Form C-144 July 21, 2008

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the form of the

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 Proposed Alternative Method Permit or Closure Plan Application

☐ Closure of a  BGT 1 ☐ Modification	pit, closed-loop system, below-grade tank, or proposed alternative method pit, closed-loop system, below-grade tank, or proposed alternative method n to an existing permit n only submitted for an existing permitted or non-permitted pit, closed-loop system, ernative method
Instructions: Please submit one application (1	Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
	we the operator of liability should operations result in pollution of surface water, ground water or the esponsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator: Four Star Oil & Gas Company	OGRID #: <u>131944</u>
Address: P.O. Box 36366 Houston, TX 77236	
Facility or well name: Shiotani #10	
API Number: <u>30-045-32480</u>	OCD Permit Number:
U/L or Qtr/Qtr _Qtr/Qtr_F Section _32	Township 30N Range 12W County: San Juan
	Longitude <u>108 125273°</u> NAD: <u>1927</u> 1983
☐ String-Reinforced	mil
intent)  Drying Pad	Workover or Drilling (Applies to activities which require prior approval of a permit or notice of aul-off Bins   Other   MI OTHER HDPE   PVC OTHER MININGS OF AULTRICATION OF
Tank Construction material: <u>Steel</u> ☐ Secondary containment with leak detection ☐ Vi ☐ Visible sidewalls and liner ☐ Visible sidewalls on	d: Produced Water
5.  Alternative Method:  Submittal of an exception request is required. Exception	ons must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

<ul> <li>Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</li> <li>☐ Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school,</li> </ul>	hospital,				
institution or church)  ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet					
Alternate. Please specify None.					
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)					
8.					
Signs: Subsection C of 19.15.17.11 NMAC  ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  ☐ Signed in compliance with 19.15.3.103 NMAC					
9.					
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.					
Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.	office for				
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.					
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of 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 certifying that, at the time, there were no watercourses within the distance specified above.	☐ Yes ☒ No				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - 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 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)	☐ Yes ☐ No ☑ NA				
- 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	☐ Yes ⊠ No				
the time, there were no wells or springs within the distances specified above.  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.	☐ Yes ⊠ No				
<ul> <li>Within 500 feet of a wetland.</li> <li>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</li> </ul>	☐ Yes ⊠ No				
Within the area overlying a subsurface mine.  - Please reference the attached topographic map	☐ Yes ⊠ No				
<ul> <li>Within an unstable area.</li> <li>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.</li> </ul>	☐ Yes ⊠ No				
Within a 100-year floodplain FEMA map					

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 19.15.17.12 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: or Pe
12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design) API Number:
☐ Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.    Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC   Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC   Climatological Factors Assessment   Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC   Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC   Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC   Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC   Quality Control/Quality Assurance Construction and Installation Plan   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan   Emergency Response Plan   Oil Field Waste Stream Characterization   Monitoring and Inspection Plan   Erosion Control Plan   Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Proposed Closure: 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative  Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
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

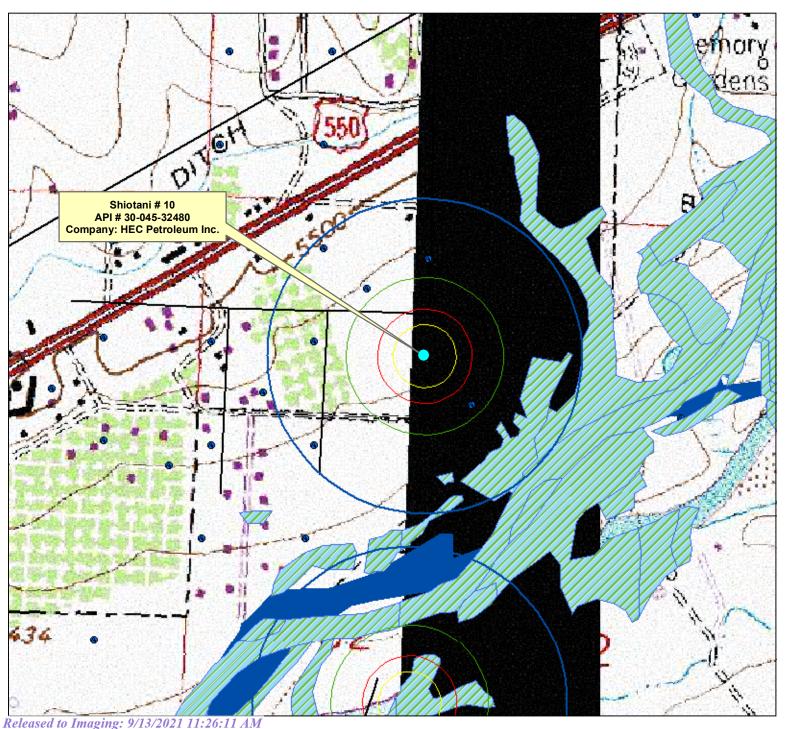
D NMAC) more than two
vice and operations?
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☐ Yes ☐ No ☐ NA
☐ Yes ☐ No ☐ NA
☐ Yes ☐ No ☐ NA
☐ Yes ☐ No
.15.17.11 NMAC

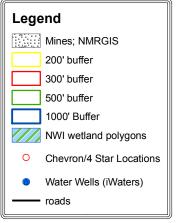
19.	
Operator Application Certification:  I hereby certify that the information submitted with this application is true.	ue accurate and complete to the best of my knowledge and belief
Name (Print): Rodney Bailey	Title: Waste & Water Group Lead
Time (Time), Addity Batter	The Hall of Hall Stap Ball
Signature: Troding Stroley	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) X OCD Conditions (see attachment)
OCD Representative Signature: CRWhitehead	Approval Date: September 13, 2021
Title: Environmental Specialist	OCD Permit Number: BGT 1
	an prior to implementing any closure activities and submitting the closure report.  days of the completion of the closure activities. Please do not complete this
22.  Closure Method:  Waste Excavation and Removal □ On-Site Closure Method □  If different from approved plan, please explain.	Alternative Closure Method   Waste Removal (Closed-loop systems only)
	Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: uids, drilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities perform  Yes (If yes, please demonstrate compliance to the items below)	
Required for impacted areas which will not be used for future service and  Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique	d operations:
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 of Disposal Facility Name and Permit Number □ Soil Backfilling and Cover Installation □ Re-vegetation Application Rates and Seeding Technique □ Site Reclamation (Photo Documentation)	Longitude NAD:
25.	
Operator Closure Certification:  I hereby certify that the information and attachments submitted with this belief. I also certify that the closure complies with all applicable closure	closure report is true, accurate and complete to the best of my knowledge and requirements and conditions specified in the approved closure plan.
Name (Print):	Title:
Signature:	Date:

e-mail address:\_

Telephone: \_\_\_

# Shiotani # 10 API # 30-045-32480





Disclaimer: Data presented in the maps has been obtained or modified from data available from many different environmental programs, including data gathered from regional observations by Envirotech, inc. personnel. Outside data sources include the Ni. rGIS, Waters Database, USGS 7.5 Minute Quadrangle Maps. Chevron Midcontinent LP, and National Wetlands Inventory.

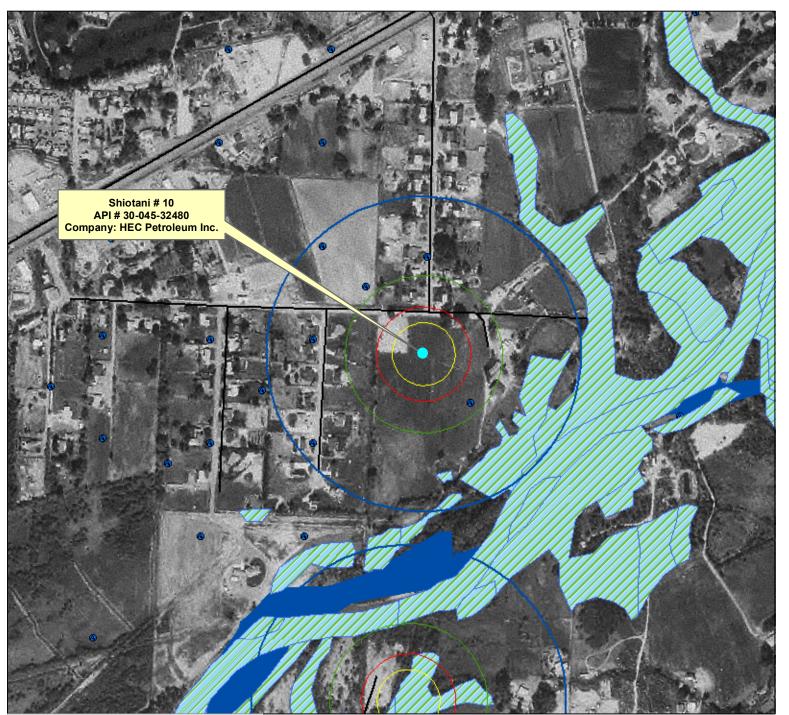
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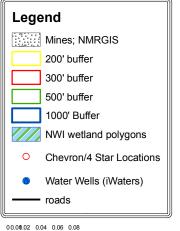
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# Shiotani # 10 API # 30-045-32480





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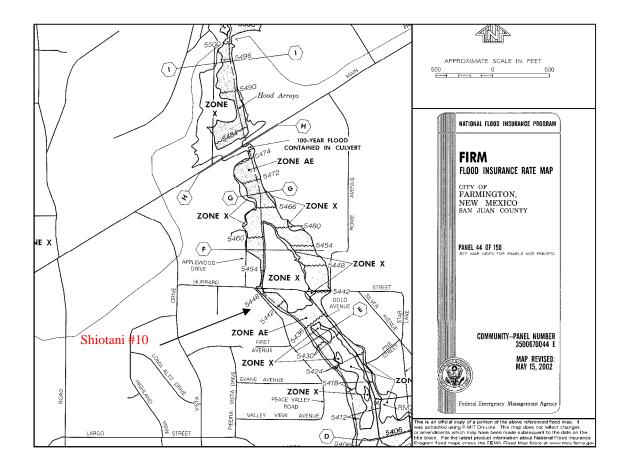
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Shiotani # 10 API # 30-045-32480 NE ¼ NW ¼ Sec. 32 T30N R12W

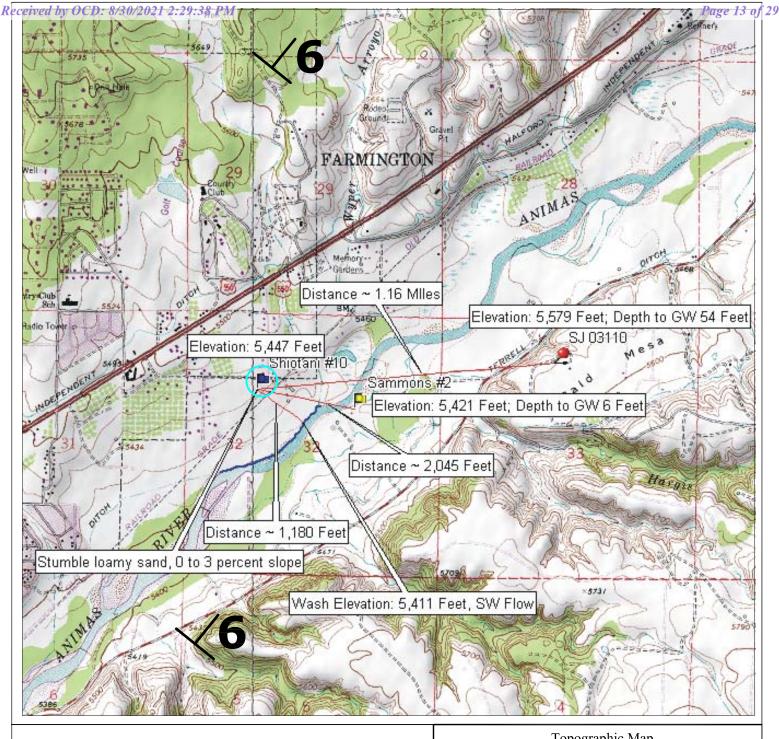


#### Shiotani #10 Groundwater Statement

The attached iWATERS database search and topographic map shows a water well approximately 1.16 miles to the east with a depth to groundwater of 54 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 132 feet higher than the Shiotani #10 well site, which is represented by a blue flag on the topographic map. The attached memorandum for groundwater contamination in 1997 for the Sammons #2 well site, owned and operated by Burlington Resources, shows that groundwater was encountered at 6 feet. This memorandum is stamped as being accepted by the OCD in April of 1997. The Sammons #2 well site is located approximately 2,045 feet to the south-east of the Shiotani #10 well site at an elevation approximately 26 feet lower than the Shiotani #10 well site. The Sammons #2 well site is represented on the map with a yellow flag. The soil type at the Shiotani #10 well site is a Stumble loamy sand, 0 to 3 percent slopes. This is a somewhat excessively drained soil, characterized by eolian deposits derived from sandstone, with a low available water capacity. The nearest surface water is approximately 1,180 feet to the south-east of the Shiotani #10 well site at an elevation of 5,411 feet. This is a south-west flowing river called the Animas River. The Shiotani #10 well site lies in the Nacimiento Formation Aguifer which dips at 6 degrees to the north-east (Frenzel, 1983); see Topographic Map for aquifer dip direction. The Nacimiento Formation lies at the surface in a broad belt at the western and southern edges of the central basin and dips beneath the San Jose Formation in the basin center. (Frenzel, 1983). These findings indicate that the depth to groundwater may not be greater than 50 feet from the bottom of the BGT at the Shiotani #10 well site. All above information, excluding the aquifer dip, was confirmed by a visual inspection performed by Envirotech, Inc

The Nacimiento Formation (Tn) is Paleocene in age and grades laterally into the Animas Formation (Tka) around Dulce, New Mexico thickening considerably around The Animas occurs at the same stratigraphic interval as the Durango, Colorado. Nacimientos (Fassett and Hinds, 1971, p. 34). The Nacimiento sits unconformably to conformably below the San Jose Formation, outcrops in a broad band inside the southern and western boundaries of the central basin and rises structurally as a narrow band along the west side of the Nacimiento Uplift (Baltz, 1967, p. 35). The Nacimiento is the surface formation in the eastern third of the San Juan Basin, and being nonresistant, erodes to low rounded hills or the formation of badlands-type physiography distinctive from the much more resistant overlying San Jose Formation. The Nacimiento Formation is present in only the southern two-thirds of the Basin where it conformably both overlies and intertongues with the much thinner Ojo Alamo Sandstone (Fassett, 1974, p. 229). Thickness ranges from 800 feet in the southern part to nearly 2232 feet (Stone, etal, 1983, p. 30) in the subsurface of the northern part. In the eastern outcrops, the thickness is less than 500 feet to nearly 1400 feet due to folding and erosion (Baltz, 1967, p. 1). In general, the total thickness of the Nacimiento thickens from the basin margins towards the basin center. The Nacimiento in the southern area is comprised predominantly of drab interbedded black and gray claystones and siltstones with some discontinuous relatively unconsolidated white, medium to coarse-grained arkosic sandstone with a few

interbedded resistant sandstone strata (Stone, etal, 1983, p.30). To the north, the Naciemento Formation contains a much greater proportion of sandstone, and at some localized places more than 50 percent (Baltz, 1967, p. 1), although most of the sandstones extend only a few thousand feet (Brimhall, 1973, p. 201). Overall, the environment of deposition is predominantly lake deposits and to a lesser extent localization in stream channels (Brimhall, 1973, p. 201).



# LEGEND

Topographic Map Shiotani #10 Sec 32, Twp 30N, Rge 12W San Juan County, New Mexico

6 Aquifer Strike &

SCALE: NTS
PROJECT N092270-0342

FIGURE NO. 1

REV

Animas River

NO. DATE BY DESCRIPTION

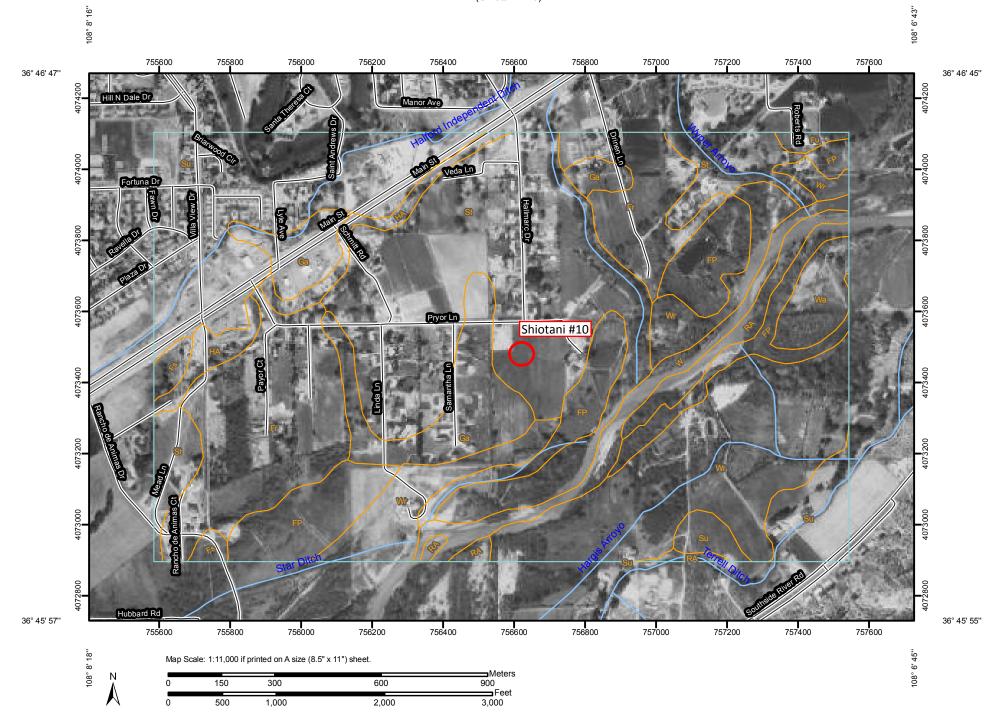
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REVISIONS

Well Area Soil Type







### Soil Map-San Juan County, New Mexico, Eastern Part (Shiotani #10)

#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Units

#### **Special Point Features**

Blowout

■ Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

.. Gravelly Spot

Landfill

علد Marsh or swamp

Mine or Quarry

Miscellaneous Water

Rock Outcrop

Perennial Water

+ Saline Spot

"." Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Spoil Area

Stony Spot

#### N Very Stony Spot

Wet Spot

Other

#### **Special Line Features**

⊋ Gully

Short Steep Slope

Other

#### **Political Features**

Cities

#### Water Features



Streams and Canals

#### Transportation

+++ Rails

Interstate Highways

~

US Routes



Major Roads



Local Roads

#### MAP INFORMATION

Map Scale: 1:11,000 if printed on A size (8.5" × 11") sheet.

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

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 12N NAD83

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

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

Date(s) aerial images were photographed: 10/13/1997

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## **Map Unit Legend**

San Juan County, New Mexico, Eastern Part (NM618)				
Map Unit Symbol	p Unit Symbol Map Unit Name		Percent of AOI	
FP	Fluvaquents, ponded	58.8	10.1%	
Fr	Fruitland sandy loam, 0 to 2 percent slopes	78.6	13.4%	
Fs	Fruitland sandy loam, 2 to 5 percent slopes	4.7	0.8%	
Fu	Fruitland loam, 1 to 3 percent slopes	2.0	0.3%	
Ga	Garland loam	41.3	7.1%	
НА	Haplargids-Blackston-Torriorthents complex, very steep	13.9	2.4%	
RA	Riverwash	13.2	2.3%	
St	Stumble loamy sand, 0 to 3 percent slopes	148.3	25.4%	
Su	Stumble loamy sand, 3 to 8 percent slopes	88.4	15.1%	
W	Lakes, rivers, reservoirs	17.3	3.0%	
Wa	Walrees loam	10.9	1.9%	
Wr	Werlog loam	107.3	18.4%	
Totals for Area of Interest 584.8 10				

Shiotani #10

#### San Juan County, New Mexico, Eastern Part

#### St—Stumble loamy sand, 0 to 3 percent slopes

#### **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**

Stumble and similar soils: 90 percent Fruitland and similar soils: 10 percent

#### **Description of Stumble**

#### Setting

Landform: Dunes

Landform position (three-dimensional): Side slope

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

Parent material: Eolian deposits derived from sandstone

#### **Properties and qualities**

Slope: 0 to 3 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

Calcium carbonate, maximum content: 2 percent Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm) Available water capacity: Low (about 3.7 inches)

#### Interpretive groups

Land capability classification (irrigated): 4e

Land capability (nonirrigated): 7e Ecological site: Sandy (R035XB002NM)

#### **Typical profile**

0 to 5 inches: Loamy sand 5 to 29 inches: Loamy sand

29 to 49 inches: Gravelly loamy sand

49 to 81 inches: Loamy sand

#### **Description of Fruitland**

#### Setting

Landform: Alluvial fans

Landform position (three-dimensional): Rise

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



Map Unit Description: Stumble loamy sand, 0 to 3 percent slopes-San Juan

County, New Mexico, Eastern Part

Shiotani #10

Parent material: Fan 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 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: 10 percent

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

cm)

Available water capacity: Moderate (about 7.5 inches)

#### Interpretive groups

Land capability classification (irrigated): 2e

Land capability (nonirrigated): 7e

Ecological site: Loamy (R035XB001NM)

#### **Typical profile**

0 to 8 inches: Loam

8 to 60 inches: Fine sandy loam

#### **Data Source Information**

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

Survey Area Data: Version 9, Feb 20, 2009



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

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

			(quarte				allest	to larg	est)	(NAD83 UTN	I in meters	)	(In fe	et)
POD Number	Sub basin U	80	County		Q 16		Sec	Twe	Pna	х	Y	-	-	Water Column
SJ 00444		DM	SJ	U-T	4	2	33		12W		4073990*			
SJ 00447		OM	SJ		1	4	33		12W		4073605			39
SJ 00474		DM	SJ	3	3	2	33		12W		4073899			44
SJ 00505		DM	SJ	Ü	4	2	33		12W		4073990			40
SJ 00590		DM	SJ	3	1	4	33	30N	12W		4073504			38
SJ 00605		DM	SJ		1	2	33		12W		4074499			37
SJ 00606		DM	SJ			2	33		12W		4074499			69
SJ 00613		DM	SJ	3	2	3	33	30N	12W		4073511			52
SJ 00622		DM	SJ	2	1	4	33		12W		4073704			35
SJ 00986		DM	SJ			4	33		12W		4073593			24
SJ 01036		DM	SJ		2	2	33	30N	12W		4074388			35
SJ 01045		DM	SJ		2	2	33		12W		4074388	73		28
SJ 01072	DO	DM	SJ		2	2	33	30N	12W	223628	4074388*	110	50	60
SJ 01118	DO	DM	SJ		2	3	33	30N	12W	222784	4073612*	32	10	22
SJ 01174	DO	DM	SJ		3	1	33	30N	12W	222402	4074022	· 36	19	17
SJ 01231	DC	DM	SJ	3	2	4	33	30N	12W	223486	4073492	246	161	85
SJ 01256	DC	DM	SJ		4	2	33	30N	12W	223607	4073990*	250	160	90
SJ 01286	DC	DM	SJ			3	33	30N	12W	222565	4073418	265	227	38
SJ 01390	DC	DM	SJ		3	1	33	30N	12W	222402	4074022	40	22	18
SJ 01633	DC	DM	SJ		3	3	33	30N	12W	222364	4073217	280	240	40
SJ 02212	DC	DM	SJ		3	3	33	30N	12W	222364	4073217	320	269	51
SJ 02981	DO	DM	SJ	2	1	2	33	30N	12W	223325	4074499*	100	60	40
SJ 03110	DO	DM	SJ	4	2	1	33	30N	12W	222924	4074310	320	54	266
SJ 03133	DO	DM	SJ	4	4	1	33	30N	12W	222903	4073910	39	20	19
SJ 03140	DO	DM	SJ	1	3	2	33	30N	12W	223105	4074099	42	20	22
SJ 03143	D	ЭL	SJ	3	2	1	33	30N	12W	222724	4074310	97	60	37
SJ 03143 POD2	Do	OL	SJ	2	4	1	33	30N	12W	222903	4074110	40	10	30
SJ 03349	DC	MC	SJ	1	2	1	33	30N	12W	222724	4074510	55		
SJ 03614	Do	OL	SJ	3	3	2	33	30N	12W	223105	4073899	42	33	9

\*UTM location was derived from PLSS - see Help

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

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

Sub Q Q Q Depth Depth Water
POD Number basin Use County 64 16 4 Sec Tws Rng X Y Well WaterColumn

Average Depth to Water: 74 feet

Minimum Depth: 10 feet

Maximum Depth: 269 feet

Record Count: 29

**PLSS Search:** 

Section(s): 33 Township: 30N Range: 12W

# 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

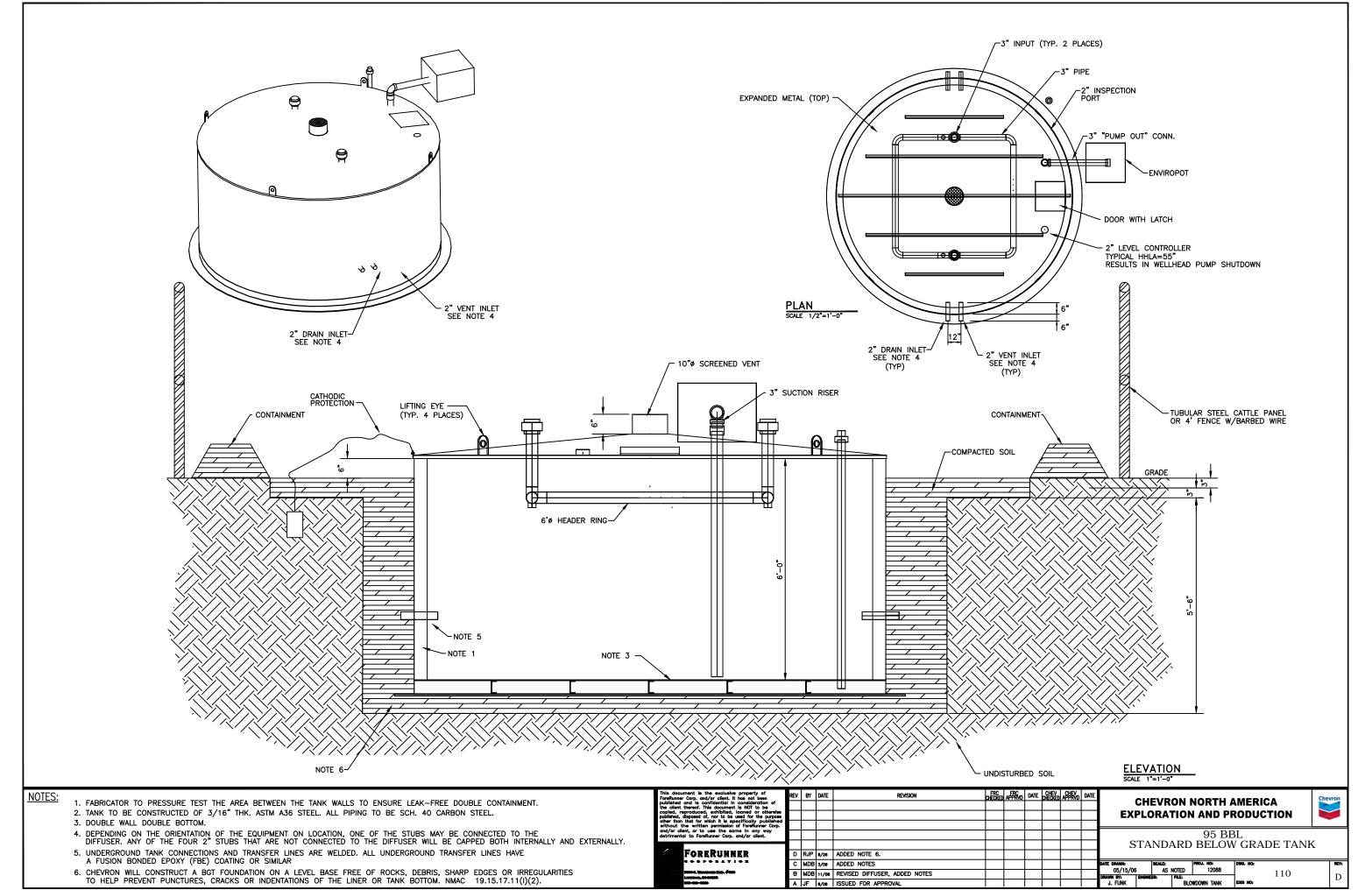
In accordance with NMAC §§ 19.15.17.9(B)(4) and 19.15.17.11 Chevron (representing Chevron USA Inc, Chevron Midcontinent, L.P., and Four Star Oil & Gas Company) submits this Design and Construction Plan for below grade tanks (BGTs) in New Mexico. This Plan contains standard conditions that attach to multiple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

OCD: 8/30/2021 2:29:38 PM



Filing this legacy BGT registration in response to a compliance issue received for no BGT registration on file. Attached is the registration filed by Chevron in 2010.

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 45251

#### **QUESTIONS**

Operator:	OGRID:		
ENDURING RESOURCES, LLC	372286		
6300 S Syracuse Way, Suite 525	Action Number:		
Centennial, CO 80111	45251		
	Action Type:		
	[C-144] Legacy Below Grade Tank Plan (C-144LB)		

#### QUESTIONS

Facility and Ground Water					
Please answer as many of these questions as possible in this group. More information will help us identify the appropriate associations in the system.					
Facility or Site Name	Not answered.				
Facility ID (f#), if known	Not answered.				
Facility Type	Below Grade Tank - (BGT)				
Well Name, include well number	Not answered.				
Well API, if associated with a well	Not answered.				
Pit / Tank Type	Not answered.				
Pit / Tank Name or Identifier	Not answered.				
Pit / Tank Opened Date, if known	Not answered.				
Pit / Tank Dimensions, Length (ft)	Not answered.				
Pit / Tank Dimensions, Width or Diameter (ft)	Not answered.				
Pit / Tank Dimensions, Depth (ft)	Not answered.				
Ground Water Depth (ft)	Not answered.				
Ground Water Impact	Not answered.				
Ground Water Quality (TDS)	Not answered.				

Below-Grade Tank				
Subsection I of 19.15.17.11 NMAC				
Volume / Capacity (bbls)	Not answered.			
Type of Fluid	Not answered.			
Pit / Tank Construction Material	Not answered.			
Secondary containment with leak detection	Not answered.			
Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	Not answered.			
Visible sidewalls and liner	Not answered.			
Visible sidewalls only	Not answered.			
Tank installed prior to June 18. 2008	Not answered.			
Other, Visible Notation. Please specify	Not answered.			
Liner Thickness (mil)	Not answered.			
HDPE (Liner Type)	Not answered.			
PVC (Liner Type)	Not answered.			
Other, Liner Type. Please specify (Variance Required)	Not answered.			

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)	Not answered.				
Four foot height, four strands of barbed wire evenly spaced between one and four feet	Not answered.				
Alternate, Fencing. Please specify (Variance Required)	Not answered.				

Netting					
Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)					
Screen	Not answered.				
Netting	Not answered.				
Other, Netting. Please specify (Variance May Be Needed)	Not answered.				

#### Signs

Subsection C of 19.15.17.11 NMAC (If there are multiple operators at a site, each operator must have their own sign in compliance with Subsection C of 19.15.17.11 NMAC.)

12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	Not answered.
Signed in compliance with 19.15.16.8 NMAC	Not answered.

ariances and Exceptions	
Justifications and/or demonstrations ofequivalency are required. Please refer to 19.15.17 NMAC for Please check a box if one or more of the following is requested, if not leave blank:	guidance.
Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	Not answered.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	Not answered.

#### Siting Criteria (regarding permitting)

19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

Siting Criteria, General Siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	Not answered.
NM Office of the State Engineer - iWATERS database search	Not answered.
USGS	Not answered.
Data obtained from nearby wells	Not answered.

Siting Criteria, Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark)	Not answered.
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption	Not answered.

oposed Closure Method	
Below-grade Tank	Below Grade Tank - (BGT)
Waste Excavation and Removal	Not answered.
Alternate Closure Method. Please specify (Variance Required)	Not answered.

perator Application Certification	
Registered / Signature Date	Not answered.

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ACKNOWLEDGMENTS

Action 45251

#### **ACKNOWLEDGMENTS**

Operator:	OGRID:
ENDURING RESOURCES, LLC	372286
6300 S Syracuse Way, Suite 525	Action Number:
Centennial, CO 80111	45251
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

#### **ACKNOWLEDGMENTS**

$\overline{\checkmark}$	I acknowledge that I have received prior approval from the OCD to submit documentation of a legacy below-grade tank on behalf of my operator.
W	I hereby certify that the information submitted with this documentation is true, accurate and complete to the best of my knowledge and belief.

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CONDITIONS

Action 45251

#### **CONDITIONS**

Operator:	OGRID:
ENDURING RESOURCES, LLC	372286
6300 S Syracuse Way, Suite 525	Action Number:
Centennial, CO 80111	45251
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

#### CONDITIONS

Created By	Condition	Condition Date
cwhitehead	BGT registration approved under the condition it is removed in the proceeding 120 days due to proximity of less than 300 feet from residential property.	9/13/2021