Jones, Brad A., EMNRD

From: Lindsey, Don (LLIN) [LLIN@chevron.com]

Sent: Monday, August 29, 2011 11:06 AM

To: Jones, Brad A., EMNRD

Cc: Powell, Brandon, EMNRD; Clenney, Laura E; Toni McKnight; Murray, Michael

Subject: Chevron BGT Removals in 2011 Per Brad Jones' Request

Brad.

Per our telephone discussions and agreement last Thursday, find below a list of the Below Ground Tank removal projects for this year, for the Chevron San Juan office.

Note the last 4 highlighted in yellow are the last 4 planned for the year and are yet, although about to be done. You and I discussed and I updated you on those four in my Thursday e-mail below, and you indicated you were intending on trying to provide closure approvals on those, perhaps as early as today.

Also as we discussed, for all but those last four, we will need to pursue obtaining your closure approvals in a separate effort

I look forward to getting that process direction from you, and working with you and perhaps Brandon Powell in Aztec as needed.

Another longer term item we discussed, was the planned removal/replacement of approximately 20 BGTs in calendar year 2012. We will advise you many weeks in advance of starting those projects next spring, so that Closure Approvals can be issued by you well in advance of that work. Again, the 2012 BGT projects will round out our BGT replacement project and none are planned for 2013. With that schedule, we plan to be finished well in advance of the June, 2013 deadline. Should you have any further questions, please send to a note to me as well as Laura Clenny, as Laura is the BGT Project Manager and most knowledgeable of any technical information.

Thank you again,

Don Lindsey
Environmental & Health Specialist
Aztec, NM
Office 505-333-1920
Cell 505-301-5576
Ilin@chevron.com

2011 Chevron BGTs Projects:

<u>Site</u>	<u>API</u>	Location S/T/R (all San Juan Co.)	New Replacement Tank No Replacement Tank, we Abdn the
Jicarilla C-34	30-039-22840	Section 22 T25N R5W	Loc .
Wayne Moore Com 2S	30-045-31993	Section 16 T31N R9W	No Replacement Tank
Redfern 2	30-045-29023	Section 33 T30N R12W	No Replacement Tank
State 3	30-045-22781	Section 2 T31N R7W	Single Wall Above Ground
Horton Federal CB-27 #1	30-045-28892	Section 27 T32N R12W	Double Wall Below Ground
Redfern 1	30 045-29035	Section 14 T29N R13W	Double Wall Below Ground
State 16-1E	30-045-24298	Section 16 T26N R8W	Single Wall Above Ground
Rincon 193M	30-039-25529	Section 35 T27N R7W	Single Wall Above Ground
Rincon 303	30-039-25403	Section 33 T27N R7W	Single Wall Above Ground
Rincon 186M	30-039-25406	Section 33 T27N R7W	Single Wall Above Ground
Rincon 73	30-039-06824	Section 33 T27N R7W	Double Wall Below Ground

Rincon 303M	30-039-26744	Section 36 T27N R7W	Double Wall Below Ground
Rincon 306	30-039-25404	Section 34 T27N R7W	Single Wall Above Ground
Rincon 72	30-039-06780	Section 33 T27N R7W	Double Wall Below Ground
Rincon 169M	30-039-26209	Section 26 T27N R7W	Double Wall Below Ground
Rincon 302	30-039-25396	Section 11 T26N R7W	Single Wall Above Ground
Rincon 187E	30-039-25361	Section 35 T27N R7W	Single Wall Above Ground
Rincon 183E	30-039-25433	Section 31 T27N R6W	Single Wall Above Ground
Shelby Federal 1E	30-039-25343	Section 24 T27N R7W	Double Wall Below Ground
Rincon 128M	·30-039-25224	Section 28 T7N R6W	Single Wall Above Ground .
Rincon 146	30-039-20157	Section 23 T27N R6W	Double Wall Below Ground

From: Lindsey, Don (LLIN)

Sent: Thursday, August 25, 2011 1:32 PM

To: Jones, Brad A., EMNRD **Cc:** Clenney, Laura E

Subject: Chevron BGT Planned Removals in Near Term

Brad.

Thanks again for your time on the phone today.

Below is a list of the 4 Below Ground Tanks (BGTS) we will remove in the next few days.

I will e-mail to you in separate subsequent e-mails in a few minutes, each C-144 (the entire scanned 20+ page package) for each. The Well specifics (location, APIs) are on those. I must e-mail those separately as the files are too large to send together in one e-mail.

A replacement BGT will be going on site on all of these. See notes below on each.

Also, more clarification on the replacement tank design since you and I talked:

The new replacement tank will either be a double wall/double floor buried tank or single wall above-ground tank, depending on the location and operational specifics.

Shelby Fed 1-E; Only one BGT on location. Replacement will be Double wall/Double floor buried, and place in same spot on site.

Rincon 183 E; BGT No 2, the only single wall BGT on location. Replacement will be Single wall above-ground, Not buried. Place in a different spot.

Rincon 128 M; BGT No 2, the only single wall BGT on location. Replacement will be Single wall above-ground, Not buried. Placed in a different spot.

Rincon 146; Only one BGT on location. Replacement will be Double wall/Double floor buried, and placed in the same spot on site.

Thank you,

Don Lindsey
Environmental & Health Specialist
Aztec, NM
Office 505-333-1920
Cell 505-301-5576
Ilin@chevron.com

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 87505010

State of New Mexico Energy Minerals and Natural Resources Department RECEION Conservation Division 1220 South St. Francis Dr.

4 PM 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 conv. to the appropriate NMOCD.

provide a copy to the appropriate NMOCD District Office.

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

Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method	
Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method	
Modification to an existing permit	
Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop syste	m,
below-grade tank, or proposed alternative method	

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.				
Operator: Chevron Midcontinent, LP OGRID #: 241333				
Address: _P.O. Box 36366 Houston, TX 77236				
Facility or well name: _State 16-1E				
API Number: <u>30-045-24298</u> OCD Permit Number:				
U/L or Qtr/Qtr Otr/Qtr P Section 16 Township 26 N Range 7W County: San Juan				
Center of Proposed Design: Latitude <u>36_489193°</u> Longitude <u>107_692261°</u> NAD: <u>1983</u>				
Surface Owner: Federal State Trivate Tribal Trust or Indian Allotment				
2.				
Pit: Subsection F or G of 19.15.17.11 NMAC				
Temporary: Drilling Workover				
Permanent Emergency Cavitation P&A				
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other				
☐ String-Reinforced				
Liner Seams: Welded Factory Other Volume: 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				
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other				
Liner Seams: Welded Factory Other				
4. ⊠ Below-grade tank: Subsection I of 19.15.17.11 NMAC				
Volume: _95bblbbl Type of fluid: _Produced Water				
Tank Construction material: Steel				
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off				
☐ Visible sidewalls and liner ☒ Visible sidewalls only ☐ Other				
Liner type: Thicknessmil				
5.				
Alternative Method:				
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Rureau office for consideration of approval				

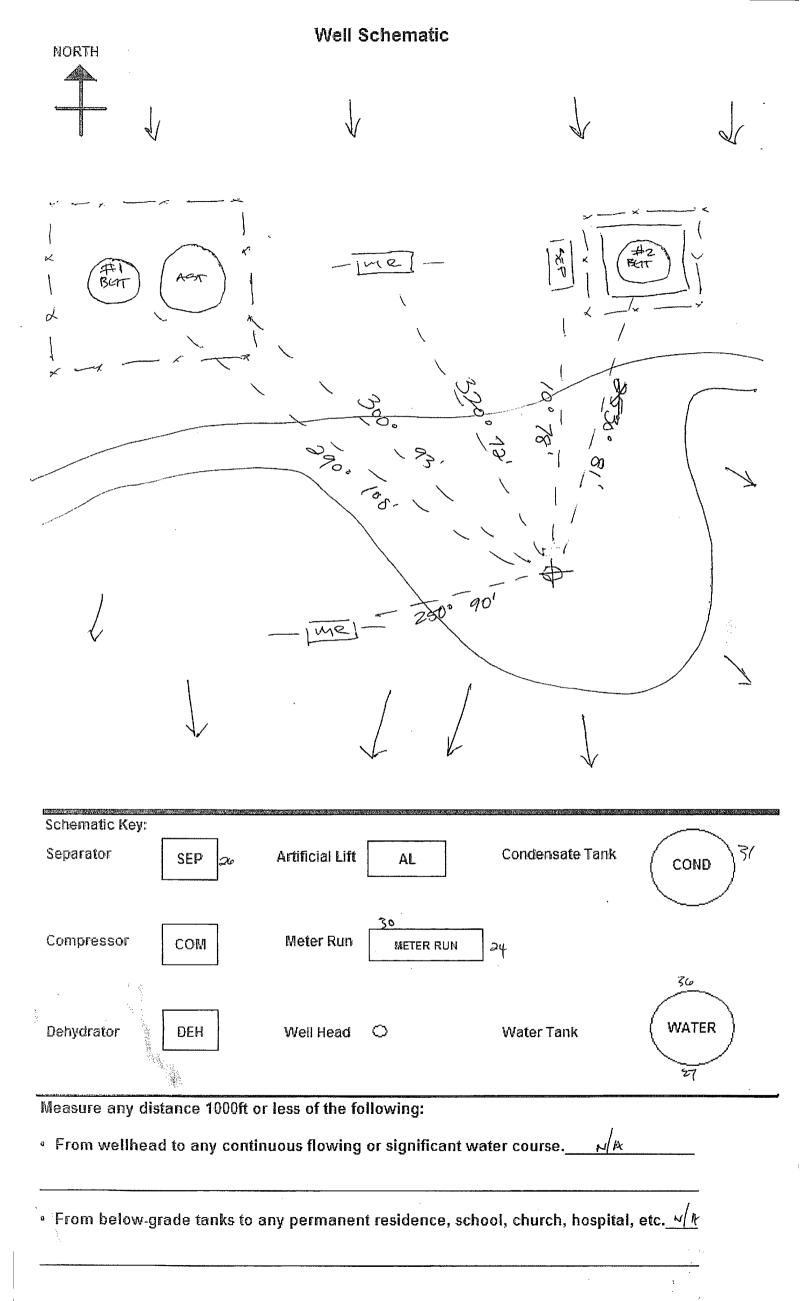
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school,	hospital,
institution or church) [Four foot height, four strands of barbed wire evenly spaced between one and four feet	•
Alternate. Please specify Four foot, pipe frame with square wire mesh.	
7.	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen □ Netting □ Other	
Monthly inspections (If netting or screening is not physically feasible)	
Informally inspections (if neutring of screening is not physically reasons)	
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	office for
consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
10.	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval.
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - Please reference hydrogeologic report and printout from iWATERS database.	☐ 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). - Please reference the attached topographic map with distance rings. In addition, a field visit was conducted by Envirotech in July 2008	☐ Yes ☑ No
certifying that, at the time, there were no watercourses within the distance specified above. Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☑ No
(Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Please reference the attached aerial photo. In addition, a field visit was conducted by Envirotech in July 2008 certifying that, at the time, there were no referenced buildings within the distance specified above.	□ NA
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) Please reference the attached aerial photo. In addition, a field visit was conducted by Envirotech in July 2008 certifying that, at the time, there were no referenced buildings within the distance specified above. 	
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. - Please reference the attached iWATERS printout. In addition, a field visit was conducted by Envirotech in July 2008 certifying that, at the time, there were no wells or springs within the distances specified above.	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.	☐ Yes ☒ No
The site is not within any known incorporated municipal boundaries, please reference the attached topographic map. Within 500 feet of a wetland.	│ □ Yes ☑ No
 Please reference the attached topographic map with distance rings. In addition, a field visit was conducted by Envirotech in July 2008 certifying that, at the time, there were no wetlands within the distance specified above 	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Please reference the attached topographic map	☐ Yes ☑ No
Within an unstable area. - Please reference the attached topographic map which includes FEMA flood map data. The map indicates the well site is outside of any known 100 year floodplains.	☐ Yes ⊠ No
Within a 100-year floodplain.	_

11. 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:(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 Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including 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 H of 19.15.17.13 NMAC ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

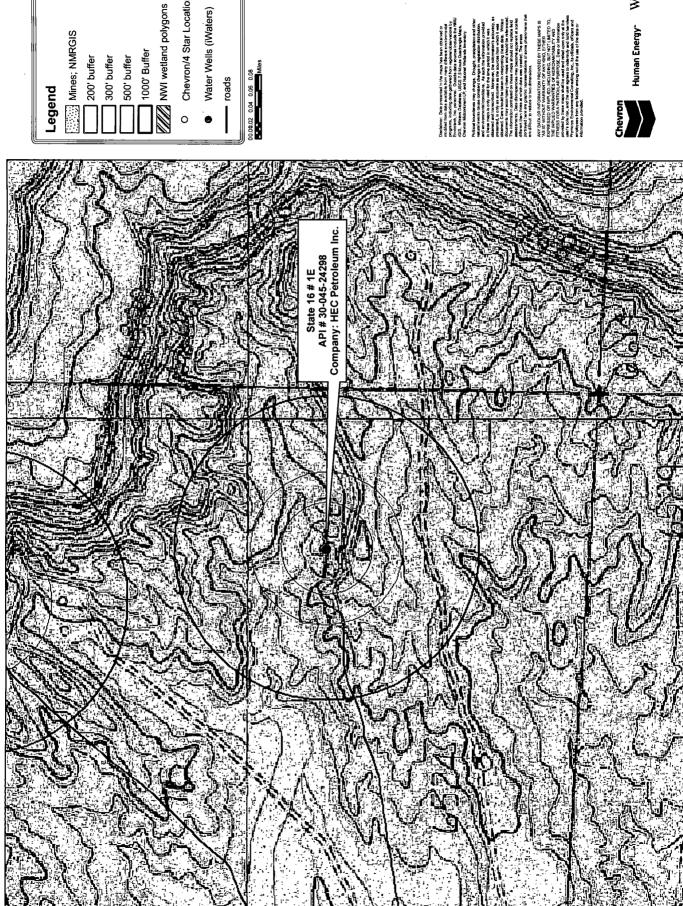
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, a facilities are required.		
•	Disposal Facility Permit Number:	
Disposal Facility Name: Disposal Facility Permit Number:		•
Will any of the proposed closed-loop system operations and associated activities of Yes (If yes, please provide the information below) ☐ No	ccur on or in areas that will not be used for future serv	vice and operations?
Required for impacted areas which will not be used for future service and operatio Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	e requirements of Subsection H of 19.15.17.13 NMAC I of 19.15.17.13 NMAC	2
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may require considered an exception which must be submitted to the Santa Fe Environmental demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC j	e administrative approval from the appropriate distr l Bureau office for consideration of approval. Justi	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data	a 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	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;	a obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sig lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site	nificant watercourse or lakebed, sinkhole, or playa	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church - Visual inspection (certification) of the proposed site; Aerial photo; Satellite		☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that les watering purposes, or within 1000 horizontal feet of any other fresh water well or see NM Office of the State Engineer - iWATERS database; Visual inspection of	spring, in existence at the time of initial application.	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approve		☐ Yes ☐ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visu	al inspection (certification) of the proposed site	Yes No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining	g and Mineral Division	☐ Yes ☐ No
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
18. On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached. □ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying proceeding Protocols and Procedures - based upon the appropriate requirements of 19.1. □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Confirmation Plan - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	quirements of 19.15.17.10 NMAC f Subsection F of 19.15.17.13 NMAC ppropriate requirements of 19.15.17.11 NMAC pad) - based upon the appropriate requirements of 19. 5.17.13 NMAC quirements of Subsection F of 19.15.17.13 NMAC Subsection F of 19.15.17.13 NMAC drill cuttings or in case on-site closure standards cann H of 19.15.17.13 NMAC I of 19.15.17.13 NMAC	15.17.11 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): Rodney Bailey Title: Waste & Water Group Lead	_		
Signature: Date: March 1, 2010	- }		
e-mail address: Bailerg@chevron.com Telephone: (432) 687 7123			
20. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)			
OCD Representative Signature: Approval Date: 4/2/11	-		
Title: OCD Permit Number:	_ <u> </u>		
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.			
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more th two facilities were utilized.			
Disposal Facility Name: Disposal Facility Permit Number:	-		
Disposal Facility Name: Disposal Facility Permit Number:	-		
Yes (If yes, please demonstrate compliance to the items below) 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: 1927 1983			
25. Operator Closure Certification:	$\overline{}$		
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.			
Name (Print): Title:			
Signature: Date:			
e-mail address: Telephone:			

JEW BRYCHTULY DREEL Well Name & Number: STATE # 16-1E (Davora) API#: 3004524298 Initials: Lease #: 516-1E Quarter/Quarter: P Section: 16 Township: 26x Range: 7w Lat: <u>1310.483193</u> Long: 10107.6922101 Pit Tank #1: Manufacturer: 8120 FAGUE WELDING DOM: 12-04 Serial #: 8120 Size 20 bbl Height_4./ o If N/A – Dimensions: Diameter <u>/\varphi</u>. | Steel X Galvanized Material: Fiberglass____ Tank Configuration: Double Wall ____ Single Wall ____ (Buried ____ or Exposed ___ Walls) Contents: Produced Water Condensate Recycled Oil Tank Top Covering: Solid/Cone-top____ Netting \(\frac{\cappa}{2} \) (Solid \(\cappa \) Fiber__) Secondary Containment: Yes \(\frac{1}{2} \) No____ Fencing around berm: Yes \(\sqrt{} \) No____ ○ Fence Type: Cattle Panel Field Fence X Barbwire Pit Tank #2: Manufacturer: EAGLE WELVING Size_ 95 DOM: 12/04 Serial #: 9123 ○ If N/A – Dimensions: Diameter /Z Height___♥ Steel X ___ Material: Galvanized Fiberglass Tank Configuration: Double Wall Single Wall X (Buried or Exposed X Walls) Contents: Produced Water X Condensate Recycled Oil Tank Top Covering: Solid/Cone-top____ Netting \(\sqrt{} \) (Solid \(\sqrt{\sqrt{}} \) Fiber__) Secondary Containment: Yes X No Fencing around berm: Yes 😗 Field Fence $\overset{\sim}{}$ o Fence Type: Cattle Panel Barbwire Above-Ground Tank #1: Manufacturer: EATON METHE PRINCES DOM:__ </ Serial #: 6108-51 Size 300 bbl Height___ /5 o If N/A – Dimensions: Diameter / Z Steel X'___ Galvanized___ Material: Fiberglass__ Contents: Produced Water____ Condensate X (State # 41 - 4230) Recycled Oil Secondary Containment: Yes X No Above-Ground Tank #2: Manufacturer:___ DOM:____ Serial #:____ Size____bbl If N/A – Dimensions: Diameter_____ Height____ Galvanized____ -Material: --- Steel---Fiberglass_ Contents: Produced Water____ Condensate____(State #_____) Recycled Oil__ Secondary Containment: Yes____ No__ Above-Ground Tank #3: Manufacturer:___ Size____bbl DOM:_____ Serial #:_ If N/A – Dimensions: Diameter Height____ Material: Steel____ Galvanized___ Fiberglass___ Condensate_____(State #_____) Recycled Oil____ Contents: Produced Water____ Secondary Containment: Yes____ No_



State 16 # 1 E API # 30-045-24298



Chevron/4 Star Locations

roads

1000' Buffer

Mines; NMRGIS

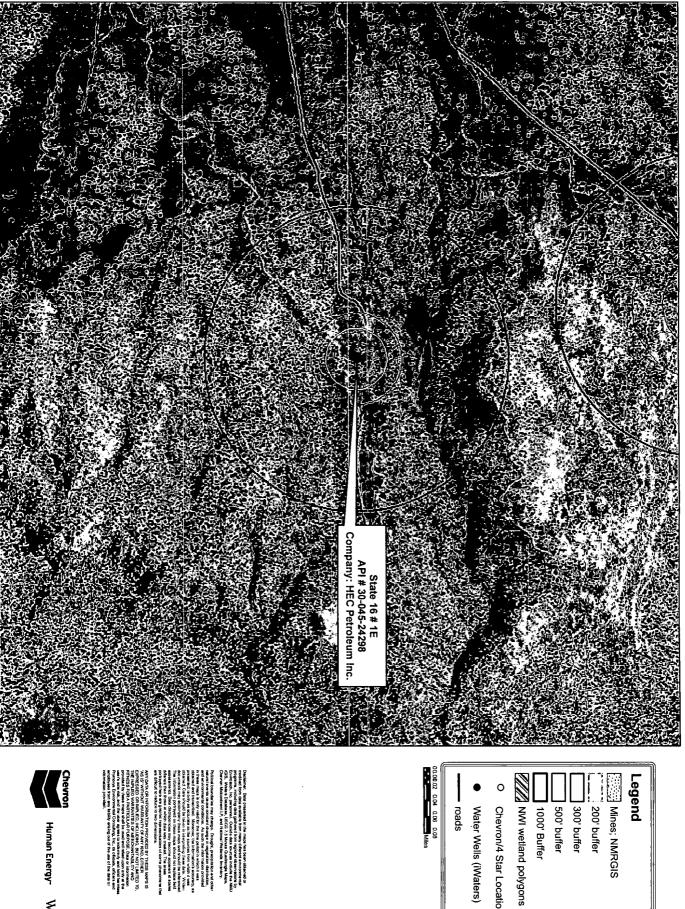
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State 16 # 1 E API # 30-045-24298





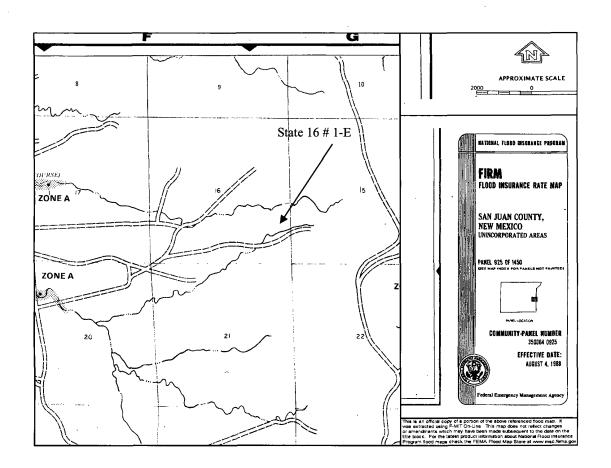
1000' Buffer 500' buffer 300' buffer





Chevron Human Energy W <

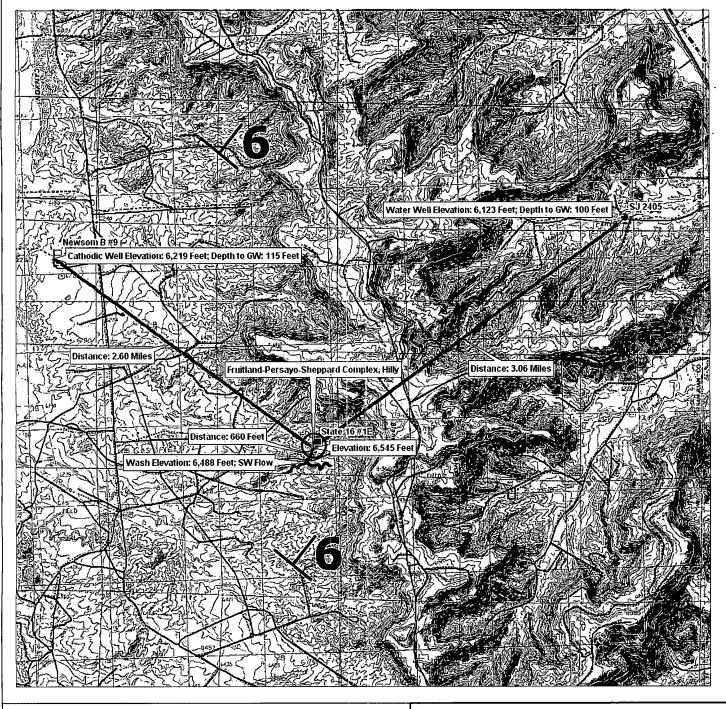
State 16 #1-E API # 30-045-24298 SE ½ SE ½ Sec. 16 T26N R8W



State 16 #1E Groundwater Statement

The attached iWATERS database search and topographic map shows a water well approximately 3.06 miles to the north-east with a depth to groundwater of 100 feet. This water well is labeled on the topographic map with a red point. As evidenced on the attached topographic map, the water well is at an elevation approximately 422 feet lower than the State 16 #1E well site, which is represented by a blue flag on the topographic map. The attached cathodic well data sheet for a cathodic well drilled in 1994 for the Newsom B #9 well site, owned and operated by Meridian Oil Inc., shows that groundwater was encountered at 115 feet. This cathodic well data sheet is stamped as being accepted by the OCD in January of 1995. The Newsom B #9 well site is approximately 2.60 miles north-west of the State 16 #1E well site and at an elevation 326 feet lower than the State 16 #1E well site. The Newsom B #9 well site is labeled on the topographic map with a yellow flag. The soil type at the State 16 #1E well site is the Fruitland-Persayo-Sheppard Complex, hilly. This is a well drained soil, characterized by a fine sandy loam material and a moderate water capacity. The nearest wash is approximately 660 feet to the south of the State 16 #1E well site at an elevation of 6,488 feet. This is a south-west flowing emphereal wash that only exists during periods of heavy precipitation. This wash is not a first or second order tributary or a named wash. The State 16 #1E well site lies in the Ojo Alamo Sandstone Formation Aquifer which dips at 6 degrees to the north-east (Frenzel, 1983); see Topographic Map for aquifer dip direction. The Ojo Alamo Sandstone Formation dips towards the basin center to a maximum depth of 3,645 feet (Frenzel, 1983). These findings give definitive proof that the depth to groundwater is greater than 50 feet from the bottom of the BGT at the State 16 #1E well site. All above information, excluding the aguifer dip, was confirmed by a visual inspection performed by Envirotech, Inc.

The **Ojo Alamo Sandstone** (Toa) of Paleocene age is the basal Tertiary unit within the eastern San Juan Basin and grades into the overlying silts and clays of the Nacimientos/Animas Formations (Brimhall, 1983, p. 200). The Ojo Alamo disconformably overlies the Kirtland Shale in the subsurface although in some places along the eastern side of the basin, the Ojo Alamo unconformity completely cut out the Kirtland to Fruitland Formations and rests directly on the Lewis Shale (Fassett, 1974, p. 228). The thickness of the overall section ranges from 72 to 313 feet (Stone, etal, 1983, p. 31). The unit is comprised predominantly a cross-bedded, moderately consolidated, medium to very coarse-grained, frequently pebbly immature lithic conglomeratic sandstones (Stone, etal, 1983, p. 31). The depositional environment of the sandstone beds is fluvial (Fassett, 1973) and interbedded with clay and silt beds. Where it structurally outcrops along a narrow band, the Ojo Alamo forms well-pronounced cliffs.



LEGEND

Aquifer Strike &

√ Emphereal Wash

Well Area Soil Type



Distance

Topographic Map State 16 #1E Sec 16, Twp 26N, Rge 08W San Juan County, New Mexico

SCAI	E: N	rs		FIGURE	F NO	1	REV
PROJECT N092270-0342		110011	. 110.				
	REVISIONS						
NO.	DATE	BY			DESCRIF	PTION	
MAP	DRWN	TLM		DATE	4/27/09	j	



5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

Web Soil Survey 2.2 National Cooperative Soil Survey

Natural Resources Conservation Service

Soil Map-San Juan County, New Mexico, Eastern Part

MAP LEGEND

MAP INFORMATION

Soils Area of Interest (AOI) Area of Interest (AOI) 8 Other

Special Point Features Soil Map Units Blowout

Gravel Pit Closed Depression Clay Spot Borrow Pit

Marsh or swamp Lava Flow Landfill

Perennial Water Miscellaneous Water

Mine or Quarry

Rock Outcrop

Sandy Spot Saline Spot

Sinkhole

Severely Eroded Spot

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Wet Spot Very Stony Spot

Special Line Features Gully

Political Features Other

Water Features

Oceans 0

Gravelly Spot

Streams and Canals

Transportation ₹ Rails

Interstate Highways

US Routes

Local Roads Major Roads

Short Steep Slope

Coordinate System: UTM Zone 13N NAD83

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov

Please rely on the bar scale on each map sheet for accurate map

The soil surveys that comprise your AOI were mapped at 1:63,360

Map Scale: 1:9,570 if printed on A size (8.5" × 11") sheet.

measurements.

Cities

the version date(s) listed below. This product is generated from the USDA-NRCS certified data as of

Soil Survey Area: San Juan County, New Mexico, Eastern Part Survey Area Data: Version 9, Feb 20, 2009

The orthophoto or other base map on which the soil lines were Date(s) aerial images were photographed: 10/13/1997

imagery displayed on these maps. As a result, some minor shifting compiled and digitized probably differs from the background of map unit boundaries may be evident.

Map Unit Legend

San Juan County, New Mexico, Eastern Part (NM618)				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
ВТ	Blancot-Notal association, gently sloping	40.2	9.0%	
DS	Doak-Sheppard-Shiprock association, rolling	18.7	4.2%	
FX	Fruitland-Persayo-Sheppard complex, hilly	288.4	64.5%	
RT	Rock outcrop-Travessilla-Weska complex, extremely steep	89.2	19.9%	
TA	Travessilla-Weska-Rock outcrop complex, moderately steep	10.7	2.4%	
Totals for Area of Interest		447.2	100.0%	

San Juan County, New Mexico, Eastern Part

FX—Fruitland-Persayo-Sheppard complex, hilly

Map Unit Setting

Elevation: 4,800 to 6,400 feet

Mean annual precipitation: 6 to 10 inches Mean annual air temperature: 51 to 55 degrees F

Frost-free period: 140 to 160 days

Map Unit Composition

Fruitland and similar soils: 40 percent Persayo and similar soils: 30 percent Sheppard and similar soils: 25 percent

Description of Fruitland

Setting

Landform: Alluvial fans, stream terraces

Landform position (three-dimensional): Riser, rise

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Slope alluvium derived from sandstone and shale

Properties and qualities

Slope: 5 to 30 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00

to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/

cm)

Sodium adsorption ratio, maximum: 2.0

Available water capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability (nonirrigated): 7e

Ecological site: Sandy (R035XB002NM)

Typical profile

0 to 4 inches: Sandy loam 4 to 60 inches: Fine sandy loam

Description of Persayo

Setting

Landform: Breaks, hills, ridges

Landform position (two-dimensional): Backslope, footslope,

shoulder, toeslope

Landform position (three-dimensional): Side slope, nose slope, head

slope, crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Residuum weathered from shale

Properties and qualities

Slope: 5 to 30 percent

Depth to restrictive feature: 5 to 20 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately high (0.00 to 0.20 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 2 percent

Gypsum, maximum content: 2 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Land capability (nonirrigated): 7e

Ecological site: Shale Hills (R035XA130NM)

Typical profile

0 to 18 inches: Clay loam 18 to 20 inches: Bedrock

Description of Sheppard

Setting

Landform: Dunes

Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Eolian deposits over mixed alluvium

Properties and qualities

Slope: 5 to 30 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to

very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm) Available water capacity: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability (nonirrigated): 7e

Ecological site: Deep Sand (R035XB007NM)

Typical profile

0 to 4 inches: Loamy fine sand 4 to 60 inches: Loamy fine sand

Data Source Information

Soil Survey Area: San Juan County, New Mexico, Eastern Part

Survey Area Data: Version 9, Feb 20, 2009

6-30.045-05938

9-30-045-05943 Data sheet for deep ground bed cathodic. Protection wells NORTHWESTERN NEW MEXICO

Operator Meridian Oil INC Location: Unit G Sec. 07 Two 26 Rng 08
Name of Well/Wells.or Pipeline Serviced
Newsom B#G AND B#9
Elevation 62/9 Completion Date 4/20/94 Total Depth 392 Land Type F
Casing Strings, Sizes, Types & Depths 4/15 Set 99' of 8" Puc CASING.
NO GAS OF WATER, BUT 5' (60-65) OF Boulders Were ENCOUNTERED During CASING
If Casing Strings are cemented, show amounts & types used CemenTed
WITH 21 SACKS.
If Cement or Bentonite Plugs have been placed, show depths & amounts used
None
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. HIT Flesh WATER AT 115, And More Fresh
WATER AT 330. A WATER SAMPLE WAS TAKEN.
Depths gas encountered: None
Ground bed depth with type & amount of coke breeze used: 392 DepTH
Used 51 SACKS OF LOTESCO SW (5100#)
Depths anodes placed: 375, 367, 362, 344, 325, 315, 305, 295, 285, 258, 250, 239, 231, 191, +183.
Depths vent pipes placed: Surface To 392. DECEMBED
Vent pipe perforations: BoTTom 275' JAN 2 N 1995
Remarks: ON CON DING
DIST. 3

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 Point of Diversion Summary

Back

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

POD Number Tws Rng Sec q q q

Tion monte onle of the pate business

26N 08W 01 3 4 3

x

Y

1450 1 01 1

SJ 02405

Zone

-

Driller Licence:

Driller Name: KAIME, JOE

Drill Start Date:

Log File Date:
Pump Type:

Casing Size:
Depth Well: 180

Source:

Drill Finish Date: 12/31/1947

PCW Received Date:
Pipe Discharge Size:
Estimated Yield:
Depth Water: 100

0 11 11

10/5/000

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 BGT 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 I). 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.

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

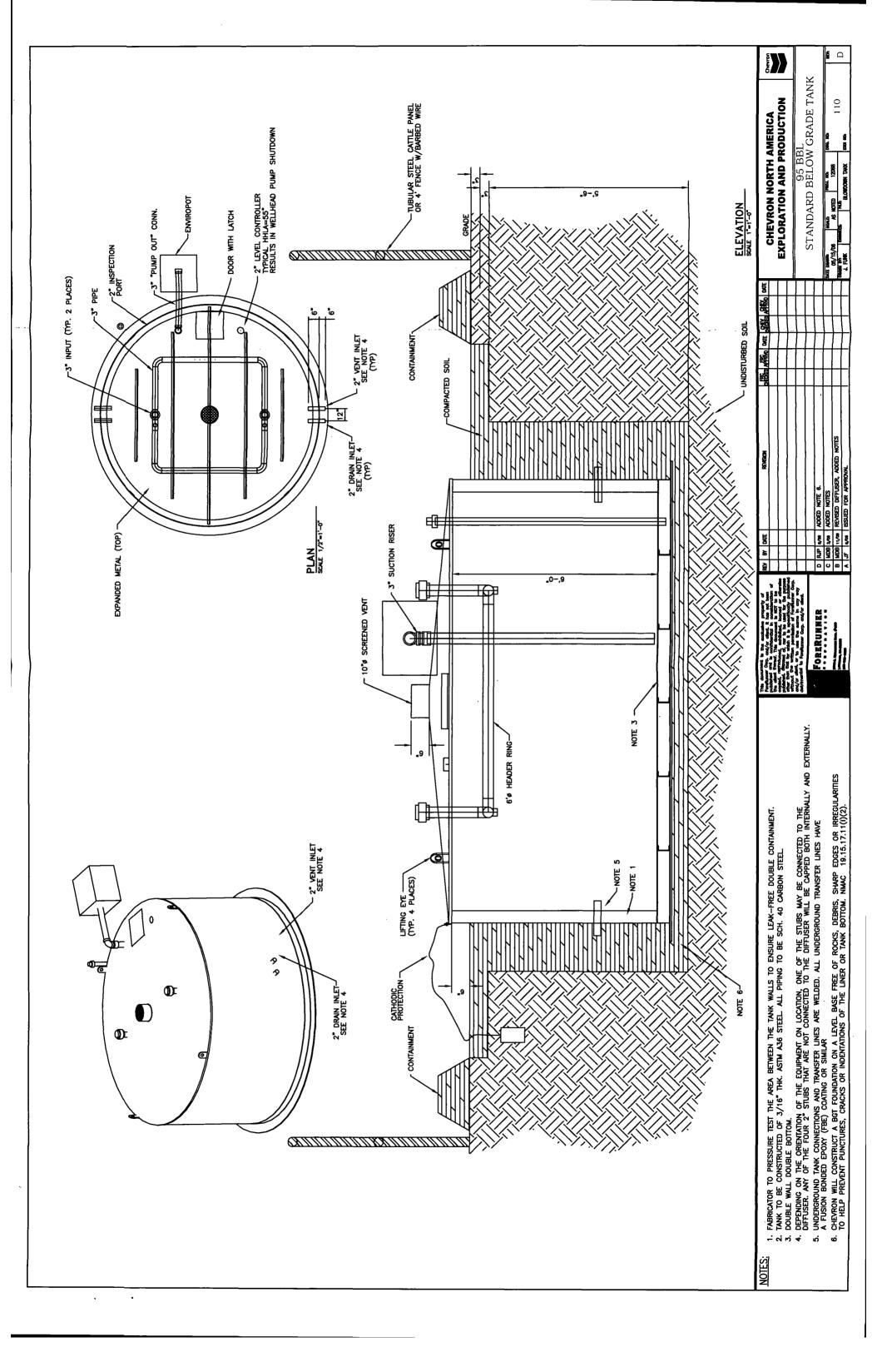
INTRODUCTION

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.



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

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.
- 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).
 - 9. 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

Inspe	ction	Date:	

Below 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;	yes .	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

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

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