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.

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	*Keui:
<u>Propo</u>	sed Alternative Method Permit or Closure Plan Application	<u>.</u> 7
Type of action:	Permit of a pit, closed-loop system, below-grade tank, or proposed alternative	method

Santa Fe, NM 87505

\*Revising for Permit#8695

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. 71st St., Oklahoma City, OK 73116
Facility or well name:Canyon Largo Unit #482
API Number: _30-039-31042 OCD Permit Number:
U/L or Qtr/Qtr _ P _ Section _ 3 Township _ 25N Range _ 7W County: _ Rio Arriba
Center of Proposed Design: Latitude36.42418N Longitude107.55694W NAD: □1927 ☑ 1983
Surface Owner: X Federal X State Private Tribal Trust or Indian Allotment
RCVD OCT 1'12
OIL CORS. DIV.
Temporary:  Drilling  Workover
☐ Lined ☐ Unlined Liner type: Thickness 20 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
4.
Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume:120_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
Liner type: Thickness60mil
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.



September 26, 2012

RCVD OCT 1'12 OIL CONS. DIV. DIST. 3

New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87410

Attn: Jonathan Kelly

Re: Canyon Largo Unit #482 C144 Permit

API#: 30-039-31042 Sec 3, T25N-R7W Rio Arriba Co., NM

Dear Jonathan,

As per our phone conversation this afternoon, enclosed is a revised front page for the C-144 pit permit application for the above referenced well. The original Permit to Drill, approved in 2005, assigned API # 30-039-29642 for the well. The drilling permit had expired and was re-permitted in September, 2010. The BLM drilling permit was then approved on March 9, 2011 and reassigned new API# 30-039-31042 to the well. The C-144 BGT/Pit Permit was filed July 19, 2011, and was approved on September 27, 2011. At that time, the approved C-144 was then scanned in under the wrong API#. Therefore, I have enclosed a Revised C-144 for the well that lists the current and correct API# on the front page.

Please contact me at (405) 840-9876 ext. 129 if any additional information is needed.

Thank you for your help with this matter.

Sincerely,

Catherine Smith

Regulatory

10.01

District 1 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 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

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

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# Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances. Operator \_\_\_Huntington Energy, L L C OGRID # 208706 Address 908 N W 71st St , Oklahoma City, OK 73116\_\_\_\_\_ Facility or well name \_\_Canyon Largo Unit #482\_\_\_\_\_ API Number 30-039-29642 OCD Permit Number: U/L or Qtr/Qtr \_\_P\_ Section \_\_3 \_\_ Township \_\_25N \_\_\_ Range \_\_7W \_\_\_ County: \_\_Rio Arriba Center of Proposed Design. Latitude 36 42418N Longitude -107 55694W NAD □1927 ☑ 1983 Surface Owner | Federal | State | Private | Tribal Trust or Indian Allotment Pit: Subsection F or G of 19 15 17 11 NMAC Temporary Drilling Workover Permanent Emergency Cavitation P&A ☐ String-Reinforced 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 ☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other ☐ Lined ☐ Unlined Liner type Thickness \_\_\_\_\_mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_. Linei Seams Welded Factory Other Below-grade tank: Subsection I of 19.15 17 11 NMAC Volume \_\_120\_bbl Type of fluid \_\_\_\_\_Produced Water Tank Construction material Steel Secondary containment with leak detection X Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off ☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other Liner type: Thickness 60 mil ⊠ HDPE □ PVC □ 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.

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, 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	hospital,
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)	
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	
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 consideration of approval.  Exception(s). Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 above-grade tanks associated with a closed-loop system.	priate district pproval.
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	☐ Ycs ⊠ 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
<ul> <li>Within an unstable area</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources, USGS; NM Geological `Society; Topographic map</li> </ul>	☐ Y¢s 🛭 No
Within a 100-year floodplain - FEMA map	☐ Yes ⊠ No

Form C-144

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
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 17.11 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   Quality Control/Quality Assersance 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 <sub>2</sub> S, 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)
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 G of 19 15.17 13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13 Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if 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 se 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 NMA  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	AC
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 sort provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate disconsidered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	trict 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 obtained from nearby wells	Yes No
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database scarch; 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
<ul> <li>Within an unstable area</li> <li>Engineering measures incorporated into the design, NM Bureau of Geology &amp; Mineral Resources, USGS, NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	Yes No
On-Site Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of the following items must be attached to the closure plan 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 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 can 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 G of 19.15 17 13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15 17 13 NMAC	9.15.17.11 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 Oathern Smith Date. 7/19/2011
c-mail addresscsmith@huntingtonenergy com Telephone:405-840-9876
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: 4727/2011
Title: Compliance Officer 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:
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
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
Yes (If yes, please demonstrate compliance to the items below) \( \subseteq \text{No} \)
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
14.
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 NAD1927 1983
Operator Closure Certification:  1 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 1 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

- - -

DISTRICT 1 1825 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

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

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102 Revised July, 16, 2010 Submit one copy to appropriate District Office

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

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

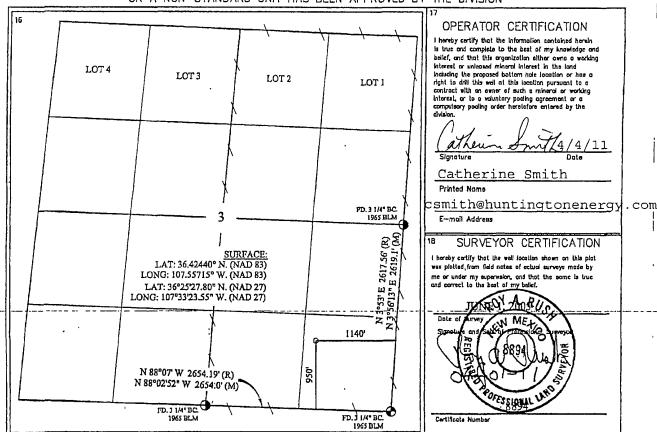
'API Number 30-039-31	<sup>2</sup> Pool Code 71599	³Pool Nome Basin Dako	ota
*Property Code	5 Propert	y Name	Well Number
32660	CANYON L	ARGO UNIT	482
OGRID No.	*Operato	r Name	* Elevation
208706	HUNTINGTON	6806'	

<sup>10</sup> Surface Location UL or lot no. Section Township Ronga Lot Idn Feet from the North/South line Feet from the East/West line County 7-W P 25-N SOUTH 3 950 1140 EAST RIO ARRIBA <sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. Section Township Range Let Idn Feet from the North/South line Feet from the East/West line County

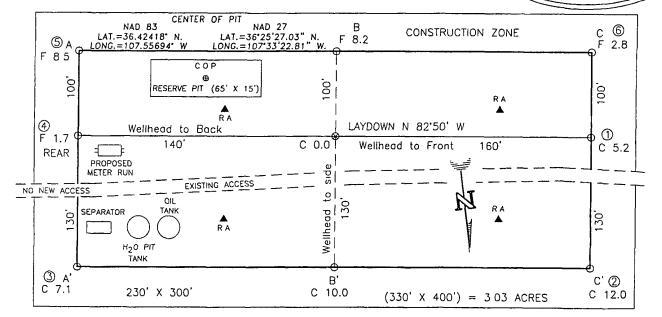
Dedicated Acres DK - E/320

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



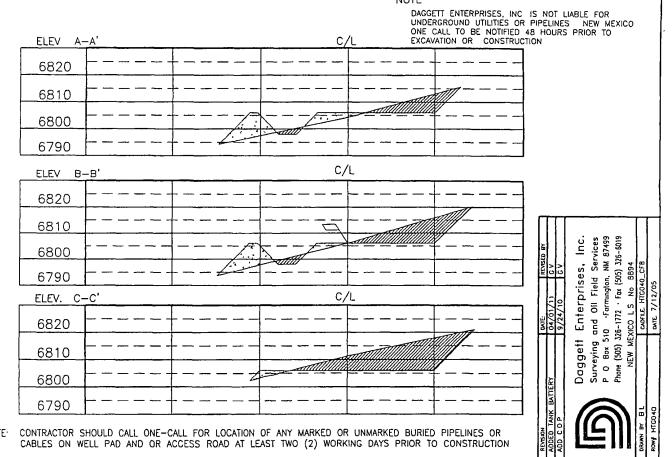
HUNTINGTON ENERGY, LLC
CANYON LARGO UNIT No. 482, 950 FSL 1140 FEL
SECTION 3, T-25-N, R-7-W, N.M.P.M., RIO ARRIBA COUNTY, N.M.
GROUND ELEVATION: 6806, DATE: JUNE 1, 2005

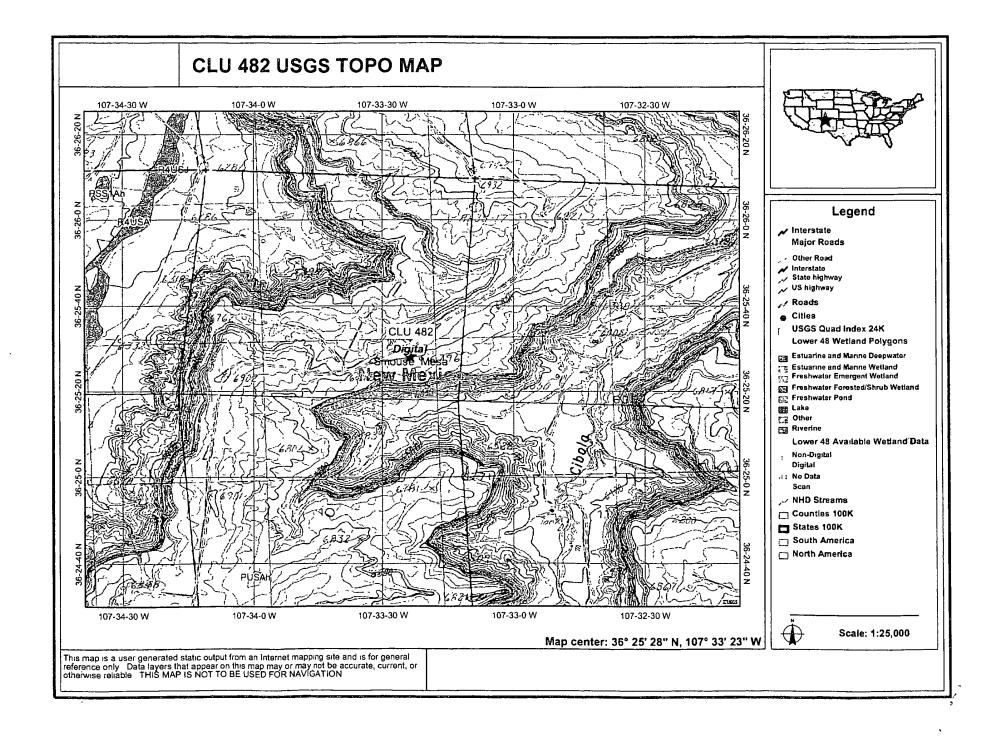
NAD 83 LAT. = 36.42440° N LONG. = 107.55715° W NAD 27 LAT. = 36'25'27 80" N LONG. = 107'33'23.55" W



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE)
BLOW PIT OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT

NOTE





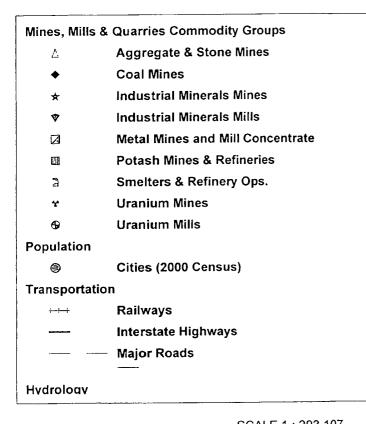
# / CLU432. 642418-107.55694

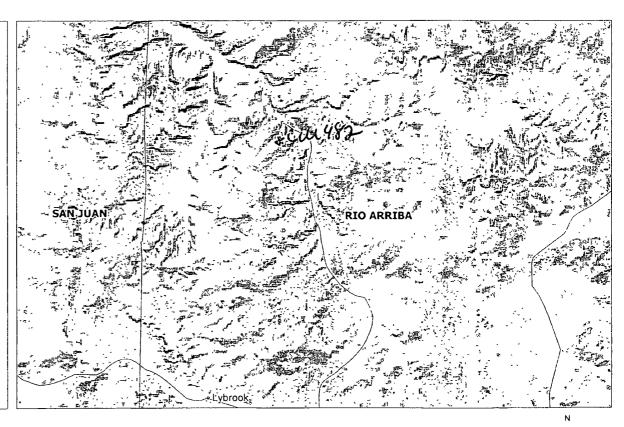
**ZONE X** 

-ZONE A

D

# CLU 482 Mines, Mills and Quarries Web Map











# New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

Basin/County Search:

County: Rio Arriba

PLSS Search:

Township: 25N Range: 07W



# New Mexico Office of the State Engineer

# Wells with Well Log Information

No wells found.

Basin/County Search:

County: Rio Arriba

PLSS Search:

Township: 25N Range: 07W

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data



# New Mexico Office of the State Engineer

# Point of Diversion by Location (with Owner Information)

No PODs found

POD Search:

POD Basin: San Juan

Basin/County Search:

County: Roosevelt

PLSS Search:

Township: 25N

Range: 07W

RECEIVED DATA OIL CINS. DIV. DIST. 3 CO. OIL CO. O

# SHEET FOR DEEP GROUND BED CATHODIC. PROTECTION WELLS NORTHWESTERN NEW MEXICO

Operator Meridian Oil An. Location: Unit M Sec. 10 Twp 25 Rng 7
Name of Well/Wells or Pipeline Serviced
Conyon Large 425
Elevation 6825 Completion Date 2/26/95 Total Depth 4// Land Type F
Casing Strings, Sizes, Types & Depths 2/25/95 Let 60 of 8" Pro
Cosing, No gas, water or boulders were encountered burning Cosing.
If Casing Strings are cemented, show amounts & types used
Comented with 12 sacks.
IIf Cement or Bentonite Plugs have been placed, show depths & amounts used
None
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. Driller segested a water seep at 150;
No sample was taken.
Depths gas encountered: None
Ground bed depth with type & amount of coke breeze used: 411 Dopth.
Thet 56 sucke of loserer 5w rake breeze Elocib sucked
Depths anodes placed: 380 370 360 350 340 330 320 310 300 250 280 270, 250 240 23
Depths vent pipes placed: desface to 411
Vent pipe perforations: Button 300
Remarks:
OIL COM. DUV.
23260

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

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

# **CLU 482**

Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The subject well is not located in an unstable area. Visual inspection has been performed, 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, or institution; not within 500' of any private water well or spring. The topographic map confirms no visual inspection of water course. FEMA Map confirms the location is not within a 100 year floodplain. The Cathodic well, associated with Canyon Largo Unit #425 in Sec 10-25N-7W, has an elevation of 6851' with ground water at 150'. Off this, it is estimated the ground water at the Canyon Largo Unit #482, elevation 6806', should be approximately 105' below ground surface. 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.



# Hydrogeological Report for Canyon Largo Unit #482

### 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.

# HUNTINGTON ENERGY, L.L.C. BELOW GRADE TANK SITING/VISUAL INSPECTION CHECKLIST

Well Name: CLU 482

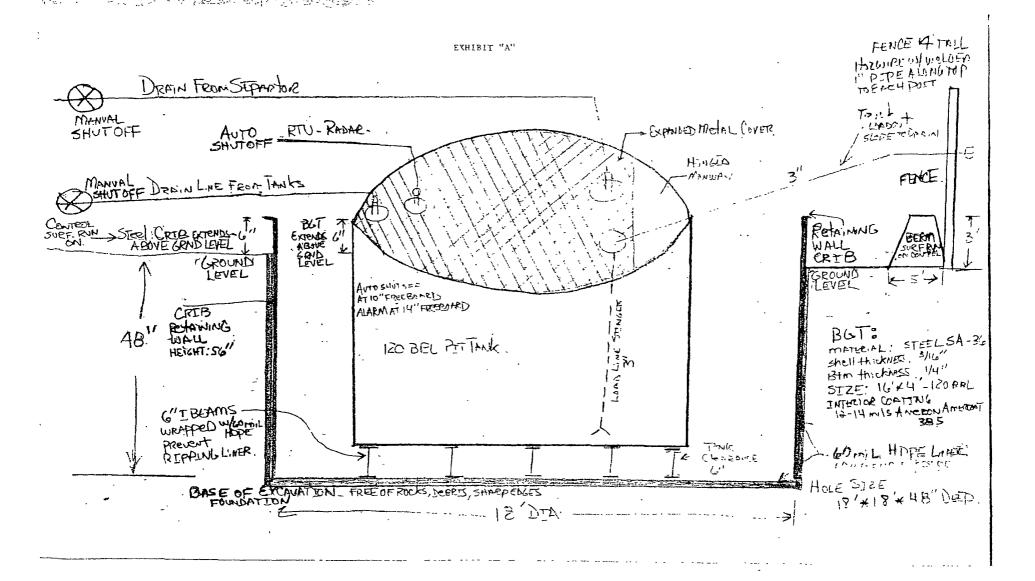
Legal Location: SE/4, SEC 3, T25N R7W

Date of Inspection: 7/19/11

Siting Personnel: David Morales

# I observed the following:

1 0086	erved the following.	Yes	No
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



# 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 (l-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

TENTED PROPERTY	TENT METHOD	PRECHENC	Y	h	TINUMUM V	ACEE	
Product Code			HDE monocoo	HDE 040A000	MDE OSOACOO	hIDE DBOMBOO	1
Trikikness,(minenum wwarzpe) வி (mm)	ASTM DE189	Every rofi	30 (0.78)	40 (1.00)	<b>8</b> 0 (1.50)	(2.DO)	1 12 [3]
Lowest todividual reacting (-10%)		1	27 (0.69)	36 (0.91)	5-4 (1.40)	72 (1)300	1 500 C
Denoky, picm <sup>3</sup>	AUTM D 1505	200,000 16	0.64	D.94	0.94	V).944	
Tenalle Properties (each providion)	AETM D 6893,7 ypm IV	20,000 lb					
Strength at Break, John (N/mm)	Dumbell, 2 ipm	1	114 (20)	152 (27)	226 (40)	30% (53)	'fbart'.
Springth at Yink!, kvin (N/mm)			E9 (11)	B4 (15)	126 (22)	150 (29)	77.74
Eloquisional Break, %	G.L. 2.0 In (51 mm)		700	700	700	7/0/0	7 76
Elemperiori at Ylefd, %	G.L. 1.3 In (33 mm)		.12	12	12	12	W
Team Formisterion, 85 (IN)	ASTM D 1004	45,000 lb	21 (93)	28 (1.25)	<b>42 (187)</b>	56 (249)	والا الداء
Puncture Remetance, Ib (N)	ASTM D 4533	45,000 lb	54 (240)	75 (320)	105 (460)	146 (B40)	190 [
Demoon Black Content, N	ASTM D 1603"/C18	301,000 P	2.0	20	20	25	د مناسطه ۱۹۰۱ ما ۱۹۰۱ ما مناسطه
Darpon Black Dispunsion	ASTM D 5905	45,000 to	- Note 1	+ hrose 1	+ Note 1	- Note 1	him
blaned Consant Tensile Load, ht	ASTM D 5367, Appendix	300,000 lp	300	30¢	337	500	
REFERENCE PROPERTY	יבנו איבווים:	PREQUENCY		CM.	MINAL VAL	JE	
лобить вискороп Типе. тап	ASTN DOSSE, 200° C. D <sub>2</sub> 1 stm	200,000 lb	>100	>100	>100	-160	المراد إساء سيده المراد إساء سيده المراد :
ici L <del>argin'<sup>()</sup> (हट्टर क्यांक्ट</del> र), र्ह. (m)			1,120 (341)	इन्हर (२०५५)	580 (171)	400 (101)	
toll Whatth <sup>(1)</sup> , ft (m)			22.5 (6.9)	22.5 (5.9)	Z.5 (c.v)	72.5 (E,9;	الله أأالم
of Area, it (mt)			ZS,ZXX (C,241)	18,575 (1,819)	12,600	8,676	王 阿雷

### WUTE.

- +Noter). Dispersion only appear to men spheroid aggromenties. 9 of 10 views shall be Ontegory 1 or 2. No more than 1 view from Category 3.
- ¢36 HD is available in role weighing about 3,500 ib (1,75⊋ kg)
- All GSS permembranes have demonstrated with ASTM D 1204 and LTB of <-77" C when treated with ASTM D 746.</li>
- Thicon lengths and weathe lieve a tolerance of ± 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.

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

# Canyon Largo Unit Pit Design and Construction Plan

In accordance with Rule 19.15.17, the following describes the design and construction of temporary pits for Huntington Energy.

# General Plan

- 1. HE will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water, protect public health and environment.
- 2. Topsoil will be stockpiled prior to construction in the construction zone for later use in restoration.
- 3. HE will post a well sign on the well site prior to constructing the temporary pit. The sign will list the operator, well location with section, township, range and emergency numbers. Signs will be no less than 12" x 24".
- 4. He will construct fences using 48" steel mesh field fence on the bottom with a single strand of barbed wire on top. T-posts will be installed every 12' and corners will be anchored using a secondary T-post. Temporary pits will be fenced at all times except when the front side of the fence will be temporarily removed for operating purposes.
- 5. The foundation and interior slopes of the temporary pit will be firm and free of rocks, debris, or any other irregularities to prevent liner failure.
- 6. HE shall construct the pit so the slopes are no steeper than 2 horizontal feet to 1 vertical foot.
- 7. Pit walls will be compressed following construction.
- 8. Temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
- 9. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
- 10. All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
- 11. HE will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used when possible. Field seams will be overlapped four to six inches and will be placed parallel to the line of maximum slope. The number of field seams in corners and irregularly shaped areas will be minimized.
- 12. Liners shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 13. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit when necessary.
- 14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.

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

Canyon Largo Unit
Pit Maintenance and Operating Plan



In accordance with Rule 19.15.17, the following information described the operations—and maintenance of temporary pits for Huntington Energy.

# General Plan

- 1. HE will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. HE will transfer liquids to pits ahead of the rigs when possible. All other drilling fluids will be disposed at 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.
- 3. HE will not discharge or store any hazardous waste in any temporary pit.
- 4. If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then HE shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
- 5. If a leak develops below the liquid's level, HE shall remove all liquids above the damaged liner within 48 hours and repair the damage. The Aztec Division office will be contacted by phone or email within 48 hours of the discovery for leaks less than 25 barrels. HE will contact the Aztec Division office within 24 hours of discovery of leaks greater than 25 barrels. Immediate verbal notification will be reported to the division's Environmental Bureau-Chief.
- 6. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit when needed.
- 7. Any visible layer of oil from the surface of the temporary pit after drilling or workover operation is complete will be immediately removed. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will be on-site until pit closure.
- 8. Only fluids from drilling or workover process will be discharged into a temporary pit.
- 9. HE will maintain the temporary pit free of miscellaneous solid waste or debris.
- 10. HE will inspect the temporary pit at least once daily during drilling or workover operations in order to comply with the plan. Inspections are logged on daily drilling reports.
- 11. After drilling or workover, HE will inspect the temporary pit weekly as long as liquids remain in the pit. A log of the inspections will be sent per request.
- 12. HE shall maintain at least two fee of freeboard for a temporary pit.
- 13. Liquids will be removed from the temporary pit within 30 days from the date the rig is released.

# Huntington Energy, L.L.C. San Juan Basin-Canyon Largo Unit Pit Closure Plan

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary pits on Huntington Energy, L.L.C. (HE) locations. This is HE's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of pit. Closure report will be filed on C-144 and include the following:

- Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

### General Plan:

- 1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. The facilities to be used for liquids will be IEI NM-010010B and IEI will be used for solids (#01001010B).
- 2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19 15.17.13 are met.
  - 3. The surface owner shall be notified of HE's closing of the temporary pit.
  - 4. Within 6 months of the rig off status occurring, HE will ensure that the temporary pits are closed, re-contoured and reseeded.
  - 5. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email, or verbally. The notification of closure will include the following:
    - i. Operator's name
    - ii. Location by Unit Letter, Section, Township, and Range, Well name and API number.
- 6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove all of the liner. All excessive liner will be disposed of at the San Juan County Landfill located on CR 3100.
- 7. Pit contents shall be mixed with non-waste containing earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed as safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
- 8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., dig and haul.

Components	Test Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	1000/500

- 9. Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. If standard testing fails, HE will dig and haul all contents pursuant to 19 15.17 13.i.a. After doing so, confirmation sampling will be conducted to ensure a release has not occurred.
- 10. During the stabilization process, if the liner is ripped by equipment, the Aztec OCD office will be notified within 48 hours and the liner will be repaired if possible. If the liner can not be repaired, then all contents will be excavated and removed.
- 11. Dig and Haul Material will be transported to IEI (Permit # 010010B).
- 12. Re-contouring of location will match fit, shape, line, form and texture of the surrounding Reshaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 13. Notification will be sent to the OCD when the reclaimed area is seeded.
- 14. HE shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (unimpacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeated seeding or planting will be continued until successful vegetative growth occurs.

Type	Variety or Cultivator	PLS/A
Western Wheatgrass	Arriba	3.0
Indian Ricegrass	Paloma or Rimrock	. 3.0
Slender Wheatgrass	San Luis	20
Crested Wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	0.25

Species shall be planted in pounds of pure live seed per acre:

Present Pure Live Seed (PLS) = Purity X Germination/100

Two lots of seed can be compared on the basis of PLS as follows:

Source No. One (poor quality)
Purity
50 percent
Percent PLS
20 percent
Source No. two (better quality)
Purity
80 percent
Germination
63 percent
Percent PLS
50 percent
Percent PLS
50 percent

5 lb bulk seed required to make 1 lb PLS

2 lb bulk seed required to make 1 lb PLS

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