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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Alternative Method:

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application				
Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method				
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request				
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.				
Operator: Williams Operating Co. LLC OGRID #: 120782				
Address: PO Box 640 / 721 S Main Aztec, NM 87410				
Facility or well name: Rosa Unit #090C				
API Number:3004534278 OCD Permit Number:				
U/L or Qtr/Qtr <u>G</u> Section <u>33</u> Township <u>32N</u> Range <u>6W</u> County: <u>San Juan</u>				
Center of Proposed Design:   Latitude   36.93928N   Longitude   -107.46140W   NAD:   □ 1927 ☒ 1983				
Surface Owner:  Federal  State  Tribal Trust or Indian Allotment				
2.    Pit: Subsection F or G of 19.15.17.11 NMAC				
Temporary:  Drilling  Workover				
Permanent Emergency Cavitation P&A				
☐ Lined ☑ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other				
☐ String-Reinforced				
Liner Seams: ☐ Welded ☒ Factory ☐ Other Volume: 20,000 bbl Dimensions: L 140' x W 70' x D 12'				
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				
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other ☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other				
Lined   Unlined Liner type: Thickness   mil   LLDPE   HDPE   PVC   Other				
4. // NECEIVED 61				
Below-grade tank: Subsection I of 19.15.17.11 NMAC				
Volume:bbl Type of fluid: \\2				
Tank Construction material:				
Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off				
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other				
Liner type: Thicknessmil				

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

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Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specifyBLM APD Stipulation	hospital,
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)	
Signs: Subsection C of 19.15.17.11 NMAC  ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  ☐ Signed in compliance with 19.15.3.103 NMAC	
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying above-grade tanks associated with a closed-loop system.	priate district pproval.
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ 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

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.
<ul> <li>         ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>         ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC</li> <li>         ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>         ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> </ul>
<ul> <li>☑ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>☑ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC</li> <li>and 19.15.17.13 NMAC</li> </ul>
Previously Approved Design (attach copy of design) API Number: or Permit Number:
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 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  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  Preeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan  Emergency Response Plan  Oil Field Waste Stream Characterization  Monitoring and Inspection Plan  Erosion Control Plan  Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative  Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)  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.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids,				
facilities are required.  Disposal Facility Name:	Dienogal Facility Parmit Number			
Disposal Facility Name: Disposal Facility Permit Number:				
Disposal Facility Name: Disposal Facility Permit Number: Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations? 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 G of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.				
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Dat	a 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; Dat	a obtained from nearby wells	<ul><li>☐ Yes ⊠ No</li><li>☐ NA</li></ul>		
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Database search;	a obtained from nearby wells	Yes □ No □ NA		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	nificant watercourse or lakebed, sinkhole, or playa	☐ Yes ⊠ No		
Within 300 feet from a permanent residence, school, hospital, institution, or church - Visual inspection (certification) of the proposed site; Aerial photo; Satellite		☐ Yes ⊠ No		
Within 500 horizontal feet of a private, domestic fresh water well or spring that les watering purposes, or within 1000 horizontal feet of any other fresh water well or so NM Office of the State Engineer - iWATERS database; Visual inspection	pring, in existence at the time of initial application.	☐ Yes ⊠ No		
Within incorporated municipal boundaries or within a defined municipal fresh wat adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approx		☐ Yes ☒ No		
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visu	al 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	g and Mineral Division	☐ Yes ⊠ No		
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map</li> </ul>	y & Mineral Resources; USGS; NM Geological	☐ Yes ⊠ No		
Within a 100-year floodplain FEMA map		☐ Yes ⊠ No		
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  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  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				

Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate	te and complete to the best of my knowledge and belief.
Name (Print): Michael K. Lane	Title: Sr. EH & S Specialist
Signature:	Date: 11/3/09
e-mail address: myke.lane@williams.com	Telephone: 505-634-4219
OCD Approval: Permit Application (including closure plan) Closure Plan	un (only) OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date:
Title: Enviro /spec	OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection k Instructions: Operators are required to obtain an approved closure plan prior to The closure report is required to be submitted to the division within 60 days of th section of the form until an approved closure plan has been obtained and the closure plan plan has been obtained and the closure plan plan plan plan plan plan plan plan	implementing any closure activities and submitting the closure report. e completion of the closure activities. Please do not complete this
Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternat If different from approved plan, please explain.	ive Closure Method  Waste Removal (Closed-loop systems only)
23. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please indentify the facility or facilities for where the liquids, drilli</u>	
two facilities were utilized.	ng jamus ana arm cannigs were ansposed. Ose anaenment ij more than
-	Dismond Carilles Daniel Mountain
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or i  Yes (If yes, please demonstrate compliance to the items below) No	n areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and operation	ns:
☐ Site Reclamation (Photo Documentation) ☐ Soil Backfilling and Cover Installation	
Re-vegetation Application Rates and Seeding Technique	
24. <u>Closure Report Attachment Checklist</u> : <u>Instructions</u> : Each of the following item	ms 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)	
	de NAD: 🔲 1927 🔲 1983
25.	
Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.	
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

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

Temporary Pit
Drilling/Completion and Workover

# Type of action & rational

•	Drilling Pit to Completion/Workover Pit Williams proposes to utilize the same pit built to drill the well for the subsequent workover/completion activities noted in the well APD and necessary to bring the subject well into optimum production. Utilization of the same pit will minimize environmental impacts and waste of resources (i.e. waste of fuel and associated greenhouse emissions, surface disturbance) Workover Rig to be mobilized within six months of Drilling Rig demobilized.
☐ Transfer	Drilling Pit fromto
•	(well name)  As required by the Surface Owner and/or Surface Managing Agency (e.g. BLM, USFS, Tribal), Williams is being required to utilize the same well pad for multiple new wells. In these cases, Williams proposes to utilize the same pit for all the new wells to be drilled. Utilization of the same pit will minimize environmental impacts and waste of resources (i.e. waste of tuel and associated greenhouse emissions, surface disturbance). Williams has permitted the common pit for each well, and requests permission to transfer the pit since the first well has been drilled and completed.  Pit to be considered closed for first well named.  Drill Rig to be rig-up within six months of former rig demobilized.
•	As required by the Surface Owner and/or Surface Managing Agency (e.g. BLM, USFS, Tribal), Williams can not conduct construction or similar activities during Seasonal Closures and therefore can not meet the closure requirements specified in the referenced rule. Closure will be scheduled and initiated as soon as the Seasonal Closure is lifted.

## Transfer Plan

In accordance with Rule 19.15.17 NMAC, this Modification/Iransfer (M/I) Plan describes the modifications to the Design and Construction (D&C), Operations and Maintenance (O&M) and Closure Plans for the transfer of a previously permitted Temporary Pit on a Williams Production Co, LLC (WPX) location in the San Juan Basin of New Mexico.

This M/T plan will be followed in that case

#### D&C Plan:

No proposed changes. Williams will comply with the original Design Plan. This will
include ensuring that the original design of the pit is large enough to accommodate all
of the fluids and solids.

## O&M Plan:

- The pit is to be considered out-of-service for the purpose of drilling the referenced well.
- The pit status will be considered in-service during this transition to and during the scheduled workover/completion activities.
- Pit inspections during the period between drill-rigdown and workover/completion-rigup will be weekly.
- The fluid will be removed within 30 days after the completion of each process.
- Williams will conduct an inspection and take photo documentation no more than seven days prior to the pit being placed back into use.
- Williams will notify NMOCD district office 7-14 days prior to start of each process.
- If any mud and solids require removal to ensure the two-foot freeboard is maintained, it will be removed by use of a Supersucker® (or similar equipment that will not damage the liner) and disposed of offsite at Envirotech (Permit Number NM-01-0011).
- Williams will sample the contents of the pit after each process is completed for Benzene, BTEX, and TPH (only required for a pit used for multiple wells).
- No other modifications or changes to the operation and maintenance of the pit will take place.

## Closure Plan:

- Due to the use of the pit for multiple processes the confirmation sampling will occur only
  after the contents have been stabilized to ensure a representative sample (only required
  for a pit used for multiple wells).
- Williams will submit the photo documentation and testing stated above with the C-144 closure.
- All APD #s and well names will be placed on the C-144 form when the closure form is filed.
- No additional proposed changes except as noted above, Williams will comply with the rest of the original Closure Plan.

Williams realizes this does not relieve them of any of the requirements of 19.15.17 NMAC.