Griswold, Jim, EMNRD

From:

Jones, Brad A., EMNRD

Sent:

Thursday, October 04, 2012 12:52 PM

To:

Griswold, Jim, EMNRD

Subject:

FW: Chevron Below Ground Tanks - Closure Request

Attachments:

Document.pdf; Document.pdf

Jim,

Take a look at the mod and let's discuss it before taking any action.

Brad

Brad A. Jones

Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us

Office: (505) 476-3487 *Fax:* (505) 476-3462

From: Clenney, Laura E [mailto:Laura.Clenney@chevron.com]

Sent: Thursday, October 04, 2012 12:40 PM

To: Jones, Brad A., EMNRD

Subject: RE: Chevron Below Ground Tanks - Closure Request

Brad,

As we discussed, the modified permit for the Rincon NP 137 (API 30-039-06975) is attached. We are requesting a change from the previously approved closure plan to request permit of the pit (BGT #2).

I had to split the permit into two files due to size.

Please let me know if you have any questions.

Thanks,

Laura Clenney

Facilities Engineer - San Juan FMT Laura.Clenney@Chevron.com

Chevron North America Exploration and Production

Mid-Continent Business Unit 332 ROAD 3100 Aztec, NM 87410 Tel 505 333 1950 From: Clenney, Laura E

Sent: Wednesday, October 03, 2012 10:44 AM

To: 'Jones, Brad A., EMNRD' **Cc:** Barnes, Leslie (LeslieBarnes)

Subject: RE: Chevron Below Ground Tanks - Closure Request

Brad,

I did not mean for the Rincon NP 137 to be on the list for closures. We are planning to do a retrofit at this location. What can I do to amend this? Can I send you an updated siting criteria packet for this pit tank?

Thanks,

Laura Clenney

Facilities Engineer - San Juan FMT Laura.Clenney@Chevron.com

Chevron North America Exploration and Production

Mid-Continent Business Unit 332 ROAD 3100 Aztec, NM 87410 Tel 505 333 1950 Mobile 281 881 0322

From: Jones, Brad A., EMNRD [mailto:brad.a.jones@state.nm.us]

Sent: Wednesday, June 20, 2012 2:31 PM

To: Clenney, Laura E

Cc: Pohl, April E; Barnes, Leslie (LeslieBarnes)

Subject: RE: Chevron Below Ground Tanks - Closure Request

Please see the attached... it is a copy of your approval(s). If you have any questions regarding this matter, please do not he sitate to contact me.

Brad

Brad A. Jones

Environmental Engineer Environmental Bureau NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, New Mexico 87505 E-mail: brad.a.jones@state.nm.us

Office: (505) 476-3487 Fax: (505) 476-3462

From: Clenney, Laura E [mailto:Laura.Clenney@chevron.com]

Sent: Tuesday, June 19, 2012 12:47 PM

To: Jones, Brad A., EMNRD

Cc: Pohl, April E; Barnes, Leslie (LeslieBarnes)

Subject: RE: Chevron Below Ground Tanks - Closure Request

Brad.

Thank you for discussing these closure requests with me yesterday. I updated the table to show the following:

- a) All buried tanks are indicated with an "X".
- b) The Rincon 101 BGT #2 tank we plan to close is the 45 BBL tank.
- c) The correct API for the Farming E# 001E is 30-039-22367. It was entered incorrectly (as API 30-039-05681, which is the API for the Farming E #001) in the original C-144 permit.
- d) I added two tanks to this list, so there are now eight (8) total tanks we are requesting closure for at six (6) sites. For both the Farming E#001E and Farming E#004 we plan to remove **both** BGT's at each site.

Well Name	API	Global Positioning Coordinates	ULSTR	Pit Tank/ BGT	Buried
		36.339438/			
Farming E#001E	30-039-22367	107.431807	I-2 -24N-06W	BGT:#2	Χ
	Arm Service	36.339438/		Market State of the State of th	
Farming E#001E	30-039-22367	107.431807	I-2 -24N-06W	BGT#1	
		.36.345780/			
Farming E#004	30-039-22350	107:443243	5-2 -24N-06W	BGT #1	Χ
		36.345780/		0.775	
Farming E#004	30-039-22350	107.443243	5-2 -24N-06W	BGT #2	A CONTRACT OF
		36:398030/			
Navajo L 18 #008	30-045-22030	107.942925	3-18-25N-10W	BGT #1	X
		36.512185/			118
Rincon Unit No. 101	30-039-06693	107.532949	L-1 -26N-07W	BGT #2 (45 BBL)	Χ
1,4		36.495038/			1
Rincon Unit No. 212	30-039-21716	107.521386	P-12-26N-07W	BGT #1	Х
Rincon Unit NP 137	30-039-06975	36.556766/107.529231	11-24-27N-07W	BGT #2	χ

Please let me know if you need any additional clarifications.

Thanks,

Laura Clenney

Facilities Engineer - San Juan FMT <u>Laura.Clenney@Chevron.com</u>

Chevron North America Exploration and Production

Mid-Continent Business Unit 332 ROAD 3100 Aztec, NM 87410 Tel 505 333 1950 Mobile 281 881 0322

From: Clenney, Laura E

Sent: Wednesday, June 13, 2012 4:36 PM

To: 'brad.a.jones@state.nm.us'

Cc: Pohl, April E; Barnes, Leslie (LeslieBarnes)

Subject: Chevron Below Ground Tanks - Closure Request

Brad,

Chevron is requesting to **Close** the following six (6) BGT's in 2012, beginning in late June. Each site is listed in the table below. Identified in the 5th column of the table is the BGT targeted for removal, so you can reference it from the respective C-144's.

Each of the C-144's for these six tanks has "Permit of a pit" checked at the top of the C-144 instead of "Closure of a pit", but since the initial submittal of these packages we have identified these tanks for closure.

Well Name	API	Global Positioning Coordinates	ULSTR	Pit Tank/ BGT
Farming E#001E	30-039-22367	36.339438/ 107.431807	I-2 -24N-06W	BGT #2
Farming E#004	30-039-22350	36.345780/107.443243	5-2-24N-06W	BGT #1
Navájo L 18 #008	30-045-22030	36.398030/107.942925	3-18-25N-10W	BGT #1
Rincon Unit No. 101	30-039-06693	36.512185/ 107.532949	L-1 -26N-07W	BGT #2
Rincon Unit No. 212	30-039-21716	36.495038/107.521386	P-12-26N-07W	BGT#1
Rincon Unit NP 137	30-039-06975	36.556766/107.529231	11-24-27N-07W	BGT #2

Please let me know if you need additional information in order to process the closure of these BGT's.

Thanks,

Laura Clenney

Facilities Engineer - San Juan FMT Laura.Clenney@Chevron.com

Chevron North America Exploration and Production

Mid-Continent Business Unit 332 ROAD 3100 Aztec, NM 87410 Tel 505 333 1950 Mobile 281 881 0322 District 1
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec. NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144 Revised August 1, 2011

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.

Proposed Alternative Method Permit or Closure Plan Application

Closure of a pit closed loc	p system, below-grade tank, or proposed alternative method op system, below-grade tank, or proposed alternative method g permit requesting change from previously approved close ed for an existing permitted or non-permitted pit, closed-loop system, and od
Instructions: Please submit one application (Form C-144) per	r individual pit, closed-loop system, below-grade tank or alternative request of
Please be advised that approval of this request does not relieve the operator of nvironment. Nor does approval relieve the operator of its responsibility to continuous terms of the responsibility terms of the responsibility to continuous terms of the responsibility terms of the res	f liability should operations result in pollution of surface water, ground water or the omply with any other applicable governmental authority's rules, regulations or ordinances.
	OGRID:#: 241333
Address: Post Office Box 36366, Houston, TX 77236	
Facility or well name: _Rincon Unit NP 137	
API Number: _30-039-06975	OCD Permit Number:
U/L or Qu/Qur K Section 24 Township 27N	Range 7W County: Rio Arriba
	Longitude107.52980 NAD: □1927 🛭 1983
Surface Owner: 🛭 Federal 🗌 State 🗌 Private 🛄 Tribal Trust or India	an Allotment
Closed-loop System: Subsection H of 19.15.17.11 NMAC Type of Operation: □ P&A □ Drilling a new well □ Workover or I intent) □ Drying Pad □ Above Ground Steel Tanks □ Haul-off Bins □	
☑ Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: 95 bbl Type of fluid: Produced wat Tank Construction material: Stéel ☑ Secondary containment with leak detection ☑ Visible sidewalls only ☑ Other ☑ Visible sidewalls and liner ☑ Visible sidewalls only ☑ Other Liner type: Thickness mil ☐ HDPE ☐ PVC	liner, 6-inch lift and automatic overflow shut-off Buried
5. Alternative Method: Submittal of an exception request is required. Exceptions must be submitted of an exception request is required.	mitted to the Santa Fe Environmental Bureau office for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, he institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify Four foot, pipe frame with square wire mesh	ospital,	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen Netting ☑ Other Solid 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 19.15.16.8 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 o 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 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.		
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. Groundwater is estimated to be 38 feet below the bottom of the below-grade tank on the Rincon Unit NP 137 well site; see attached Data Sheet for Deep Ground Cathodic Protection Wells. 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). The below-grade tank is greater than 300 feet from a continuously flowing watercourse and greater than 200 feet of any other	Yes □ No	
significant watercourse or lakebed, sinkhole, or playa lake; see attached <i>Topographic Map</i> . 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) - The below-grade tank is greater than 300 feet from the nearest residence, school, hospital, institution, or church; see attached		
Aerial Map. Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) Not applicable for below-grade tanks. 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. The below-grade tank is estimated to be 1934 meters (1.20 miles) from the nearest domestic fresh water well and greater than 1000 feet from the nearest spring; see attached NMOSE Water Column/Average Depth to Water Report. Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance.	Yes No.	
adopted pursuant to NMSA 1978, Section 3-27-3, as amended. The below-grade tank is not within incorporated Municipal Boundaries; see attached Municipal Boundary Map. Within 500 feet of a wetland. The below-grade tank is greater than 500 feet from the nearest wetland; see attached Topographic Map and U.S. Fish and		
Wildlife Service National Wetlands Inventory Map. Within the area overlying a subsurface mine. - The below-grade tank is not within an area overlying a subsurface mine; see attached NM EMNRD - Mining and Mineral Division Map.		
Within an unstable area. - The below-grade tank is not within an unstable area; see attached USGS Geologic Map, USGS Karst Map, and Hydrogeologic Report. Within a 100-year floodplain.		
- The below-grade tank is outside of any known 100-year flood plain; see the attached FIRM Flood Insurance Rate Map.	∏ Yes⊠ No	

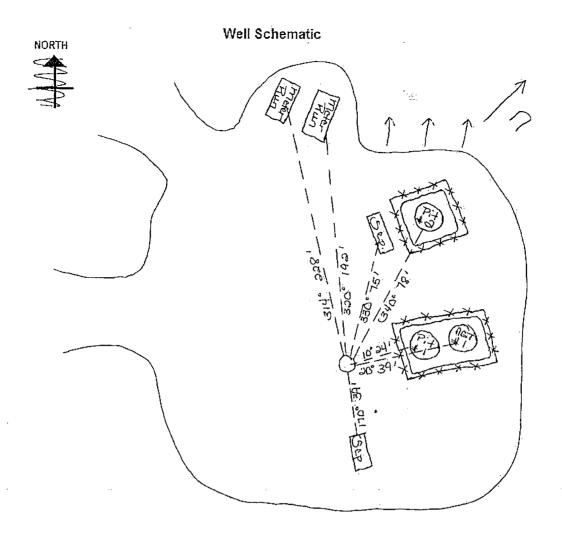
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are				
attached. Hydrogeologic 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 19:15.17.11 NMAC. Operating and Maintenance Plan - based upon the appropriate requirements of 19:15.17.12 NMAC. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19:15.17.9 NMAC.				
and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number:				
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:				
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 String 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 ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC				
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Type: Drilling: Workover: Emergency: Cavitation: P&A Permanent Pit: Below-grade Tank: Closed-loop System: Alternative Proposed Closure Method: Waste Excavation and Removal: Waste Removal: (Closed-loop systems only): On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial: On-site Trench Burial: Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)				
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 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.				
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. If yes, please provide the information below) \(\subseteq \) No	vice 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	C			
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; Data obtained from nearby wells	Yes No			
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No			
Ground water is more than 100 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	Yes 1 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	☐ Yés ☐ No			
Within the area overlying a subsurface mine. - Written confurnation 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 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 and complete to the best of my knowledge and belief.				
Name (Print): Leslie Burnes Title: Operations Manager, Piceance & San Juan				
Signature: 24 (1) 72 Date: 10/4/12				
e-mail address: LestieBarnes@chevron.com Telephone: (970) 257-6009				
OCD Approval: Permit Application (including closure plan) Closure Plan (only) COD Conditions (see attachment)				
OCD Representative Signature: Approval Date: /0/15/12				
Title: Semor Hydrologist OCD Permit Number:				
21. 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:				
Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain.				
23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Blue Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than 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 in areas that will not be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) \(\sum \) No				
Required for impacted areas which will not be used for future service and operations: Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique				
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached: Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (If applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation)				
On-site Closure Location: Latitude Longitude NAD:				
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):				
Signature:				
e-mail address:Telephone:				

Site Inventory Sheet WP+ 135 Well Name & Number: Ringon Lint 10, 13' API#: Lease #: CSF 079298 - D Quarter/Quarter: Section: 24 Township: 2717 Range: 743 LatiN 30.556760 Long: W 107.509231 Pit Tank #1: Manufacturer: DOLLE Serial #: 11 1 994 o If N/A - Dimensions: Diameter Height_ Steel_ Material: Galvanized Fiberglass Tank Configuration: Double Wall Single Wall (Buried or Exposed Walls) • Contents: Produced Water Condensate Recycled Oil Oct labeled Tank Top Covering: Solid/Cone-top____ Netting (Solid Fiber) Secondary Containment: Yes No • Fencing around berm: Yes No____ o Fence Type: Cattle Panel Field Fence • Pit Tank #2: Manufacturer: Double, Trock Corp Serial #: 1/1_ 995 DOM: 6/2000 o If N/A - Dimensions: Diameter_ Height_ Steel Material: Galvanized_ Fiberglass_ • Tank Configuration: Double Wall Single Wall (Buried or Exposed Walls) Contents: Produced Water Condensate Recycled Oil • Tank Top Covering: Solid/Cone-top Netting (Solid Fiber) Secondary Containment: Yes No • Fencing around berm: Yes X Field Fence o Fence Type: Cattle Panel . Above-Ground Tank #1: Manufacturer: Blank, Sivalb, & Bruson, Inc. • Serial #: 30360 DOM: 1957 o If N/A - Dimensions: Diameter_ Height_ Steel Material: Galvanized Fiberglass Contents: Produced Water_ Condensate (State #30070) Recycled Oil Secondary Containment: Yes No Above-Ground Tank #2: Manufacturer: Serial #:_ DOM: If N/A – Dimensions: Diameter Height Material: Steel Galvanized___ Fiberglass Contents: Produced Water Condensate____(State #_____) Recycled Oil____ Secondary Containment: Yes No Above-Ground Tank #3: Manufacturer: Serial #: DOM: Size bbl If N/A - Dimensions: Diameter Height____ Material: Steel_ Galvanized_ Fiberglass: Contents: Produced Water Condensate (State # Recycled Oil

Secondary Containment: Yes____ No_____



	in an				
Schematic Key:					
Separator	SEP	Artificial Lift	AL	Condensate Tank	COND
Compressor	сом	Meler Run	METER RUN		
Dehydrator	DEH	Well Head	0	Water Tank	WATER

Measure any distance 1000ft or less of the following:

From wellhead to any continuous flowing or significant water course. <u>N/A</u>

From below-grade tanks to any permanent residence, school, church, hospital, etc._____

MA

Chevron Midcontinent, LP BGT Permit Siting Criteria Summary Sheet Rincon Unit NP 137

- Groundwater is estimated to be 38 feet below the bottom of the BGT. This was calculated using information from the cathodic well located on the well site. The top of casing elevation for the cathodic well is 6760 feet and the depth to groundwater is recorded as 55 feet; see the attached Data Sheet for Deep Ground Bed Cathodic Protection Wells. (Depth to groundwater for water wells is measured from the top of casing so that all wells are labeled from a common point of interest.) This gives a groundwater elevation of 6705 feet. The topographic map indicates the site elevation to be 6748 feet. The BGT is buried five (5) feet below ground surface which gives a bottom of the BGT elevation of 6743 feet. The difference between the BGT bottom elevation and groundwater elevation is 38 feet.
- The below-grade tank is not within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake. The nearest continuously flowing watercourse is the San Juan River estimated to be 17 miles northwest of the BGT. The nearest lake is Cuervo Lake estimated to be 1.50 miles northwest of the BGT. The nearest ephemeral wash is 900 feet northwest of the BGT; however, it is not considered a significant watercourse. The nearest significant watercourse is an un-named, ephemeral wash, that is a first order tributary of Little Palluche Canyon creek, and is estimated to be 1900 feet south of the BGT; see attached *Topographic Map*. (The red dot on the topographic map indicates the location of the BGT.)
- The below-grade tank is not within 300 feet of a permanent residence, school, hospital, institution, or church in existence at the time of initial application; see the attached Aerial Map. (The red dot on the aerial map indicates the location of the BGT.) There are no permanent residences, schools, hospitals, institutions or churches within the mapped area of the Aerial Map. The nearest residence is 5 miles southwest of the BGT. The nearest school, hospital, institution, or church is at least 20 miles to the southwest and northwest of the BGT.
- The BGT is not 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. There are no freshwater springs within 1000 feet of the BGT as indicated on the attached *Topographic Map*. The closest water well is estimated to be 1,934 meters (1.20 miles) southeast of the BGT and was revealed on the attached *NMOSE Water Column/Average Depth to Water Report*.
- The below-grade tank is not 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;
 see the attached *Municipal Boundary Map*. The closest boundary is the Nageezi Municipal Boundary located
 approximately 22 miles southwest of the site. (The Nageezi City Limits are colored orange and the BGT is
 indicated by a red circle on the *Municipal Boundary Map*.)
- The below-grade tank is not within 500 feet of a wetland; see the attached Topographic Map and U.S. Fish
 and Wildlife Service National Wetlands Inventory Map. Any wetlands on the topographic map are noted in
 dark blue. The nearest wetland area is estimated to be one (1) mile northeast of the BGT.
- The below-grade tank is not within an area overlying a subsurface mine; see the attached NM EMNRD-Mining
 and Mineral Division Map. The nearest mine is an aggregate mine located approximately 26 miles northwest
 of the BGT.
- The below-grade tank is not within an unstable area; see the attached USGS Geologic Map and USGS Karst Map. The site is indicated on the maps by a red square. The nearest Karst Feature is approximately 35 miles southeast of the site and is shown on the USGS Karst Map. The underlying geology is comprised of the San Jose Formation, a Tertiary formation composed of shale, siltstone and sandstone.
- The well site is outside of any known 100 year floodplains as evidenced on the attached FIRM Flood Insurance Rate Map. (Any floodplains are indicated by blue dotted hatching on the map.)

HYDROGEOLOGIC REPORT

Rincon Unit NP #137 Hydrogeologic Report

Topography and Surface Hydrology

The Rincon Unit NP #137 well site is located in what is considered the Colorado River Basin, within the Gould Pass, Rio Arriba County, New Mexico, United States Geological Survey (USGS) 7.5-minute Quadrangle Map approximately 22 miles to the northeast of Nageezi, New Mexico; see attached *Municipal Boundary Map*. The largest, continuously flowing streams of the Colorado River Basin are the Animas and San Juan Rivers. The San Juan River is the closest continuously flowing waterway to the site and is approximately 17 miles northwest of the site. Most stream channels within the Colorado River Basin are ephemeral, with some being intermittent (Stone et al., 1983). The tributaries of the San Juan River that contribute large quantities of water during precipitation events are Canyon Largo, Gallegos Canyon, Chaco River, and the La Plata River. The nearest wash is approximately 900 feet northwest of the below grade tank (BGT) and is an un-named wash, that is not a significant watercourse. The nearest significant watercourse is an un-named wash approximately 1900 feet south of the BGT and is a first order tributary to Little Palluche Canyon Creek. The Little Palluche Canyon Creek is an ephemeral wash that only exists during periods of heavy precipitation and is a first order tributary to Canyon Largo Wash. The general topographic slope of the site is to the north. Storm water runoff flows off of the Rincon Unit NP #137 well site toward the north and then follows surface runoff channels toward a wetland area approximately one (1) mile to the northeast of the site; see attached *Topographic Map*.

The nearest identified wetland area to the Rincon Unit NP #137 well site is estimated to be one (1) mile to the northeast of the BGT. This wetland area is identified as "other" in accordance with the attached U.S. Fish and Wildlife Service National Wetlands Inventory Map. The well site is not located within a 100 year flood plain; see attached Firm Flood Insurance Rate Map.

Residential areas are mostly within the San Juan River Valley to the north and within the Bloomfield City Municipal Boundaries. The closest permanent residence is approximately 5.0 miles to the southwest of the Rincon Unit NP #137 well site. The nearest schools are the Dzilth-Na-O-Dith-Hle School and Blanco Elementary located approximately 20 miles southwest and northwest respectively of the Rincon Unit NP #137. All other schools, churches and institutions are all located within the Bloomfield and Nageezi City Municipal Boundaries. The closest hospital is located within Farmington, New Mexico, approximately 15 miles west of Bloomfield.

The only mining activities identified are to the northwest of the Rincon Unit NP #137. The mining activities are Aggregate and Stone Mines and the nearest mine is approximately 26 miles northwest of the well site. No mines were identified within the map boundary; see attached NM EMNRD – Mining and Mineral Division Map.

Soil

The San Juan Basin contains a wide range of soil types, with the northwest part of the basin, including the bulk of the drainage area of the Chaco and San Juan Rivers, characterized by light-colored, cool, desertic soil types. The higher elevations bordering the basin are characterized by moderately dark to dark mountain soils, and the area in between the two zones being characterized by dark-colored, western plateau soils. The majority of the soils within the basin are of alluvial valley fill and consist of gravel, sand, silt, and clay (Stone et al., 1983). The soil type in the area of the Rincon Unit NP #137 well site is predominantly the Orlie fine sandy loam. This soil is characterized by moderate organic material and moderately high permeability. The unit consists of Fan alluvium and/or slope alluvium derived from sandstone and shale. The unit is relatively flat and ranges between one (1) and eight (8) percent sloping grade. It is a well drained soil with a very high available water capacity. The depth to paralithic bedrock is more than 80 inches. The underlying bedrock is mainly weathered sandstone and shale with visible outcrops along the canyon rim to the north of the well site. The unit is found between the elevations of 6,200 feet and 7,500 feet. Mean annual precipitation is between 13 to 16 inches per year (Natural Resources Conservation Service Soil Survey).

Geology and Groundwater Hydrology

The area geology is comprised of mostly sandstone, mudstone, and siltstone. Karst features are formed by the dissolution of soluble rocks, such as limestone and dolomite, and can be characterized by springs, caves, and sinkholes. The nearest documented Karst features are approximately 35 miles southeast of the well site in accordance with a search of Karst features conducted from the New Mexico Institute of Mining and Technological Petroleum Recovery Research Center Webb Mapping Portal. The information used to create the Karst feature search was compiled using data from the United States Geological Survey (USGS) Digital Engineering Aspects of Karst Map web site. The identified Karst features consist of fissures, tubes and caves generally less than 1,000 feet long, 50 feet or less vertical extent, in moderately to steeply dipping beds of carbonate rock.

Most water supplies in the San Juan Basin are from groundwater that is accessed through wells completed within the surficial valley-fill deposits of Quaternary age and sandstones of Tertiary, Cretaceous, Jurassic, and Triassic age. The Rincon Unit NP #137 well site lies in the San Jose Formation Aquifer which dips at 7 degrees to the north-east (Frenzel, 1983). The San Jose Formation ranges from less than 200 feet in the west and south to nearly 2,700 feet in the basin center between Cuba and Gobernador (Frezel, 1983).

The San Jose Formation (Tsj) is the youngest Tertiary unit in the San Juan Basin and was named by Simpson (1948, p. 277-283). It is of early Eocene age and as early as 1875 was correlated with the Wasatch Formation in Wyoming. The San Jose is the surface formation in the eastern two-thirds of the San Juan Basin. Although largely exposed in New Mexico, the San Jose also straddles the New Mexico/Colorado State boundaries. It outcrops in its west, south and northeast boundaries in a broad, and in some places irregular, southeasterly trending band in the Blanco Canyon to Largo Canyon area. On the east side, it rises structurally and outcrops in a narrow band along the west face of the Nacimiento Uplift forming the eastern boundary of the San Juan Basin. There are several smaller, isolated remnants of the San Jose Formation west of the central exposure. The San Jose has eroded deeply in some areas and because of differential resistance to erosion of its various sandstone and shale units, produces a large thickness variance and in some places formation of very rugged topographic expression (Baltz, 1967, p. 45). In some places it erodes to horseshoe-shaped badlands and massive cliffs. The San Jose overlays the nonresistant slope-forming Nacimiento Formation (Tn). Thickness of the San Jose ranges from less than 200' at the outcrop on the west and south sides to almost 2700 feet in the the Basin center (Stone, et al, p. 25). The thickness is 1300' or less on the southern part of the Tapicitos Plateau where the San Jose structurally rises and its upper beds are eroded. In the Largo Plains area (Largo Canyon) which marks the western exposure of the preserved San Jose, more than half of the Formation was removed by erosion (Baltz, p. 46). The San Jose Formation contact is that of an angular unconformity surface with the underlying Paleocene-age Nacimiento Formation near the Nacimiento Uplift, but is slightly disconformable to conformable in the Basin center (Stone, et al, p. 25). The San Jose Formation is comprised of four identifiable rock facies (in ascending order) called the Cuba Mesa, the Regina, the Llaves and the Tapicitos Members. These four members are only present in the far eastern part of the basin (Brimhall, 1973, p. 198). Within the preserved area, only the Cuba Mesa and Regina are widespread throughout the basin. The oldest Member of the San Jose is the Cuba Mesa (150-800 feet thick), which is largely a massive cliff-forming buff and yellow, rusty-weathering cross-bedded arkosic coarse-grained sandstone with lenticular reddish, green and gray shale beds (Baltz, p. 46). The Cuba Mesa is overlain in the southern two-thirds of the area by drab-colored variegated shale and interbedded soft to hard sandstones known as the Regina Member (100 to 1700 feet thick) and overlain in the northern one-third by a thick sequence of sandstone called the Llaves (50 to 1300 feet thick) which in turn intertongues and grades southward into the Regina. In the northeastern part of the area, the upper Llaves Member grades southward and westward into the red silty mudstones, siltstones and interbedded poorly consolidated sandstones of the Tapicitos Member (120-500 feet thick) (Stone, et al, p. 25).

The nearest registered water well determined by a radius search of 3000 meters (1.86 miles) from the center of the BGT on the Rincon Unit NP #137 well site is approximately 1,934 meters (1.20 miles) southeast of the BGT with a depth of groundwater of 300 feet below the top of casing; see attached New Mexico Office of the State Engineer Water Column/Average Depth to Water Report and Topographic Map. Due to the distances of the water wells from the well site, water well data was not used in the determination of depth to groundwater. Groundwater is estimated to be 38 feet below the bottom of the BGT. This was calculated using information from the cathodic well servicing the well site. The top of casing elevation for the cathodic well is 6,760 feet and the depth to groundwater is recorded as 55 feet; see the attached Data Sheet for Deep Ground Bed Cathodic Protection Wells. This gives a

groundwater elevation of 6,705 feet. The topographic map indicates the site elevation to be 6,748 feet. The BGT is buried approximately five (5) feet below the surface elevation giving the bottom of the BGT an elevation of approximately 6,743 feet. The difference between the BGT bottom elevation and groundwater elevation is 38 feet.

Resources

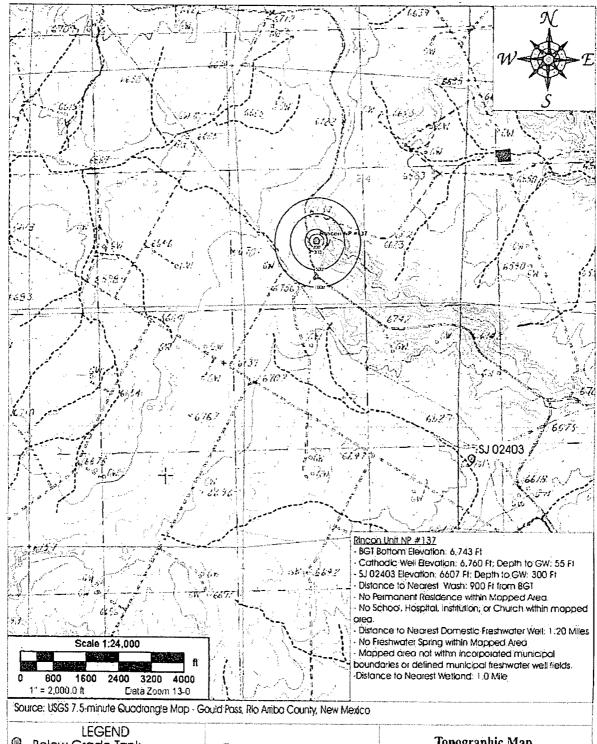
New Mexico Office of the State Engineer (NMOSE) New Mexico Water Right Reporting System (iWaters database)

Stone et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico: Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.

Natural Resources Conservation Service Soil Survey web page

New Mexico Institute of Mining and Technological Petroleum Recovery Research Center Webb Mapping Portal

SITING CRITERIA COMPLIANCE DEMONSTRATIONS



- Below Grade Tank
- Water Well
- Wetland Area Spring or Seep
 - Ephemeral Wash

envirotech EMPROWMENTAL SCIENISIS 3 EN GINEBS

5796 U.S. HIGHWAY 64 Farmington, New Mexico 87401 505:632.0615

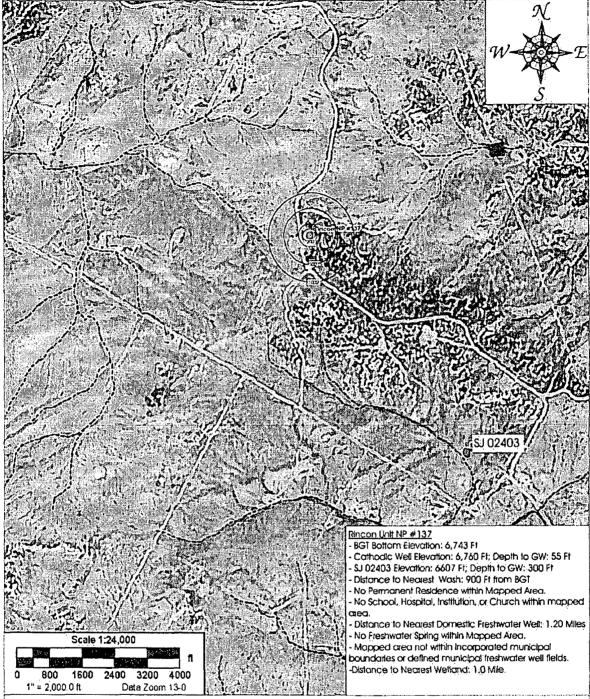
Topographic Map

Chevron North America Rincon Unit NP #137 Section 24, Township 27 N, Range 7 W Rio Amba County, New Mexico

DRAWN BY: Toni McKnight

PROJECT MANAGER: Greg Craptree

PROJECT Number 92270-1008 Date Drawn: 09/05/12



Source: USGS 7.5-minute Quadrangle Map - Gould Pass, Rio Arriba County, New Mexico

LEGEND

- Below Grade TankWater Well
- Wetland Area Spring or Seep
- Ephemeral Wash

envirotech

EMPROMEMEN A SCIENTISIS & ENGINERS

5796 U.S. HIGHWAY 64 Farmington, New Mexico 87401 505.632.0615

Aerial Map

Chevron North America Rincon Unit NP #137 Section 24, Township 27 N, Range 7 W Rio Arriba County, New Mexico

DRAWN BY: Toni McKnight

PROJECT MANAGER: **Greg Crabtree**

PROJECT Mumber:92270-1008 Date Drawn: 09/05/12

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DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator Union Oil Company of California Location: Unit Sec. 24 Twp27N Rng7W
Name of Well/Wells or Pipeline Serviced Rincon #137 DK/MV
Elevation 6760' Completion Date 10/18/76 Total Depth 300' Land Type* F Casing, Sizes, Types & Depths None
If Casing is cemented, show amounts & types used None
If Cement or Bentonite Plugs have been placed, show depths & amounts used None
Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 55' - 70' Deep 15'Thick
170' - 185' Deep 15' Thick
Depths gas encountered: NA
Type 4 amount of coke breeze used: type unknown 5000 lbs K
Depths anodes placed: 195' to 285' MAYI 4 1990
Depths vent pipes placed: 280' OIL CON. DIV.1
Vent pipe perforations: 216'
Remarks: El Paso Natural Gas Co. was the operator at the time this ground bed was installed
First ground bed installed at this location
If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is

closed)

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

(NAD83 UTM in meters)

(in feet)

POD

QQQ

Depth Depth Water

POD Number

Code Subbasin County 64 16 4 Sec Tws Rng

Y Distance Well Water Column

505

300 205

SJ 02403

3 1 3 30 27N 06W

274714 4047115*

1934 Average Depth to Water:

300 feet

Minimum Depth:

300 feet

Maximum Depth:

300 feet

Record Count: 1

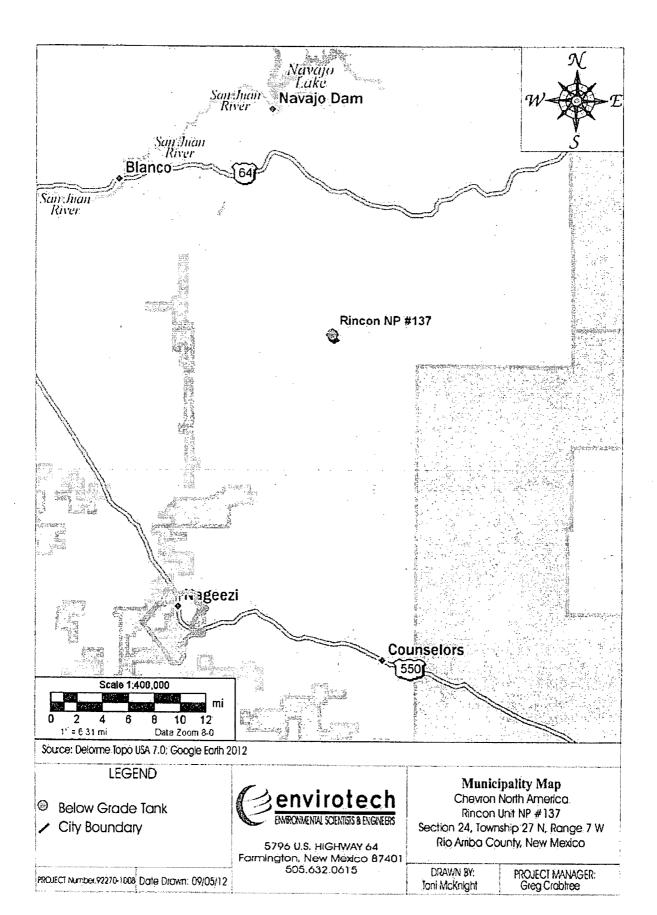
UTMNAD83 Radius Search (in meters):

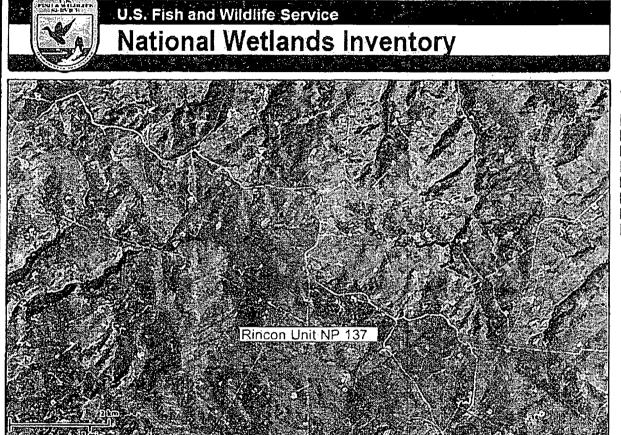
Easting (X): 273587.15

Northing (Y): 4048687.54

Radius: 3000

*UTM location was derived from PLSS - see Help





Chevron / Rincon Unit NP 137

Aug 30, 2012

Wetlands

Freshweler Emergent

Freshwater Forested/Shrub

Estuanne and Marine Deepwater

Estuanne and Marine

Freshwater Pond

Lake

Riverine

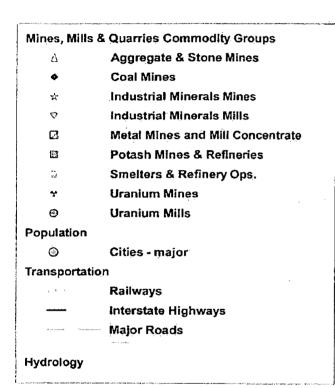
Olher

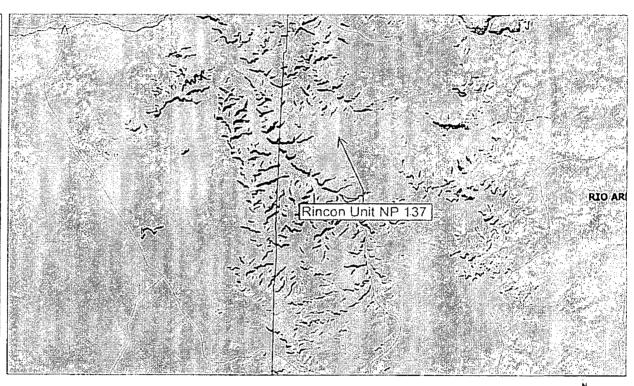
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wattande Mapper web site.

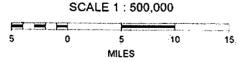
User Remarks:

MMQonline Public Version

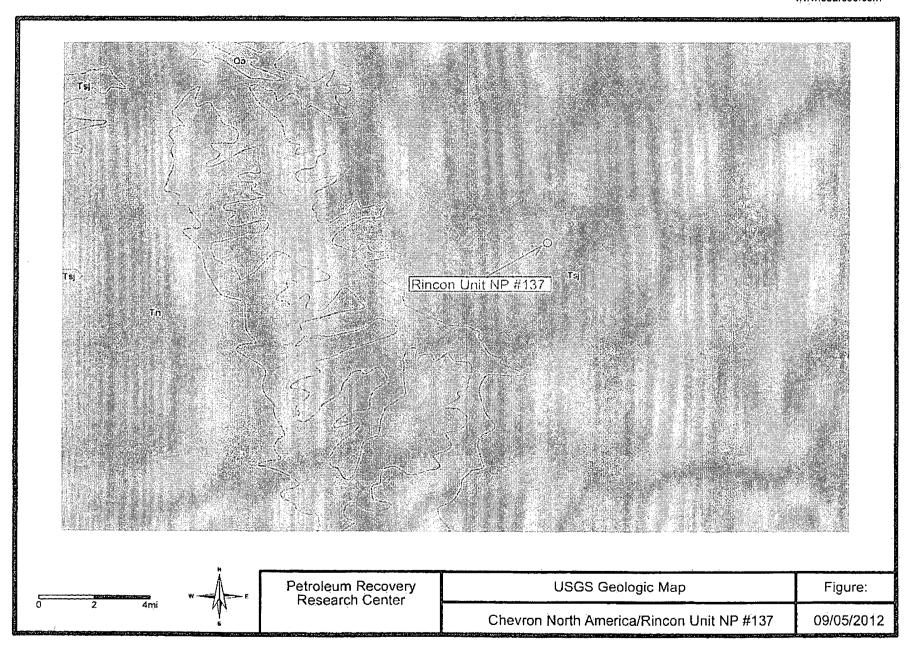
NM EMNRD - Mining and Mineral Division Map Chevron North America / Rincon Unit NP 137





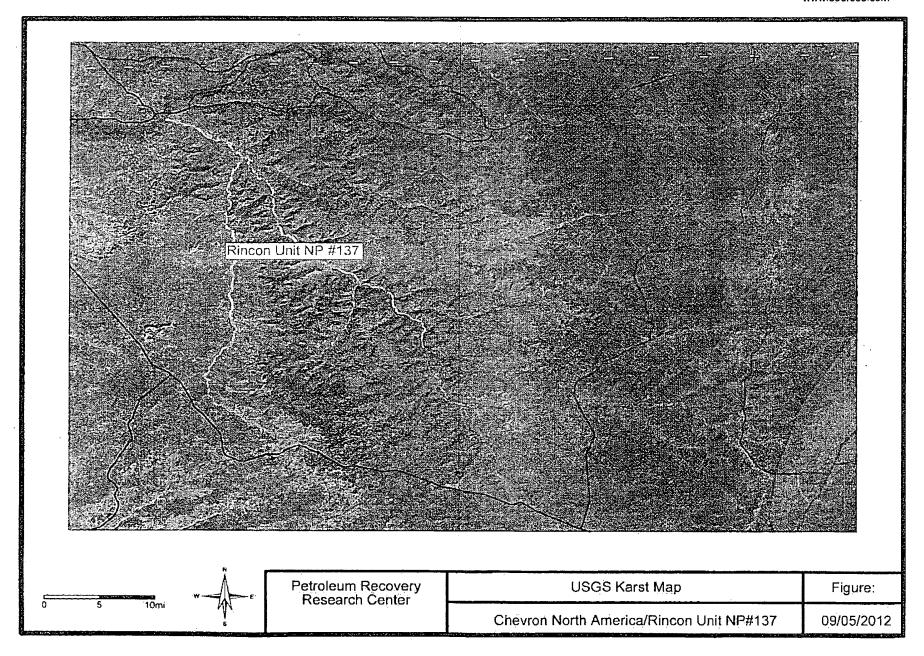






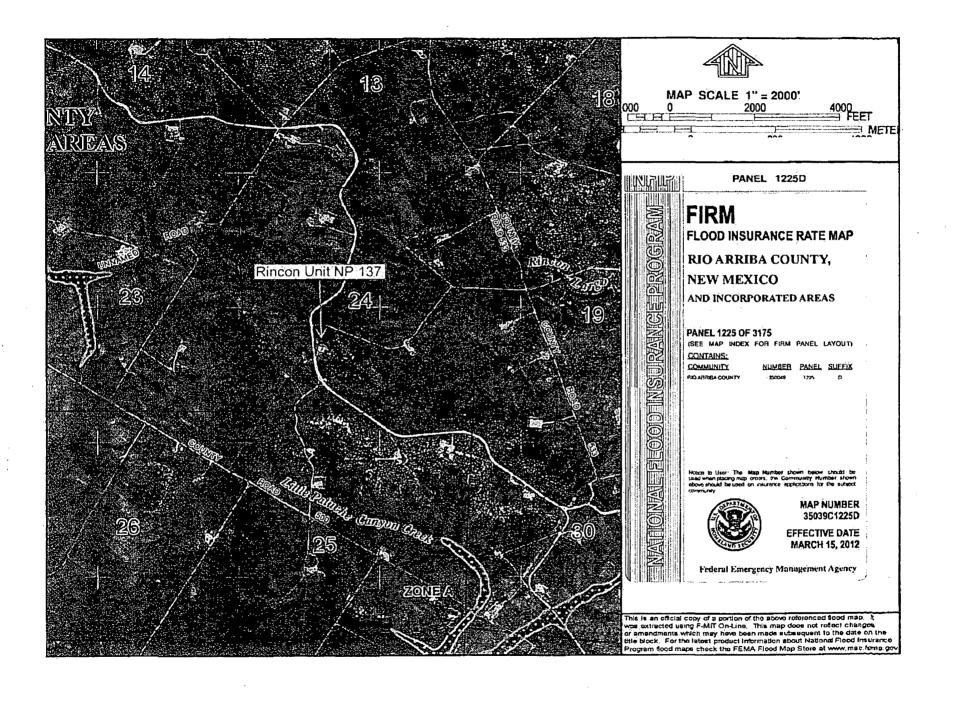
USGS Geologic Map Legend

Tmb, Basalt and andesite flows; Miocene	Same marketing was some several commences of the second of
Tn, Nacimiento Formation	
Thb, Basalt and andesite flows; Neogene	
Thr, Tertiary-Silicic to intermediate volcanic nocks	
Thu, Tertirary Heogene volcanic rocks	
To, Tertiary-Ogallala Formation	
Toa, Tertiary-Ojo Alamo Formation	
Tos, Tertiary-sedimentary and volcaniclastic rocks	;
Tpb, Basalt and andesite flows; Pliocene	•
Tpc, Tertiary-Poison Canyon Formation	
Tps, Tertiary-Paleogene sedimentary units	
Tsf, Tertiary-Lower and Middle Santa Fe Group	
Tsj, Tertiary-San Jose Formation	
Tual, Tertiary-Upper Oligocene andesites and basaltic ande	sites
Tuau, Tertiary-Lower Miscene and uppermost Olfgocene basal	tic andesites
Tui, Tertiary-Miocene to Oligocene silicic to intermediate	intrusive rocks; dikes, stocks, plugs, and diatremes
Tuim, Upper and Middle Tertiary mafic intrusive rocks	
Turf, Tertiary-Upper Digocene silicic (or felsic) flows a	nd masses and associated pyroclasite rocks
Turp, Tertiary-Upper Oligocene rhyolitic pyroclastic rocks	
Tus, Upper Tertiary sedimentary units	•
Tuv. Tertiary-Volcanic and some volcaniclastic rocks; andi	fferentiated
To, Middle Tertiary volcanic rocks; undifferentiated	
(ES) Nater	
X, Precambrian-Lower Proterozoic rocks; andivided	
Xm. Precambrian-Lower Proterozoic metasedimentary rocks	
Xmo, Precambrian- Lower Proterozoic metamorhic rocks; dom	inantley mafic
Xms, Precambrian-Louer Proterozoic metasedimentary rocks	
Xmu, Precambrian-Lower Protenozoic metanorphic rocks, undi	vided
Xp, Precambrian-Lower Proterozoic plutonic rocks	
YXp, Precambrian-Middle and Lower Proterozoic plutonic roc	ks, undivided



USGS Karst Map Legend

Fissures, tubes, and caves over 1,000 ft (300 m) long: 50 ft (15 m) to over 250 ft (75 m) vertical extent: in metamophosed limestone, dolostone, and marble
#Fiscures, tubes, and caves over 1,000 ft (300 m) long: 50 ft (15 m) to over 250 ft (75 m) vertical excent: in moderately to steeply dipping beds of carbonate rock
Fiscures, tubes, and caves over 1,000 ft (300 m) long: 50 ft (15 m) to over 250 ft (75 m) vertical extent: in gently dipping to flat-lying beds of carbonate rock.
图 Fissures, tubes, and caves over 1,000 ft (300 m) long; 50 ft (15 m) to over 250 ft (75 m) vertical extent; in gently dipping to flat lying beds of carbonate rock beneath an overburden of
Fissures, tubes, and caves over 1,000 ft (300 m) long: 50 ft (15 m) to over 250 ft (75 m) vertical extent: in moderately to steeply dipping bads of gypsum.
Fissures, tubes, and caves over 1,000 ft (300 m) long: 50 ft (15 m) to over 250 ft (75 m) vertical extent: in gently dipping to flat lying beds of gypsum
Fiscures, tubes and caves generally less than 1,000 ft (300 m) long; 50 ft (15 m) or less vertical extent; in metamorphosed limestone, dolostone, and marble
Seriesures, tubes and caves generally less than 1,000 ft (300 m) long: 50 ft (15 m) or less vertical extent. In crystalline, highly siliceous, intensely folded carbonate rock
Fissures, tubes and caves generally less than 1,000 ft (300 m) long: 50 ft (15 m) or less vertical extent; in moderately to steeply dipping beds of carbonate rock
📆 Fissures, tubes and caves generally less than 1.000 ft (300 m) long; 50 ft (15 m) or less vertical extent: In gently dipping to flat-lying bads of cerbonate rock
🐯 Fissures, tubes and caves generally less than 1.000 ft (300 m) long; 50 ft (15 m) or less vertical extent; in gently dipping to flat lying beds of carbonate rock beneath an overburden of i
🔞 Fissures, tubes and caves generally less than 1,000 ft (300 m) long. So ft (15 m) or less vertical extent. In moderately to steeply dippling beds of gypsum
👺 Fissures, tubes and caves generally less than 1.000 ft (300 m) long: 50 ft (15 m) or less vertical extent: in gently dipping to flat-lying beds of gypsum
图Fissures, tubes and caves generally less than 1:000 ft (300 m) long: 50 ft (15 m) or less vertical extent: in gently dipping to flat ying beds of gypsum beneath an overburden of nongyps
🔞 Fissures, tubes and caves generally less than 1,000 ft (300 m) long: 50 ft (15 m) or less vertical extent; in carbonate zones in highly calcitic granite (Alaska only)
Fissures, tubes and caves generally less than 1.000 ft (300 m) long: 50 ft (15 m) or less vertical extent; in moderately to steeply dipping beds of carbonate rock with a thin cover of glat
Fissures, tubes, and caves generally absent; where present in small isolated areas, leas than 50 ft (15 m) long; less than 50 ft (15 m) ventical extent; in crystalline, highly sliceous inter
Fissures, tubes, and caves generally absent: where present in small isolated areas, less than 50 ft (15 m) long; less than 50 ft (15 m) vertical extent: in moderately to steeply dipping b
Fiscures, tubes, and caves generally absent; where present in small isolated areas, less than 50 ft (15 m) long; less than 50 ft (15 m) vertical extent; in gently dipping to flat-lying beds.
र्थ Fissures and voids present to a depth of 250 ft (75 m) or more in areas of subsidence from piping in thick, unconsolidated material
🕮 Fissures and voids prosent to a depth of 50 ft (15 m) in areas of subsidence from piping in thick, unconsolidated material
of Fissures, tubes, and tunnels present to a depth of 250 ft (75m) or more in lava
照 Fiscures, tubos, and tunnels present to a depth of 50 ft. (15 m) in lava
Transparent - no korst



BGT DESIGN PLAN

BELOW GRADE TANK (BGT) DESIGN AND CONSTRUCTION PLAN

SUBMITTED TO:

ENVIRONMENTAL BUREAU,

NEW MEXICO OIL CONSERVATION DIVISION

ON BEHALF OF:

CHEVRON USA INC., CHEVRON MIDCONTINENT, L.P., AND FOUR STAR OIL & GAS-COMPANY
P.O. Box 730
AZTEC, NEW MEXICO 87410
(505) 333-1901

Chevron San Juan Basin Below Grade Tank Design and Construction Plan

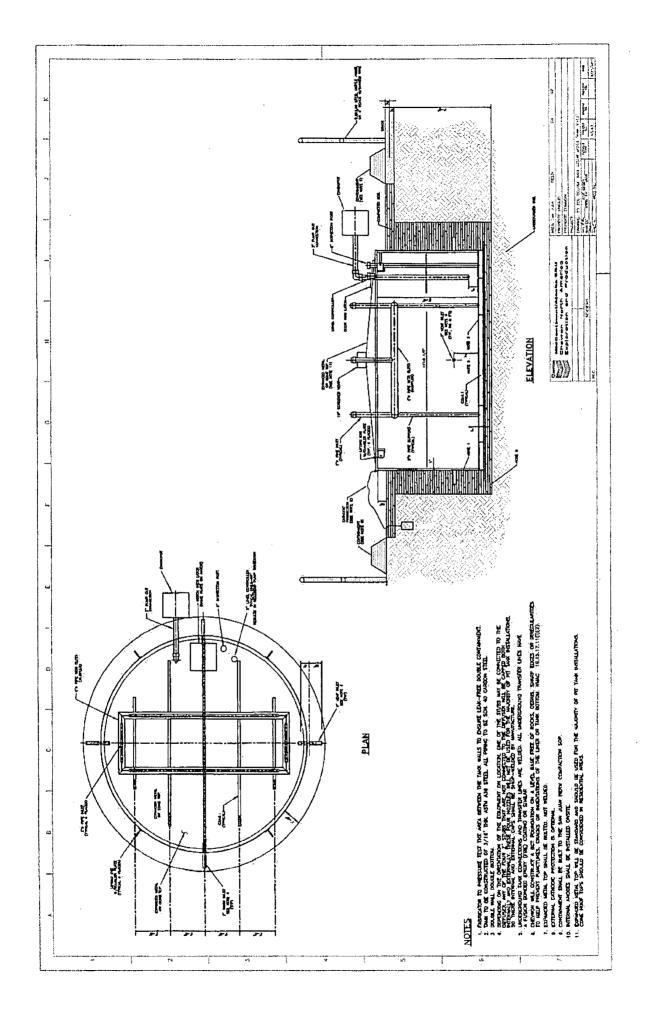
INTRODUCTION

In accordance with NMAC §§ 19.15.17.9(B)(4) and 19.15.17.11 Chevron (representing Chevron USA Inc, Chevron Midcontinent, L.P., and Four Star Oil & Gas Company) submits this Design and Construction Plan for below grade tanks (BGTs) in New Mexico. This Plan contains standard conditions that attach to multiple BGTs.

- 1. Chevron will design and construct a BGT to contain liquids and solids, prevent contamination of fresh water, and protect public health and the environment. NMAC § 19.15.17.11(A).
- 2. Chevron will post an upright sign not less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the BGT, unless the BGT is located on a site where there is an existing well, signed in compliance with NMAC § 19.15.16.8, that is operated by Chevron. Chevron will post the sign in a manner and location such that a person can easily read the legend. The sign will provide the following information: Chevron's name; the location of the site by quarter-quarter or unit letter, section, township and range; and emergency telephone numbers. NMAC § 19.15.17.11(C).
- 3. Chevron will fence or enclose a BGT in a manner that prevents unauthorized access and will maintain the fences in good repair. Fences are not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or facility, including the BGT. NMAC § 19.15.17.11(D)(1).
- 4. Chevron will fence or enclose a BGT located within 1000 feet of a permanent residence, school, hospital, institution or church with a chain link security fence, at least six feet in height with at least two strands of barbed wire at the top. Chevron will close and lock all gates associated with the fence when responsible personnel are not on-site. NMAC § 19.15.17.11(D)(2).
- 5. Chevron will fence BGTs to exclude livestock with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level. NMAC § 19.15.17.11(D)(3). Chevron may install tubular steel cattle panels, as it determines appropriate (photo of cattle

- panel fence submitted to NMOCD, 24 June 2009). As illustrated on the attach photo.
- 6. Chevron will screen the permanent opening on the tank top with expanding steel mesh in order to render it non-hazardous to wildlife, including migratory birds. NMAC § 19.15.17.11(E).
- 7. Chevron's BGTs will be constructed with the design features illustrated on the attached drawing.
- 8. Only double-walled, double-bottomed BGTs will be installed.
- 9. Chevron will use 3/16" carbon steel which is resistant to the anticipated contents and resistant to damage from sunlight. NMAC § 19.15.17.11(I)(1).
- 10. Chevron will construct a BGT foundation on a level base free of rocks, debris, sharp edges or irregularities to help prevent punctures, cracks or indentations of the liner or tank bottom. NMAC § 19.15.17.11(I)(2).
- 11. Chevron will construct a BGT to prevent overflow and the collection of surface water run-on. NMAC § 19.15.17.11(I)(3). Chevron, or a contractor representing Chevron, will install a level control device to help prevent overflow from the BGT and will use berms and/or a diversion ditch to prevent surface run on from entering the BGT. NMAC §§ 19.15.17.11(I)(3), 19.15.17.12(A)(7), and 19.15.17.12(D)(1).
- 12. All BGTs, in which the side walls are not open for visible inspection for leaks, will be double walled with leak detection capability. NMAC § 19.15.17.11(I)(4)(b).
- 13. Chevron, as the operator of a below-grade tank constructed and installed prior to June 16, 2008 that does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC and is not included in Paragraph (6) of Subsection I of 19.15.17.11 NMAC, is not required to equip or retrofit the below-grade tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as it demonstrates integrity. If the existing below-grade tank does not demonstrate integrity, the operator shall promptly remove that below-grade tank and install a below-grade tank that complies with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, as illustrated in the approved drawing. Chevron shall comply with the operational requirements of 19.15.17.12 NMAC.

14. Chevron, as the operator of a below-grade tank constructed and installed prior to June 16, 2008 that is single walled and where any portion of the tank sidewall is below the ground surface and not visible, shall equip or retrofit the below-grade tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it, within five years after June 16, 2008. If the existing below-grade tank does not demonstrate integrity, Chevron shall promptly remove that below-grade tank and install a below-grade tank that complies with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, as illustrated in the approved drawing. Chevron shall comply with the operational requirements of 19.15.17.12 NMAC.



BGT OPERATING AND MAINTENANCE PLAN

BELOW GRADE TANK (BGT) OPERATING AND MAINTENANCE PLAN

SUBMITTED TO:

ENVIRONMENTAL BUREAU,

NEW MEXICO OIL CONSERVATION DIVISION

ON BEHALF OF:

CHEVRON USA INC., CHEVRON MIDCONTINENT, L.P., AND FOUR STAR OIL & GAS COMPANY

P.O. Box 730

AZTEC, NEW MEXICO 87410

(505) 333-1901

Chevron

San Juan Basin

Below Grade Tank Operating and Maintenance Plan

INTRODUCTION

In accordance with NMAC §§ 19.15.17.9(B)(4) and 19.15.17.12 Chevron (representing Chevron USA Inc, Chevron Midcontinent, L.P., and Four Star Oil & Gas Company) submits this Operating and Maintenance Plan (O&M Plan) for below grade tanks (BGTs) in New Mexico. This O&M Plan contains standard conditions that attach to multiple BGTs. If needed for a particular BGT, a modified O&M Plan will be submitted to the New Mexico Oil Conservation Division (NMOCD or the division) for approval prior to implementation.

GENERAL PLAN:

- 1. Chevron, or a contractor representing Chevron, will operate and maintain a BGT to contain liquids and solids to prevent contamination of fresh water and to protect public health and environment. NMAC § 19.15.17.12(A)(1).
- 2. Chevron will not discharge into or store any hazardous waste in a BGT. NMAC § 19.15.17.12(A)(3).
- 3. If a BGT develops a leak or is penetrated below the liquid surface, Chevron will remove liquid above the damage within 48 hours, notify the appropriate division district office within 48 hours of discovery and will promptly repair the BGT. If a BGT develops a leak Chevron will remove liquid above the damage within 48 hours, notify the appropriate division district office within 48 hours of discovery and will promptly repair or replace the BGT. If replacement is required, the BGT will meet all specification included in the attached approved design drawing and comply with 19.15.17.11(I)(1-4).
- 4. If Chevron as an operator of a below-grade tank that was constructed and installed prior to June 16, 2008 that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC and discovers that the below-grade tank does not demonstrate integrity or that the below-grade tank develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC, then Chevron or their representative shall close the existing below-grade tank pursuant to the closure requirements of 19.15.17.13 NMAC and install a below-grade tank that complies with the requirements of Paragraphs

- (1) through (4) of Subsection I of 19.15.17.11 NMAC. NMAC § 19.15.17.12(D)(5). If replacement is required, the BGT will meet all specification included in the attached approved design drawing.
- 5. If Chevron as the operator of the below-grade tank that was constructed and installed prior to June 16, 2008 that does not comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC and equips or retrofits the existing tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, then Chevron or their representative shall visually inspect the area beneath the below-grade tank during the retrofit and document any areas that are wet, discolored or showing other evidence of a release on form C-141. Chevron shall demonstrate to the division whether the evidence of contamination indicates that an imminent threat to fresh water, public health, safety or the environment exists. If the division determines that the contamination does not pose an imminent threat to fresh water, public health, safety or the environment, the operator shall complete the retrofit or the replacement of the below-grade tank. If Chevron or division determines that the contamination poses an imminent threat to fresh water, public health, safety or the environment, then Chevron shall close the existing below-grade tank pursuant to the closure requirements of 19.15.17.13 NMAC prior to initiating the retrofit or replacement. NMAC § 19.15.17.12(D)(6). If replacement is required, the BGT will meet all specification included in the attached approved design drawing.
- 6. Chevron, or a contractor representing Chevron, will use berms and/or diversion ditches to prevent surface run-on from entering the BGT by diverting surface water run-on away from the bermed area. NMAC §§ 19.15.17.12(A)(7) and 19.15.17.12(D)(1).
- 7. Chevron, or a contractor representing Chevron, will not allow a BGT to overflow and will maintain adequate freeboard on existing BGTs by routine inspections utilizing pumper trucks whose routes are timed based on known production rates. Fluid is pumped out on this schedule. For newly constructed BGTs Chevron, or a contractor representing Chevron, will maintain adequate freeboard by installing level control devices that automatically shut off inflow to alleviate potential overtopping. NMAC § 19.15.17.12(D)(1) and 19.15.17.12(D)(4).
- 8. Chevron, or a contractor representing Chevron, will remove a visible or measurable layer of oil from the fluid surface of a BGT. NMAC § 19.15.17.12(D)(2).
 - Chevron, or a contractor representing Chevron, will inspect the BGT to assess compliance with NMAC § 19.15.17.12, Operational Requirements, at least once monthly and maintain a written record of each inspection for at least five (5) years. The approved inspection form is attached.

Chevron: New Mexico Inspection Form for Below Grade Tanks

Inspection	Date:	

elow Grade Tank (BGT) Location:	**************************************	
Does the BGT have adequate freeboard to prevent overflow;	yes	no
Does the tank have visible leaks or sign of corrosion;	yes.	no
Do tank valves, flanges and hatches have visible leaks;	yes	no
Is there evidence of significant spillage of produced liquids;	yės	no
Is this a single of double wall tank;		
Are berms and/or diversion ditches in place to prevent surface		
run-on from entering the BGT;	yes	no
Have visible or measurable layers of oil been removed from		
liquid surface fluid;	yes	no

BGT CLOSURE PLAN

BELOW GRADE TANK (BGT) CLOSURE PLAN

SUBMITTED TO:

ENVIRONMENTAL BUREAU,

NEW MEXICO OIL CONSERVATION DIVISION

ON BEHALF OF:

CHEVRON USA INC., CHEVRON MIDCONTINENT, L.P., AND FOUR STAR OIL & GAS COMPANY
P.O. Box 730
AZTEC, NEW MEXICO 87410
(505) 333-1901

Chevron San Juan Basin Below Grade Tank Closure Plan

INTRODUCTION

In accordance with NMAC §§ 19.15.17.9(B)(4) and 19.15.17.13, Chevron (representing Chevron USA Inc, Chevron Midcontinent, L.P., and Four Star Oil & Gas Company) submits this Closure Plan for below grade tanks (BGTs) in New Mexico. This Closure Plan contains standard conditions that attach to multiple BGTs. If needed for a particular BGT, a modified Closure Plan for a proposed alternative closure will be submitted to the New Mexico Oil Conservation Division (NMOCD or the division) for approval prior to closure.

CLOSURE PLAN PROCEDURES AND PROTOCOLS (NMAC §§ 19.15.17.9(C) and 19.15.17.13).

- 1) Chevron, or a contractor acting on behalf of Chevron, will close a BGT within the time periods provided in NMAC § 19.15.17.13(A), or by an earlier date required by NMOCD to prevent an imminent danger to fresh water, public health, or the environment. NMAC § 19.15.17.13(A).
- 2) Chevron, or a contractor acting on behalf of Chevron, will close an existing BGT that does not meet the requirements of NMAC § 19.15.17.11(I)(1 through 4) or is not included in NMAC § 19.15.17.11(I)(5) within five years after June 16, 2008, if not retrofitted to comply with § 19.15.17.11(I)(1 through 4). NMAC § 19.15.17.13(A)(4).
- 3) Chevron shall close an existing below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not retrofitted to comply with Paragraphs 1) through (4) of Subsection I of 19.15.17.11 NMAC, prior to any sale or change of operator pursuant to 19.15.9.9 NMAC.
- 4) Chevron, or a contractor acting on behalf of Chevron, will close a permitted BGT within 60 days of cessation of the BGT's operation or as required by the transitional provisions of NMAC § 19.15.17.17(B) in accordance with a closure plan that the appropriate division district office approves. NMAC §§ 19.15.17.13(A)(9) and 19.15.17.9(C).
- 5) In accordance with NMAC § 19.15.17.13(J)(1), Chevron will notify the surface owner by certified mail, return receipt requested, of its plans to close a BGT prior to beginning closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance. Chevron will also notify the appropriate division district office verbally or by other means at least 72 hours, but not more than one week, prior to any closure operation. The notice shall include the operator's name and the location to be closed by unit letter, section, township and range. If the closure is associated with a particular well, then the notice shall also include the well's name, number and API number. NMAC § 19.15.17.13(J)(2).

- 6) Chevron, or a contractor acting on behalf of Chevron, will remove liquids and sludge from a BCT prior to implementing a closure method and will dispose of the liquids and sludge in a division approved facility. NMAC § 19.15.17.13(E)(1). A list of Chevron currently approved disposal facilities is included at the end of this document.
- 7) The proposed method of closure for this Closure Plan is waste excavation and removal. NMAC §§ 19.15.17.13 (E)(1).
- 8) Chevron, or a contractor acting on behalf of Chevron, shall remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. When required, prior approval for disposal will be obtained. NMAC § 19.15.17.13(E)(2). Documentation regarding disposal of the BGT and its associated liner, if any, will be included in the closure report.
- 9) Waste generated during closure will be handled and disposed of in accordance with applicable laws. NMAC § 19.15.35.8(C)(1)(m) provides that plastic pit liners may be disposed at a solid waste facility without testing before disposal, provided they are cleaned well.
- 10) Chevron, or a contractor acting on behalf of Chevron, will remove on-site equipment associated with a BGT unless the equipment is required for some other purpose. NMAC § 19.15.17.13(E)(3).
- 11) Chevron, or a contractor acting on behalf of Chevron, will test the soils beneath the BGT to determine whether a release has occurred. At a minimum, 5 point composite samples will be collected along with individual grab samples from any area that is wet, discolored, or showing other evidence of a release. Samples will be analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250mg/kg; or the background concentration, whichever is greater. Chevron, or a contractor acting on behalf of Chevron, will notify the NMOCD Division District office of its results on form C-141. NMAC § 19.15.17.13(E)(4).
- 12) If Chevron or the division determines that a release has occurred, Chevron will comply with NMAC §§ 19.15.29 and 19.15.30, as appropriate. NMAC § 19.15.17.13(E)(5).
- 13) If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in NMAC § 19.15.17.13(E)(4), Chevron will backfill the excavation with compacted, non-waste containing, earthen materials; construct a division prescribed soil cover; re-contour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements shall comply with NMAC § 19.15.17.13)(G, H and l). NMAC § 19.15.17.13(E)(6).

- 14) As per NMAC § 19.15.17.13(G)(1), once Chevron has closed a BGT or is no longer using the BGT or an area associated with the BGT, Chevron will reclaim the BGT location and all areas associated with it including associated access roads not needed by the surface estate owner to a safe and stable condition that blends with the surrounding undisturbed area. Chevron will substantially restore impacted surface area to the condition that existed prior to its oil and gas operations by placement of soil cover as provided in NMAC § 19.15.17.13(H) (see below), recontour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography, and re-vegetate according to NMAC § 19.15.17.13(I). NMAC § 19.15.17.13(G)(1).
- 15) Chevron may propose an alternative to the re-vegetation requirement of NMAC § 19.15.17.13(G)(1) if it demonstrates that the proposed alternative effectively prevents erosion, and protects fresh water, human health and the environment. The proposed alternative must be agreed upon in writing by the surface owner. Chevron will submit the proposed alternative, with written documentation that the surface owner agrees to the alternative, to the division for approval. NMAC § 19.15.17.13(G)(2).
- 16) Soil cover for closures where Chevron has removed the pit contents or remediated the contaminated soil to the division's satisfaction will consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. NMAC § 19.15.17.13(H)(1).
- 17) Chevron will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material. NMAC § 19.15.17.13(H)(3).
- 18) As per NMAC § 19.15.17.13(I)(1) and 19.15.17.13(G)(2), Chevron will seed or plant disturbed areas during the first growing season after it is no longer using a BGT or an area associated with the BGT including access roads unless needed by the surface estate owner as evidenced by a written agreement with the surface estate owner, if any and written approval by NMOCD.
- 19) Seeding will be accomplished by drilling on the contour whenever practical or by other division approved methods. Chevron will obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two growing seasons that prove viability, Chevron will not artificially irrigate the vegetation. NMAC § 19.15.17.13(I)(2).
- 20) Chevron will notify the division when it has seeded or planted and when it successfully achieves re-vegetation. NMAC§ 19.15.17.13(I)(5).
- 21) Seeding or planting will be repeated until Chevron successfully achieves the required vegetative cover. NMAC § 19.15.17.13(I)(3).

- 22) When conditions are not favorable for the establishment of vegetation, such as periods of drought, the division may allow Chevron to delay seeding or planting until soil moisture conditions become favorable or may require Chevron to use additional cultural techniques such as mulching, fertilizing, irrigating, fencing or other practices. NMAC § 19.15.17.13(I)(4).
- 23) As per NMAC § 19.15.17.13(K), within 60 days of closure completion, Chevron will submit a closure report containing the elements required by NMAC § 19.15.17.13(K) including:
 - i) Confirmation sampling results,
 - ii) A plot plan,
 - iii) Details on back-filling, capping and covering, where applicable, including revegetation application rates and seeding technique,
 - iv) Proof of closure notice to the surface owner, if any, and the division,
 - v) Name and permit number of disposal facility, and
 - vi) Photo documentation.
- 24) The closure report will be filed on NMOCD Form C-144. Chevron will certify that all information in the closure report and attachments is correct and that it has complied with all applicable closure requirements and conditions specified in the approved closure plan. NMAC § 19.15.17.13(K).
- 25) As requested, the following are the current Chevron approved Waste Disposal Sites for the identified waste streams:

Soils and Sludges

i) Envirotech Inc. Soil Remediation Facility, Permit No. NM-01-0011

Solids

ii) San Juan County Regional Land Fill (NMAC § 19.15.35.8 items only, with prior NMOCD approval when required)

Liquids

- i) Key Energy Disposal Facility, Permit No. NM-01-0009
- ii) Basin Disposals Facility, Permit No. NM-01-005.
- 26) These waste disposal sites are subject to change if their certification is lost or they are closed or other more appropriate, equally protective sites become available. Chevron will provide notice if such a change is affected.