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.

| 7/30 | | Pit, Closed-Loop System, Below-Grade Tank, or | |
|------|-----------------|---|--|
| 7 ' | Propos | sed 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 hability 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. | | | | | |
|---|--|--|--|--|--|
| I. | | | | | |
| Operator: WILLIAMS PRODUCTION COMPANY, LLC OGRID #: 120782 | | | | | |
| Address: PO Box 640 Aztec, NM 87410 | | | | | |
| Facility or well name: ROSA UNIT #149 | | | | | |
| API Number: 3003925501 OCD Permit Number: | | | | | |
| Section 12G Township 31N Range 06W County RIO ARRIBA | | | | | |
| Latitude: 36.91709000000000 Longitude 107.41101 NAD: 1983 Surface Owner: FEDERAL | | | | | |
| | | | | | |
| 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: bbl Dimensions: L x W x D | | | | | |
| 3, | | | | | |
| Closed-loop System: Subsection H of 19.15.17.11 NMAC | | | | | |
| Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) | | | | | |
| ☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other | | | | | |
| | | | | | |
| Liner Seams: Welded Factory Other | | | | | |
| | | | | | |
| | | | | | |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC | | | | | |
| ☑ Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: 120 bbl Type of fluid: PRODUCED WATER | | | | | |
| 4. Below-grade tank: Subsection of 19.15.17.11 NMAC Volume: 120 bbl Type of fluid: PRODUCED WATER Tank Construction material: FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER | | | | | |
| Tank Construction material:FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER | | | | | |
| Tank Construction material:FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER Secondary containment with leak detection □ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off | | | | | |
| Tank Construction material:FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER | | | | | |
| Tank Construction material: FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Visible sidewalls and liner Visible sidewalls only Other | | | | | |

| 6. Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) | | | | |
|--|--------------------|--|--|--|
| Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, | | | | |
| institution or church) ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet | | | | |
| Alternate. Please specify | | | | |
| 7. | | | | |
| Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) | | | | |
| | | | | |
| ☐ 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 | | | | |
| 9. Administrative Approvals and Exceptions: | | | | |
| Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. | | | | |
| Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s). Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau of | office for | | | |
| consideration of approval. | | | | |
| Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. | | | | |
| 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 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. | □ v□ v. | | | |
| 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 | | | |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. | ☐ Yes ☐ No ☐ NA | | | |
| (Applies to permanent pits) Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | | | | |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock 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 Within the area overlying a subsurface mine. | | | | |
| - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | | | | |
| 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. - FFMA map | | | | |

| Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.13 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: | | | | |
| Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC | | | | |
| Previously Approved Design (attach copy of design) API Number: | | | | |
| Previously Approved Operating and Maintenance Plan API Number: (Applies only to closed-loop system that use | | | | |
| above ground steel tanks or haul-off bins and propose to implement waste removal for closure) | | | | |
| Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC 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 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 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) | | | | |
| 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 I 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 I of 19.15.17.13 NMAC | | | | |

| Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two | | | | | |
|---|--|---|--|--|--|
| facilities are required. | arilling fluias and arill cuttings. Use attachment if t | nore than two | | | |
| 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? | | | | |
| 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 | | | | | |
| 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; Database search; | 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; Database search; | a 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; Database search; | ta obtained from nearby wells | ☐ Yes ☐ No ☑ NA | | | |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other siglake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site | gnificant watercourse or lakebed, sinkhole, or playa | ☐ Yes ⊠ No | | | |
| Within 300 feet from a permanent residence, school, hospital, institution, or churcl - Visual inspection (certification) of the proposed site; Aerial photo; Satellit | | ☐ 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 some NM Office of the State Engineer - iWATERS database; Visual inspection | spring, 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-Minin | g and Mineral Division | ☐ Yes ⊠ No | | | |
| Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map | 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 Subsection F 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 | | | | | |

| · | | | | |
|---|--|--|--|--|
| Operator Application Certification: I hereby certify that the information submitted with this application is true, accur | rate and complete to the best of my knowledge and belief. | | | |
| Name (Print): | Title: | | | |
| Signature: | Date: | | | |
| e-mail address: | Telephone: | | | |
| OCD Approval: Permit Application (including closure plan) Closure P OCD Representative Signature: Title: | Approval Date: (C) COD Conditions (see attachment) OCD Permit Number: | | | |
| Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date:4/30/2010 | | | | |
| 22. Closure Method: Waste Excavation and Removal On-Site Closure Method Alternated If different from approved plan, please explain. | ative Closure Method Waste Removal (Closed-loop systems only) | | | |
| 23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please indentify the facility or facilities for where the liquids, drift two facilities were utilized. | | | | |
| Disposal Facility Name: | Disposal Facility Permit Number: | | | |
| Disposal Facility Name: | Disposal Facility Permit Number: | | | |
| Were the closed-loop system operations and associated activities performed on or Yes (If yes, please demonstrate compliance to the items below) No | | | | |
| Required for impacted areas which will not be used for future service and operation. Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation. Re-vegetation Application Rates and Seeding Technique. | ions | | | |
| Closure Report Attachment Checklist: Instructions: Each of the following it mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude Longit | | | | |
| 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 requires | | | | |
| | EH&S Coordinator | | | |
| | Date:10-19-10hone:505-634-4209 | | | |
| e-mail address: Vanessa neids@williams.com | | | | |

Below-Grade Tank Removal Closure Report

Well: (Rosa Unit#149)
API No: 30-03925501

Location: G-S12-T31N-R06W, NMPM



In accordance with Rule 19.15.17.13 NMAC, the following report describes the general closure of the referenced below-grade tanks (BGT) on Williams Production Co, LLC (WPX) location in the San Juan Basin of New Mexico. The closure follows this 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 the 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 initiated within 60 days of cessation of the BGT's
 operation.
- BGTs installed prior to June 16, 2008 that do not meet the requirements under 19.15.17.11.1(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 landowner of record. The landowner 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 landowner of record will be notified as soon as practical.

<u>Williams notified the SMA of its intent to clean close the BGT via Certified Mail on March 10, 2009 see attached. No return receipt required per BLM:FFO/NMOCD MOU dated 5/4/09.</u>

- 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)

Aztec District office was notified of Williams E&P intent to close on (04/15/2010). Email attached.

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.

<u>Williams closed the BGT used by the separator and piped all liquids to the Rosa Unit#149</u>
<u>Produced Water Storage Tank.</u>

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).

<u>Produced water in the BGT prior to closures was removed by vacuum truck and hauled to the Rosa Unit disposal wells listed.</u>

5. Solids and sludges will be shoveled and /or vacuumed out for disposal at Envirotech (Permit Number NM-01-0011).

No solids or sludge required removal prior to excavation and removal of the tank.

6. Williams 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 or 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.

The fiberglass tank and plastic liner was disposed of at the San Juan Regional Landfill.

- 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.

 The fiberglass tank and plastic liner were removed offsite. All other piping and equipment remains in use. See attached photo.
- 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.

| Ia | ble | 1: | C | losure | ; C | riteria | Ţ | or | B | G | IS | |
|----|-----|----|---|--------|-----|---------|---|----|---|---|----|--|
| | | | | | | | | | | | | |

| Components | Testing Methods | Closure Limits (mg/Kg) | Sample Results (mg/Kg) |
|------------|----------------------------------|---------------------------|------------------------------|
| Benzene | EPA SW-846 Method 8021B or 8260B | 0.2 | ND |
| BTEX | EPA SW-846 Method 8021B or 8260B | 50 | ND |
| TPH | EPA SW-846 Method 418.1(1) | 100 | 29.8 |
| Chlorides | EPA SW-846 Method 300.1(1) | 250(2) | 5 |

⁽¹⁾ Method modified for solid waste.

9. If the Division and/or Williams determine there is a release, Williams will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC.

No release detected.

10. Upon completion of the tank removal, and any necessary soil remediation, the excavation will be backfilled with non-waste earthen material compacted to native and covered with a minimum of one foot of top soil or background thickness. The surface will be recontoured to match the native grade.

<u>Pit area backfilled with clean earthen material following sample results. No contaminated soil taken off site.</u> Backfill compacted to avoid settling and pit area remains in use for production operations.

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

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 (un-impacted) 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: WPX assumes the seeding stipulations including mix and seeding methods specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) APD are Division-approved methods unless notified by the Division of their unacceptability. If a landowner agreement requires reseeding or other surface restoration that does not meet the revegetation requirements of 19.15.17.13., I then WPX will submit the proposed alternative with written documentation that the landowner agrees to the alternative, for Division approval.

<u>Pit area along with unused portions of well pad interim reclaimed and following P&A entire location to be reclaimed and recontoured in accordance with Surface Management Agency requirements in APD-COAs and per BLM:FFO/NMOCD MOU dated 5/4/09.</u>

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. See above notes.

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)
- Re-vegetation Application Rate & Seeding techniques
- Photo Documentation of Reclamation



Explanation & Production FO Box 640 Aziec INM 61137 505/634 4219 505/634 4214 Fax

March 10, 2009

Mr. Mark Kelly Bureau of Land Management Farmington Field Office 1235 La Plata Hwy Farmington, NM 87401

Sent via Certified Mail

RE. Notification of Production Pit Closure

Rule 19 15.17 13 NMAC

Production Pits associated Natural Gas Development

Operated by Williams Production Co. LLC

Pursuant to Rule 19.15-17-13 NMAC, this correspondence is to notify the Bureau of Land Management. Farmington Field Office, of Williams Production LLC's (Williams') intent to clean close all production pits on the attached list of wells operated with the District in San Juan County and Rio Arriba County, New Mexico Closure will follow the plan included with this correspondence

Thank you for your consideration. If there are any questions or additional information is requested, please contact me at (505) 634-4209

Respectfully submitted.

Holly C. Perkins EH&S Specialist

Encl: Williams Production Pit Inventory List (Federal wells)

San Juan Basin - New Mexico Assets. Below-Grade Tank Closure Plan

cc Environmental File

Meador, Tasha

From: Lane, Myke

Sent: Thursday, April 15, 2010 8:38 AM

To: Powell, Brandon, EMNRD

Cc: Meador, Tasha; Basye, Matt

Subject: Closure Notice - Rosa 149

Brandon: Williams tentatively plans to initiate closure of the following BGT later this week, depending on weather and available resources.

| WELLSITE | API | FMT | SEC | TWN | RNG | |
|-----------|------------|-----------|-----|-----|-----|--|
| | | | | | | |
| | | | | | | |
| Rosa #149 | 3003925501 | BLANCO MV | 12G | 31N | 06W | |

Please contact me if there are any problems or you request additional information. Thanks for your consideration

Michael K. (Myke) Lane, PE EH&S Team Leader - San Juan Basin Operations 721 S. Main/PO Box 640, Aztec, NM 87410 (505) 634-4219(off); -4205(fax); 330-3198(cell)

"The problems we face cannot be resolved at the same level of thinking as that which gave rise to them!"--- shared with me by Brent Hale

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

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

| OPERATOR | | Release Notification and Corrective Action | | | | | | | | | | | | |
|--|--|--|------------------|------------|-------------------|------------|----------------|---------------------|-------------|--------------|-------------|-----------|----------|-------|
| Name of Company WILLIAMS PRODUCTION, LLC Contact Vanessa Fields P.O. BOX 640, AZTEC, NM 87410 Telephone No. (505) 634-4209 Facility Name Ross Unlife 149 Facility Type Well Site Surface Owner: Federal | | | | | | | OPERA | ГOR | | | al Report | | Final R | eport |
| Facility Name | Name of Co | mpany | WILLIAMS | PRODU | CTION, LLC | | | | | | <u></u> _ | | | |
| Surface Owner: Federal Mineral Owner: Lease No. LOCATION OF RELEASE Unit Letter Section Township Range 12 31N 06W Feet from the North/South Line Feet from the East/West Line County Latitude 36.9170902N Longitude -107.41101W NATURE OF RELEASE Type of Release No Release Occurred Volume of Release Volume of Release North Regular Of Source Of Release North Regular North Regular Of Release North Regular North | | | P.O. BOX 6 | 40, AZTI | EC, NM 87410 | | | | | | | | | |
| LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County Latitude 31N 06W Longitude -107.41101W NATURE OF RELEASE Volume Recovered Volume Recovered Source of Release North Required Date and Hour of Occurrence Date and Hour of Discovery If YES, To Whom? By Whom? Date and Hour Problem Pro | Facility Nar | ne | Rosa Unit# | 149 | | | Facility Typ | e Well Site | | | | | | |
| Latitude 36.9170902N Longitude -107.41101W NATURE OF RELEASE | Surface Ow | ner: Fede | ral | | Mineral C |)wner: | | | | Lease N | lo. | | | |
| Latitude 36.9170902N Longitude -107.41101W NATURE OF RELEASE Type of Release No Release Occurred Volume of Release Volume Recovered Date and Hour of Discovery If YES, To Whom? Was Immediate Notice Given? Was a Watercourse Reached? Date and Hour of Occurrence Date and Hour of Discovery If YES, Volume Impacting the Watercourse. Date and Hour If YES, Volume Impacting the Watercourse. Describe Cause of Problem and Remedial Action Taken.* No action required Describe Area Affected and Cleanup Action Taken.* N/A Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required for report and/or file certain release notifications and perform corrective actions for releases which may endanger public health for the environment. The acceptance of a C-141 report by the NMOCD marked as 'Final Report' does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. The acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, of local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Printed Name: Vanessa Fields | | | | | LOCA | TIOI | N OF REI | LEASE | | | | | | |
| Latitude | Unit Letter | Section | Township | Range | Feet from the | North/ | South Line | Feet from the | East/V | est Line | County | | | |
| Latitude | G | 1.0 | 2121 | 06111 | | | | | | | | | | ļ |
| Type of Release No Release Occurred Volume of Release Volume Recovered | | 12 | 31N | _06W | | | | <u> </u> | | | | | | |
| Type of Release No Release Occurred Source of Release Source of Release Was Immediate Notice Given? Yes No Not Required By Whom? Date and Hour of Occurrence If YES, To Whom? Date and Hour If YES, Volume Impacting the Watercourse. If YES, Volume Impacting the Watercourse. If A Watercourse was Impacted, Describe Fully.* N/A Describe Cause of Problem and Remedial Action Taken.* No action required Describe Area Affected and Cleanup Action Taken.* N/A Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground waters, burnan health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, of local laws and/or equilations. OIL CONSERVATION DIVISION Signature: OIL CONSERVATION DIVISION Approved by District Supervisor: | | | Lat | itude | _36.9170902N | | Longitude | 107.41101 | W | | | | | |
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| Title: EH&S Coordinator Approval Date: Expiration Date: | Printed Name: Vanessa Fields Approved by District Supervisor. | | | | | | | | | | | | | |
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| E-mail Address: Vanessa.fields@williams.com Conditions of Approval: | | | | | | | | | | | | | | |
| Date: 10-19-10 Phone: (505) 634-4209 | Date: 10-10 | 9-10 | | Phon | ne: (505) 634-420 | 9 | Attached | | | | | | | |

^{*} Attach Additional Sheets If Necessary

Below-Grade Tank Removal 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 19.15.17.11.1(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:

- 1. 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 shutin 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

Production Pit: Fiberglass Below-Grade Tank

Although these tanks have performed well to protect the public health, welfare and environment, in accordance with Rule 19.15.17.13.A (4) NMAC, Williams will removed all BGTs constructed of fiberglass by June 16, 2013. These tanks do not meet the construction/design standards specified in 19.15.17.11 (1-4). The following plans describes the general design and construction (D&C) and Operations and Maintenance (O&M)of these production pits used on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico.

Design and Construction Plan

The pit is located as close as possible to the well and associated production/process equipment to minimize surface disturbance. The excavation bottom and sidewalls were compacted prior to installation of the pit. The BGT consisted of single-wall fiberglass tank following appropriate API and industry codes, placed in a 20-mil High-Strength Polyethylene resin (Permeability Rating – 0.041 USPerms), and the liner banded to the tanks. A 2" Sch-40 PVC riser was placed between the tank and liner as a leak-detection inspection port. See the attached Schematic and liner spec sheet. The pit is protected from runon by the construction of a compacted earthen berm. Fencing is constructed to protect livestock/wildlife as specified by the federal Surface Management Agency or, if not federal land/minerals requirements. WPX posts a well sign in accordance with the federal Surface Management Agency and rule 19.15.3.103.

Operations and Maintenance Plan

- 1. WPX only allows 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 is 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. WPX maintains sufficient freeboard for to prevent overtopping. Discharges to the pit will be shutoff if the liquid level does not provided sufficient free-board and liquid removal can not be scheduled in a timely manner. Any oil or hydrocarbon collecting on the pit is removed. Saleable condensate is returned to the sales tank. Slop oil from compression is recycled with Safety Kleen, Farmington, NM or Hydropure, Aztec, NM (No Permit Required).
- 2. 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.
- 3. Berms around the perimeter of the pit, shall be maintained as protection from run-on.
- 4. WPX will inspect the BGT 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.

Production Pit: Below-Grade 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 procedure for all out-of-service BGTs used to store produced liquids during production operations at gas wells 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. All closure activities will include proper documentation and will be submitted to OCD within 60 days of the pit closure on a Closure Report using Division Form C-144. The Report will include the following:

- Plot Plan (Pit Diagram)
- Available Inspection reports

- Sampling Results
- Waste disposal documentation

General Plan Requirements:

- 1. 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.
- 2. All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed of by injection at one of the Williams Production Rosa Unit Salt Water Disposal wells: Rosa SWD #1 (API: 30-039-27055) I-23-31N-06W Permit SWD-916 or Rosa Unit #94 (API: 30-039-23035) K-16-31N-05W, Permit SWD-758.
- 3. Notice of Closure will be given to the landowner or SMA, and 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)
- The BGT and all associated materials will be removed, and recycled, reused, or disposed, of in a Division-approved facility. All materials that can not be recycled or reused will be treated a solid waste and will be disposed of at a licensed disposal facility (probably San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426).
- 5. 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(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), a release will be reported following Rule 116 and impacted soils will be excavated and hauled to Envirotech Landfarm near Bloomfield, NM (NMOCD Permit NM-01-0011). Approval to haul will be requested of the Aztec District office prior to initiation.

Table 1: Closure Criteria for BGTs

| Components | ilesting Wethods - 1.2 | Glosvædimils (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 8015 M(Full Range)* | 100 |
| | or Method 418.1 | |
| Chlorides | EPA SW-846 Method 300.1 | 250 |

^{*} Preferred method

- 6. Upon completion of the tank removal and any necessary soil remediation, the excavation will be backfilled with non-waste earthen material compacted to native and covered with a minimum of one foot of top soil. The surface will be re-contoured to match the native grade.
- 7. 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 (un-impacted) 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: WPX assumes the seeding stipulations including mix and seeding methods specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) or Land owner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability.
- 8. For those portions of the former pit area required for production activities, re-seeding will be done at well abandonment, and following the procedure noted above.

Below-Grade Tank Removal 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 19.15.17.11.1(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:

- 1. 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 shutin 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

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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 BGTs

| | | <u> </u> |
|------------|----------------------------------|--------------------------|
| 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 (un-impacted) 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 revegetation requirements of 19.15.17.13.1 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.

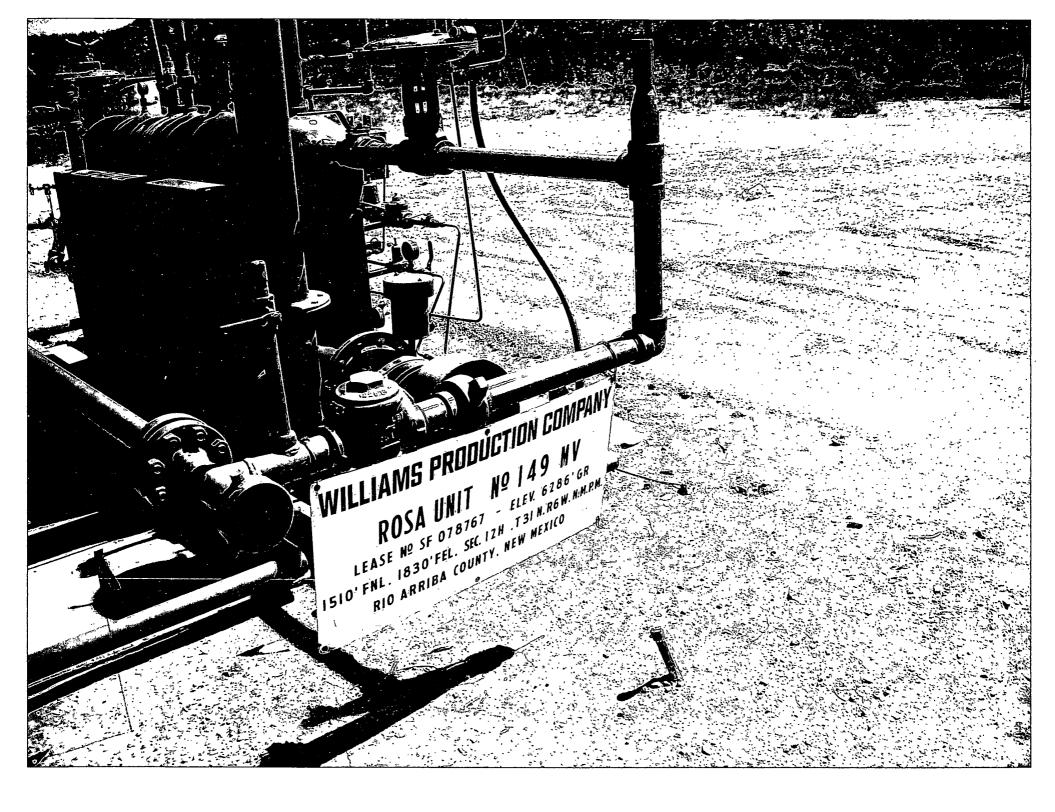
Closure Report:

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:

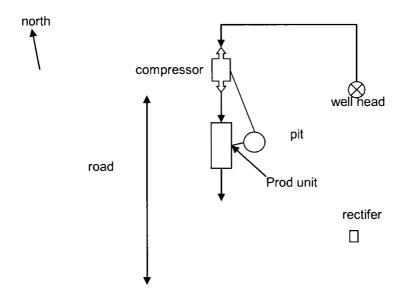
- Proof of Closure Notice (surface owner & NMOCD)
- Backfilling & Cover Installation
- Site Diagram with coordinates
- Available Inspection reports

- 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.



Williams Production Rosa 149 Mesaverde Sec 12 T 31 N R 6 W



*Revised 07-03 07-09-03 Dehy Removed Prod Unit Installed

| | | | | | 1 | | l I | Leak | • | |
|-----------|-------------------|-------|------------|--------------|-----------------------|---|-------------|-----------|-------|----------------------------------|
| | | | | | | | | Detection | | |
| | | | | | | Liner | _eak detect | | Pit | |
| Date | WellName | Run | Formation | Construction | SGT. BGT, Above | Banded Plastic liner, Double Wall Steel, Bottom Plastic Liner | Y/N | level | level | Comments / Repairs needed |
| Oct-08 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | 9" | 22.5" | Possible leak |
| | ROSA UNIT #149 | 04-65 | Mesa Verde | | BGT | Banded Plastic Liner | | 4.75" | 24.5" | i ossibie ieuk |
| Dec-08 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | yes | 4.25" | 24" | |
| Jan-09 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | 6.25 | 27 | |
| Feb-09 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | | |
| Mar-09 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | 4.5 | 28.5 | |
| Apr-09 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | | |
| May-09 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | 12 | 30 | |
| 6/10/2009 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | | N/A | 22in | 48in Pit |
| 7/7/2009 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | 3in | 32in | Well shut in, hole in tubing. |
| 8/26/2009 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | 29" | |
| 9/1/2009 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | | |

04-65

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| | 04-65 | | | | | | | | | |
|------------|-------------------|-------|---------------|----------------|-----------------------|---|-------------------|----------------------------|-------|------------------------------|
| | | _ | | | | Liner | Leak detection | Leak Detection level | Pit | |
| Date | WellName | Run | Formation | Construction | SGT. BGT, Above | Banded Plastic liner, Double Wall Steel, Bottom Plastic Liner | Y/N | level | level | Comments / Repairs needed |
| | 770 | | 1 01111411011 | 00110111011011 | 7 | | | | | |
| 10/5/2009 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | 29" | |
| 11/10/2009 | ROSA | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | 29" | |
| 12/23/2009 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | 30" | |
| 1/12/2010 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | 30" | |
| 2/17/2010 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | | 32" | |
| 3/18/2010 | ROSA UNIT #149 | 04-65 | Mesa Verde | FIBERGLASS | BGT | Banded Plastic Liner | Yes | 12" | 40" | |



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

| Client: | Williams | Project #: | 04108-0136 |
|----------------------|----------|---------------------|------------|
| Sample ID: | Rosa 149 | Date Reported: | 05-03-10 |
| Laboratory Number: | 53912 | Date Sampled: | 04-21-10 |
| Chain of Custody No: | 9193 | Date Received: | 04-28-10 |
| Sample Matrix: | Soil | Date Extracted: | 04-29-10 |
| Preservative: | | Date Analyzed: | 04-30-10 |
| Condition: | Intact | Analysis Requested: | 8015 TPH |

| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | ND | 0.2 |
| Diesel Range (C10 - C28) | ND | 0.1 |
| Total Petroleum Hydrocarbons | ND | 0.2 |

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Rosa 149



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

| Client: | QA/QC | Project #: | N/A |
|--------------------|--------------------|---------------------|----------|
| Sample ID: | 04-30-10 QA/QC | Date Reported: | 05-03-10 |
| Laboratory Number: | 53882 | Date Sampled: | N/A |
| Sample Matrix: | Methylene Chloride | Date Received: | N/A |
| Preservative: | N/A | Date Analyzed: | 04-30-10 |
| Condition: | N/A | Analysis Requested: | TPH |

| | ::I-Cal Date | Fill Calling of | O-CaliRE | % Difference | AcceptaRange |
|-------------------------|--------------|-----------------|-------------|--------------|--------------|
| Gasoline Range C5 - C10 | 05-07-07 | 1.1089E+003 | 1.1093E+003 | 0.04% | 0 - 15% |
| Diesel Range C10 - C28 | 05-07-07 | 1.0246E+003 | 1.0250E+003 | 0.04% | 0 - 15% |

| BlankCone (ing/L-ring/kg) | Gonganigalion | Delegio: Unit |
|------------------------------|---------------|---------------|
| Gasoline Range C5 - C10 | ND | 0.2 |
| Diesel Range C10 - C28 | ND | 0.1 |
| Total Petroleum Hydrocarbons | ND | 0.2 |

| Diplicate Cone (ne/ke) | Sample : | e Dupliedte | d % Difference | Accente Rence |
|-------------------------|----------|-------------|----------------|---------------|
| Gasoline Range C5 - C10 | ND | ND | 0.0% | 0 - 30% |
| Diesel Range C10 - C28 | ND | ND | 0.0% | 0 - 30% |

| Spike@one.(mg/ke) | Sample * | Spike Added | Spike Result | % Recovery | Accept Renger |
|-------------------------|----------|-------------|--------------|------------|---------------|
| Gasoline Range C5 - C10 | ND | 250 | 246 | 98.4% | 75 - 125% |
| Diesel Range C10 - C28 | ND | 250 | 251 | 100% | 75 - 125% |

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 53882 and 53908 - 53912.

Review Meter



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

| Client: | Williams | Project #: | 04108-0136 |
|--------------------|----------|---------------------|------------|
| Sample ID: | Rosa 149 | Date Reported: | 05-03-10 |
| Laboratory Number: | 53912 | Date Sampled: | 04-21-10 |
| Chain of Custody: | 9193 | Date Received: | 04-28-10 |
| Sample Matrix: | Soil | Date Analyzed: | 04-30-10 |
| Preservative: | | Date Extracted: | 04-29-10 |
| Condition: | Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| _ | | |
| Benzene | ND | 0.9 |
| Toluene | ND | 1.0 |
| Ethylbenzene | ND | 1.0 |
| p,m-Xylene | ND | 1.2 |
| o-Xylene | ND | 0.9 |
| Total BTEX | ND | |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 98.8 % |
| | 1,4-difluorobenzene | 99.2 % |
| | Bromochlorobenzene | 99.4 % |

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

Rosa 149



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

| Client: | N/A | Project #: | N/A |
|--------------------|-----------------|----------------|----------|
| Sample ID: | 04-30-BTX QA/QC | Date Reported: | 05-03-10 |
| Laboratory Number: | 53882 | Date Sampled: | N/A |
| Sample Matrix: | Soil | Date Received: | N/A |
| Preservative: | N/A | Date Analyzed: | 04-30-10 |
| Condition: | N/A | Analysis: | BTEX |

| Callbration and |) - (I-GallREL)) - (I-GallREL) | e (€.€a) RE L Assept Rang | # 1970)ff; 3 1610 - 145% - 4 | Blank Conc | Deject 2 2 Umit 2: 9 |
|-----------------|------------------------------------|------------------------------|---------------------------------|---------------|-------------------------|
| Benzene | 1.9068E+006 | 1.9107E+006 | 0.2% | ND | 0.1 |
| Toluene | 1.2828E+006 | 1.2854E+006 | 0.2% | ND | 0.1 |
| Ethylbenzene | 1.0373E+006 | 1.0394E+006 | 0.2% | ND | 0.1 |
| p,m-Xylene | 2.1884E+006 | 2,1928E+006 | 0.2% | ND | 0.1 |
| o-Xylene | 8.6369E+005 | 8.6542E+005 | 0.2% | ND | 0.1 |

| Duplicate conca(up/Kg) | Sample Buy | olicate pie | - | :/Accept/Range | Datalealling |
|------------------------|------------|-------------|------|----------------|--------------|
| Benzene | ND | ND | 0.0% | 0 - 30% | 0.9 |
| Toluene | ND | ND | 0.0% | 0 - 30% | 1.0 |
| Ethylbenzene | ND | ND | 0.0% | 0 - 30% | 1.0 |
| p,m-Xylene | ND | ND | 0.0% | 0 - 30% | 1.2 |
| o-Xylene | ND | ND | 0.0% | 0 - 30% | 0.9 |

| Spike Conc. (ug/kg) | Samile: Am | un Spiked - Spik | (ed Sample) | %IRecovery = | Accepticange |
|---------------------|------------|------------------|-------------|--------------|--------------|
| Benzene | ND | 50.0 | 50.3 | 101% | 39 - 150 |
| Toluene | ND | 50.0 | 48.1 | 96.1% | 46 - 148 |
| Ethylbenzene | ND | 50.0 | 49.1 | 98.1% | 32 - 160 |
| p,m-Xylene | ND | 100 | 99.7 | 99.7% | 46 - 148 |
| o-Xylene | ND | 50.0 | 50.9 | 102% | 46 - 148 |

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 53826 - 53829, 53882 and 53908 - 53912.

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

| Client: | Williams | Project #: | 04108-0136 |
|----------------------|----------|------------------|------------|
| Sample ID: | Rosa 149 | Date Reported: | 05-03-10 |
| Laboratory Number: | 53912 | Date Sampled: | 04-21-10 |
| Chain of Custody No: | 9193 | Date Received: | 04-28-10 |
| Sample Matrix: | Soil | Date Extracted: | 04-30-10 |
| Preservative: | | Date Analyzed: | 04-30-10 |
| Condition: | Intact | Analysis Needed: | TPH-418.1 |

| | | Det. |
|-----------|---------------|---------|
| | Concentration | Limit |
| Parameter | (mg/kg) | (mg/kg) |

Total Petroleum Hydrocarbons

29.8

13.5

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Rosa 149



EPA METHOD 418.1 TOTAL PETROLEUM HYROCARBONS QUALITY ASSURANCE REPORT

Client:

QA/QC

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

04-30-10

Laboratory Number:

04-30-TPH.QA/QC 53877 Freon-113

Date Sampled:

N/A

Sample Matrix: Preservative:

N/A

Date Analyzed: Date Extracted: 04-30-10 04-30-10

Condition:

N/A

Analysis Needed:

TPH

Calibration !-Cal Date C-Cal Date

04/22/2010

04-30-10

L-Cal RF: C-Cal RF: % Difference Accept: Range 1,690 1,790

5.9%

+/- 10%

Blank/Conc. (mg/Kg)

Concentration

Detection Limit 13.5

TPH

ND

% Difference - Accept: Range

Duplicate Conc. (mg/Kg) **TPH**

Sample : 15.6

Duplicate 18.9

21.2%

+/- 30%

Spike Conc. (mg/Kg) **TPH**

Sample 15.6

Spike Added/ Spike Result %: Recovery Accept Range > 2,000

1,890

93.8%

80 - 120%

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

QA/QC for Samples 53906 - 53912 and 53877 - 53878.

Mustum Walton Review



Chloride

Client: Williams Project #: 04108-0136 Sample ID: Rosa 149 Date Reported: 05-05-10 Lab ID#: 53912 Date Sampled: 04-21-10 Sample Matrix: Soil Date Received: 04-28-10 Preservative: Date Analyzed: 05-05-10 Condition: Intact Chain of Custody: 9193

Parameter

Concentration (mg/Kg)

Total Chloride

5

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Rosa 149

Analyst July

Review P.

CHAIN OF CUSTODY RECORD

| Client: Project Name / Location: | | | | | | | | | | | ΔΝΔΙ΄ | | / PAR | AME | TERS | | | | | | | | |
|--|---|---------|----------------------------|---------------|-------------------|------------------|----------|-------|-------------------|--------------------|-------------------|---------------|----------------|----------|---------------|-------------|-------------|----------|--|-----|------|-------------|---------------|
| William- | Client: Project Name / Location: Client Address: Project Name / Location: ROSa 149 Sampler Name: | | | | | | | | | | , | -11 47 IL | 0.0 | | /\l | | | | | | | | |
| Client Address: 13/5/102 Client Phone No.: | • • | | Sampler Name: Client No.: | 2 . | | | | - | 5) | 21) | 6 | | | | | | | | | | | | |
| 7215.Ma | Ch | | Ylatte | asc | 10 | | | | TPH (Method 8015) | BTEX (Method 8021) | VOC (Method 8260) | <u>s</u> | | | a | | | | | | | | _ |
| Client Phone No.: | | | Client No.: | 0410 | 8-0136 | | | _ | g g | st jo | hod | Aeta | nior | | Ξ | | £. | Щ | | | | [00] | ıtac |
| 1004-4019 | | | 00068 | -000 | 5 a | | | | Met | Š | Met | RCRA 8 Metals | Cation / Anion | | TCLP with H/P | | TPH (418.1) | CHLORIDE | | | | Sample Cool | Sample Intact |
| Sample No./ | Sample | Samp | l lah No | | ample | No./Volume of | | | | Ä | o o | CRA | ation | RCI | 占 | PAH | F | 물 | | | | amp | amb |
| Identification | Date | Time | • | | /latrix | Containers | HgCl, HC | 1 | | <u>'n</u> | > | Ě | Ö | <u> </u> | <u>F</u> | <u> </u> | LE. | 0 | | | | Ś | |
| Rosa 149 | Pallo | 1500 | 53912 | Solid | Sludge Aqueous | 140 | | | $ \chi $ | X | | | | | | | X | X | | | | N | 4 |
| | | | | Soil Solid | Sludge Aqueous | 0 | | | | : | | | | | | | | | | | | | |
| | | | | Soil Solid | Sludge Aqueous | | | | | | | | | | | | | | | | | | |
| | | | | Soil S | | | | | | | | | | | | | | | | | | | |
| | | | | Soil Solid | Sludge Aqueous | | | | | | | | | | | | | | | | | | |
| - | | | | Soil Solid | Sludge Aqueous | | | | | | | | | | | | | | | | | | |
| | | | | Soil Solid | Sludge Aqueous | | | | | | | | | | | | | | | | | | |
| | | | | Soil Solid | Sludge Aqueous | | | | | | | | | | | | | | | | | | |
| | | | | Soil Solid | Sludge Aqueous | | | | | | | | | | | | | | | | | | |
| | Λ | Λ | | Soil Solid | Sludge Aqueous | | | | | | | | | | | | | | | | | | |
| Relinquished by: (Sign Relinquished by: (Sign | ature) | \prod | | • | Date | Time | | | d by: | | ature) | | _ | · | | > | | | | D. | ate | Ti | ime |
| Belinguished by Tsign | ature) | رفلا | | <u>-</u> | 1/28/16 | 230 | 10 | Coive | ed by: | Sign | atura | _ | | | | | ······ | | | 4/2 | 0/W) | 17 | 130 |
| | <u>-</u> | | | | | | | | .u Dy. | المرين | ,,,,,, | , | | | | • | | | | | = | | |
| Relinquished by: (Sign | ature) | | | - | | | Re | ceive | d by: | (Sign | ature) |) | | | | | | | | | | | |
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| | | | | A | | _ × | | | . 4. | | _ L | | | | | | | | | | | | |





WM of NM - San Juan County ... 78 County, Road 3140 Aztec, NM, 87410 Ph: (505) 334-1121

Original ... Ticket# 1292620

Customer Name WILLIAMSPRODUCT WILLIAMS PROD Carrier HALD HALD SERVICES INC Ticket Date 07/23/2010 Vehicle# T10 Volum Payment Type Credit Account Container

Volume.

Manual Ticket#

Driver

Hauling Ticket# ...

Check#

Route

Billing # 0000114

State Waste Code

Gen EPA ID

Manifest Destination

Grid .

Profile Generator

Time

Time Scale Operator Inbound In 07/23/2010 10:12:59 Inbound 301 nbaca Out 07/23/2010 10:40:28 Outbound 302 MMORGAN

. Net

22720 1b

Tons

2560 lb. 1.28

Product

Oty

Tax Amount 7 / Origin

MEY-MSW-Loose- Yds 100 7 4.00 Yards

5.51 4 1.39 4 \$22.04

JUL 2 8 2010

Total Ticket

Driver's Signature