District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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

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 conv. the santarpropriate NMOCD

provide a copy to the appropriate NMOCD District Office.

de,

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 ordi	
Operator:Huntington Energy, L.L.COGRID #:208706	
Address:908 N.W. 71st St., Oklahoma City, OK 73116	
Facility or well name:Canyon Largo Unit #506	
API Number:30-039-31098OCD Permit Number:	
U/L or Qtr/QtrD Section33 Township25N Range6W County:Rio Arriba	
Center of Proposed Design: Latitude36.39082N Longitude107.53529W NAD: ☐1927 ☒ 1983	
Surface Owner: Federal State Tribal Trust or Indian Allotment	
2.	
☐ Pit: Subsection F or G of 19.15.17.11 NMAC	
Temporary: ☑ Drilling ☐ Workover	
□ Permanent □ Emergency □ Cavitation □ P&A OIL CONS. DIV.	
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other	
☐ String-Reinforced	
Liner Seams: Welded Factory Other Volume: 10000 bbl Dimensions: L_140'_x W_65'_x D_10	,
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 notic intent)	e of
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other	
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other	
Liner Seams: Welded Factory Other	
4. Below-grade tank: Subsection I of 19.15.17.11 NMAC	
Volume:120bbl Type of fluid:Produced Water	
Tank Construction material: Steel	
Secondary containment with leak detection \(\sum \) 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	
5.	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approx	/al.

6.						
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)						
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)						
Four foot height, four strands of barbed wire evenly spaced between one and four feet						
Alternate. Please specify: 4' 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.						
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 19.15.16.8 NMAC						
9. Administrative Approvals and Exceptions:						
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.						
Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau 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 accep						
material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro-						
office 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 dryi						
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	☐ Yes ☒ No					
lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site						
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No					
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	⊠ NA					
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No					
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)	NA NA					
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image						
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock	☐ Yes ☒ No					
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	☐ Yes ☒ No					
adopted pursuant to NMSA 1978, Section 3-27-3, as amended.						
- Written confirmation or verification from the municipality; Written approval obtained from the municipality						
Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification many Tonographic many Visual inspection (contification) of the proposed site.	☐ Yes 🖾 No					
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site						
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.	☐ Yes ☑ No					
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	—					
Within a 100-year floodplain FEMA map	☐ Yes ☑ No					

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are
attached. ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:
12. Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design) API Number:
Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
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 Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H ₂ S, Prevention Plan Gil Field Waste Stream Characterization Monitoring and Inspection Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
<u>Proposed Closure</u> : 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.D NMAC) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two					
facilities are required.					
Disposal Facility Name: Disposal Facility Permit Number:					
Disposal Facility Name: Disposal Facility Permit Number:					
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service. \(\subseteq \text{ Yes} \) (If yes, please provide the information below) \(\subseteq \subseteq \text{ No} \)	ee 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 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					
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justific demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	t 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 search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA				
	☐ Yes ☐ No ☐ NA				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes No				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No				
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No				
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No				
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No				
Within a 100-year floodplain FEMA map	Yes No				
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC	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: 3/19/2012
e-mail address:csmith@huntingtonenergy.com Telephone:405-840-9876
20. OCD Approval: Permit Application (including closure plan)
OCD Representative Signature: 3/20/2012
Title: Complance Office 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.
23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than
two facilities were utilized.
Disposal Facility Name: Disposal Facility Permit Number:
Disposal Facility Name: Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation) ☐ Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
24. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check
mark in the box, that the documents are attached.
☐ Proof of Closure Notice (surface owner and division) ☐ Proof of Deed Notice (required for on-site closure)
Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number ☐ Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)
On-site Closure Location: Latitude Longitude NAD: D1927 D1983
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:

Form C-102

OCT 31 2011

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department Submit one copy to appropriate OIL CONSERVATION DIVISION District Office

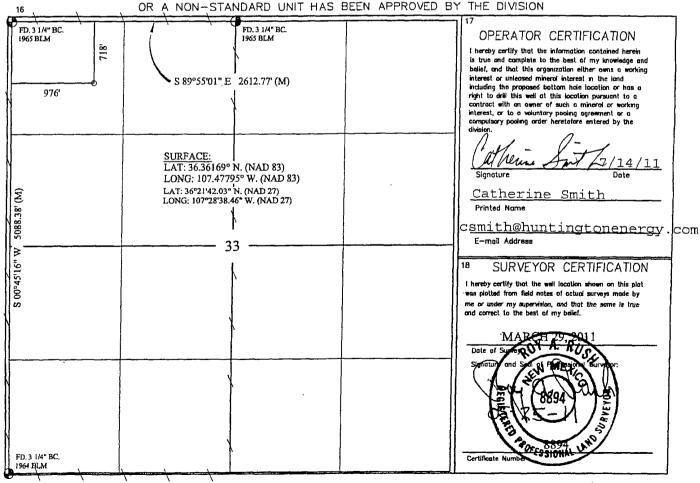
1220 South St. Francis Dr. Santa Fe, NM 87505

☐ AMENDED REPORT

	WELL LOCATION AND	ACREAGE DEDICATION PLAT		
¹ API Number ² Paol Code ³ Paol Name				
	71599	Basin Dakota	_	
*Property Code	⁵ Pro	perty Name	⁸ Well Number	
32660	CANYON	506		
⁷ OGRID No.	^a Elevation			
208706	HUNTINGTO	6780'		

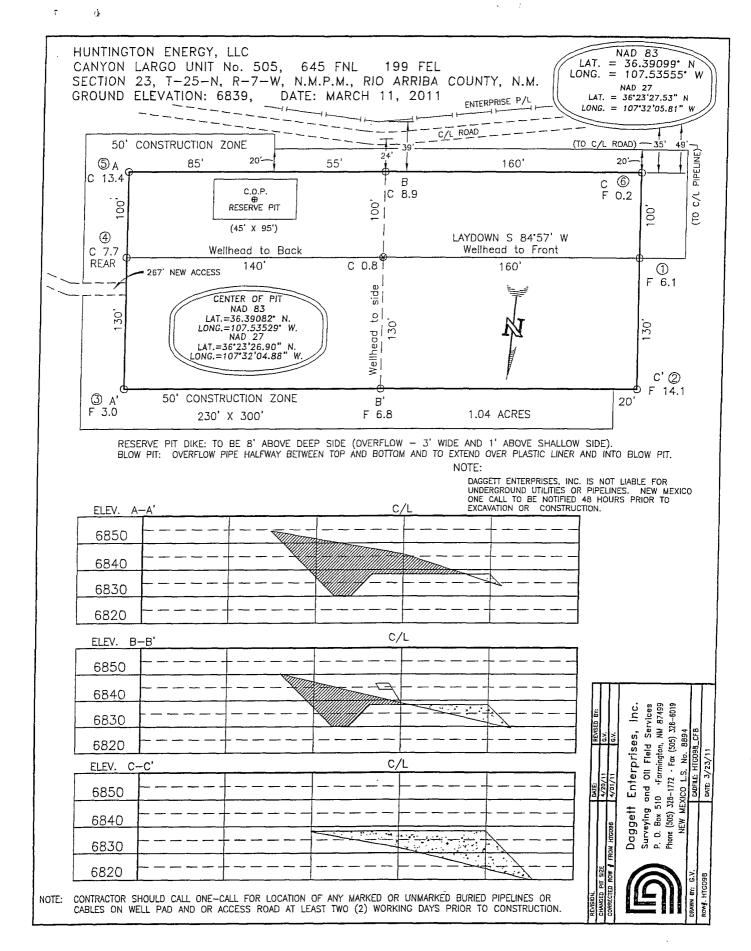
¹⁰ Surface Location North/South line East/West line UL or lot no. Feet from the Feet from the Section Township Range Lot Idn County NORTH 976 WEST 25-N 6-W 718 RIO ARRIBA D 33 11 Bottom Hole Location If Different From Surface UL or lot no. Section Feet from the North/South line Feet from the Range East/West line County ² Dedicated Acres Consolidation Code Order No. Joint or Infill W/2 - 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 NAD 83 LAT. = 36.36169° N CANYON LARGO UNIT No. 506, 718 FNL 976 FWL LONG. = 107.47795° SECTION 33, T-25-N, R-6-W, N.M.P.M., RIO ARRIBA COUNTY, N.M. NAD 27 GROUND ELEVATION: 6780, DATE: MARCH 29, 2011 LAT. = 36°21'42.03" N LONG. = 107°28'38.46" W C.L.U #48 METER RUN В 50' CONSTRUCTION ZONE F 1.8 (5) A F 4.0 C 6 C 0.4 6 20' C.O.P. 100 RESERVE PIT (45' X 95') 00 F 0.6 4 REAR LAYDOWN S 85'23' W Wellhead to Back 140' Wellhead to Front (1) 160 C 1.7 CENTER OF PIT EFS // NAD 83 LAT.=36.36151° N. LONG.=107.47770° W. NAD 27 LAT.=36°21'41.40° N. ONG.=107°28'37.54° W. 30 FT. NEW ACCESS 30, Wellhead 30, PROPOSED TANKS В' METER RUN ③ A' C 0.7 © C 1.6 20' 15' 230' X 300' C' 2 (2.77 ACRES WITH / 48 C 2.1 CONSTRUCTION ZONE) PIPELINE RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE). NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION. C/L ELEV. A-A 6790 6780 6770 6760 C/L ELEV. B-B 6790 Proveying and Oil Field Services
P. 0. Box 510 - Farmington, NM 87499
Phone (505) 226-1772 - Fox (505) 326-6019
NEW MEXICO L.S. No. 8894
CORNE. HTG097_CF8 6780 6770 6760 C/L ELEV. C-C' 6790 6780 6770 6760 NOTE, CONTRACTOR SHOULD CALL ONE-CALL' FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

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mapquest m^Q

Map of:

Latitude: 36.39082 Longitude: -

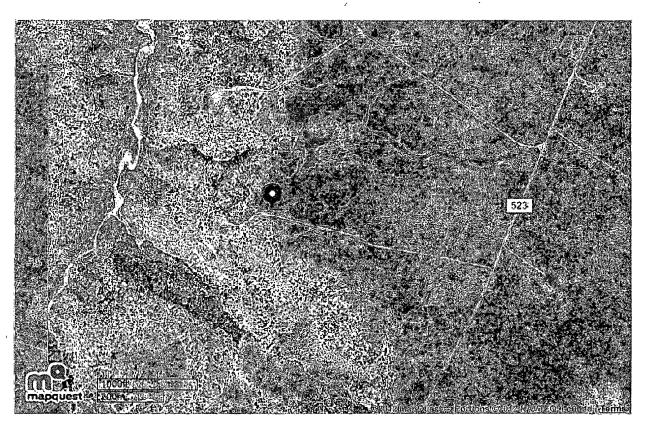
107.53529

Notes

Canyon Largo Unit #506

NW/4 Sec 33-25N-6W

Rio Arriba Co., NM



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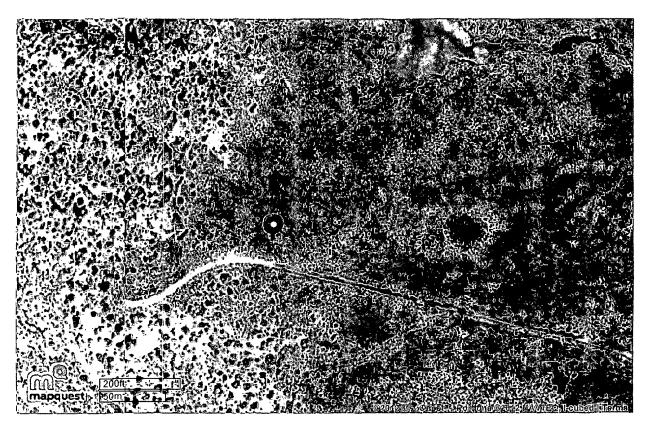
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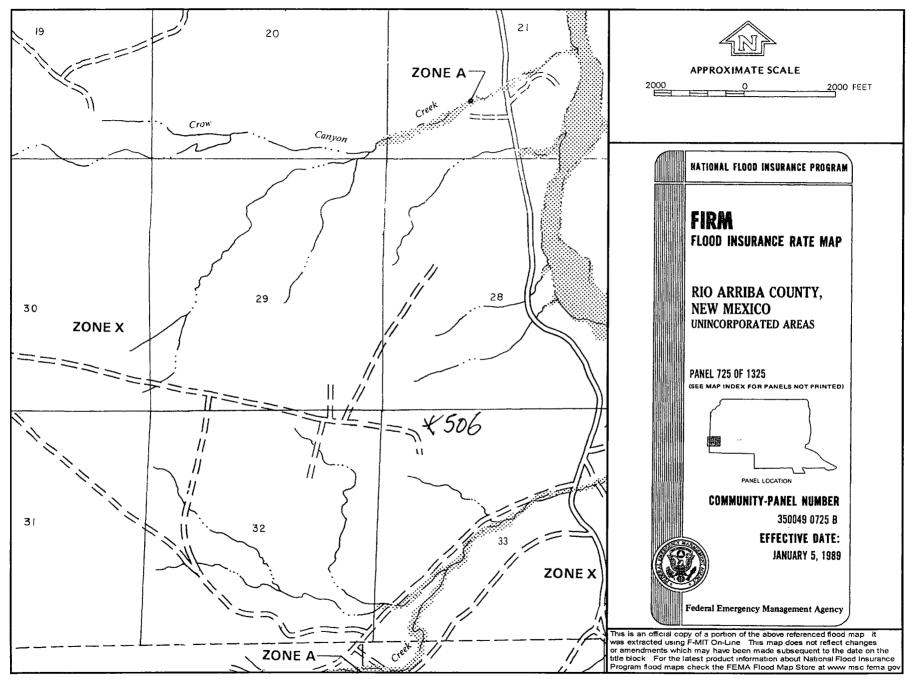
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107.53529

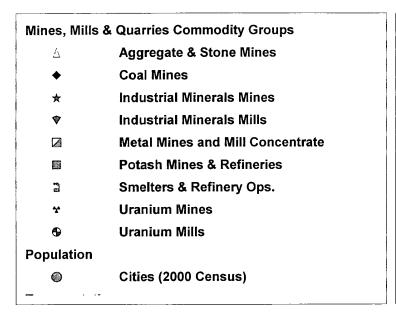
Notes Canyon Largo Unit #506 NW/4 Sec 33-25N-6W Rio Arriba Co., NM

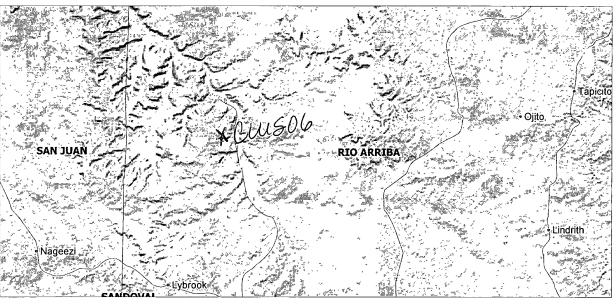


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Canyon Largo Unit #506 Mines, Mills and Quarries Web Map











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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a

(R=POD has been replaced, O=orphaned,

& no longer serves a C=the file is water right file.) closed)

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

closed) (quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Code Subbasin C	ounty	Q 64	e e e e e e e e e e e e e e e e e e e			Tws	Rng	X		25 . V. SP	epth Wa Vater Col	2006/3.6 N
SJ 00201		RA		1	4	03	25N	06W	280124	4034064*	1346	500	846
SJ 00681		RA	4	1	4	21	25N	06W	278527	4029227*		80	
SJ 00681 12		RA	4	4	4	33	25N	06W	278833	4025662*	435		
									Avera	age Depth to	Water:	290 feet	
										Minimum	Depth:	80 feet	
										Maximum	Depth:	500 feet	į

Record Count: 3

Basin/County Search:

Basin: San Juan

County: Rio Arriba

PLSS Search:

Township: 25N

Range: 06W



New Mexico Office of the State Engineer

Currently Active Points of Diversion

(with Ownership Information)

_						(quarters are 1=	NW 2=NE	3=S\	N 4=SE)			_
		(acre	e ft per annum)			(quarters	are small	est to	largest) (NAD83 UTM	in meters)	
	the state of	Sub pasin Use Di	liversion Owner	Count	y POD Number Grant	Source	q q q. 6416 4	Sec 1	īws Rng	X	Ÿ	
	SJ 00201	OFM	4 BURLINGTON RESOURCES OIL & GAS	RA	SJ 0020*	Artesian	1 4	03 2	25N 06W	280124	4034064*	
	SJ 00207	OFM	16 BURLINGTON RESOURCES OIL & GAS	RA	SJ C0207	Shallow	1 1	04 2	25N 06W	277738	4034896*	
	SJ 00681	STK	8 HOMER C. BERRY	RA	SJ 00681		4 1 4	21 2	25N 06W	278527	4029227*	
	SJ 00681 1	STK	8 HOMER C. BERRY	RA	SJ 00681 1		4 1	31 2	25N 06W	274734	4026644*	
	SJ 00681 12	IRR	200 HOMER C. BERRY	RA	SJ 00681 12		4 4 4	33 2	25N 06W	278833	4025662*	
	SJ 00681 18	STK	16.13 HOMER C. BERRY	RA	SJ 03681 18		2 2 4	21 2	25N 06W	278932	4029419*	
	SJ 30681 19	STK	24.195 HOMER C. BERRY	RA	SJ C3681 19		4 2 4	28 2	25N 06W	278887	4027613*	
	SJ 00681 24	STK	3 HOMER C BERRY	ŔA	SJ 00681 24		3 2 3	11 2	25N 06W	281194	4032362*	
	SJ 00681 31	STK	32 HOMER C. BERRY	RA	SJ 0368131		4 4	21 2	25N 06W	278820	4028916*	
	SJ 00681 33	STK	48 HOMER C. BERRY	RA	SJ 00681 33		3 3	27 2	25N 06W	279176	4027301*	
	SJ 00885	DOM	24 TRUBY RANCH	RA	SJ 00885 3		1 4 1	03 2	25N 06W	279636	4034564*	
				RA	SJ 03885 6		3 2 3	11 2	25N 06W	281194	4032362*	
				RA	SJ 00885 7		4 1 4	03 2	25N 06W	280223	4033963*	

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.

^{*}UTM location was derived from PLSS - see Help

Record Count: 13

POD Search:

POD Basin: San Juan

Basin/County Search:

Basin: San Juan County: Rio Arriba

PLSS Search:

Township: 25N Range: 06W

Sorted by: File Number

CLU 506 NWNW Lot D, Sec 33, T25N-R6W Rio Arriba Co., NM

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. 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. Cathodic Well in SW/4 Sec 33-25N-6W shows depth of fresh water at 200'.

Hydrogeological Report for Canyon Largo Unit #506

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.

Cuiso6

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

Operator Meridian Oil INC. Location: Unit N Sec. 33Twp 25Rng 06
Name of Well/Wells.or Pipeline Serviced
CANYON LATGO UNIT #188
Elevation 6422 Completion Date 8-25-93 Total Depth 478 Land Type P
Casing Strings, Sizes, Types & Depths 5/275eT 120 0f8" PVC CASING.
NO GAS, WATER, Or Boulders Were ENCOUNTERED During CASING.
If Casing Strings are cemented, show amounts & types used <u>Cemented</u>
WITH 22 SACKS.
If Cement or Bentonite Plugs have been placed, show depths & amounts used
No plugs
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc 200'and was clear
Depths gas encountered: No gas
Ground bed depth with type & amount of coke breeze used: 478' with
141 (5016) sacks of Asbung 218 R.
Depths anodes placed: #/ is at 440' and #15 is at 250'
Depths vent pipes placed: Bottom to Surface
Vent pipe perforations: Op 20 218. DEGEIVED
Remarks:
OIL CON. DIV
DIST. 3

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.

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.

Туре	Variety or Cultivator	PLS/A
Western Wheatgrass	Arriba	3.0
Indian Ricegrass	Paloma or Rimrock	3.0
Slender Wheatgrass	San Luis	2.0
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

Germination

40 percent

Percent PLS

20 percent

5 lb bulk seed required to make

Source No. two (better quality)

Purity

80 percent

Germination

63 percent

Percent PLS

50 percent

2 lb bulk seed required to make

1 lb PLS 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.





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.

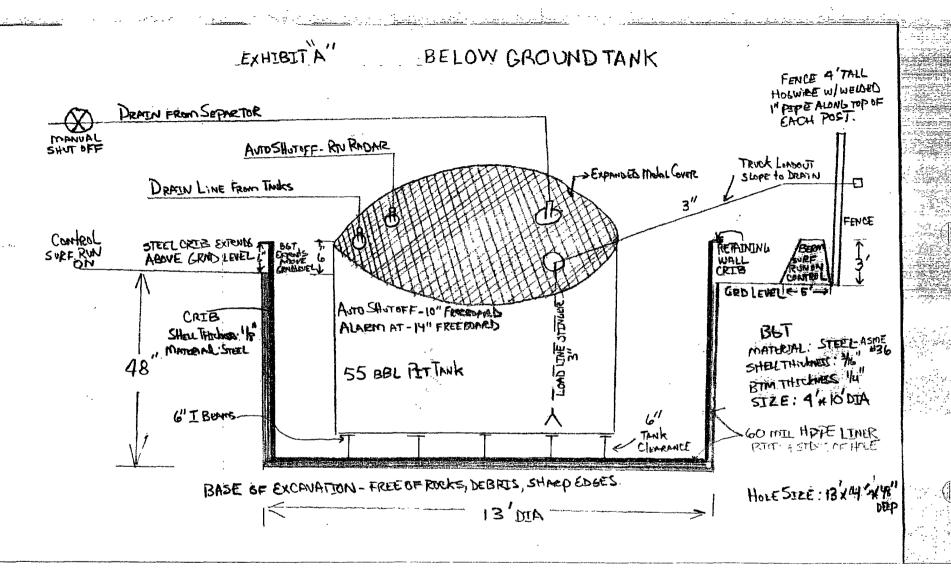
8. HE will construct a BGT system employing an external crib that stands between the wall of the foundation of the hole and the BGT. The crib will be placed on top of the 60 mil liner and will extend 6" above ground level. It is made of steel with a grey coating. The BGT side walls will be visible and 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-Burfaced HDPE Geomembranes:

TEBIED PROPERTY	TEST METHOD	PREGLENC	MINIMUM VALUE					
Froduct Code			HDE 0304000	HDE	MDE 080A000	HIDE	700	
Thickness,(minemumчинада) मधे (mm)	ASTM D 5189	Every roll	30 (0.78)	40 (1.00)	60 (1,50)	图 (汉,四百)	1000	
Lowest individual reading (-10%)			27 (0.69)	36 (0.91)	54 (1.40)	72 (1160)	1. 程代为[ht	
Denoky, g/cm ³	ASTM D 1505	200,000 lb	0.94	D.\$44	0.84	107.194	و د د د د د د د د د د د د د د د د د د د	
Tenulle Proporties (each timestori)	ASTM D 8893, Type IV	20,000 lb	1				-[
Strength at Break, Ibin (N/mm)	Dumbell, 2 lpm		114 (20)	152 (27)	226 (40)	30-4 (63)	10mg(*) (4)	
Strangth at Yield, Wiln (Nimm)		1	69 (11)	B4 (15)	126 (22)	168 (29)	1 778	
Elongation at Break, %	G.L. 2.0 tn (51 mm)	-	700	700	700	7/040	Titals	
Elegation of Yield, %	G.L. 1,3 in (33 mm)		12	12	12	វែល	11.6	
Tear Resistance, to (N)	ASTM D 1004	46,000 lb	21 (193)	20 (125)	42 (187)	56 (240)	Pro green	
Puncture Remainne, Ib (N)	ASTIM D 4833	45,000 lb	54 (240)	15 (250)	108 (480)	144 (B00)	TBC) FUN	
Certon Black Centent, W	ASTM D 16031/4218	20,000 %	2.0	20	20	2.0	الأوالية. الأوالية:	
Carbon Black Dispension	ASTM D 5505	45,000 lb	+ Note 1	→ Note 1	+ Note 1	+ Name 1	ni dilenti:	
Noticeed Constant Tennile Load, by	ASTM D 5367, Appendix	200,000 lb	300	300	300	500	300	
REFERENCE PROPERTY	TEST WEEKOD	FREQUENCY	,,	NOMINAL VALUE				
Distribution Time, min	ASTM D 3895, 200° C; 0-, 1 360	200,000 lb	>100	>100	×100	>160	en-maister per paper per better en- tres deter	
Roll L angtin¹¹⁾ (sportuálna va), fi (m)			1,120 (341)	670 (205)	560 (171)	430-(531)	新起一切	
toli Whath ^{tti} , fi (m)		1	22.5 (6.9)	22.5 (5.9)	22.5 (6.9)	72.5 (8,9)		
ROE ACMS, Th ² (M ²)			25,200 (2,941)	19,575 (1,819)	12, 600 (1,171)	9,675 (629)	7. 斯路	

- A Above : Department notice against to over entennel aconomicative. 9 of 10 ways shall be Ostegory 1 or 2. No gaze than 1 way from Caragory 1
- GSG HD is available in role weighing about 3,900 lb (1,789 kg)
- AR GBS promembranes have demonstrated stability of 北京 when leased with ASTM D 1204 and LTB of 477° C when based with ASTM D 746.
- ... InDraw temorns and writte have a interested of a 1%
- a "Madifed





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. BELOW GRADE TANK SITING/VISUAL INSPECTION CHECKLIST

Well Name: CLU 506

Legal Location: NW SEC 33, T25N R6W

Date of Inspection: 03/07/2012 Siting 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