

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

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

Form C-144  
July 21, 2008

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

**Pit, Closed-Loop System, Below-Grade Tank, or  
Proposed Alternative Method Permit or Closure Plan Application**

- Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  
**Existing BGT** ☐ 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: XTO Energy, Inc. OGRID #: 5380  
Address: #382 County Road 3100, Aztec, NM 87410  
Facility or well name: Valencia Canyon Unit #27  
API Number: 30-039-21595 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr M Section 22 Township 28N Range 04W County: Rio Arriba  
Center of Proposed Design: Latitude 36.641840 Longitude 107.244180 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.  
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

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

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 Visible sidewalls, vaulted, automatic high-level shut off, no liner  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

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



**Pit Permit  
Siting Criteria  
Information Sheet**

Client:	XTO Energy
Project:	tank permitting
Revised:	23-Nov-08
Prepared by:	Trevor Ycas

API#: 30-039-21595

USPLSS: 28N 04W 22 M

Name: VALENCIA CANYON UNIT No. 027

Lat/Long: 36.641840°, -107.244180°

Depth to groundwater: depth < 50'

Geologic formation: San Jose Formation (Tsj), alluvium

Distance to closest continuously flowing watercourse: 20.7 miles NW to 'San Juan River' at Navajo Reservoir

Site Elevation: 2217m/7274' groundwater depth estimation is based primarily on elevation of nearby springs

Distance to closest significant watercourse, lakebed, playa lake, or sinkhole: 4624' SE to Valencia Canyon'

Permanent residence, school, hospital, institution or church within 300': NO

Soil Type: Rockland/ Aridisols

Domestic fresh water well or spring within 500': NO

Annual Precipitation: Navajo Dam: 12.95", Gobernador: 11.98", Capulin Rgr Stn.: 14.98", Otis: 10.41"

Any other fresh water well or spring within 1000': NO; ~1100' SW to 'Gettem Spring' (SP03619)

Precipitation Notes: Historical daily max. precip.: 4.19" (Bloomfield)

Within incorporated municipal boundaries: NO  
Within defined municipal fresh water well field: NO

Attached Documents: 27N03W\_iWaters.pdf, 27N04W\_iWaters.pdf, 27N05W\_iWaters.pdf, 28N03W\_iWaters.pdf, 28N04W\_iwaters.pdf, 28N05W\_iwaters.pdf, 29N03W\_iWaters.pdf, 29N04W\_iWaters.pdf, 29N05W\_iWaters.pdf

FM350049IND0\_30-039-21595.jpg 30-039-21595\_gEarth-PLS.jpg, 30-039-21595\_topo-PLS.jpg, 30-039-21595\_gEarth-iWaters.jpg

Wetland within 500': NO

Mining Activity: None Near

Within unstable area: NO

NM\_NRD-MMD\_MinesMillQuarries\_30-039-21595.jpg

Within 100 year flood plain: unmapped area

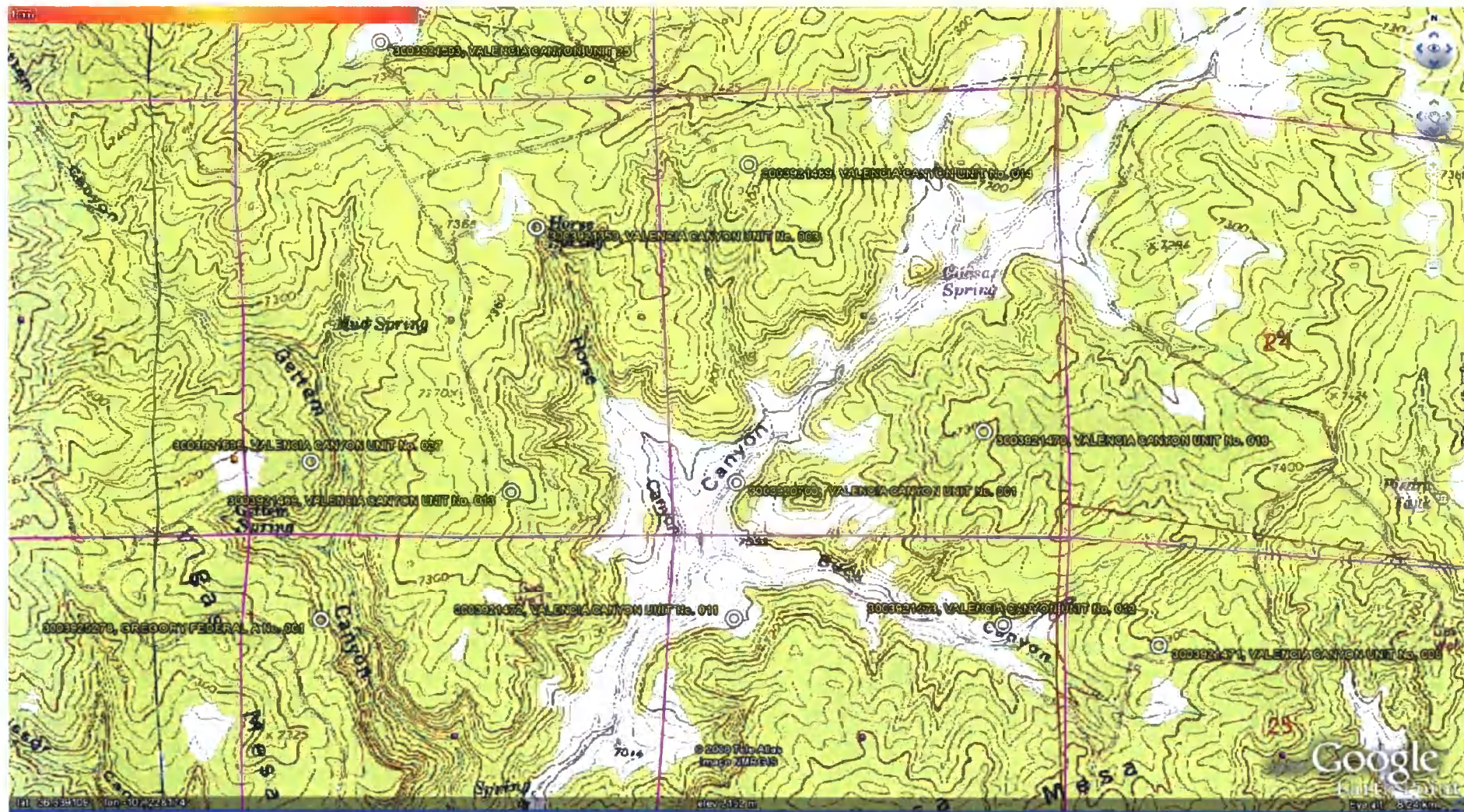
**Additional Notes:**

drains to 'Largo Canyon' via 'Valencia Canyon'

iWaters: springs SP03811(elev. 2182m), SP03620(elev. 2211m) both supply livestock water; USGS:Horse Spring (elev.2234m) use unknown; 'Gettem Spring' (elev. 2196m)

located on 'Vigas Mesa', W of 'Gettem Canyon', & W of 'Valencia Canyon'









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

Township:  Range:  Sections:   
NAD27 X:  Y:  Zone:  Search Radius:   
County:  Basin:  Number:  Suffix:   
Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic ☒ All

[POD / Surface Data Report](#) [Avg Depth to Water Report](#) [Water Column Report](#)

[Clear Form](#) [iWATERS Menu](#) [Help](#)

**WATER COLUMN REPORT 08/12/2008**

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

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water (in feet) Column
<u>SJ 00037</u>	29N	04W	04	2						373		

Record Count: 1

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

Township:  Range:  Sections:   
NAD27 X:  Y:  Zone:  Search Radius:   
County:  Basin:  Number:  Suffix:   
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[POD / Surface Data Report](#) [Avg Depth to Water Report](#) [Water Column Report](#)

[Clear Form](#) [iWATERS Menu](#) [Help](#)

**WATER COLUMN REPORT 08/12/2008**

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

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water (in feet) Column
<u>SJ 01575</u>	29N	03W	08	4	4	2				306		

Record Count: 1



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

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NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

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

**POD / SURFACE DATA REPORT 10/11/2008**

DB File Nbr	Use	Diversion	Owner	POD Number	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)				X Y are in Feet			UTM are in Meters			Start Date	Finish Date	Depth Well
						Tws	Rng	Sec	q	q	q	q	Zone	X	Y			
<u>SD 07850</u>	PDL	3	ROSA B. MARTINEZ	<u>SD 07850</u>		28N	05W	18	2	3	4							
<u>SD 07851</u>	PDL	3	ROSA B. MARTINEZ	<u>SD 07851</u>		28N	05W	18	1	2	1							
<u>SD 07852</u>	PDL	3	ROSA B. MARTINEZ	<u>SD 07852</u>		28N	05W	18	2	1	1							
<u>SJ 00036</u>	IND	65	BURLINGTON RESOURCES OIL & GAS	<u>SJ 00036</u>	Shallow	28N	05W	28	3							06/27/1953	06/27/1953	303
<u>SJ 00047</u>	NOT	0	MAMIE MANGUM	<u>SJ 00047</u>	Shallow	28N	05W	28								07/30/1953	08/04/1953	465
<u>SJ 01893</u>	STK	3	ROSA B. OR JUAN L. MARTINEZ	<u>SJ 01893</u>	Shallow	28N	05W	18	4							09/14/1984	10/12/1984	390
<u>SJ 03806</u>	STK	3	ROSA B. MARTINEZ	<u>SJ 03806 POD1</u>		28N	05W	07	4	4	2	130509	2065482	13	286111	4061033		

Record Count: 7

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

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

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

**POD / SURFACE DATA REPORT 10/19/2008**

DB File Nbr	Use	Diversion	Owner	POD Number	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)				X Y are in Feet			UTM are in Meters			Start Date	Finish Date	Depth Well
						Tws	Rng	Sec	q	q	q	q	Zone	X	Y			
<u>SJ 00045</u>	IND	0	U.S. GOVERNMENT	<u>SJ 00045</u>	Shallow	28N	04W	07					13	295235	4061453	09/04/1952	09/10/1952	600
<u>SJ 02385</u>	STK	3	CARSON NATIONAL FOREST	<u>SJ 02385</u>	Shallow	28N	04W	26	1	1	1		13	300818	4057064			160
<u>SP 03618</u>	STK	1.58	UNITED STATES OF AMERICA	<u>SP 03618</u>		28N	04W	09	3	1			13	297832	4061209			
<u>SP 03619</u>	STK	0.36	UNITED STATES OF AMERICA	<u>SP 03619</u>		28N	04W	21	4	4			13	298924	4057416			
<u>SP 03620</u>	STK	0.36	UNITED STATES OF AMERICA	<u>SP 03620</u>		28N	04W	22	1	4			13	299736	4058240			
<u>SP 03621</u>	STK	0.58	UNITED STATES OF AMERICA	<u>SP 03621</u>		28N	04W	29	2	2			13	297324	4057019			
<u>SP 03622</u>	STK	0.36	UNITED STATES OF AMERICA	<u>SP 03622</u>		28N	04W	33	2	4			13	298821	4054927			
<u>SP 03808</u>	STK	1.67	CARSON NATIONAL FOREST	<u>SP 03808</u>		28N	04W	17	3	1			13	296199	4059551			
<u>SP 03809</u>	STK	1.67	CARSON NATIONAL FOREST	<u>SP 03809</u>		28N	04W	17	4	4			13	297378	4059116			
<u>SP 03811</u>	STK	1.67	CARSON NATIONAL FOREST	<u>SP 03811</u>		28N	04W	14	1	1			13	300944	4060310			
<u>SP 03972</u>	STK	0	CARSON NATIONAL FOREST	<u>SP 03972</u>		28N	04W	36	3	3			13	302344	4053996			
<u>SP 04028</u>	STK	0.85	CARSON NATIONAL FOREST	<u>SP 04028</u>		28N	04W	32	2	4			13	297271	4054953			

Record Count: 12



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

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Township:  Range:  Sections:   
NAD27 X:  Y:  Zone:  Search Radius:   
County:  Basin:  Number:  Suffix:   
Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic ☒ All

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POD / SURFACE DATA REPORT 10/19/2008

(acre ft per annum)  
DB File Nbr Use Diversion Owner

POD Number

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

(quarters are biggest to smallest X Y are in Feet  
Source Tws Rng Sec q q q Zone X Y

UTM are in Meters)

UTM\_Zone Easting Northing Date

Start

Finish

Depth

No Records found, try again

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

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

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

**POD / SURFACE DATA REPORT 09/16/2008**

DB File Nbr	(acre ft per annum)			POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)				X Y are in Feet			UTM are in Meters			Start Date	Finish Date	Depth Well
	Use	Diversion	Owner		Source	Tws	Rng	Sec	q	q	q	q	Zone	X			
<u>RG 81026</u>	STK	3	BUREAU OF LAND MANAGEMENT	<u>RG 81026</u>	Shallow	27N	05W	27	4	4	3	13	290530	4046294	09/12/2003	09/16/2003	460
<u>SJ 00046</u>	IND	16	BURLINGTON RESOURCES OIL & GAS	<u>SJ 00046</u>	Shallow	27N	05W	04	4	4		13	289133	4052788	01/13/1954	01/13/1954	506
<u>SJ 00199</u>	OPM	4	BURLINGTON RESOURCES OIL & GAS	<u>SJ 00199</u>	Artesian	27N	05W	03	2	1		13	290409	4053971		05/02/1967	1640

Record Count: 3

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

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

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

**POD / SURFACE DATA REPORT 09/16/2008**

DB File Nbr	Use	Diversion	Owner	POD Number	Source	(quarters are 1=NW 2=NE 3=SW 4=SE)				X Y are in Feet			UTM are in Meters			Start Date	Finish Date	Depth Well 1
						Tws	Rng	Sec	q	q	q	q	Zone	X	Y			
<u>SJ 00048</u>	IND	48	BURLINGTON RESOURCES OIL & GAS	<u>SJ 00048</u>	Shallow	27N	04W	01					13	302928	4052997	07/28/1953	07/31/1953	142
<u>SJ 01049</u>	IND	30.55	BURLINGTON RESOURCES OIL & GAS	<u>SJ 01049</u>		27N	04W	18	4	2	2		13	295646	4049831	06/30/1967		15
<u>SJ 01205</u>	OIL	60	MERIDIAN OIL PRODUCTION, INC.	<u>SJ 01205</u>	Artesian	27N	04W	34	4	4	4		13	300255	4044335	10/18/1980	10/25/1980	3054
<u>SP 03616</u>	STK	0.58	UNITED STATES OF AMERICA	<u>SP 03616</u>		27N	04W	24	2	4			13	303452	4048375			
<u>SP 03617</u>	STK	0.58	UNITED STATES OF AMERICA	<u>SP 03617</u>		27N	04W	25	4	4			13	303356	4045974			
<u>SP 03810</u>	PLS	1.24	CARSON NATIONAL FOREST	<u>SP 03810</u>		27N	04W	30	1	2			13	294693	4047368			
<u>SP 03971</u>	STK	0	CARSON NATIONAL FOREST	<u>SP 03971</u>		27N	04W	12	2	3			13	303116	4051580			

Record Count: 7



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

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Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

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

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POD / SURFACE DATA REPORT 10/19/2008

DB File Nbr	(acre ft per annum) Use Diversion Owner	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Source Tws Rng Sec q q q	X Y are in Feet Zone X Y	UTM are in Meters UTM_Zone Easting Northing	Start Date	Finish Date	Depth Well	1
No Records found, try again									

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

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

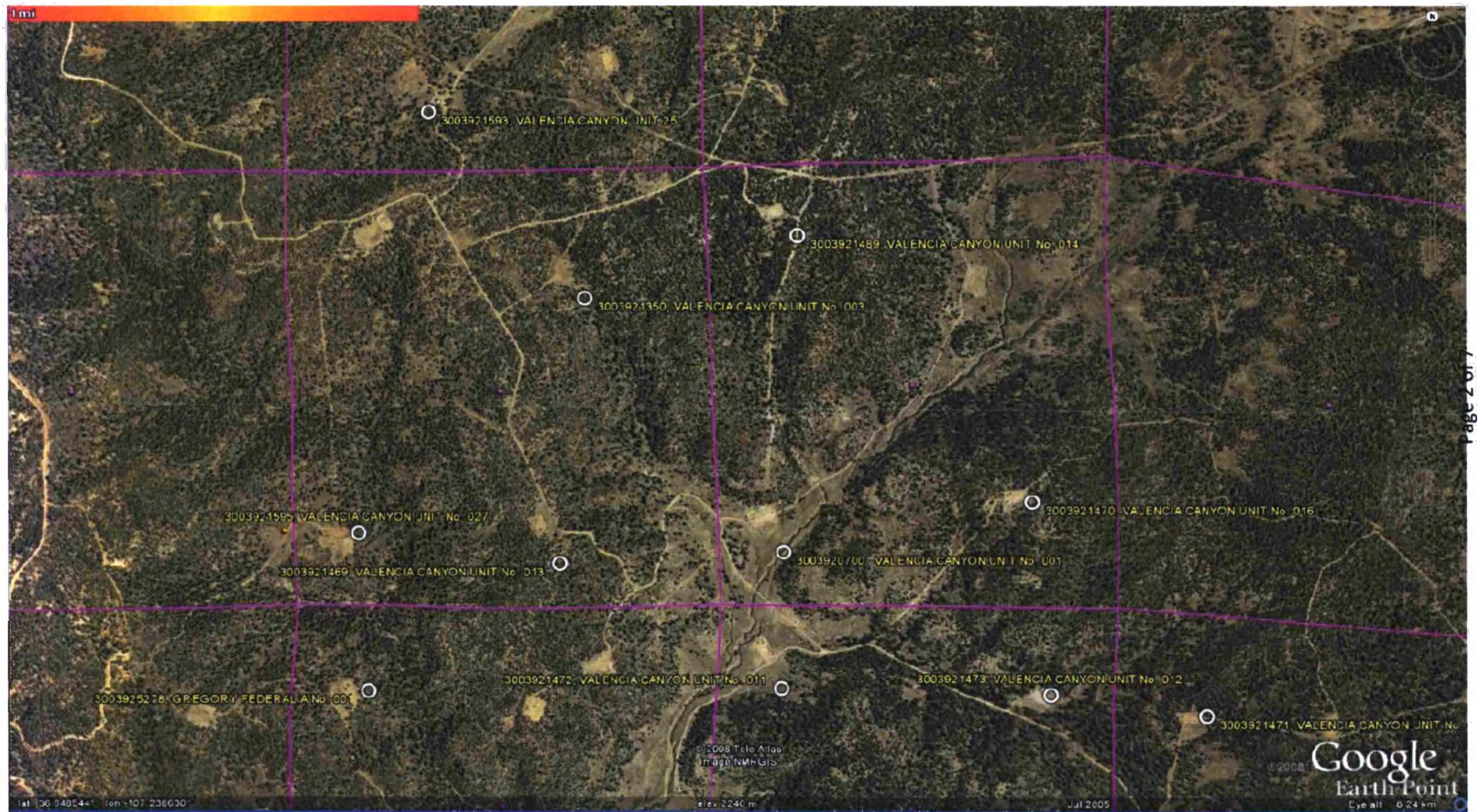
Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic ☒ All

**WATER COLUMN REPORT 08/12/2008**

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

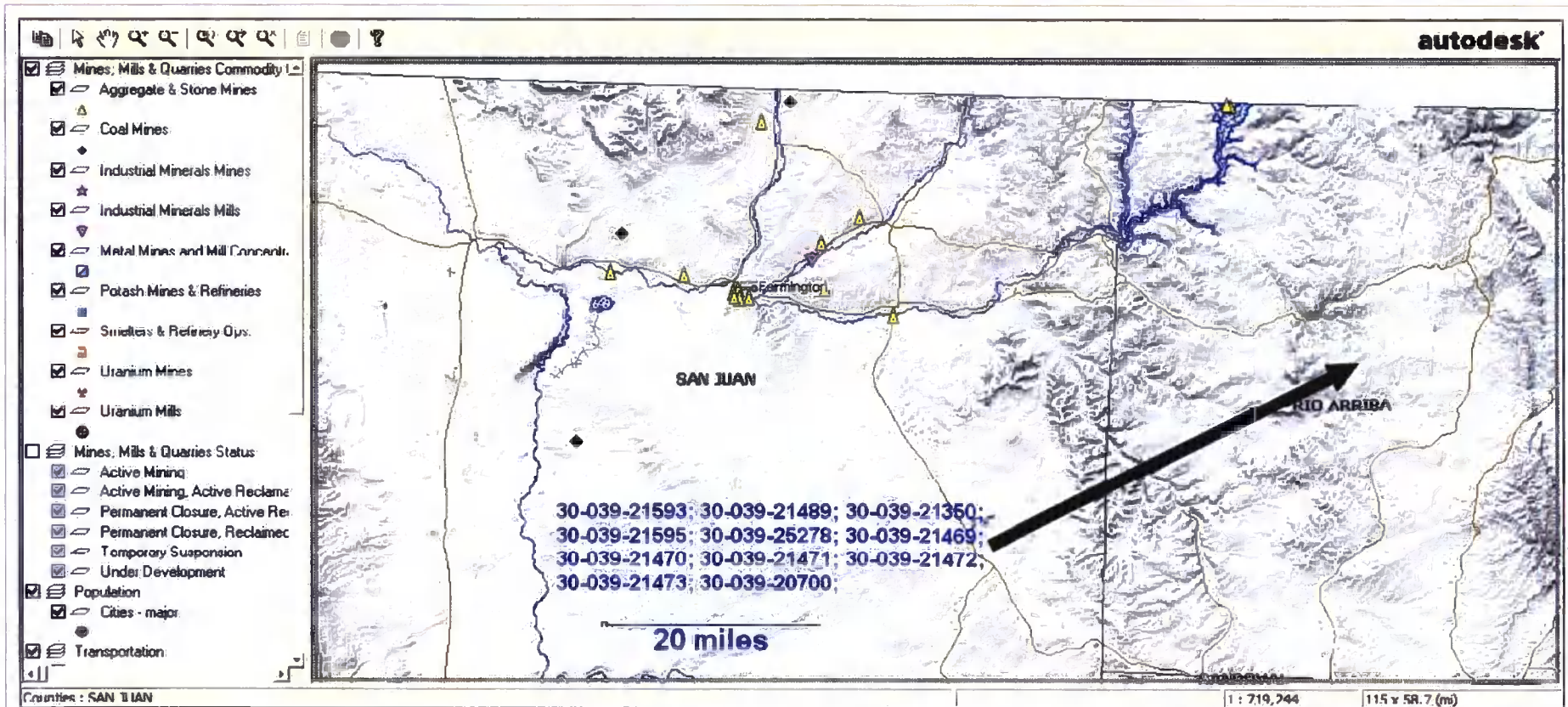
POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water (in feet) Column
<b>SJ 02339</b>	29N	05W	29	3	3	3				350	108	242
<b>SJ 00422</b>	29N	05W	31	2						239	135	104
<b>SJ 00056</b>	29N	05W	31	2	3	1				142	50	92
<b>SJ 00057</b>	29N	05W	31	2	3	1				158	57	101
<b>SJ 03208</b>	29N	05W	31	3	3	3				220	160	60
<b>SJ 02383</b>	29N	05W	32	1	1	1				300	100	200

Record Count: 6





# Mines, Mills and Quarries Web Map





SPECIAL FLOOD HAZARD AREAS HAVE NOT BEEN DETERMINED OR MAPPED FOR PORTIONS OF CARSON NATIONAL FOREST, SANTA FE NATIONAL FOREST, SAN JUAN INDIAN RESERVATION, JICARILLA APACHE INDIAN RESERVATION, AND SANTA CLARA INDIAN RESERVATION. FLOOD INSURANCE UNDER THE NATIONAL FLOOD INSURANCE PROGRAM IS NOT AVAILABLE IN UNMAPPED AREAS.

## FIRM FLOOD INSURANCE RATE MAP

**RIO ARriba COUNTY,  
NEW MEXICO  
UNINCORPORATED AREAS**

## MAP INDEX

**PANELS PRINTED:** 26, 50, 75, 95, 100, 125, 150, 175,  
200, 225, 250, 260, 275, 300, 325, 350, 375, 400, 425,  
450, 475, 500, 525, 550, 575, 600, 625, 650, 675, 700,  
725, 750, 775, 800, 825, 850, 875, 900, 925, 950, 975,  
1000, 1025, 1050, 1070, 1075, 1080, 1125, 1150, 1175,  
1180, 1180, 1200, 1205, 1225, 1270, 1275, 1280, 1285,  
1290, 1325

**COMMUNITY-PANEL NUMBERS**  
350049 0001-1325

**MAP REVISED:  
AUGUST 5, 1997**



**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

**XTO Energy Inc.**  
**San Juan Basin (Northwest New Mexico)**  
**General Design and Construction Plan**  
**For Below-Grade Tanks**

In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

**General Plan**

1. XTO will design and construct below-grade tanks to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the existing well site operated by XTO where the existing below-grade tank is located. The sign will list the Operator on record as the operator, the location of the well site by unit letter, section, township, range, and emergency telephone numbers.
3. XTO is requesting approval of an alternative fencing to be used on below-grade tank locations. Below-grade tank locations will be fenced utilizing 48" steel mesh field-fence (hogwire) with pipe railing along the top. A 6' chain link fence will be utilized around the well pad if the well site is within a city limits or ¼ mile of a permanent residence, school, hospital, institution or church. Below-grade tanks located within 1000' of a permanent residence, school, hospital, institution or church will be fenced by 6' chain link fence with at least two strands of barbed wire at the top. All gates associated with below-grade tanks will remain closed and locked when responsible individuals are not on site.
4. XTO shall construct below-grade tanks with an expanded metal covering or solid vaulted top on the top of the below-grade tank.
5. XTO will ensure that below-grade tanks are constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight. Tanks will be constructed of A36 carbon steel with 3/16" sides and ¼" bottom. (See attached drawing).
6. The below-grade tank system will have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom. Sand bedding (4") will be placed on top of a level foundation to ensure prevention of punctures, cracks or indentations of the liner or tank bottom.
7. XTO will construct a berm and/or diversion ditch in a manner that prevents the collection of surface water run-on. Below-grade tanks will be equipped with automatic high level shut-off devices as well as manually operated shut-off valves. (See attached drawing).
8. XTO will construct and use below-grade tanks that do not have double walls. The below-grade tank sidewalls will be open for visual inspection for leaks. The sidewalls of the cellar will be constructed with 2" X 12" pine sidewalls and 4" X 4" pine brace posts. The below-grade tank



XTO Energy Inc.  
San Juan Basin (Northwest New Mexico)  
General Design and Construction Plan  
For Below-Grade Tanks  
Page 2

bottom will be elevated a minimum of 6" above the underlying ground surface and the below-grade tank will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected. (See attached drawing).

9. XTO will equip below-grade tanks designed in this manner with a properly functioning automatic high-level shut-off control device and manual controls to prevent overflows. (See attached drawing).
10. XTO will demonstrate to the OCD that the geomembrane liner complies with the specifications of Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from OCD prior to the installation of the design. The geomembrane liner shall have a hydraulic conductivity no greater than  $1 \times 10^{-9}$  cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acids and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A. (See attached drawing).
11. The general specifications for design and construction are attached.



**XTO Energy Inc.**  
**San Juan Basin (Northwest New Mexico)**  
**General Maintenance and Operating Plan**  
**For Below-Grade Tanks**

In accordance with Rule 19.15.17.12 NMAC the following information describes the operation and maintenance of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

**General Plan**

1. XTO will operate and maintain below-grade tanks to contain liquids and solids, maintain the integrity of the liner and secondary containment system, prevent contamination of fresh water and protect public health and the environment. Fluid levels will be monitored weekly and high levels will be removed as necessary. Monthly inspections will be conducted to monitor integrity of below-grade tank systems and below-grade tanks will be equipped with automatic high-level shut-off devices.
2. XTO will not allow below-grade tanks to overflow and will use berms and/or diversion ditch to prevent surface run on to enter the below-grade tank. Below-grade tanks will be equipped with automatic high-level shut-off control devices as well as manually operated shut-off valves. See attached drawing for vault design and placement of diversion berms and shut-off devices.
3. XTO will continuously remove any visible or measurable layer of oil from the fluid surface of below-grade tanks in order to prevent significant accumulation of oil.
4. XTO will inspect the below-grade tank monthly and maintain written records for five years. Monthly inspections will consist of documenting the following: (see attached template),
  - Well Name
  - API #
  - Sec., Twn., Rng.
  - XTO Inspector's name
  - Inspection date and time
  - Visible tears in liner
  - Visible signs of tank overflow
  - Collection of surface run on
  - Visible layer of oil
  - Visible signs of tank leak
  - Estimated freeboard
5. XTO will maintain adequate freeboard to prevent over topping of the below-grade tank. High level shut-off devices control the freeboard at an average of 28" beneath the top of the tank.
6. XTO will not discharge into or store any hazardous waste in any below-grade tank.
7. If a below-grade tank develops a leak, or if any penetration of a below-grade tank occurs below the liquids surface, XTO will remove all liquids above the damage or leak line within 48 hours,



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notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the below-grade tank. If an existing below-grade tank does not meet current requirements of Paragraphs 1-4 of Subsection I of 19.15.17.11 NMAC the tank will be modified or retrofitted to comply. If compliance can not be achieved XTO will implement the approved closure plan.

## MONTHLY BELOW GRADE TANK INSPECTION FORM

Well Name: \_\_\_\_\_

API No.: \_\_\_\_\_

## Legals

Sec: \_\_\_\_\_ Township: \_\_\_\_\_

Range:

[illegible]

Notes:	Provide Detailed Description:

Provide Detailed Description:

**Misc:**

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In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

**General Plan**

1. XTO will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
2. XTO will close a below-grade tank 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 five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:
  - Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B
    - Soil contaminated by exempt petroleum hydrocarbons
    - Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes
  - Basin Disposal Permit No. NM01-005
    - Produced water
5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office has approved prior to removal. Any associated liners will be removed, properly cleaned and disposed of per 19.15.9.712 NMAC at San Juan County Landfill. Documentation of the final disposition will be included in the closure report.
6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
7. XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be

analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/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 100mg/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. XTO will notify the division of its results on form C-141.

8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.
9. If the sampling program demonstrates that a 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, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
10. Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally.  
The notification will include the following:
  - i. Operator's name
  - ii. Well Name and API Number
  - iii. Location by Unit Letter, Section, Township, and Range

The surface owner shall also be notified prior to the implementation of any closure operations of below-grade tanks as per the approved closure plan using certified mail, return receipt requested.

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping 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.
12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. Soil cover will be constructed to the site's existing grade and ponding of water and erosion of the cover material will be prevented with drainage control, natural drainages and silt traps where needed.
13. XTO will 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 or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) 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. Repeat seeding or planting will be continued until successful vegetative growth occurs.



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14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
- i. Proof of closure notice to division and surface owner;
  - ii. Details on capping and covering, where applicable;
  - iii. Inspection reports;
  - iv. Confirmation sampling analytical results;
  - v. Disposal facility name(s) and permit number(s);
  - vi. Soil backfilling and cover installation;
  - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable);
  - viii. Photo documentation of the site reclamation.