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

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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<u>Pit, Closed-Loop System, Below-Grade Tank, or</u> <u>Proposed Alternative Method Permit or Closure Plan Application</u>

Proposed Alternative Method Permit of Closure Plan	Application
Type of action: Permit of a pit, closed-loop system, below-grade tank, or pro Closure of a pit, closed-loop system, below-grade tank, or pr Modification to an existing permit Closure plan only submitted for an existing permitted or non below-grade tank, or proposed alternative method	oposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, b	elow-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in poll	
environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable government.	mental authority's rules, regulations or ordinances.
Operator: Williams Operating Co, LLC OGRID #:	120782
Address: PO Box 640 / 721 S Main Aztec, NM 87410	
Facility or well name: JAECO 26-3 22 #2	
API Number: OCD Permit Number:	
U/L or Qtr/Qtr D Section 22 Township 26N Range 03W Co	ounty: Rio Arriba
Center of Proposed Design: Latitude 36.476401 Longitude -107.138096 NA	.D: □1927 ⊠ 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment	
2.	
Pit: Subsection F or G of 19.15.17.11 NMAC	ROVD JAN 20 103
Temporary: Drilling Workover	
Permanent Emergency Cavitation P&A	cii cons. Iiv.
☐ Lined ☐ Unlined Liner type: Thickness ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other	
☐ String-Reinforced	surgicione o e non
Liner Seams: Welded Factory Other Volume: bbl Dimer	nsions: Lx Wx 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 re intent)	equire prior approval of a permit or notice of
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other	
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Oth	er
Liner Seams: Welded Factory Other	
4.	
☑ Below-grade tank: Subsection I of 19.15.17.11 NMAC	
Volume:bbl Type of fluid:PRODUCED WATER	
Tank Construction material:DBL WALL STEEL	
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflo	w shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other	
Liner type: Thicknessmil	
5.	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental E	Bureau office for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)						
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)						
Four foot height, four strands of barbed wire evenly spaced between one and four feet						
Alternate. Please specifyper BLM-BIA spec						
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 19.15.3.103 NMAC						
Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for					
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying above-grade tanks associated with a closed-loop system.	priate district pproval.					
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ⊠ No					
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No					
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☑ No ☐ NA					
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☑ NA					
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No					
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☑ No					
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No					
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ⊠ No					
 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					

C-144 Page 2 of 22 JAECO 26-3 22 #2

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. Mydrogeologic 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)
13.
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 Lak 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 Preeboard 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 Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems)
In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
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 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 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 Site Reclamation 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 Site Reclamation 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 Site Reclamation 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 Site Reclamation 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 Site Reclamation 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 Site Reclamation 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 Site Reclamation 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 19.15.1

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Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13. Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.	
Disposal Facility Name: Disposal Facility Permit Number:	
Disposal Facility Name: Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future ser Yes (If yes, please provide the information below) No	
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	С
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 sou provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate dist considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ⊠ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Xes □ 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 proby 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 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 Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	.15.17.11 NMAC
 ⊠ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC ⊠ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC 	

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19. Operator Application Certification:	
I hereby certify that the information submitted with this application is true, ac	curate and complete to the best of my knowledge and belief.
Name (Print): Michael K. Lane	Title: Sr. EH & S Specialist
Name (Print): Michael K. Lane Signature: by Holly C. Perkirs	Date: /-19·2009
e-mail address:myke.lane@williams.com	Telephone: <u>505-634-4219</u>
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure	•
OCD Representative Signature:	
Title: Enviro Spec	OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior The closure report is required to be submitted to the division within 60 days of section of the form until an approved closure plan has been obtained and the	or to implementing any closure activities and submitting the closure report. If the completion of the closure activities. Please do not complete this closure activities have been completed.
	☐ Closure Completion Date:
Closure Method: Waste Excavation and Removal On-Site Closure Method Alte If different from approved plan, please explain.	rnative Closure Method
23. Closure Report Regarding Waste Removal Closure For Closed-loop Syste Instructions: Please indentify the facility or facilities for where the liquids, a two facilities were utilized.	rilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	,
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on	Disposal Facility Permit Number:
Yes (If yes, please demonstrate compliance to the items below) \(\sigma\) No	of ill areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and open Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ations:
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)	
	gitude NAD:
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requirements.	ements and conditions specified in the approved closure plan.
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

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Hydrogeological Report Williams Production Company, LLC Jaeco 26-3 22 #2 Regional Hydrological Context

Referenced Well Location:

The referenced well and pit is located on the Jicarilla Apache Reservation in Rio Arriba County, New Mexico. This site is positioned in the northeastern portion of the San Juan Basin, an asymmetrical syncline that extends from northwestern New Mexico into southwestern Colorado (Carson National Forest FEIS, 2008). Elevation of the referenced well is approximately 7158 feet MSL.

General Regional Groundwater Description:

As a portion of the San Juan Basin, the Jicarilla Reservation is underlain by sandstone aquifers of the Colorado Plateau. The primary aquifer of potential concern at this location is the Unita-Animas Aquifer, composed primarily of Lower Tertiary rocks in the San Juan Basin. The aquifer consists of the San Jose Formation; the underlying Animas formation and its lateral equivalent, the Nacimiento formation; and the Ojo Alamo Sandstone. The thickness of the Unita-Animas aquifer generally increases toward the central part of the basin. In the northeastern part of the San Juan Basin, the maximum thickness of the aquifer is approximately 3500 feet (USGS, 2001). This aquifer contains fresh to moderately saline water.

Groundwater generally flows toward the San Juan River and it tributaries, where it becomes alluvial groundwater or is discharged to stream flow. Additional information regarding the Hydrogeologic setting can be found in the provided references.

Site Specific Information:

Surface Hydrology: The pit is located in mid elevations on a western slope, draining towards a

wash associated with Tapicito Creek. Although the topographic maps indicate a possible wash near the proposed wellsite. Field inspection found no evidence (e.g. well defined streambed ...) of a significant drainage. Therefore, it is found that the pit will not be within 200 feet of

a significant surface drainage. (See enlarged aerial).

1st Water Bearing Formation:

Formation Thickness: Underlying Formation: Depth to Groundwater: San Jose, Tertiary

Approximately 2200 ft. Nacimiento/Animas

Depth to groundwater is estimated at greater than 100 feet bgs. The four

nearest iWATERS wells for which water depth information was available are located approximately 4 to 6 miles from the pit. All of these wells have recorded depth to groundwater between 210 and 750 feet. (see

Siting Criteria Map I for details).

References:

Allen, Erin. Undated. Colorado Plateau Aquifers.

http://academic.emporia.edu/schulmem/hydro/TERM%20PROJECTS/2007/Allen/Aquifer.html.

New Mexico Energy, Minerals and Natural Resources Department, Division of Mining and Minerals. Database. 2008. Internet accessed October 2008.

New Mexico Office of the State Engineer. October 2008. iWaters database. Internet accessed October 2008.

New Mexico WQCC. 2005. State of New Mexico Water Quality Act and the Water Control Commission Regulations.

United States Department of Agriculture, Forest Service. 2008. Final Environmental Impact Statement for Surface Management of Gas Leasing and Development. Jicarilla Ranger District, Carson National Forest, Rio Arriba County, New Mexico.

United States Department of the Interior. Bureau of Land Management. 2003. Final Farmington Resource Management Plan and Final Environmental Impact Statement. Farmington Field Office, Farmington, New Mexico.

United States Geological Survey. 2001. Groundwater Atlas of the United States: Arizona, Colorado, New Mexico and Utah. USGS Publication HA 730-C; http://capp.water.usgs.gov.

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District

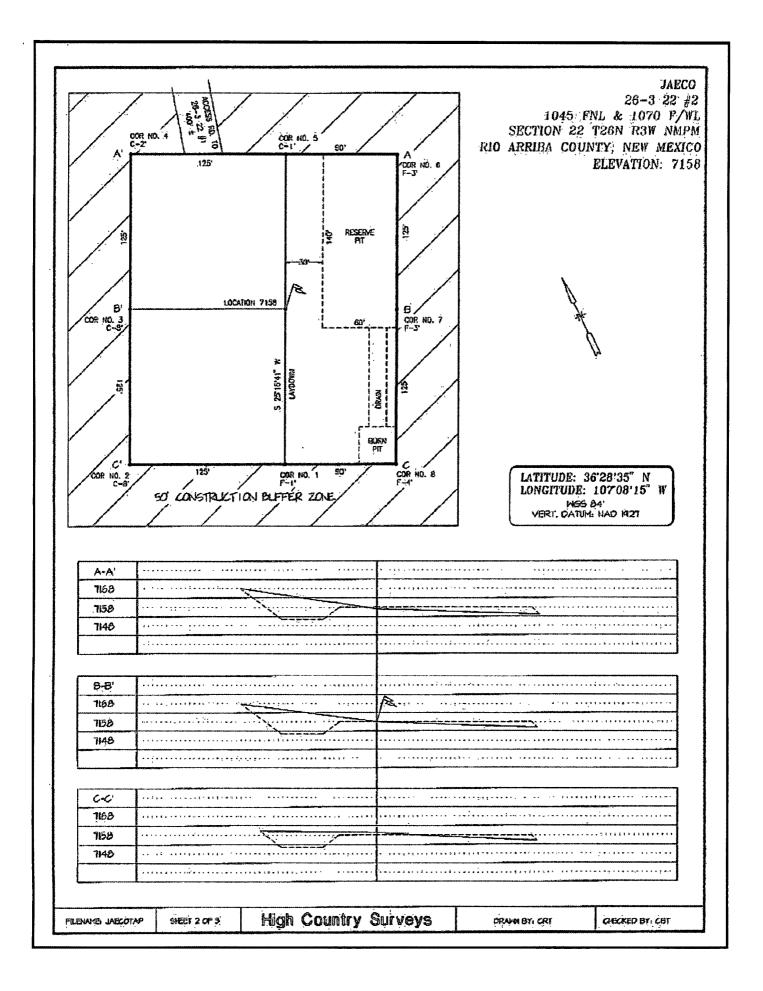
1625 N. French Dr., Hobbs, NM 83246

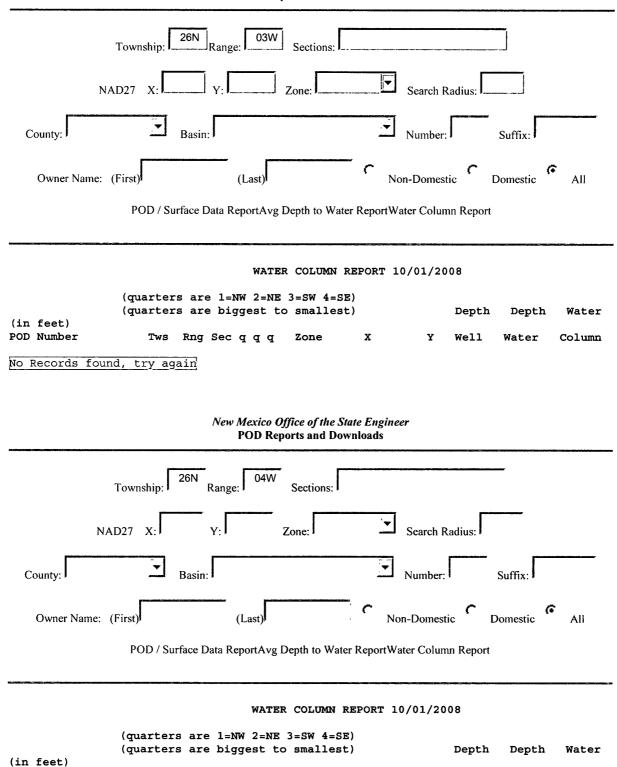
State of New Mexico

Boergy, Minerals & Natural Resources Department

Form C-102 Revised June 10, 2003

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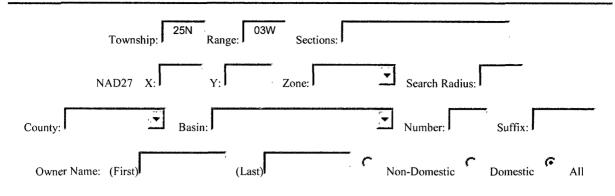
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Well

Water

Column

New Mexico Office of the State Engineer POD Reports and Downloads



POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

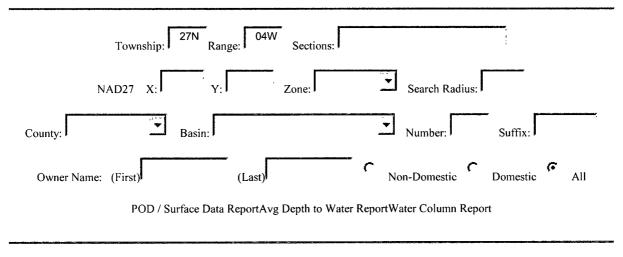
WATER COLUMN REPORT 10/01/2008

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

	(quarter	s are	e big	gge	st to	smallest)			Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	q	дq	Zone	X	Y	Well	Water	Column		
RG 79470	25N	03W	24	4	4 4				504	125	379		
RG 45161	25N	03W	33	3	4 1				640	165	475		
RG 49658	25N	03W	36	1	4 4				160	18	142		
SJ 02203	25N	03W	01	2	4				665	245	420		
SJ 01305	25N	03W	80	3	1 3				750	265	485		
SJ 02695	25N	03W	13	1	2 3				510	225	285		
SJ 02224	25N	03W	18	1	1 4				325	56	269		
SJ 02520	25N	03W	22	2	2 3				1000	850	150		
SJ 02520 DCL	25N	03W	22	2	2 3				1000	850	150		
SJ 02949	25N	03W	23	4	1 4				260	75	185		
SJ 02414	25N	03W	25	2	1 2				250	130	120		
SJ 03228	25N	03W	25	2	2 1				550	160	390		
SJ 03231	25N	03W	25	3	2 4				335	90	245		
SJ 02416	25N	03W	26	1	4 4				150	110	40		
SJ 02519	25N	03W	27	2	1 3				1215	650	565		
SJ 02519 DCL	25N	03W	27	2	1 3				1215	650	565		
SJ 02517 DCL	25N	03W	32	1	3 2				250	100	150		
SJ 02517	25N	03W	32	1	3 2				250	100	150		
SJ 02518 DCL	25N	03W	33	1	2 4				250	110	140		
SJ 02415	25N	03W	35	2	4 2				50	30	20		
SJ 01453	25N	03W	36	2	2				132	70	62		
SJ 02076	25N	03W	36	4	4 2				295	75	220		

Record Count: 22

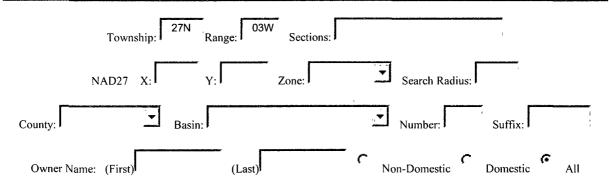
New Mexico Office of the State Engineer POD Reports and Downloads



WATER COLUMN REPORT 10/01/2008

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water (in feet) POD Number Tws Rng Sec q q q Zone Well Water Column SJ 00048 27N 04W 01 143 SJ 01049 27N 04W 18 4 2 2 15 SJ 01205 27N 04W 34 4 4 4 3054 750 2304

Record Count: 3



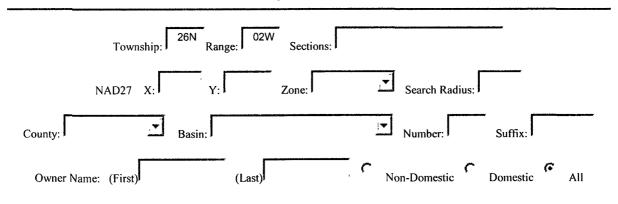
POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

WATER COLUMN REPORT 10/01/2008

Depth Depth Water (in feet) Well Water Column

No Records found, try again

New Mexico Office of the State Engineer POD Reports and Downloads



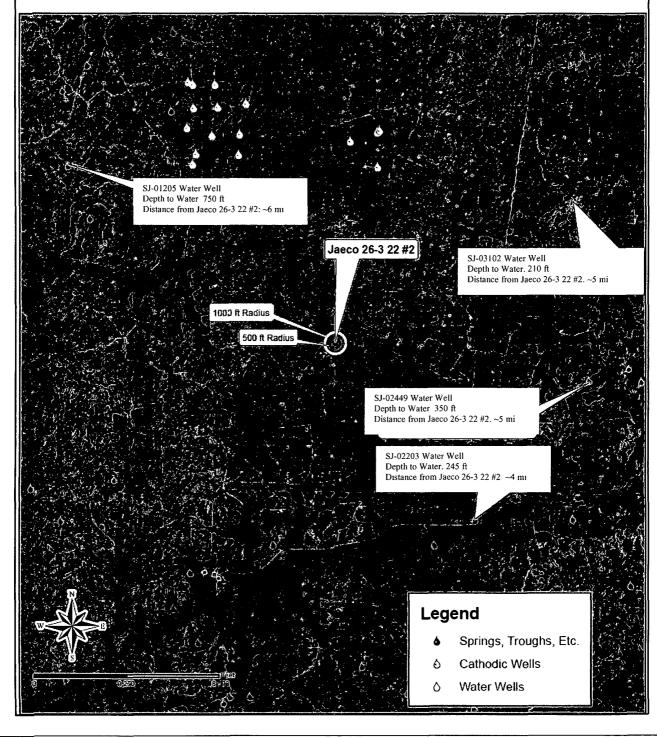
POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

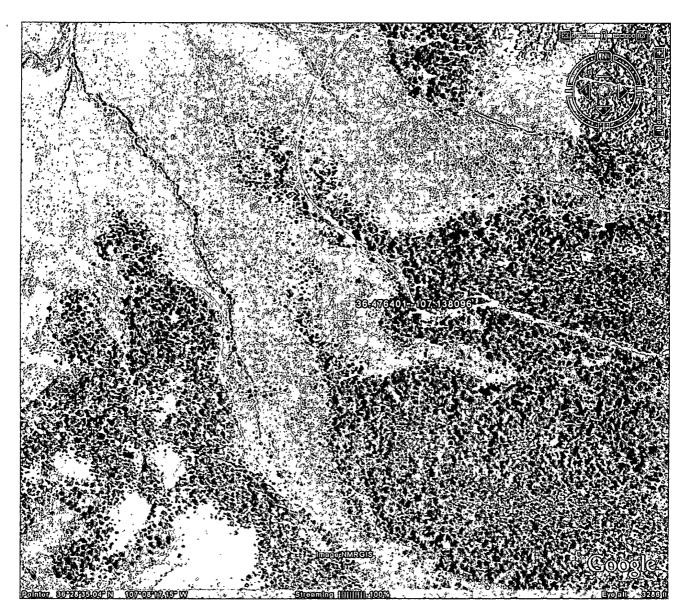
WATER COLUMN REPORT 10/01/2008

	(quarter	s are	1=1	₩ 2	=NE	3=SW 4=SE)			;			
	(quarter	s are	big	ges	t to	smallest)			Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	q q	q	Zone	X	Y	Well	Water	Column	
SJ 02963	26N	02W	02	3 3	2				1300			
SJ 03102	26N	02W	04	1 4	1				630	210	420	
SJ 02842	26N	02W	10	4 1	1				7603			
SJ 02889	26N	02W	12	3 3					7658			
SJ 03489	26N	02W	14	2 2	2				600			
SJ 02449	26N	02W	21	4 1	4				605	350	255	
SJ 02101	26N	02W	22	1 4	4				600	150	450	
SJ 03425	26N	02W	22	4 1	4				1500			
SJ 00419	26N	02W	22	4 4	1				160	15	145	
SJ 02964	26N	02W	23	1 2	2				342	150	192	
SJ 02905	26N	02W	24	3 3	3				500	180	320	

Record Count: 11

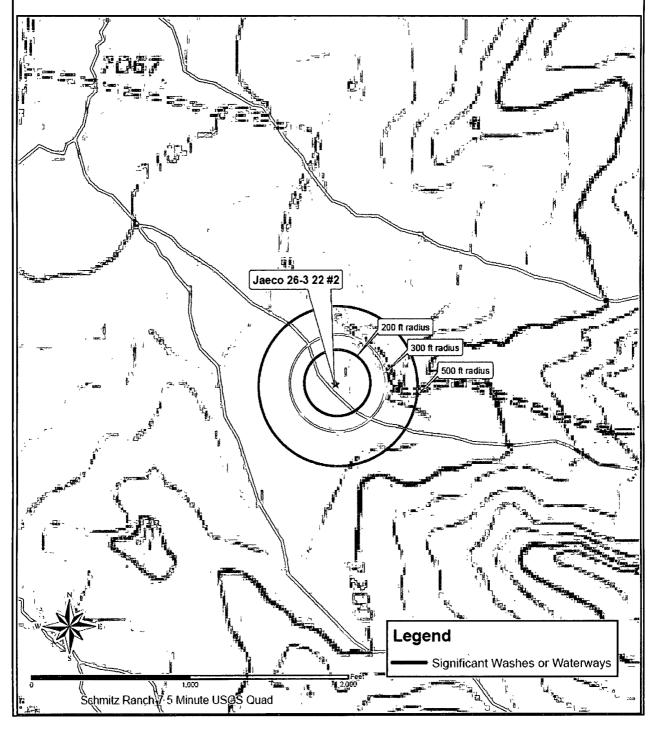
Siting Criteria Map I Water Wells, Cathodic Wells, & Springs Williams Exploration and Production Company Jaeco 26-3 22 #2 T26N, R3W, Section 22, NMPM Rio Arriba County, New Mexico





Enlarged Aerial of JAECO 26-3 22#002 Demonstrates no evidence of significant surface drainage features.

Siting Criteria Map II Topographic Features Williams Exploration and Production Company Jaeco 26-3 22 #2 T26N, R3W, Section 22, NMPM Rio Arriba County, New Mexico



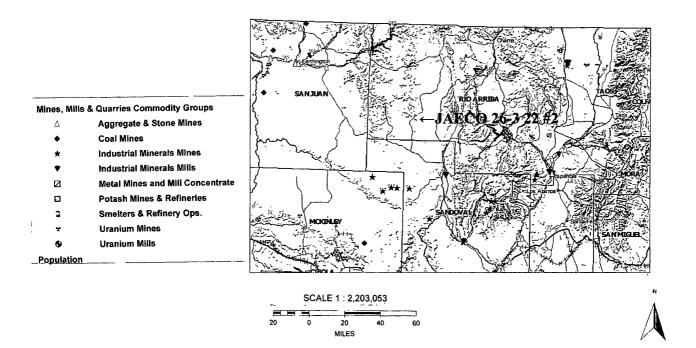
FEMA Map - 100-Year Floodplain:

As this location is within the Jicarilla Apache Reservation, FEMA maps are not available for the site. However, ortho and topographic maps indicate that the location is not within a floodplain.

Siting Criteria Compliance Demonstrations:

The Jaeco 26-3 22 #2 is not situated over a mine or a steep slope (see attached New Mexico Mines, Mills, and Quarries Map). Excavated pit material will not be located within 300 feet of a continuously flowing water course. The USFWS has not digitally mapped this area for wetlands, but topographic and ortho maps indicate that this upland region is not within 500 feet of any riparian areas or wetlands. The pit is not within 500 feet of any private, domestic fresh water well or spring or within 1000 feet of any other fresh water well or spring (see Siting Criteria Map I). The pit will not be within any incorporated municipal boundaries or defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. The location of the pit is not within 300 feet of any permanent residence, school, hospital, institution, or church. The location is not within 300 feet of a significant water course.

MMQonline Public Version



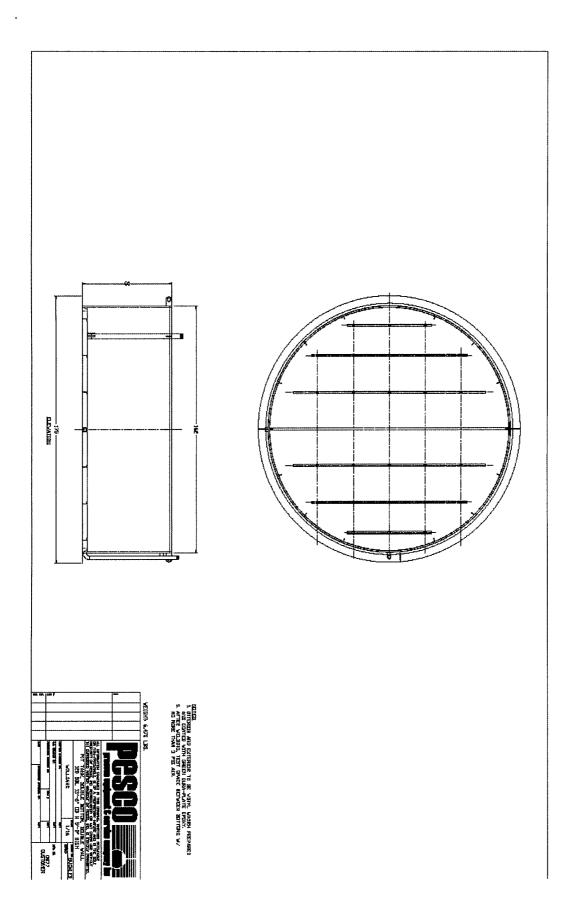
Williams Production Co., LLC San Juan Basin: New Mexico Assets

Production Pit: Buried Double-Wall Steel Tank
Design and Construction Plan

In accordance with Rule 19.15.17 NMAC, the following plan describes the general design and construction (D&C) of production pits using buried double-wall steel tanks on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. For those production pits which do not conform to this standard plan, a separate well specific D&C plan will be developed and utilized.

General Plan Requirements:

- 1. WPX will design and construct a production pit to contain liquids associated with the dehydration and compression of produced natural gas, which will prevent contamination of fresh water resources and protect public health and the environment.
- 2. The pit will be located as close as possible to the well and associated production/process equipment to minimize surface disturbance. Prior to excavation for the pit, topsoil will be stripped and stockpiled on the well location.
- 3. The excavation will have a firm compacted bottom and sidewalls that are stable for the soil conditions.
- 4. The BGT will be placed in the excavation such that there is a minimum 12 inch free board between the surrounding soils and the tank top. Backfilled soils will be carefully compacted to avoid damaging the tank.
- 5. The buried BGT will be constructed of steel with double-walls and double-bottom, welded following appropriate API and industry codes, coated with an epoxy based paint, covered with a steel #9 mesh screen, and equipped with a EFM to monitor high liquid levels and automatically shut off liquid discharges.
- 6. A solid riser pipe will be installed to allow withdrawal of liquids by suction. The riser will draw from the bottom of the BGT, capped when not in use and sloped to the pit to allow drainage of liquids not collected during withdrawal operations.
- 7. A solid riser pipe will be installed between the interstitial space of the double-walls to allow monthly inspection to determine tank integrity.
- 8. The BGT will be protected from run-on by the construction of a compacted earthen berm.
- 9. Fencing will be constructed to protect livestock/wildlife as specified by the federal Surface Management Agency or, if not federal land/minerals, NMOCD rule 17 requirements.
- 10. WPX will post a well sign in accordance with the federal Surface Management Agency and rule 19.15.3.103.



Williams Production Co., LLC San Juan Basin: New Mexico Assets

Production Pit: Buried Double-Wall Steel Tank Operations and Maintenance Plan

In accordance with Rule 19.15.17 NMAC, the following plan describes the general operations and maintenance (O&M)of production pits using subgrade tanks on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. For those production pits which do not conform to this standard O&M plan, a separate well specific O&M plan will be developed and utilized.

- 1. WPX will only allow produced liquids meeting the RCRA exemption for O&G wastes to be stored in the SGT. WPX will not discharge or store any hazardous waste as defined under RCRA 40CFR 261 and 19.15.1.7.W(3) NMAC in any temporary pit.
- Produced water will be disposed by evaporation or transport any of the following NMOCD approved facilities depending on the well location: Basin Disposal, Inc in Bloomfield, New Mexico (Permit # NM-01-005), Williams Rosa SWD#1 (Permit # SWD-916), Williams Rosa #94 (Permit # SWD-758), Burlington Resources Jillson SWD#1 (Permit #R10168A), or other NMOCD approved water disposal facilities.
- 3. WPX shall maintain sufficient freeboard for to prevent overtopping. Discharges to the pit will be shutoff automatically if the high-level alarm is triggered from the EFM or manually if the EFM is not functional.
- 4. Any oil or hydrocarbon collecting on the pit will be removed. Saleable condensate will be returned to the sales tank. Slop oil from compression will be recycled with Safety Kleen, Farmington, NM or Hydropure, Aztec, NM (No Permit Required).
- 5. If the tank integrity is compromised:
 - a. All discharges will be shut off to the pit.
 - b. All liquids will be removed as soon as possible but no more that within 24 hours of discovery
 - c. WPX will notify and report to NMOCD as follows:
 - i. If the release is less than 25 bbls, the Aztec District Office by phone or email within 48-hours of discovery and repair.
 - ii. If the release is suspected to be greater than 25 bbls, the Aztec District Office and the Environmental Bureau Chief by phone for immediate verbal notification pursuant to 19.15.3.116.B (1)(d).
 - d. Written Spill/Release reports will be submitted on Form C-141 per 19.15.3.116.C NMAC within 15 days to the Aztec District Office.
- 6. Berms around the perimeter of the pit shall be maintained as protection from run-on.
- 7. WPX will inspect the SGT pit monthly. Electronic copies of the inspections will be kept at the WPX San Juan Basin office for a minimum of five years following completion. Copies of the inspections will be available to NMOCD upon request.

Williams Production Co., LLC San Juan Basin: New Mexico Assets

Production Pit: Buried Double-Wall Steel Tank Closure Plan

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general closure requirements of below-grade tanks (BGT) on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard closure procedure for all BGTs regulated under Rule 19.15.17 NMAC and operated by WPX. For those closures which do not conform to this standard closure plan, a separate well/pit specific closure plan will be developed and utilized.

Closure Conditions and Timing:

Pursuant to 19,15,17,13 (A) NMAC, WPX will initiate closure of any BGT should any one of these conditions occur:

- The Division requires closure because of imminent danger to fresh water, public health or the environment.
- The integrity of the BGT fails. Notification will be within 48 hours to the Division and closure will be schedule as specified in 19.15.17.12 (A)(5) NMAC.
- WPX chooses to take the BGT out-of-service due to operational needs. Closure under these conditions will be closed within 60 days of cessation of the BGT's operation.
- BGTs installed prior to June 16, 2008 that do not meet the requirements under 19.15.17.11.I(6) NMAC and WPX chooses not to retrofit or upgrade. Closure under these conditions will be completed within five years (by June 16, 2013).

General Plan Requirements:

- Prior to initiating any BGT Closure except in the case of an emergency, WPX will review County Tax Records for the current surface owner of record. The surface owner of record will be notified of the intent to closure the BGT by certified mail and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner of record will be notified as soon as practical.
- 2. Notice of Closure will be given to the Aztec District office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
 - a. Operators Name (WPX)
 - b. Well Name and API Number
 - c. Location (USTR)
- 3. All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks, temporary frac tank, ...). The well will be temporarily shut in until the rerouting is completed.
- 4. All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed at one of the following NMOCD approved facilities depending on the proximity of the BGT site: Rosa Unit SWD #1 (Order: SWD-916, API: 30-039-27055), Rosa Unit #94 (Order: SWD-3RP-1003-0, API: 30-039-23035), Jillson Fed. SWD #001 (Order: R10168/R10168A, API: 30-039-25465), Middle Mesa SWD #001 (Order: SWD-350-0, API: 30-045-27004) and/or Basin Disposal (Permit: NM-01-0005).
- 5. Solids and sludges will be shoveled and /or vacuumed out for disposal at Envirotech (Permit Number NM-01-0011).
- 6. WPX will obtain prior approval from NMOCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liners materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass

tanks and liner materials will meet the conditions of paragraph 1 subsection D of 19.15.9.712 NMAC. Disposal will be at a licensed disposal facility, presently San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426.

- 7. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure will be removed from the location.
- 8. Following removal of the tank and any liner material, a five-point composite sample will be taken of the excavation and tested per 19.15.17.13(E)(4) NMAC as identified in Table 1. Grab samples will be collected from any area that is wet, discolored or showing other evidence of a release. Results will be report to the Division following receipt from the lab on Form C-141.

Table	1.	Closure	Criteria	for	RCTs
IUDIC	١.	CIOSOIC	CITICHA	101	DO 13

Components	Testing Methods	Closure Limits (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2
BTEX	EPA SW-846 Method 8021B or 8260B	50
TPH	EPA SW-846 Method 418.1(1)	100
Chlorides	EPA SW-846 Method 300.1(1)	250 ⁽²⁾

⁽¹⁾ Method modified for solid waste.

- 9. If the Division and/or WPX determine there is a release, WPX will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC.
- 10. Upon completion of the tank removal, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot of top soil or background thickness whichever is greater and to existing grade. The surface will be recontoured to match the native grade and prevent ponding.
- 11. For those portions of the former pit area no longer required for production activities, WPX will seed the disturbed areas the first growing season after the pit is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. 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 maintained that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. Note: If a surface owner agreement requires reseeding or other surface restoration that do not meet the re-vegetation requirements of 19.15.17.13.I NMAC then WPX will submit the proposed alternative with written documentation that the surface owner agrees to the alternative, for Division approval.
- 12. For those portions of the former pit area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

Closure Report:

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the BGT closure on a Closure Report using Division Form C-144. The Report will include the following:

- Proof of Closure Notice (surface owner & NMOCD)
- Backfilling & Cover Installation
- Site Diagram with coordinates
- Available Inspection reports

- Confirmation Sampling Analytical Results
- Disposal Facility Name(s) and Permit Number(s)
- Application Rate & Seeding techniques
- Photo Documentation of Reclamation

⁽²⁾ If background concentration of Chlorides greater than 250 mg/Kg, then higher concentration will be used for closure.