District I 1625 N. French Dr., Hobbs, NM 882 District II 1301 W. Grand Avenue, Artesia, NM 88210B 28 2011 District III 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico State of New Mexico
Energy Minerals and Natural Resources Department

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

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

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

Proposed Alternative Method Permit or Closure Plan Application
Type of action:    Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method   Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method   Modification to an existing permit   Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator: Marshall and Winston Incorporated OGRID#: 014187
Address: P.O. Box 50880, Midland, TX 7910-0880
Facility or well name: Boot Hill 25 # 2
API Number: 30-035-015-38553 OCD Permit Number: 211368
API Number: 30-075-013-36-to 25 U 19 C D 25 U 19 C D Fddy
U/L or Qtr/Qtr A to I Section 36 to 25 <sub>Township</sub> 19 S Range 25 E County: Eddy
Center of Proposed Design: Latitude 32.623054 Longitude 104.432283 NAD: □1927 🖾 1983
Surface Owner:  Federal X State Private Tribal Trust or Indian Allotment (Crosses Section Lines)
2.
Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary:  Drilling  Workover
Permanent Emergency Cavitation P&A
Lined Unlined Linertype: Thicknessmil LLDPE HDPE PVC A Other Closed Loop System
☐ String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
3.
[X] 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 and steel tanks
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
Liner Seams:  Welded Factory Other
4.
Below-grade tank: Subsection 1 of 19.15.17.11 NMAC
Volume:bbl Type of fluid:
Tank Construction material:
Secondary containment with leak detection [ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thicknessmil
5.  Alternative Method:

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental 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, hospital, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify		
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		
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.		
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.		
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ 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.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No	
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No	
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No	
Within a 100-year floodplain FEMA map	☐ Yes ☐ No	

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Of Territory Process See (attention)
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: 30-025-39946
Previously Approved Operating and Maintenance Plan API Number: 30-025-39946 (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 19.15.17.19 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Climatological Factors Assessment  Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC  Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Quality Control/Quality Assurance Construction and Installation Plan  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H <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)
Us.  Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  □ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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.	drilling fluids and drill cuttings. Use attachment if n	nore than two	
*	Disposal Facility Permit Number: NM 01-000	6	
	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 operations:  Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC			
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.			
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Dat	a obtained from nearby wells	☐ Yes ☐ No ☐ NA	
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Dat	a obtained from nearby wells	Yes No .	
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Database search;	a obtained from nearby wells	☐ Yes ☐ No ☐ NA	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sig lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	mificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No	
Within 300 feet from a permanent residence, school, hospital, institution, or church Visual inspection (certification) of the proposed site; Aerial photo; Satellit		☐ Yes ☐ No	
Within 500 horizontal feet of a private, domestic fresh water well or spring that les watering purposes, or within 1000 horizontal feet of any other fresh water well or so NM Office of the State Engineer - iWATERS database; Visual inspection	spring, in existence at the time of initial application.	☐ Yes ☐ No	
Within incorporated municipal boundaries or within a defined municipal fresh wat adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approx	·	☐ Yes ☐ No	
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visu	al inspection (certification) of the proposed site	☐ Yes ☐ No	
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining	g and Mineral Division	☐ Yes ☐ No	
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map</li> </ul>	y & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No	
Within a 100-year floodplain FEMA map	`	☐ Yes ☐ No	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC  Protocols and Procedures - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC			

Operator Application Certification:  I hereby certify that the information submitted with this application is true, a	ccurate and complete to the best of my knowledge and belief.
	, ,
Name (Print): Vernon D. Dyer Signature: Uuwa D. Dyu	Date: 2-23-2011
e-mail address: vdyeroil@cableone.net	Telephone:(575) 420-0355
OCD Approval: Permit Application (including closure plan) Closure	
OCD Representative Signature:	Approval Date: 03/31/2011
Title: DIST Supervisor	Approval Date: 03/31/2011 OCD Permit Number: 211368
Closure Report (required within 60 days of closure completion): Subsections: Operators are required to obtain an approved closure plan parties closure report is required to be submitted to the division within 60 days section of the form until an approved closure plan has been obtained and to	ior to implementing any closure activities and submitting the closure report.  of the completion of the closure activities. Please do not complete this he closure activities have been completed.
	Closure Completion Date:
Closure Method:  Waste Excavation and Removal On-Site Closure Method All If different from approved plan, please explain.	ternative Closure Method   Waste Removal (Closed-loop systems only)
two facilities were utilized.	drilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed of Yes (If yes, please demonstrate compliance to the items below) N	0
Required for impacted areas which will not be used for future service and op  Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique	erations:
Closure Report Attachment Checklist: Instructions: Each of the following 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)	ongitude NAD:
<ul> <li>□ Disposal Facility Name and Permit Number</li> <li>□ Soil Backfilling and Cover Installation</li> <li>□ Re-vegetation Application Rates and Seeding Technique</li> <li>□ Site Reclamation (Photo Documentation)</li> </ul>	
☐ 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	ongitude NAD:1927 1983 ure report is true, accurate and complete to the best of my knowledge and
□ 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	ure report is true, accurate and complete to the best of my knowledge and airements and conditions specified in the approved closure plan.
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 Location:  Operator Closure Certification: I hereby certify that the information and attachments submitted with this closurelief. I also certify that the closure complies with all applicable closure requirements.	ure report is true, accurate and complete to the best of my knowledge and airements and conditions specified in the approved closure plan.  Title:

# C-144 Attachment 1losed Loop System Maintenance Summary NMOCD Rule 19.15.17 NMAC District I, NMOCD, Hobbs, NM at (575) 393-6161

### Operator and Well:

Marshall and Winston Incorporated Boot Hill 25 #1 SL: Sec. 36-B, T. 19 S., R. 25 E., BL Sec. 25-J T. 19 S., R. 25 E. Eddy County, NM

### **Equipment:**

The anticipated equipment shall consist of: Above Ground steel tanks and or Roll-off steel tanks. Dual motion shale shakers, solid removal centrifuges, gas separator, one 500 bbl fresh water and one 500 bbl brine water frac tanks. The closed loop mud system shall follow the guidance of regulations NM 19.15.17.11 NMAC.

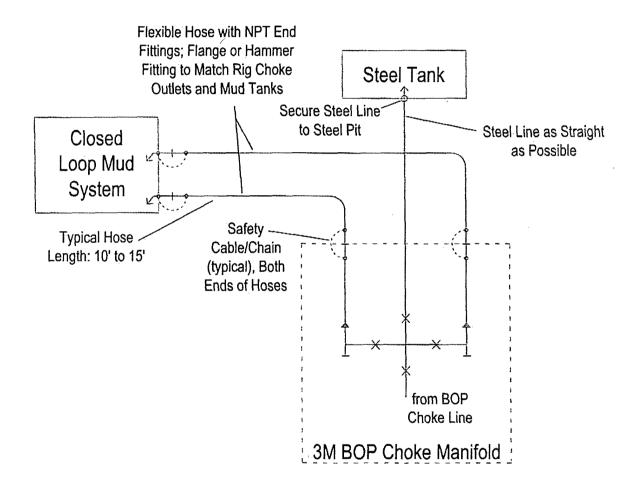
#### Maintenance:

The drilling crew will inspect the closed loop circulating system at least once during each tour. Inspections or maintenance shall be entered into the driller's log. Any release of spill discovered will be reported to the NMOCD at (575) 393-6161 within 24 hours in accordance to NMOCD Rule 19.15.29 NMAC.

#### Closure:

All circulating fluids and cuttings deemed for disposal shall be transported to one of the following state permitted waste disposal sites to be determined:

- 1) Gandy Marley Inc., waste disposal site, Route 45 Crossroads, Hwy 380, permit no. NM 711-01-020, EPID 0001002484.
- 2) Alternative disposal sites are Sundance Services, waste disposal site, located three miles east of Eunice, NM permit no. NM-01-0003.
- 3) Control Recovery Inc. waste disposal site, Halfway, Hwy 62, permit no. NM-01-0006.



Standard Closed Loop Mud System

