Jones, Brad A., EMNRD

From:

Lindsey, Don (LLIN) [LLIN@chevron.com] Monday, September 12, 2011 8:02 PM

Sent: To:

Jones, Brad A., EMNRD

Cc:

Clenney, Laura E; CARROLL, RICHARD V; Toni McKnight; Powell, Brandon, EMNRD

Subject:

Chevron Below Ground Tanks Removed-Sites w/ 2 BGTs

Attachments:

BGTs removed 2011 & 2 BGTs on loc.xlsx

Brad.

Per our Conversation last week, which included your request to ID which BGTs were removed on sites which had more than one BGT, please see the attached list.

Highlighted in Green, are the sites we identified as having 2 BGTs, and therefore two C-144 packages. I identified in the 4th column of the spreadsheet the BGT targeted for removal, so you can reference it from the respective C-144s.

I also added the Jicarilla B-18 and C-16 to the bottom of the list, as the single BGTs from both of those locations were removed as part of those site's total abandonment- all equipment and hardware was removed.

Noting a further Clarification I learned today:

That Rincon 73 and Rincon 303M are wells on the same pad and each had a single (1) BGT.

It appears we Permitted BGT 1 & 2 on Rincon 73, and no BGTs on the 303M.

I made those notes on the attached spreadsheet as well.

Also, I am still working on addressing your questions regarding Section 10 of the C-144's. We will likely have the Consultant who constructed the Packages to get involved. I am told there were a few meetings months ago with you on this issue, as the packages were being constructed. Having not been involved myself, I believe at this point we will likely need to get the folks that were involved, engaged again.

Thanks again for working with us to have all of our Closure and Permit documents in proper order.

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

^{**}Therefore, we will need to Modify the C-144 for the No 73's BGT #2, and rename it as the lone (BGT 1) on the 303M.

Double Wall Below Ground		Section 23 T27N R6W	30-039-20157	Rincon 146
Single Wall Above Ground		Section 28 T7N R6W	30-039-25224	Rincon 128M
Double Wall Below Ground		Section 24 T27N R7W	30-039-25343	Shelby Federal 1E
Single Wall Above Ground	BGT 2 = 45 BBI "Buried"	Section 31 T27N R6W	30-039-25433	Rincon 183E
Single Wall Above Ground	BGT 2 = 95 BBI "Buried"	Section 35 T27N R7W	30-039-25361	Rincon 187E
Single Wall Above Ground	BGT 1 = 65 BBI "Buried"	Section 11 T26N R7W	30-039-25396	Rincon 302
Double Wall Below Ground	BGT 2 = 95 BBI "Buried"	Section 26 T27N R7W	30-039-26209	Rincon 169M
Double Wall Below Ground		Section 33 T27N R7W	30-039-06780	Rincon 72
Single Wall Above Ground	BGT 1, 95 BBI "Buried"	Section 34 T27N R7W	30-039-25404	Rincon 306
Double Wall Below Ground	Single BGT 30 BBI- Single wall Buried	Section 36 T27N R7W	30-039-26744	Rincon 303M (Actually permited as Rincon 73 BGT#2)
Double Wall Below Ground	BGT 1, 30 BBI- Single wall Buried	Section 33 T27N R7W	30-039-06824	Rincon 73 (Same Pad & Location as Rincon 303M)
Single Wall Above Ground	BGT2, 45 BBL "Vis Sidewalls"	Section 33 T27N R7W	30-039-25406	Rincon 186M
Single Wall Above Ground	BGT 1 = 95 BBI "Buried"	Section 33 T27N R7W	30-039-25403	Rincon 303
Single Wall Above Ground	BGT 2, 45 BBI "Vis Sidewalls"	Section 35 T27N R7W	30-039-25529	Rincon 193M
Single Wall Above Ground	BGT 2, 95 BBI "Vis Sidewalls"	Section 16 T26N R8W	30-045-24298	State 16-1E
Double Wall Below Ground		Section 14 T29N R13W	30 045-29035	Redfern 1
Double Wall Below Ground		Section 27 T32N R12W	30-045-28892	Horton Federal CB-27 #1
Single Wall Above Ground		Section 2 T31N R7W	30-045-22781	State 3
No Replacement Tank	BGT 1, 65 BLL "Recycled oil"	Section 33 T30N R12W	30-045-29023	Redfern 2
No Replacement Tank		Section 16 T31N R9W	30-045-31993	Wayne Moore Com 2S
No Replacement Tank, we Abdn the Loc		Section 22 T25N R5W	30-039-22840	Jicarilla C-34
New Replacement Tank	BGT to be Removed [As described on C-144]	Location S/T/R	<u>API</u>	<u>Site</u>

Additions (BGTs removed as part of Total Location Abandonment)

Jicarilla B-18

30-039-05744 · Section 31 T25N R 5W

Jicarilla C-16

30-039-05760 Section 34 T25N R5W

Only a single BGT- 95 BBI Fiberglass Only a single BGT- 95 BBI Fiberglass

No Replacement Tank, we Abdn the Loc No Replacement Tank, we Abdn the Loc

<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 State of New Mexico Energy Minerals and Natural Resources District II Department 1301 W. Grand Avenue, Artesia, NM 88210 Oil Conservation Division 1000 Rio Brazos Road, Aztec, NM 87410 1220 South St. Francis Dr. District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 PM 1 23 Santa Fe, NM 87505 2010 MAR

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.

Pit, Closed-Loop System, Below-Grade Tank, or

Propos	sed Alternative Metho	od Permit or Closure Plan Application			
Type of action:	Closure of a pit, closed-lo Modification to an existin Closure plan only submitt	ed for an existing permitted or non-permitted pit, closed-loop system,			
below-grade tank, or proposed alternative method					
Instructions: Please submit	one application (Form C-144) po	er individual pit, closed-loop system, below-grade tank or alternative request			
		of liability should operations result in pollution of surface water, ground water or the comply with any other applicable governmental authority's rules, regulations or ordinances.			
1.					
Operator: Four Star Oil & Gas Comp	pany	OGRID #: <u>131944</u>			
Address: P.O. Box 36366 Houston,	ΓX 77236				
Facility or well name: _Jicarilla C 16					

Address: P.O. Box 36366 Houston, TX 77236				
Facility or well name: <u>Jicarilla C 16</u>				
API Number: <u>30-039-05760</u> OCD Permit Number:				
U/L or Qtr/Qtr Otr/Qtr D Section 34 Township 25N Range 5W County: Rio Arriba				
Center of Proposed Design: Latitude 36 361466° Longitude 107 353042° NAD: 1927 1983				
Surface Owner: Federal State Private 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: Thickness mil LLDPE HDPE PVC Other Liner Seams: Welded Factory Other				
4. ⊠ Below-grade tank: Subsection I of 19.15.17.11 NMAC Take				
Volume: 95 bbl Type of fluid: Produced Water				
Tank Construction material: _Fiberglass				
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: Thickness mil HDPE PVC Other None

Alternative Method:

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

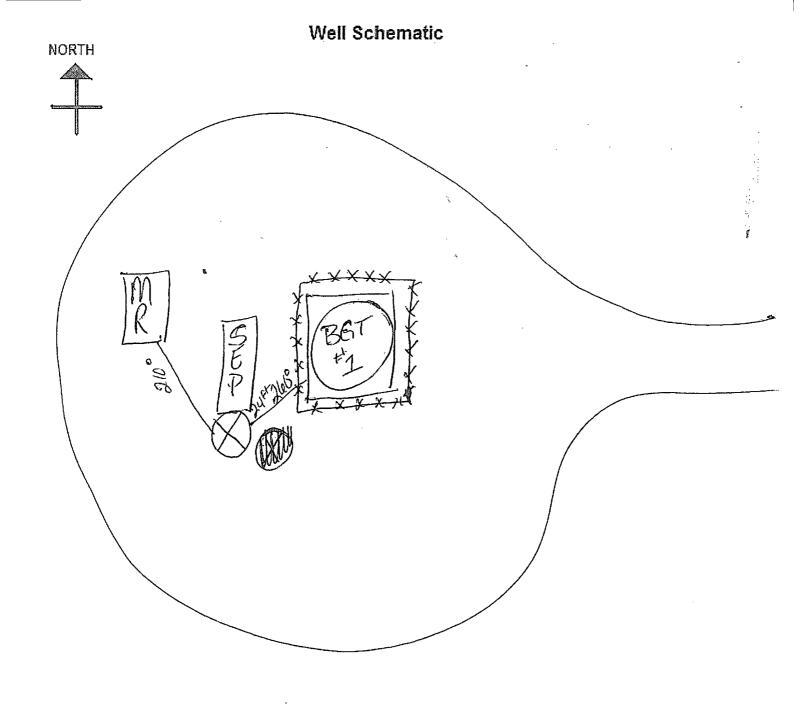
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	hospital, 1
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen Netting Other Monthly inspections (If netting or screening is not physically feasible)	
Signs: Subsection C of 19.15.17.11 NMAC ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers ☐ Signed in compliance with 19.15.3.103 NMAC	
Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau of consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying above-grade tanks associated with a closed-loop system.	priate district pproval.
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - Please reference hydrogeologic report and printout from iWATERS database. 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 ☐ 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. (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,	☐ Yes ⊠ No ☐ NA
there were no referenced buildings within the distance specified above. Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (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.	☐ Yes ☐ No ☑ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - 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☐ 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. The site is not within any known incorporated municipal boundaries, please reference the attached topographic map.	☐ Yes ☑ No
Within 500 feet of a wetland. - 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. Within a 100 year floodplain.	☐ Yes ☑ No
Within a 100-year floodplain FEMA map	

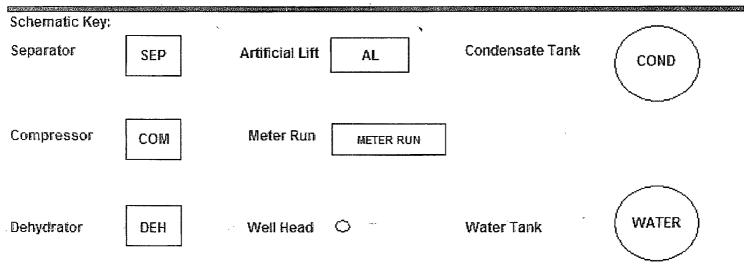
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 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)
13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC 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 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)
15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, facilities are required.					
Disposal Facility Name:	Disposal Facility Permit Number:				
Disposal Facility Name:	Disposal Facility Permit Number:				
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations? Yes (If yes, please provide the information below) No					
Required for impacted areas which will not be used for future service and operation 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 NMA(o I 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 provided below. Requests regarding changes to certain siting criteria may requi considered an exception which must be submitted to the Santa Fe Environmenta demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC	re administrative approval from the appropriate dist al 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; Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA			
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Da	ta 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; Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	gnificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No			
Within 300 feet from a permanent residence, school, hospital, institution, or churc - Visual inspection (certification) of the proposed site; Aerial photo; Satellie		Yes No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that lew attering purposes, or within 1000 horizontal feet of any other fresh water well or - NM Office of the State Engineer - iWATERS database; Visual inspection	spring, in existence at the time of initial application.	☐ Yes ☐ No			
Within incorporated municipal boundaries or within a defined municipal fresh was adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written appro	•	☐ Yes ☐ No			
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visu	nal inspection (certification) of the proposed site	Yes No			
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Minin	g and Mineral Division	☐ Yes ☐ No			
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map 	gy & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No			
Within a 100-year floodplain FEMA map		☐ Yes ☐ No			
Dn-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 a Construction/Design Plan of Temporary Pit (for in-place burial of a drying Protocols and Procedures - based upon the appropriate requirements of 19.1 Confirmation Sampling Plan (if applicable) - based upon the appropriate re— Waste Material Sampling Plan - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Soil Cover Design - 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 of Subsection F of 19.15.17.13 NMAC appropriate requirements of 19.15.17.11 NMAC pad) - based upon the appropriate requirements of 19. 15.17.13 NMAC quirements of Subsection F of 19.15.17.13 NMAC of Subsection F of 19.15.17.13 NMAC drill cuttings or in case on-site closure standards cannot H of 19.15.17.13 NMAC of 19.15.17.13 NMAC	15.17.11 NMAC			

19.	
Operator Application Certification: I hereby certify that the information submitted with this application is true, accurately that the information submitted with this application is true, accurately than the information submitted with this application is true, accurately than the information submitted with this application is true, accurately than the information submitted with this application is true, accurately than the information submitted with this application is true, accurately than the information submitted with this application is true, accurately than the information submitted with the information submitted with this application is true, accurately than the information submitted with the info	ate and complete to the best of my knowledge and belief
Name (Print): Rodney Bailey	Title: Waste & Water Group Lead
Signature: The Landson	Date: March 1, 2010
e-mail address: Bailerg@chevron.com	Telephone: (432) 687 7123
OCD Approval: Permit Application (including closure plan) OCD Representative Signature: Title:	Approval Date:OCD Permit Number:
21. <u>Closure Report (required within 60 days of closure completion)</u> : Subsection Instructions: Operators are required to obtain an approved closure plan prior t The closure report is required to be submitted to the division within 60 days of t section of the form until an approved closure plan has been obtained and the cl	o implementing any closure activities and submitting the closure report. he completion of the closure activities. Please do not complete this
22. Closure Method: Waste Excavation and Removal On-Site Closure Method Alternal If different from approved plan, please explain.	ative Closure Method Waste Removal (Closed-loop systems only)
23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please indentify the facility or facilities for where the liquids, drill two facilities were utilized.	ling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	
Were the closed-loop system operations and associated activities performed on or Yes (If yes, please demonstrate compliance to the items below) No	in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and operati Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ons:
24. Closure Report Attachment Checklist: Instructions: Each of the following its 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	ems must be attached to the closure report. Please indicate, by a check ude NAD:1927 1983
25.	
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure relation. I also certify that the closure complies with all applicable closure requirem	
Name (Print):	Title:
Signature:	Date:

0	Well Name & Number:	millac. C. # 160	DAT	TE: 7/25/08
	API#: 3003905760		Init	
0	Lease #: U/A	,		1 11/1
•	Quarter/Quarter: D Sect	ion: <u>34</u> Township:	වර්시 Range: _ ල	500 DCH14
	Lat: N36.3614/00 L			-
		. /		
0	Pit Tank #1: Manufacturer:	NA		
9	Serial #: Klf A	DOM: N/A	Size N//	bbl
	o If N/A – Dimensions: Diam	eter 12	Height_3'	Tay y Manana
0	Material: Steel	Galvanized	Fiberglass X.	
9	Tank Configuration: Double Wall			
0	Contents: Produced Water <u></u>	Condensate Recyc	led Oil	
	Tank Top Covering: Solid/Cone-t		_ Fiber <u>()</u>	
0	Secondary Containment: Yes X	No		
8	Fencing around berm: Yes X	No		
	o Fence Type: Cattle Panel_	Field Fence 🗶	Barbwire	
	Pit Tank #2: Manufacturer:			
0	Serial #:			
	o If N/A – Dimensions: Diam			
	•	Galvanized		
	Tank Configuration: Double Wall		•	edWalls)
	Contents: Produced Water			
0	Tank Top Covering: Solid/Cone-to		_ Fiber)	
9	Secondary Containment: Yes			
Ø	Fencing around berm: Yes o Fence Type: Cattle Panel		Daubyvina	
	O Fence Type. Cattle Faner_	Plead Pence	Darbwire	
0	Above-Ground/Nank #1: Manu	facturer: All	\wedge	
6	Serial #: M/A	DOM: W/A	Size M/	7 bbs
	o If N/A – Dimensions: Diam		Height 3	
ø	Material: Steel	Galvanized	Fiberglass X	
6	Contents: Produced Water X	, , ,		veled Oil
0	Secondary Containment: Yes X			
ø	Above-Ground Tank #2: Manu	facturer:		
0	Serial #:	DOM:	Size	bbl
	○ If N/A – Dimensions: Diam	eter	Height	
0	Material: Steel	Galvanized	Fiberglass	
ø	Contents: Produced Water	Condensate(State #_) Recy	ycled Oil
. 6	Secondary Containment: Yes	No		
:	N.			
0	Above-Ground Tank #3: Manu			
Ø	Serial #:			
	o If N/A – Dimensions: Diam		Height	
9	Material: Steel		Fiberglass	
0	Contents: Produced Water	Condensate (State #_	Recy	ycled Oil
0	Secondary Containment: Yes	No		





Measure any distance 1000ft or less of the following:

• From wellhead to any continuous flowing or significant water course. MA

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

MA

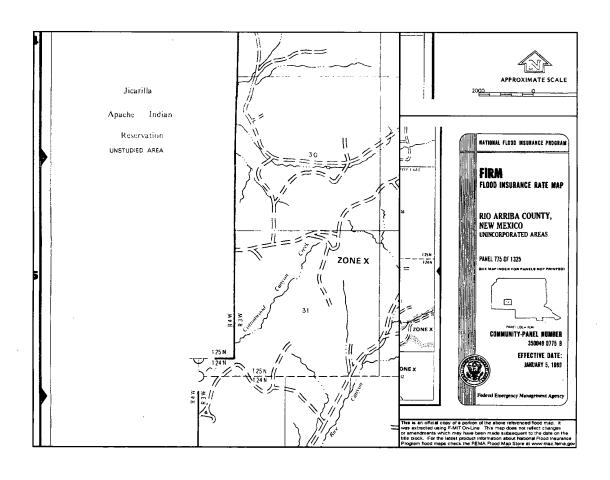
Chevron/4 Star Locations NWI wetland polygons Water Wells (iWaters) Mines; NMRGIS 1000' Buffer 500' buffer 300' buffer 200' buffer roads Legend Jicarilla C 16 API # 30-039-05760 Jicarilla C 16 API # 30-039-05760 Company: Four Star Oil & Gas

Jicarilla C 16 API # 30-039-05760 Company: Four Star Oil & Gas Jicarilla C 16 API # 30-039-05760 Chevron Legend Mines; NMRGIS 500' buffer 1000' Buffer NWI wetland polygons Water Wells (iWaters) 300' buffer Chevron/4 Star Locations 200' buffer



Jicarilla C # 16 API # 30-039-05760 Sec. 6 T24N R5W

NO Fema Map/Information available for this area

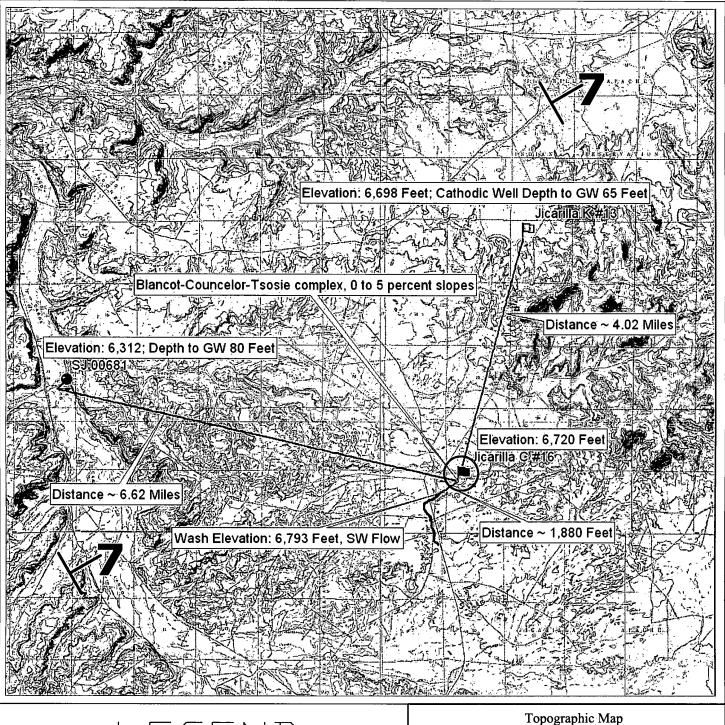


Jicarilla C #16 Groundwater Statement

The attached iWATERS database search and topographic map shows a water well approximately 6.62 miles to the north-west with a depth to groundwater of 80 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 408 feet lower than the Jicarilla C #16 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 1971 for the Jicarilla K #13 well site, owned and operated by ConocoPhillips, indicates that groundwater was encountered at 65 feet. This cathodic well data sheet is stamped as being accepted by the OCD in March of 1990. The Jicarilla K #13 well site is located approximately 4.02 miles to the north-east of the Jicarilla C #16 well site at an elevation approximately 22 feet lower than the Jicarilla C #16 well site. The Jicarilla K #13 well site is represented on the map by a yellow flag. The soil type at the Jicarilla C #16 well site is a Blancot-Councelor-Tsosie complex, 0 to 5 percent slopes. This is a well drained soil, characterized by alluvium derived from sandstone and shale and/or eolian deposits derived from sandstone and shale, with a moderate to high available water capacity. The nearest surface water is approximately 1,880 feet to the south-west of the Jicarilla C #16 well site at an elevation of 6,793 feet. This is a south-west flowing ephemeral wash that only exists during periods of heavy precipitation. This wash is not a first or second order tributary of a named wash. The Jicarilla C #16 well site lies in the San Jose Formation Aquifer which dips at 7 degrees to the north-east (Frenzel, 1983); see Topographic Map for aquifer dip direction. 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 (Frenzel, 1983). These findings indicate that the depth to groundwater is greater than 50 feet from the bottom of the BGT at the Jicarilla C #16 well site. All above information, excluding the aguifer dip, was confirmed by a visual inspection performed by Envirotech, Inc.

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, etal, 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, etal, p. 25).



LEGEND

Jicarilla C #16
Sec 34, Twp 25N, Rge 5W
Rio Arriba County, New Mexico

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\bigcirc	Well	Area	Soil	Туре
	Disto	ince		

CAL	.E: N1	rs		FIGURE NO. 1		REV	
RO	JECT NO	92270-	-0342			1	
				REVISIO	ONS		
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10.	DATE	BY	l		DESCRIP	TION	
/AP	DRWN	JPM		DATE	8/6/09		
			-				



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

Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

8/7/2009 Page 1 of 3

This product is generated from the USDA-NRCS certified data as of Soil Survey Area: Jicarilla Apache Nation, Parts of Rio Arriba and imagery displayed on these maps. As a result, some minor shifting The soil surveys that comprise your AOI were mapped at 1:24,000. Please rely on the bar scale on each map sheet for accurate map The orthophoto or other base map on which the soil lines were Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov compiled and digitized probably differs from the background Source of Map: Natural Resources Conservation Service Map Scale: 1:11,000 if printed on A size (8.5" × 11") sheet. Date(s) aerial images were photographed: 10/5/1997 MAP INFORMATION Coordinate System: UTM Zone 13N NAD83 Survey Area Data: Version 9, Dec 9, 2008 of map unit boundaries may be evident. Sandoval Counties, New Mexico the version date(s) listed below. measurements. Streams and Canals Interstate Highways Short Steep Slope Very Stony Spot Special Line Features Major Roads Local Roads US Routes Wet Spot Oceans Other Other Gully Political Features Cities Rails Water Features **Fransportation** MAP LEGEND 88 ୫ • 湖 ł ₹ Severely Eroded Spot Area of Interest (AOI) Miscellaneous Water Closed Depression Marsh or swamp Perennial Water Mine or Quarry Soil Map Units Special Point Features Rock Outcrop **Gravelly Spot** Saline Spot Sandy Spot Slide or Slip Borrow Pit Lava Flow Sodic Spot Spoil Area Stony Spot **Gravel Pit** Clay Spot Area of Interest (AOI) Sinkhole Blowout Landfiil Э X 111 Ж Soils

Map Unit Legend

Jicarilla Apache Nation, Parts of Rio Arriba and Sandoval Counties, New Mexico (NM698)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
13	Doakum-Betonnie fine sandy loams, 0 to 8 percent slopes	77.1	13.1%		
20	Menefee-Vessilla-Rock outcrop complex, 5 to 35 percent slopes	50.0	8.5%		
21	Badland-Menefee-Rock outcrop complex, 35 to 65 percent slopes	51.4	8.8%		
32	Doakum very fine sandy loam, 1 to 6 percent slopes	109.0	18.6%		
70	Blancot-Councelor-Tsosie complex, 0 to 5 percent slopes	164.9	28.1%		
104	Doakum-Oro complex, 0 to 5 percent slopes	21.5	3.7%		
156	Lindrith-Royosa complex, 2 to 7 percent slopes	91.3	15.6%		
220	Skyvillage-Eslendo-Rock outcrop complex, 3 to 35 percent slopes	21.5	3.7%		
Totals for Area of Interest		586.7	100.0%		

Jicarilla Apache Nation, Parts of Rio Arriba and Sandoval Counties, New Mexico

70—Blancot-Councelor-Tsosie complex, 0 to 5 percent slopes

Map Unit Setting

Elevation: 6,560 to 6,960 feet

Mean annual precipitation: 10 to 12 inches Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 115 to 130 days

Map Unit Composition

Tsosie and similar soils: 30 percent Councelor and similar soils: 30 percent Blancot and similar soils: 30 percent

Description of Blancot

Setting

Landform: Valley sides

Landform position (three-dimensional): Rise

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Alluvium derived from sandstone and shale

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Gypsum, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/

Sodium adsorption ratio, maximum: 13.0

Available water capacity: High (about 11.2 inches)

Interpretive groups

Land capability (nonirrigated): 6c

Ecological site: Loamy (R035XB001NM)

Typical profile

0 to 7 inches: Loam 7 to 26 inches: Clay loam 26 to 80 inches: Clay loam

Description of Councelor

Setting

Landform: Valley sides, drainageways, fans Landform position (three-dimensional): Rise

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Alluvium derived from sandstone and shale and/or

eolian deposits derived from sandstone and shale

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

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

cm)

Sodium adsorption ratio, maximum: 5.0

Available water capacity: Moderate (about 6.7 inches)

Interpretive groups

Land capability (nonirrigated): 6c Ecological site: Sandy (R035XB002NM)

Typical profile

0 to 2 inches: Fine sandy loam 2 to 32 inches: Fine sandy loam 32 to 60 inches: Loamy fine sand 60 to 80 inches: Sandy clay loam

Description of Tsosie

Setting

Landform: Drainageways, fans, valley sides Landform position (three-dimensional): Dip, rise

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Alluvium derived from sandstone and shale

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 10.0

Available water capacity: Moderate (about 8.9 inches)

Interpretive groups

Land capability (nonirrigated): 6c

Ecological site: Salt Flats (R035XB005NM)

Typical profile

0 to 2 inches: Clay loam 2 to 36 inches: Clay loam

36 to 80 inches: Stratified sandy loam to silty clay loam

Data Source Information

Soil Survey Area: Jicarilla Apache Nation, Parts of Rio Arriba and Sandoval

Counties, New Mexico

Survey Area Data: Version 9, Dec 9, 2008

30-039-20292

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

Operator Southern Union Exploration	Location: Unit E Sec. 11 Twp 25Rng 5
Name of Well/Wells or Pipeline Service	edJicarilla K #13
Elevation 6698 Completion Date 8/27/71	Total Depth 320' Land Type * Cont 145
Casing, Sizes, Types & Depths	n/a
	·
If Casing is cemented, show amounts &	types usedn/a
If Cement or Bentonite Plugs have bee	n placed, show depths & amounts used
Depths & thickness of water zones wit	•
Depths gas encountered:	n/a
Type & amount of coke breeze used: 0 i	o 1/i" mesh coke breeze
Depths anodes placed: 315,305,285,275,265	5,255,240,230,220,210'
Depths vent pipes placed:	
Vent pipe perforations:	
Remarks:	OIL CON. DIV
	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 Water Column/Average Depth to Water

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

		(quarte	rs a	re s	sma	allest	to larg	est)	(NAD83 UTM	1 in meters)		(In feet)	
POD Number	Sub basin Use	County		Q 16	۸.	Sec	Tws	Rng	X	Y		epth W VaterCo	1 4
SJ 00201	OFM	RA		1	4	03	25N	06W	280124	4034064*	1346	500	846
SJ 00681	STK	RA	4	1	4	21	25N	06W	278527	4029227*		80	
SJ 00681 12	IRR	RA	4	4	4	33	25N	06W	278833	4025662*	435		
Average Depth to Water:						290 fe	et						
		Minimum Depth:					80 fe	et					
										Maximum	Depth:	500 fe	et

Record Count: 3

PLSS Search:

Township: 25N Range: 06W

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 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)

<u>Liquids</u>

- 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.

Chevron

San Juan Basin

Below Grade Tank Design and Construction Plan

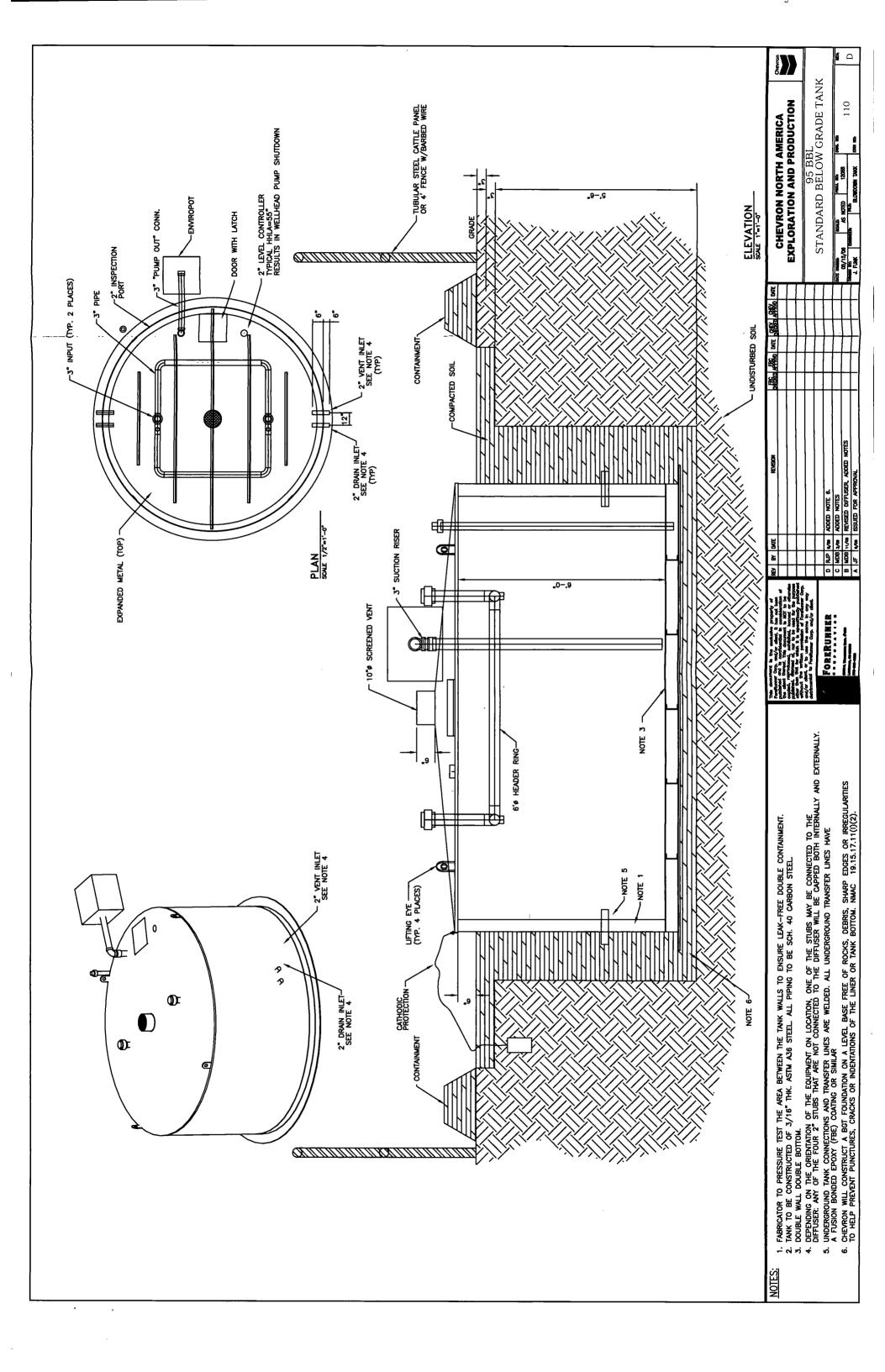
INTRODUCTION

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 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).
 - **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

Inspection Date:	Inspection	Date:	
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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

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