District I

1625 N French Dr , Hobbs, NM 88240

District II 1301 W Grand Ave, Artesia, NM 88210

District III 1000 Rio Brazos Rd, Aztec, NM 87410

District IV

Type of Operation:

Closed-loop System: Subsection H of 19 15 17 11 NMAC

P&A

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

July 21, 2008 For temporary pits, closed-loop sytems, and below-grade

Form C-144

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 C	Closure Plan Application
Type of action: X Permit of a pit, closed-loop system, below-graded and provided pit, closed and please be advised that approval of this request does not relieve the operator of hability should operate.	rmitted or non-permitted pit, closed-loop system, hod I-loop system, below-grade tank or alternative request
environment. Not does approval relieve the operator of its responsibility to comply with any other applica-	
Operator: ConocoPhillips Company	OGRID#: <u>217817</u>
Address: PO Box 4289, Farmington, NM 87499	
Facility or well name: San Juan 31-6 Unit 208	
API Number: 30-039-24436 OCD Permit No.	umber·
U/L or Qtr/Qtr: K(NE/SW) Section: 6 Township: 30N Range: Center of Proposed Design: Latitude: 36.83908°N Longitude: Surface Owner: X Federal State Private Tribal Trust or In	6W County: Rio Arriba 107.50743°W NAD: 1927 X 1983 ndian Allotment NAD: 1927 X 1983
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 String-Reinforced Liner Seams: Welded Factory Other Volume	

Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or

			_	notice of intent)	
Drying Pad Lined Liner Scams.	Abovo Unlined Welded	Ground Ste Liner type Factory	Thickness	ul-off Bins Other Other PVD Other	1157
X <u>Below-grad</u> Volume.	e tank: Subse	ction I of 19	15.17 11 NMAC Type of fluid:	Produced Water	01112137
Tank Construction	n material		Metal		10

X Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Secondary containment with leak detection Visible sidewalls and liner Visible sidewalls only Other HDPE PVC Liner Type. Thickness 45 X Other LLDPE

Alternative Method:

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

OIL CONS. DIV. DIS

6,				
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pit, 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				
X Alternate. Please specify 4' hogwire fence with a single strand of barbed wire on top.				
A Antenade. Trease specify 4 hogwire tenee with a single strained of particular with one top.				
Notice Colored F of 10.15.17.11 NNAC (April 10.15 and 10		Ĭ		
Netting: Subsection E of 19 15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)				
Screen Netting Other				
Monthly inspections (If netting or screening is not physically feasible)				
Signs: Subsection C of 19 15 17.11 NMAC				
12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers				
X Signed in compliance with 19 15.3 103 NMAC				
9				
Administrative Approvals and Exceptions:				
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.				
Please check a box if one or more of the following is requested, if not leave blank:				
Administrative approval(s). Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for cons	ideration of ar	proval		
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.				
10 - 624 - 674 - 1574 -				
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable				
source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the	1			
appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for				
consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.				
		_		
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes	XNo		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa	Yes	X 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	XNo		
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	Пла			
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image				
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	Пло		
(Applied to permanent pits)	XNA			
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image				
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering	Yes	XNo		
purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.		AINO		
NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended	Yes	XNo		
 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 map; Topographic map; Visual inspection (certification) of the proposed site	Yes	X No		
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	Yes	XNo		
Within an unstable area.	Yes	XNo		
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	LJ '\``	٣٠.٠٠		
Society; Topographic map				
Within a 100-year floodplain	Yes	XNo		
- FEMA man	1			

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.				
X 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				
X Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15.17 10 NMAC				
X Design Plan - based upon the appropriate requirements of 19 15.17 10 NMAC				
X 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 or Permit				
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				
Previously Approved Operating and Maintenance Plan API				
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 (I) of Subsection B of 19.15.17.9 NMAC				
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15 17.10 NMAC Climatological Factors Assessment				
Certified Engineering Design Plans - based upon the appropriate requirements of 19 15.17 11 NMAC				
Dike Protection and Structural Integrity Design: based upon the appropriate requirements of 19.15.17.11 NMAC				
Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC				
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17 11 NMAC				
Quality Control/Quality Assurance Construction and Installation Plan				
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC				
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19 15.17.11 NMAC				
Nuisance or Hazardous Odors, including H2S, Prevention Plan				
Emergency Response Plan Oil Field Waste Stream Characterization				
Monitoring and Inspection Plan				
Erosion Control Plan				
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17 9 NMAC and 19.15.17.13 NMAC				
14				
Proposed Closure: 19 15.17 13 NMAC				
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.				
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit X Below-grade Tank Closed-loop System				
Alternative Proposed Closure Method: X 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				
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)				
15				
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan.				
Please indicate, by a check mark in the box, that the documents are attached. X Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC				
X Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19 15.17 13 NMAC				
X Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)				
X Disposal Facility Name and Fermit Number (for inquitis, drining fitties and drin cuttings) X Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
X Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15 17.13 NMAC				
X Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				

Form C-144 Oil Conservation Division Page 3 of 5

16 Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Stee				
Instructions Please identify the facility or facilities for the disposal of liquids, drilling are required.	fluids and drill cuttings. Use attachment if more than two fa	cilities		
Disposal Facility Name	Disposal Facility Permit #:			
Disposal Facility Name	Disposal Facility Permit #:	,		
Will any of the proposed closed-loop system operations and associated activities Yes (If yes, please provide the information No	· · · · · · · · · · · · · · · · · · ·	-		
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specification - based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Plan - based upon the appropriate Plan - based upon the a	tion I of 19.15.17.13 NMAC			
Siting Criteria (Regarding on-site closure methods only: 19.15.17.10 NMAC Instructions: Each stung criteria requires a demonstration of compliance in the closure plan Receitain siting criteria may require administrative approval from the appropriate district office of for consideration of approval. Justifications and/or demonstrations of equivalency are required.	ecommendations of acceptable source material are provided below is may be considered an exception which must be submitted to the S			
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - tWATERS database search, USGS Data obta	ined from nearby wells	Yes No		
Cround motor in bottom 50 and 100 feet below the bettern of the busined mosts		☐Yes ☐No		
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - tWATERS database search; USGS; Data obtai	ned from nearby wells			
	ned from fearby wells			
Ground water is more than 100 feet below the bottom of the buried waste		∐Yes ∐No		
- NM Office of the State Engineer - iWATERS database search; USGS, Data obtain	ned from nearby wells	∐N/A		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significe (measured from the ordinary high-water mark).	ant watercourse or lakebed, sinkhole, or playa lake	Yes No		
- Topographic map; Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in e - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	existence at the time of initial application.	∐Yes ∐No 		
Within 500 horizontal feet of a private, domestic fresh water well or spring that less tha purposes, or within 1000 horizontal fee of any other fresh water well or spring, in existe - NM Office of the State Engineer - iWATERS database, Visual inspection (cerufic	ence at the time of the initial application.	Yes No		
Within incorporated municipal boundaries or within a defined municipal fresh water we pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality, Written approval obta	·	Yes No		
Within 500 feet of a wetland	ince from the manuelpanty	□Yes □No		
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspe	ection (certification) of the proposed site			
Within the area overlying a subsurface mine		Yes No		
- Written confiramtion or verification or map from the NM EMNRD-Mining and M	lineral Division			
Within an unstable area - Engineering measures incorporated into the design; NM Bureau of Geology & Mi	neral Resources; USGS; NM Geological Society;	YesNo		
Topographic map Within a 100-year floodplain FEMA map		Yes No		
18				
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of by a check mark in the box, that the documents are attached.	of the following items must bee attached to the closure	plan. Please indicate,		
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 Ptt (for in place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC				
Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC				
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC				
Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC				
Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Suc Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				

19 Operator Applica	ation Certification:			
	the information submitted with this applicati	on is true, accurate and complete to	he best of my knowledge and belief.	
Name (Print)	Ethel Tally	Title:	Staff Regulatory Technician	
Signature:	The Jall	Date	10-17-08	
e-mail address	Ethel Tally@ConocoPhillips.	Telephone:	505-599-4027	
	Permit Application (including closur	re plan) Closure Plan (onl	y) OCD Conditions (see attack	chment)
OCD Representa	tive Signature:	bGll	Approval Date:	10-29-68
Title:	Emiro/spec	OCD Pe	ermit Number:	
Instructions: Operati report is required to	required within 60 days of closure com tors are required to obtain an approved closic to be submitted to the division within 60 days of an has been obtained and the closure activiti	re plan prior to implementing any cl if the completion of the closure activ es have been completed	osure activities and submitting the clo	
22				
	vation and Removal On-site Clos	ure Method Alternative Closs	ire Method Waste Removal (Cl	losed-loop systems only)
	garding Waste Removal Closure For Close identify the facility or facilities for where the			
Disposal Facility	Name:	Disposal Facil	ity Permit Number:	
Disposal Facility			ity Permit Number	
Were the closed-	loop system operations and associated activit	· · · · · · · · · · · · · · · · · · ·	· ———	eartions?
Yes (If yes, p	please demonstrate complilane to the items b	elow) No		
	acted areas which will not be used for future	service and operations:		
=	ation (Photo Documentation) ling and Cover Installation			
	on Application Rates and Seeding Technique			
24				
Closure Repor	t Attachment Checklist: Instructions: E	ach of the following items must be a	ttached to the closure report. Please	indicate, by a check mark in
	documents are attached. osure Notice (surface owner and division)			
	eed Notice (required for on-site closure)	1		
_	or on-site closures and temporary pits)			
=	on Sampling Analytical Results (if application	able)		
=	erial Sampling Analytical Results (if appli	•		
=	icility Name and Permit Number	*		
= '	lling and Cover Installation			
Re-vegetati	on Application Rates and Seeding Techni	que		
Site Reclam	nation (Photo Documentation)			
On-site Clo	sure Location. Latitude	Longitude:	NAD	1927 🔲 1983
	Certification: the information and attachments submitted w with all applicable closure requirements and			vledge and belief I also certify that
Name (Print):		Title:		
· · · · · ·				
Signature:		Date:		
e-mail address:		Telephone		

New Mexico Office of the State Engineer POD Reports and Downloads

1	
Township: 30N Range: 06W Sections: 5,6,7,8	
NAD27 X: Y: Zone: Search Radius:	
County: Basin: Number: Suffix:	
Owner Name: (First) (Last) One-Domestic One-	1
POD / Surface Data Report Avg Depth to Water Report Water Column Report	
Clear Form WATERS Menu Help	
WATER COLUMN REPORT 10/17/2008	Hilyman
(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) POD Number Tws Rng Sec q q Q Zone X Y Well Water Column	Ln
No Records found, try again	

New Mexico Office of the State Engineer POD Reports and Downloads

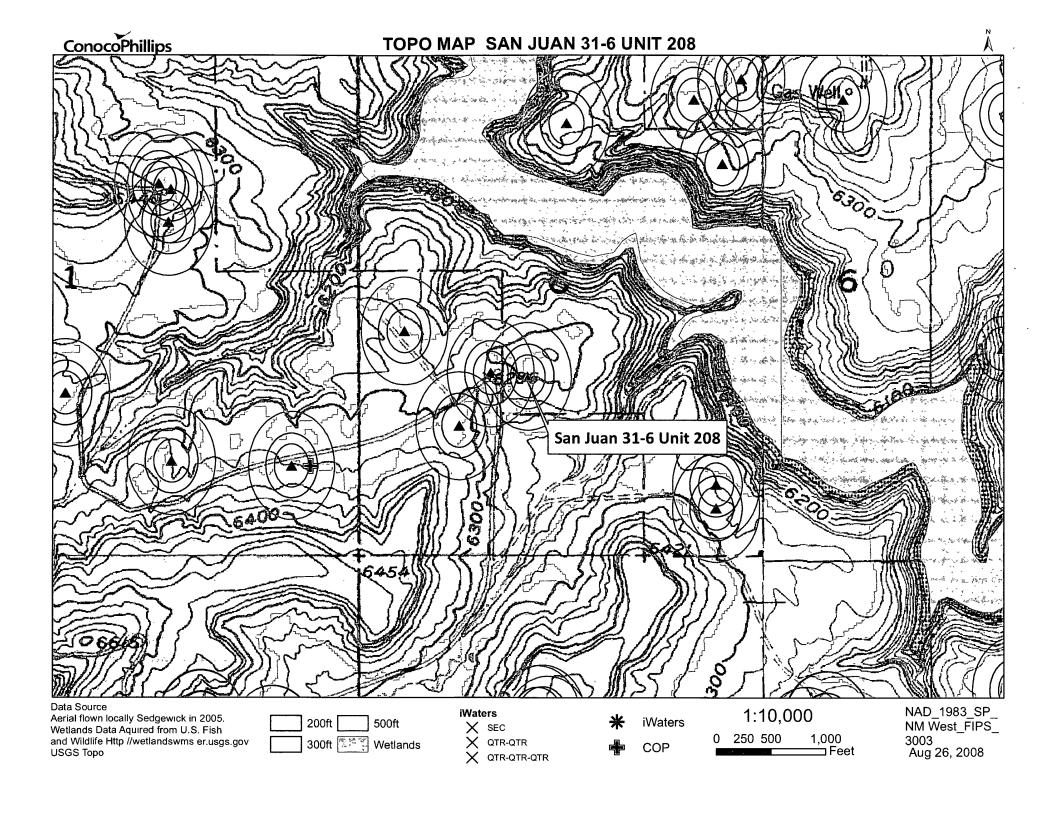
Township: 30N Range: 07W Sections: 1,12	2
NAD27 X: Y: Zone:	Search Radius:
County: Basin:	Number: Suffix:
Owner Name: (First) (Last)	ONon-Domestic ODomestic OAll
POD / Surface Data Report Avg Depth to Water	Report Water Column Report
Clear Form July iWATERS Men	nu Na. st Help
WATER COLUMN REPOR	RT 10/17/2008
(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	Depth Depth Water (in Y Well Water Column
No Records found, try again	

New Mexico Office of the State Engineer POD Reports and Downloads

-
Township: 31N Range: 07W Sections: 36
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) Onn-Domestic Odomestic Odomestic Odomestic
POD / Surface Data Report Avg Depth to Water Report Water Column Report
Clear Form iWATERS Menu Help
WATER COLUMN REPORT 10/17/2008
(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 Well Water Column
No Decords found true again

New Mexico Office of the State Engineer POD Reports and Downloads

Record Count: 1



DATA SHEET FOR DEEP BED CATHODIC PROTECTION WELLS

NORTHWESTERN NEW MEXICO

(SUBMIT 2 COPIES TO OCD AZTEC OFFICE)

30-039-24 208=

PPCO DESIGNATION: FM-340

OPERATOR: PHILLIPS PETROLEUM COMPANY

FARMINGTON, N.M. 87401

LOCATION:] 6 30 6 LEASE NUMBER: 650114

(505) 599-3400

NAME OF WELL/S OR PIPELINE SERVED: (1) SJ 31-6 UNIT #8 MV

(2) SJ 31-6 #208

ELEVATION: NA

COMPLETION DATE: 04/08/63

TOTAL DEPTH: 200 FT.

LAND: FEDERAL

CASING INFO.; SIZE: NA

IN.

DEPTH: NA

FT.

TYPE: NA CEMENT USED: NA

IF CEMENT OR BENTONITE PLUGS HAVE BEEN PLACED, SHOW DEPTHS & AMOUNTS:

PLUG DEPTH: NONE PLUG AMOUNT: NONE

WATER INFORMATION:

WATER DEPTH (FT): (1) 95 (2) -0-

WATER INFORMATION: NA

DEPTHS GAS ENCOUNTERED (FT): NA

TYPE AND AMOUNT OF COKE BREEZE USED:

COKE TYPE: METALLURGICAL COKE BREEZE

COKE AMOUNT: 2739 LBS.

DEPTHS ANODES PLACED (FT):

95,115,125,140,150,175,200,210,285,295

DEPTH VENT PIPE PLACED (FT): 200

VENT PIPE PERFORATIONS (FT): TOP 85 BOTTOM 200

REMARKS: -O-

IF ANY OF THE ABOVE DATA IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING DRILLERS LOG, WATER ANALYSIS & WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN AVAILABLE. UNPLUGGED ABANDONED WELLS ARE TO BE INCLUDED.

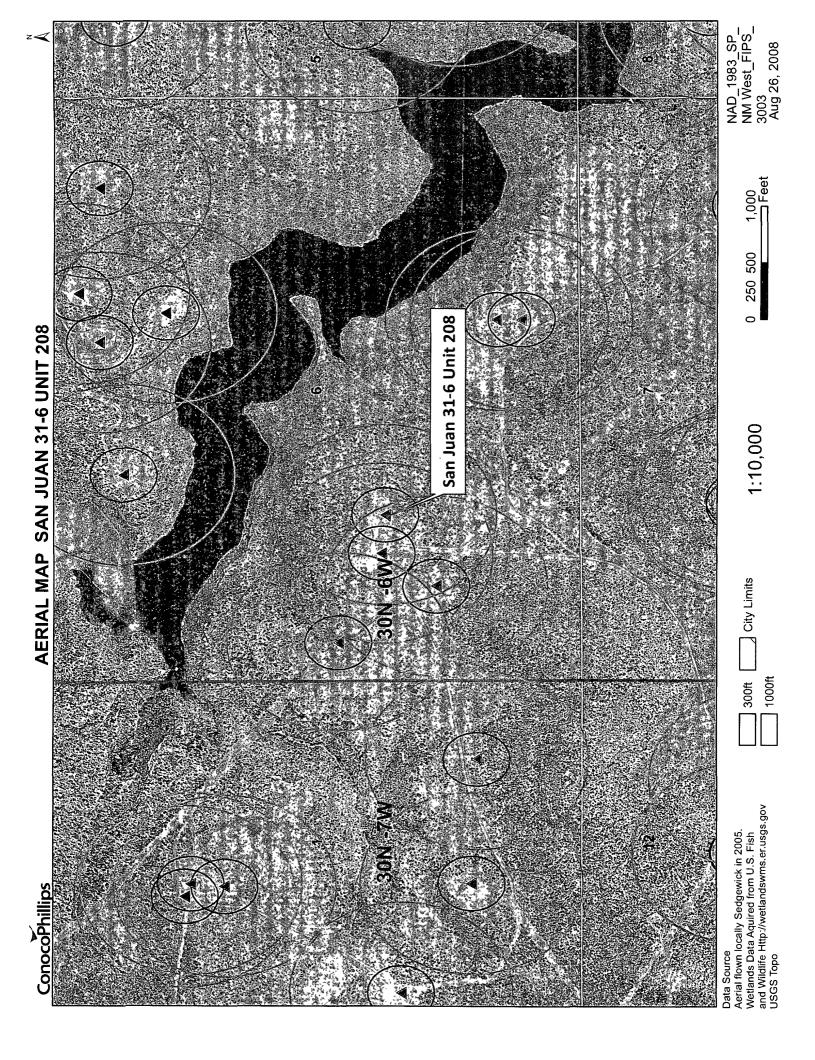
* - LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

NA-INFORMATION NOT AVAILABLE

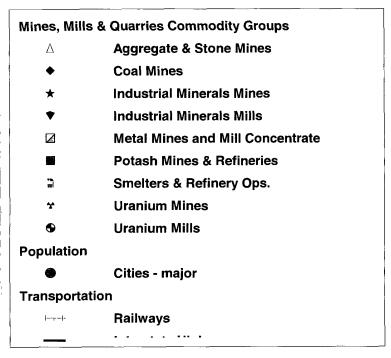
FEB21 1992

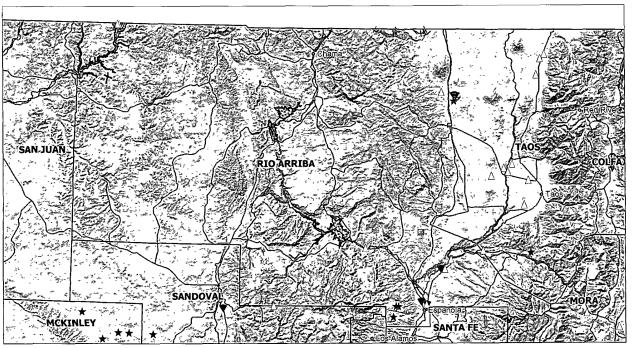
OIL CON. DIV. DIST. 3

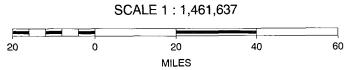
CC: CP FILE--FARMINGTON HOUSTON



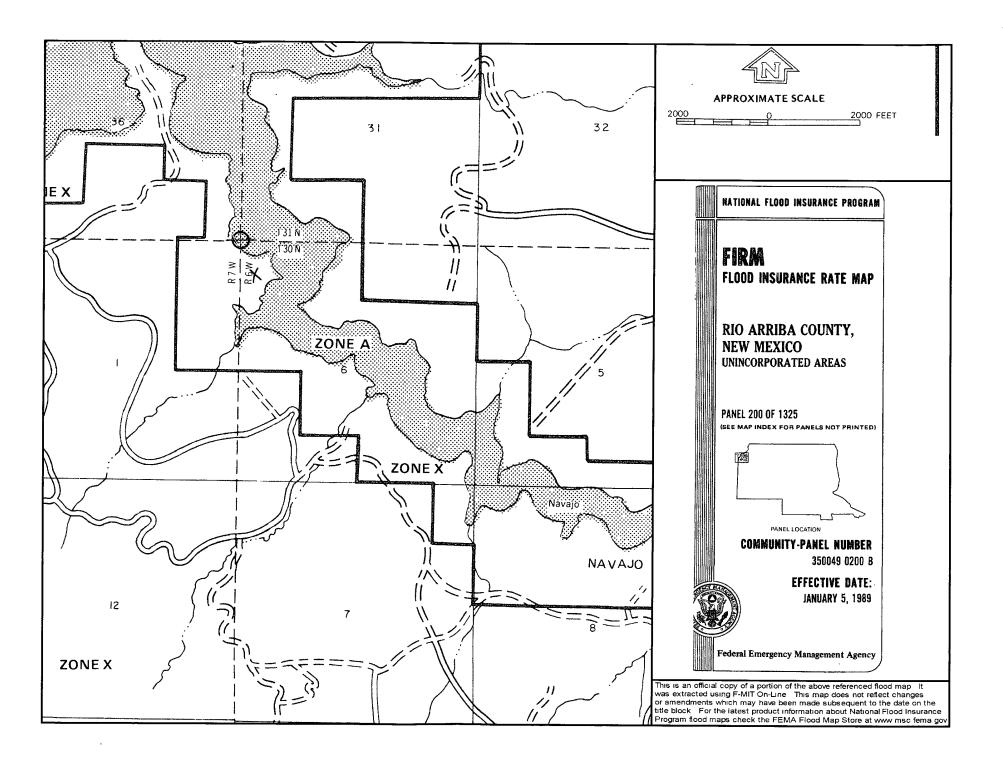
SJ 31-6 UNIT 208/MINES, MILLS AND QUARRIES MAP











Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The San Juan 31-6 Unit 208 is not located in an unstable area. 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 and Topographic Map. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map. The location is not within a 100-year floodplain area as indicated on the FEMA Map. The groundwater depth is considered to be greater than 100' as determined by the topographic map and the Cathodic well data. The subject well has an elevation of 6304' and the groundwater depth is greater than 100'. The hydro geologic analysis indicates the groundwater depth and the San Jose formation will create a stable area for this new location.

Hydrogeological report for San Juan 31-6 Unit 208

Regional Hydrogeological 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 adsorb 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.

ConocoPhillips Company San Juan Basin Below Grade Tank Design and Construction

In accordance with NMAC 19.15.17 the following information describes the design and construction of below grade tanks on ConocoPhillips Company (COPC) locations. This is COPC's standard procedure for all below grade tanks (BGT). A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

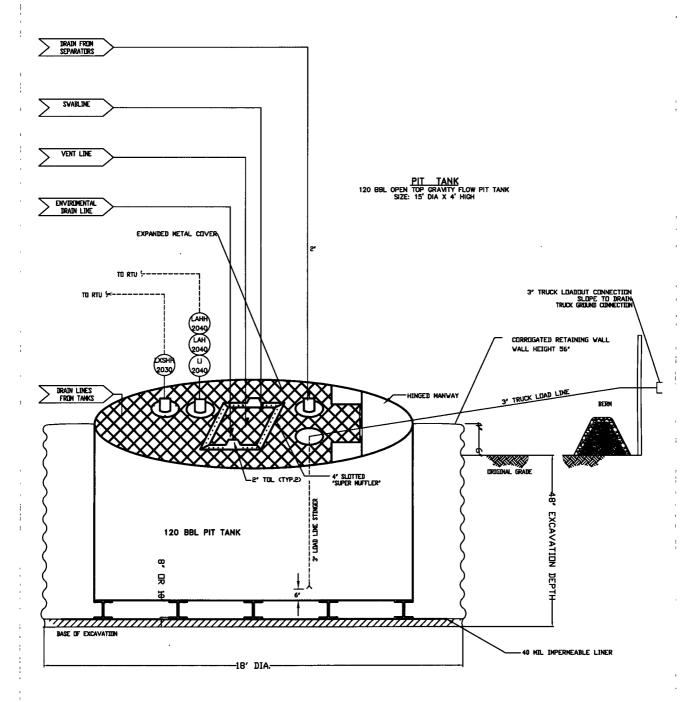
- 1. COPC will design and construct a properly sized and approved BGT which will contain liquids and should prevent contamination of fresh water to protect the public health and environment.
- 2. COPC will sign the well location in compliance with 19.15.3.103 NMAC.
- 3. COPC shall construct fencing around the BGT using 4 foot hog wire fencing topped with two strands of barbed wire, or with a pipe top rail. A six foot chain link fence topped with three strands of barbed wire will be use if the well location is within 1000 feet of permanent residence, school, hospital, institution or church.
- 4. COPC will construct a screened, expanded metal covering, on the top of the BGT.
- 5. COPC shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.
- 6. The COPC below-grade tank system shall 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.
- 7. COPC shall construct a below-grade tank to prevent overflow and the collection of surface water run-on.
- 8. COPC will construct and use a below-grade tank that does not have double walls. The below-grade tank's side walls will be open for visual inspection for leaks, the below-grade tank's bottom is elevated a minimum of six inches above the underlying ground surface and the below-grade tank is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
- 9. COPC has equipped the below-grade tanks with the ability to detect high level in the tank and provide alarm notification and shutdown process streams into the tank. Once high level is detected RTU logic closes the inlet separator sales valve and does not permit vent valve to open. This shutdown of the sales valve and gagging of the vent valves prevents any hydrocarbon process streams from entering the pit tank once a high level is detected. Furthermore, an electronic page is sent to the COPC MSO for that well site and to the designated contract

"Water-Hauling" Company indicating a high level and that action must be taken to address this alarm. The environmental drain line from COPC's compressor skid under normal operating conditions is in the open position. The environmental drain line is in place to capture any collected rain water or spilled lubricants from our compressor skids. The swab drain line is a manually operated drain and by normal operating procedures is in the closed position. The tank drain line is also a manually operated drain and during normal operations it is in the closed position.

- 10. The geomembrane liner consists of a 45-mil flexible LLDPE material manufactured by Raven Industries as RUFCO 4000B. This product provides a level of UV and harsh weather conditions protection. It is rated to a Low temperature impact failure of -94°F. It exceeds ASTMD3083 standard by 10%. It is typically used in Brine Pond, Oilfield Pit liner and other industrial applications. The manufacture specific sheet is attached.
- 11. The general specification for design and construction are attached in the COPC document.

MANUAL OPERATIONS PRODUCTION TANKS DRAINLINE SWABLINE DRAIN LINE ENVIROMENTAL DRAIN LINE FROM COMPRESSOR SKID

AUTOMATED OPERATION VENT VALVE DRAIN LINE DUMP LINE FROM SEPARATORS



ConocoPhillips San Juan Business Unit

DUMSMAN®

ROMBBENGE

PROPERTIES	TEST METHOD	J3	OBB	J86	ВВ	J45	BB
		Min Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Roll Averages	Min Roll Averages	Typical Roll Averages
Appearance		Black/Black		Black/Black		Black/Black	
Thickness	ASTM D 5199	27 mil	30 mil	32 mil	36 mil	40 mil	45 mil
Weight Lbs Per MSF (oz/yd²)	ASTM D 5261	126 lbs (18.14)	140 lbs (20.16)	151 lbs (21.74)	168 lbs (24.19)	189 lbs (27.21)	210 lbs (30.24)
Construction		**Extr	usion laminated	with encapsulat	ed tri-direction	al scrim reinforc	ement
Ply Adhesion	ASTM D 413	16 lbs	20 lbs	19 lbs	24 lbs	25 lbs	31 lbs
1". Tensile Strength	ASTM D 7003	88 lbf MD 63 lbf DD	110 lbf MD 79 lbf DD	90 lbf MD 70 lbf DD	113 lbf MD 87 lbf DD	110 lbf MD 84 lbf DD	138 lbf MD 105 lbf DD
1" Tensile Elongation @ Break % (Eilm Break)	ASTM D 7003	550 MD 550 DD	750 MD 750 DD	550 MD 550 DD	750 MD 750 DD	550 MD 550 DD	750 MD 750 DD
1" Tensile Elongation @ Peak :% (Scrim Break))	ASTM D 7003	20 MD 20 DD	33 MD 33 DD	20 MD 20 DD	30 MD 31DD	20 MD 20 DD	36 MD 36 DD
Tongue Lear Strength	ASTM D 5884	75 lbf MD 75 lbf DD	97 lbf MD 90 lbf DD	75 lbf MD 75 lbf DD	104 lbf MD 92 lbf DD	100 lbf MD 100 lbf DD	117 lbf MD 118 lbf DD
Grab Tensile	ASTM D 7004	180 lbf MD 180 lbf DD	218 lbf MD 210 lbf DD	180 lbf MD 180 lbf DD	222 lbf MD 223 lbf DD	220 lbf MD 220 lbf DD	257 lbf MD 258 lbf DD
Trapezoid Tear	ASTM D 4533	120 lbf MD 120 lbf DD	146 lbf MD 141 lbf DD	130 lbf MD 130 lbf DD	189 lbf MD 172 lbf DD	160 lbf MD 160 lbf DD	193 lbf MD 191 lbf DD
* Dimensional Stability	ASTM D 1204	<1	<0.5	<1	<0.5	<1	<0.5
Puncture Resistance	ASTM D 4833	50 lbf	64 lbf	65 lbf	83 lbf	80 lbf	99 lbf
Maximum Üse Temperature		180° F					
Minimum Use Temperature		-70° F					

MD = Machine Direction

DD = Diagonal Directions



Note: Minimum Roll Averages are set to take into account product variability in addition to testing variability between laboratories.

*Dimensional Stability Maximum Value

**DURA-SKRIM J30BB, J36BB & J45BB are a four layer reinforced laminate containing no adhesives. The outer layers consist of a high strength polyethylene film manufactured using virgin grade resins and stabilizers for UV resistance in exposed applications. DURA-SKRIM J30BB, J36BB & J45BB are reinforced with a 1300 denier (minimum) tri-directional scrim reinforcement.

Note: RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage

PLANT LOCATION

Sioux Falls, South Dakota

SALES OFFICE

P.O. Box 5107 Sioux Falls, SD 57117-5107 (605) 335-0174 (605) 331-0333 FAX 800-635-3456

INDUSTRIES

08/06

ConocoPhillips Company San Juan Basin Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of Below Grade Tank (BGT) on ConocoPhillips Company (COPC) locations. This is COPC's standard procedure for all BGT. A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

- COPC will operate and maintain a BGT to contain liquids and solids and maintain the integrity of the liner, liner system and secondary containment system to prevent contamination of fresh water and protect public health and environment.
- 2. COPC will not discharge into or store any hazardous waste in the BGT.
- 3. COPC shall operate and install the below-grade tank to prevent the collection of surface water run-on. COPC shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.
- COPC 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 overtime.
- 5. COPC shall inspect the below-grade tank at least monthly and maintain a written record of each inspection for five years.
- 6. COPC shall maintain adequate freeboard to prevent overtopping of the below-grade tank.
- 7. If a leak develops below the liquid's level, COPC shall remove all liquids within 48 hours and repair the damage or replace the below-grade tank. COPC shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. COPC shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.

ConocoPhillips Company San Juan Basin Below Grade Tank Closure Plan

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of Below Grade Tanks (BGTs) on ConocoPhillips Company locations hereinafter known as COPC locations. This is COPC's standard procedure for all BGTs. A separate plan will be submitted for any BGT which does not conform to this plan.

General Requirements:

- 1. COPC shall close a below-grade tank 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. COPC shall close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation. The closure report will be filed on C-144
- 3. COPC shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011). The liner will be disposed of at the San Juan County Landfill located on CR 3100.
- 4. COPC will receive prior approval to 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 approves. Documentation of how the below-grade tank was disposed of or recycled will be provided in the closure report.
- 5. If there is any on-site equipment associated with a below-grade tank, then BR shall remove the equipment, unless the equipment is required for some other purpose.
- 6. COPC shall test the soils beneath the below-grade tank to determine whether a release has occurred. COPC 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 0.2 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 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. COPC shall notify the division of its results on form C-141.

- 7. If COPC or the division determines that a release has occurred, then COPC shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.
- 8. 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, then COPC shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.
- 9. 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.
- 10. The surface owner shall be notified of COPC's closing of the below-grade tank prior to closure as per the approved closure plan via certified mail, return receipt requested.
- 11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. 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 place 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. COPC 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 or Forest Service stipulated seed mixes will 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.
- 13. 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.
- 14. 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 the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
 - Soil Backfilling and Cover Installation
 - Re-vegetation application rates and seeding techniques
 - Photo documentation of the site reclamation
 - Confirmation Sampling Results
 - Proof of closure notice