years.
  - 2) HE shall not store or discharge any hazardous wastes into a BGT.

### Huntington Energy, L.L.C. Below Grade Tank Closure Plan San Juan Basin

The closure requirements for below-grade tanks include the general provisions of Paragraphs A, G, H, I, J, and K of 19.15.17.13 NMAC and the specific requirements of Paragraph E of 9.15.17.13 NMAC.

### Closure Timelines:

1. HE shall close an existing BGT within the time periods provided in 19.15.17.13 NMAC, or by and earlier date that the division requires because of imminent danger to fresh water, public health or the environment. HE will close an existing BGT that does 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 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.

HE shall close a permitted BGT within 60 days of cessation of the BGT's operation or As required by the provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan the Division District Office approves.

2. HE shall submit closure notice prior to the implementation of any closure operations to the Division District Office and surface owners. HE shall notify surface owners by certified mail, return receipt requested. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records shall be provided in the Closure Report. HE will notify the Division District office at least 72 hours, but not more than one week prior to any closure operation. All operator information shall include the operator's name and the location to be closed by unit letter, section, township and range. If associated with a particular well, the notice shall include the well's name, number and API number.

### Closure Method & Procedures:

- 1. Remove liquids and sludge from a BGT prior to implementing a closure method. These will be disposed in facility IEI, Permit # 01001010B for sludge, and liquids will be disposed at the TNT Environmental, permit # NM 01-0008 or Basin Disposal, Inc., permit # NM-01-005 or Jillson SWD (Conoco-Phillips), R-10168.
- 2. HE will obtain prior approval from the OCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the final disposition of the BGT in the Closure Report.
- 3. All on-site related equipment with a BGT shall be removed unless equipments is required for some other purpose.
- 4. If the liner material requires disposal, HE will clean the liner (as per subparagraph (m) of paragraph (1) of Subsection C of 19.15.35.8 NMAC), and can be accepted at a solid waste facility at San Juan County Regional Landfill.
- 5. HE shall test the soils beneath the below-grade tank to determine whether a release has occurred. HE shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to

demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. HE shall notify the division of its results on form C-141.

- 6. If we determine a release has occurred, we will comply with 19.15.29 NMAC and 19.15.30 NMAC.
- 7. If sampling program demonstrates that release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then HE shall backfill the excavation with compacted, non-waste earthen material, construct a division prescribed soil cover, and re-contour and re-vegetate the site, as per Subsection G, H and I of 19.15.17.13 NMAC.
- 8. Once HE has closed the BGT location, including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area, HE will then restore the surface are to prior conditions before operations as provided in Subsection H of 19.15.17.13 NMAC.
- 9. The soil cover for closure shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. HE will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.
- 10. Re-vegetation: the first growing season after HE closes a BGT, HE shall seed or plant the disturbed area. HE shall accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. HE shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (unimpacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native pant species, including at lease one grass, but not including noxious weeds, and maintain the cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation. HE shall repeat seeding or planting until the required vegetative cover is achieved. HE shall notify the division when it has seeded or planted and when successful re-vegetation has occurred.
- 11. Closure Report: Within 60 days of closure, HE shall submit a closure report on form C-144/Checklist Box 24, with the following attachments: Proof of Closure Notice (surface owner and division); Proof of Deed Notice; Plot Plan, Confirmation Sampling Analytical Results (if applicable); Waste Material Sampling Analytical Results, Disposal Facility Name and Permit Number; Soil Backfilling and Cover Installation; Re-vegetation Application Rates and Seeding Technique; Site Reclamation (Photo Documentation); and Latitude and Longitude of site.