<u>District I</u> 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 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

Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Type of action: Closure of a 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 com	ply with any other applicable governmental authority's rules, regulations or ordinances.		
Operator: Dugan Production Corp.	OGRID#: 006515 pcup.IIII 15/02		
Address: 709 East Murray Drive, Farmington, New Me	xico, 87401 UN CONS. DIV.		
Facility or well name: Irish Com #90-S	DIST. 3		
API Number: 30-045-33725	OCD Permit Number:		
U/L or Qtr/Qtr O Section 11 Township 26	N Range 13W County: San Juan		
Center of Proposed Design: Latitude 36.49878 North	Longitude 108.18499 West NAD: □1927 ☒ 1983		
Surface Owner: 🗌 Federal 🗍 State 🗋 Private 🔀 Tribal Trust or Indian	Allotment		
☑ Pit: Subsection F or G of 19.15.17.11 NMAC	Closed-loop System: Subsection H of 19.15.17.11 NMAC		
Temporary: X Drilling Workover	Drying Pad Tanks Haul-off Bins Other		
☐ Permanent ☐ Emergency ☐ Cavitation	☐ Lined ☐ Unlined		
☑ Lined ☐ Unlined	Liner type: Thickness mil _ LLDPE _ HDPE _ PVC		
Liner type: Thickness 20 mil LLDPE HDPE PVC	Other		
Other String-Reinforced	Seams:  Welded  Factory  Other		
Seams:  Welded  Factory  Other	Volume:bblyd³		
Volume: 600 bbl Dimensions: L 76' x W 13' x D B'	Dimensions: Lengthx Width		
Below-grade tank: Subsection I of 19.15.17.11 NMAC	Fencing: Subsection D of 19.15.17.11 NMAC		
Volume:bbl	Chain link, six feet in height, two strands of barbed wire at top		
Type of fluid:	☐ Four foot height, four strands of barbed wire evenly spaced between one and		
Tank Construction material:	four feet		
Secondary containment with leak detection	Netting: Subsection E of 19.15.17.11 NMAC		
☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	Screen Netting Other		
☐ Visible sidewalls and liner	☐ Monthly inspections		
☐ Visible sidewalls only	Signs: Subsection C of 19,15.17.11 NMAC		
Other	12'x24', 2' lettering, providing Operator's name, site location, and		
Liner type: Thickness mil	emergency telephone numbers		
Other	Signed in compliance with 19.15.3.103 NMAC		
Alternative Method:	Administrative Approvals and Exceptions:		
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration	Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.		
of approval.	Please check a box if one or more of the following is requested, if not leave		
718.	blank:		
	Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for		
A RECEIVED &	consideration of approval.		
of approval.  RECEIVED  RE	Exception(s): Requests must be submitted to the Santa Fe		
MAL COLO	Environmental Bureau office for consideration of approval.		
Form C-144 OH OFF TO PICT 3 GOIL Conse	ervation Division Page 1 of 4		

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	X N	lo_
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes l	X N	lo
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 [ ☐ NA	X N	О
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 [ ☐ NA	X N	0
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 [	X N	0
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 [	X N	0
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes [	X) N	0
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes [	N	o
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes [	X) N	0
Within a 100-year floodplain FEMA map	☐ Yes [	X) N	0
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 **Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the do attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.15 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.15 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  Closure Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC	cuménts`a	re	-
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 do attached.  Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.10  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 - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	19.15.17.1		
☐ Previously Approved Design (attach copy of design) API Number:			

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 attached.	locuments are
☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.15 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  Ouality Control/Quality Assurance Construction and Installation Plan	
<ul> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> </ul>	
☐ Nuisance or Hazardous Odors, including H₂S, 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	7 41
Type: 🖾 Drilling 🗌 Workover 🗍 Emergency 🗍 Cavitation 🗍 Permanent Pit 🗍 Below-grade Tank 🗍 Closed-loop System [	Alternative
Proposed Closure Method: Waste Excavation and Removal  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 co	nsideration)
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No 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; Data obtained from nearby wells	Yes No
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	X Yes □ No     □ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	Yes X No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes 🗓 No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	Yes 🖾 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 图 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
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes 🏻 No
Within a 100-year floodplain FEMA map	☐ Yes 🖾 No

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 (or 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				
Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please indentify the facility				
or facilities for the disposal of liquids, drilling fluids and drill cuttings.				
Disposal Facility Name: Disposal Facility Permit Number:				
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.				
<ul> <li>         \overline{\times} Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>         \overline{\times} Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC     </li> </ul>				
Construction and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC				
Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC				
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC				
Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC				
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) ☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC				
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				
Operator Application Certification:				
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.				
Name (Print): Kurt Fagrelius Title: Vice President, Exploration				
1/ + / / / 2 / 2 / 2 / 2 / 2				
Signature: Kurt tagrelin Date: 7-10-08				
U 1. 1.5				
e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821 (0), 505-320-8248 (C)				
OCD Approval: Application (including closure plan) A Closure Plan forty)				
OCD Approval: Application (including closure plan) A Closure Plan forty)				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: 3/3/1/  Approval Date: 8-4-08				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-4-08  Title: Enviro Spec OCD Permit Number:				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-U-08  Title: Emino Spec OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-4-08  Title: Enviro Spec OCD Permit Number:				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-4-08  Title: Enviro Spec OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Completion Date: 9-13-206 &  Closure Method:				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-4-08  Title: Enviro Spec OCD Permit Number: Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method: On-Site Closure Method Alternative Closure Method				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: 3/3/// Approval Date: 8-4-08  Title:				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: 3/3/11  OCD Representative Signature: 3/3/11  OCD Permit Number: Subsection K of 19.15.17.13 NMAC  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method: Alternative Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-4-08  Title: Emino Spec OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-U-O8  Title: Enviro Spec OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Deed Notice (if applicable)				
OCD Representative Signature:    OCD Representative Signature:   OCD Permit Number:				
OCD Representative Signature:    Section   Sec				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-4-08  Title: Enviro Section (including closure plan) Closure Plan (only)  OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Deed Notice (if applicable)  Proof of Deed Notice (if applicable)  OCD Permit Number:  Approval Date: B-4-08  Approval Date: B-4-08  Approval Date: B-4-08				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B. Approval Date: B. 4-08  Title: Enviro SPC OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Deed Notice (if applicable)  Plot Plan  Confirmation Sampling Analytical Results Waste Material Sampling Analytical Results Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation				
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Representative Signature: B-H-O8  Title: Enviro   3 plan   Approval Date: B-H-O8  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Closure Notice Proof of Deed Notice (if applicable) Proof plan Sampling Analytical Results Waste Material Sampling Analytical Results Waste Material Sampling Analytical Results Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: B-H-O8  Title:				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Completion Date: 9-/3-2006  Closure Method: Closure Completion Date: 9-/3-2006  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Deed Notice (if applicable) Plot Plan  Confirmation Sampling Analytical Results Waste Material Sampling Analytical Results 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 36 44875 N Longitude 108 18491 NAD: 1927 1983				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: Signature: OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Closure Method: Closure Completion Date: 9-/3-200 E  Closure Method: Alternative Closure Method Alternative Closure Method If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Deed Notice (if applicable)  Plot Plan  Confirmation Sampling Analytical Results  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 64 19879 Longitude 108 18491 NAD: 1927 1983				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: 3/3//  Approval Date: 8-4-08  Title:				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: Part Plan Plan Plan Plan Plan Plan Plan Plan				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: 3/3//  Approval Date: 8-4-08  Title:				
OCD Representative Signature:    Ball   Approval   Approval Date:   B-4-08				
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: Part Plan Plan Plan Plan Plan Plan Plan Plan				

# Dugan Production Corp. Closure Report

Lease Name: Irish Com #90-S API No.: 30-045-33725

In accordance with Rule 10.15.17.13 NMAC the following information describes the closure of the temporary pit referenced above. All proper documentation concerning closure activities is included with the C-144. The temporary pit for this location was an approved design under Rule 19.15.17. **The closure plan for the temporary pit was submitted on 7-10-2008 and approved on 8-4-2008.** 

1. Comply with siting criteria for temporary pits established by the State of New Mexico, Energy Minerals and Natural Resources Department 19.15.17.10 NMAC.

### See approved permit dated 8-4-2008.

2. Provide the NMOCD district office at least 72-hours notice but no greater than 1-week prior to any closure operations. Notice will include operator name, well name and number, API number, and location (unit letter, section, township and range).

#### See email notification dated 9-12-2008.

3. Provide the surface owner notice of the operator's proposal of an on-site closure method. Proof of notice will be attached to the permit application. Also, proof of closure notice will be provided by certified mail to surface owner after closure. Proof of notice will be attached to final closure report.

Navajo Tribal Trust surface, certified notification not applicable as per BLM/OCD MOU, however, notification was made. Proof of notice is attached.

4. Remove all liquid from pit and reclaim, re-use or dispose of at an NMOCD approved facility. Upon completion of drilling operations, drilling mud will be vacuumed from pit and transported to the next reserve pit for re-use at another drilling location. After the remaining mud settles, the free water that shakes out and any free water left over from completion operations will be hauled to the Dugan Production operated Sanchez O'Brien #1 SWD located 1650 feet from the South line and 990 feet from the West line (Unit L) of Section 6, Township 24 North, Range 9 West NMPM, San Juan County, New Mexico. The disposal facility was permitted by the NMOCD with Administrative Order SWD-694.

Drilling rig was released (6-20-2008) and drilling mud was transferred to the Western Federal Com #90 for re-use (6-21-2008). Free water was transferred to the Sanchez O'Brien SWD #1 salt water disposal..

5. Remove all fluids from temporary pit within 30-days and close within 6-months following release of drilling rig.

Free water was removed within 30-days and temporary pit was closed (9-13-2008).

6. Air dry pit contents and stabilize or solidify to a load bearing capacity sufficient to support the temporary pit's final cover.

Pit contents were allowed to dry prior to temporary pit closure.

7. Collect a five point, composite sample of the pit contents to demonstrate that Benzene, BTEX, the GRO and DRO combined fraction, TPH. and chlorides (depth to groundwater from bottom of pit is greater than 100-feet), do not exceed the standards as specified in 19.15.17.9.B or the background concentration, whichever is greater.

A five point composite sample was taken of remaining cuttings in temporary pit and was tested in accordance with Subsection B of 19.15.17.13 (B)(1)(b)(ii). Depth from bottom of pit to top of ground-water is greater than 100-feet. Sample results are attached.

Components	Test Method	Limit (mg/kg)	*Results (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2	0.0041
BTEX	EPA SW-846 8021B or 8260B	50	0.217
TPH	EPA SW-846 418.1	2500	115
GRO/DRO	EPA SW-846 8015M	500	168
Chlorides	EPA 300.1	1000 / 500	202

8. Other methods if the standards in 19.15.17.9.B can not be met will include: The pit contents may be mixed to a ratio not to exceed 3:1, un-contaminated soil or other material to pit contents. A second five point, composite sample of the contents after treatment or stabilization will be taken to demonstrate that the contents do not exceed the standards. If the second soil analyses do no satisfy the closure standards, the operator will close the temporary pit using the waste excavation and removal method.

Not applicable, testing standards of 19.15-17.9 were met.

9. Cut pit liner off at the mud line (solids level); remove liner and apron and transport to a NMOCD approved facility for disposal.

Pit liner was removed 9-13-2008 and disposed of at the Crouch Mesa Waste Management facility on 9-13-2008 (see attached invoice).

10. Stockpiled sub-surface soil will be used to backfill pit and re-contour well pad (to a final or intermediate cover that blends with the surrounding topography). A minimum of four-feet of compacted, non-waste containing, earthen material will be used as backfill.

Stockpiled sub-surface soil was used to backfill temporary pit and re-contour well pad. A minimum of four-feet of compacted, non-waste containing, earthen material was used to backfill pit.

11. Stockpiled surface soil will be used as a cover over the backfilled pit and disturbed areas of the well pad no longer needed for production operations. The soil cover will include either the background thickness of top soil or one foot of suitable material to establish vegetation at the site whichever is greater.

Stockpiled surface soil was used to cover backfilled temporary pit and disturbed areas of the well pad no longer needed for production operations. The soil cover included the greater of either the background thickness or one foot of suitable material necessary to establish vegetation. The location was re-contoured to approximate the original topography of the site and diversions were constructed to protect soil cover and minimize erosion.

12. The area will be re-seeded as per BLM guidelines. Re-seeding will be repeated until 70% of the native natural cover is achieved and maintained for two successive growing seasons. The first growing season after the pit is closed the disturbed area will be re-seeded. The seeding method will be to drill on contour whenever possible.

The area was re-seeded according to BLM/OCD guidelines in October of 2008. The BLM less than 10" seed mix was drilled in at a rate of 2.5# per acre. Re-seeding will be repeated if needed until 70% of the native natural cover is achieved. Re-seeding will be done according to BLM guidelines as specified by BLM/OCD memorandum of understanding.

13. The NMOCD will be notified once successful re-vegetation has been achieved.

Re-seeding will be done according to BLM guidelines as specified by BLM/OCD memorandum of understanding.

14. A steel marker will be set at the center of the on-site burial following onsite-pit closure (see application for administrative approval). The marker will be (24" X 24") and will have the operator name, lease name, well number, location (UL, Sec., Twp. and Rge.) and that it designates an "on-site burial location" lettering welded on the

top side with a 4" threaded collar welded to the bottom side. The marker will be set at ground level and attached to a 4" diameter pipe that is cemented in a hole three feet deep. When the well is abandoned, a steel riser that is 4" in diameter, extending 4" above the ground will be welded to the pipe anchored in cement below the surface. The riser will have lettering welded on side showing operator name, well number, location (UL, Sec., Twp., and Rge.) and that it designates an on-site burial location.

A flat steel marker (24" X 24") with the lettering "on-site burial location" was set at ground-level in the center of the burial site. The marker is welded to a 4" pipe that is cemented in a 3-foot deep hole and is shown in the attached photographs (administrative approval was received). When the well is P&A'd, the steel plate will be removed and a riser that is 4" in diameter, extending 4' above the ground will be welded to the pipe anchored in cement below the surface. The riser will have lettering welded on the side showing operator name, well number, location (UL, Sec., Twp., and Rge.) and that it designates an on-site burial location.

- 15. Closure Report will be submitted within 60-days of completion of temporary pit closure. Closure report will include the following: 1) Proof of Closure Notice.

  - 2) Proof of Deed Notice (if applicable).
  - 3) Plot Plan.
  - 4) Confirmation Sampling Analytical Results.
  - 5) Waste Material Sampling Analytical Results.
  - 6) Disposal Facility Name and Permit Number.
  - 7) Soil Backfilling and Cover Installation.
  - 8) Re-vegetation Application Rates and Seeding Technique.

All items listed above if applicable are attached and submitted on this date.

16. A deed notice identifying the exact location of the on-site burial will be filed with the County clerk in the county where the on-site burial occurs.

Navajo Tribal Trust surface, deed notice identifying exact location of on-site burial is not applicable according to BLM/OCD MOU, however, it was recorded with the San Juan County Clerk's office. See enclosed attachment.

# Kurt Fagrelius

From: Kurt Fagrelius

Sent: Friday, September 12, 2008 7:03 AM

To: charlie.perrin@state.nm.us

Subject: Pit Closures

Dear Mr. Perrin:

been submitted and approved by the NMOCD. Soil analysis on the pits has been completed and they all test below the thresholds established by rule 17 (30-045-33725) tomorrow on September 13, 2008. Our plans are to begin at 7 AM and close them in the order listed. They are small pits (13' X 76' X 8'), located on NAPI and in close proximity to each other. These wells were spud prior to the effective date of rule 17. Pit permits and closure plans have Dugan Production Corp. would like to close the Western Federal Com #90 (30-045-33903), Waterford Com #90-S (30-045-33781) and Irish Com #90-S

scheduled to begin this work in the morning. Our equipment (dozer and blade) is being transported from the Star Lake Road area and an extended reach backhoe is being rented and transported from Farmington out to the Western Federal Com #90 location today. Our pit crew consists of 2-college students from Durango and myself, all of whom have

contouring the disturbed area with the blade All liquids have been removed from the pits for some time now, the pits are stabelized and tomorrow we will be able to take down the fences, cut and remove all liner material above the mud line (including aprons), haul to the disposal facility and backfill the pits with the dozer. Monday, we will begin re-

closure activities. I will make my best effort to comply with that rule in the future I realize that rule 17 requires Dugan to provide the NMOCD with a minimum of 72-hours but no greater than one week notice prior to commencement of

If you have any questions or require additional information, please contact me

Sincerely, Kurt Fagrelius

## **Kurt Fagrelius**

From: Perrin, Charlie, EMNRD [charlie.perrin@state.nm.us]

Sent: Friday, September 12, 2008 11:28 AM

**To:** Kurt Fagrelius **Subject:** RE: Pit Closures

Kurt

Monica conducted an inspection on each of the sites, you are approved to do the closure tomorrow

Thanks Charlie

From: Perrin, Charlie, EMNRD

Sent: Friday, September 12, 2008 8:14 AM

**To:** 'Kurt Fagrelius' **Subject:** RE: Pit Closures

Mr. Fagrelius

Greetings:

When was the last visual inspection conducted that indicated no fluid in the pit?

Thanks Charlie

From: Kurt Fagrelius [mailto:kfagrelius@duganproduction.com]

Sent: Friday, September 12, 2008 7:03 AM

**To:** Perrin, Charlie, EMNRD **Subject:** Pit Closures

Dear Mr. Perrin:

Dugan Production Corp. would like to close the Western Federal Com #90 (30-045-33903), Waterford Com #90-S (30-045-33781) and Irish Com #90-S (30-045-33725) tomorrow on September 13, 2008. Our plans are to begin at 7 AM and close them in the order listed. They are small pits (13' X 76' X 8'), located on NAPI and in close proximity to each other. These wells were spud prior to the effective date of rule 17. Pit permits and closure plans have been submitted and approved by the NMOCD. Soil analysis on the pits has been completed and they all test below the thresholds established by rule 17.

Our equipment (dozer and blade) is being transported from the Star Lake Road area and an extended reach backhoe is being rented and transported from Farmington out to the Western Federal Com #90 location today. Our pit crew consists of 2-college students from Durango and myself, all of whom have scheduled to begin this work in the morning.

All liquids have been removed from the pits for some time now, the pits are stabelized and tomorrow we will be able to take down the fences, cut and remove all liner material above the mud line (including aprons), haul to the disposal facility and backfill the pits with the dozer. Monday, we will begin recontouring the disturbed area with the blade.

I realize that rule 17 requires Dugan to provide the NMOCD with a minimum of 72-hours but no greater

than one week notice prior to commencement of closure activities. I will make my best effort to comply with that rule in the future.

If you have any questions or require additional information, please contact me.

Sincerely, Kurt Fagrelius

This inbound email has been scanned by the MessageLabs Email Security System.

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

= dp =	Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.  Print your name and address on the reverse so that we can return the card to you.  Attach this card to the back of the mailpiece, or on the front if space permits.  1. Article Addressed to:  Ms. Latter Kee  Manay Mation Land Reputation  Linguist Review Office  1. Dox 9000	A. Signature  X
Ms. Esther Kee Navajo Nation Land Department Navajo Nation Office Building – F Window Rock Boulevard Window Rock, AZ 86515	2. Article Number 7005	3. Service Type

Certification Notice of On-Site Closure of Temporary Pit for the Irish Com #90S Re:

# Return Receipt Certification Number - 7005-2570-0001-3772-1177

Dear Ms. Kee:

In accordance with the New Mexico Oil Conservation Division "Pit Rule" (19.15.17 NMAC), the Bureau of Land Management is hereby being notified that the "Temporary Pit" (drilling reserve pit for the Irish Com #90S, located on Federal surface) was closed "On-Site" in accordance with 19.15.17 NMAC.

If you have any questions or require additional information on this matter, please contact me.

Sincerely,

Kurt Fagrelius

Vice-President, Exploration

Dugan Production Corp.

168 8434	U.S. Postal S CERTIFIED COMESTO MAIL OF FORCEIVEN INTONIONE VILLED TO S		coverage Provided)	25			
<u>1</u>	Postage	\$	<b>.</b> .				
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	PS Form WWD. June 20	02	Statutates and anomaly	<u></u>			

	709	an Production C East Murray Di mington, NM 87	rive			
Well Name: Location: Drilling Operator: Rig # :	Irish Com #90-S O-Sec.11, fT26N, F Smith Drilling	R13W				
Spud Date:	6/16/2008	· · · · · · · · · · · · · · · · · · ·				
Date : Rig Moved Off	6/20/2008			: :		
Date to Remove Liquid (30-days from rig relea	· · · · · · · · · · · · · · · · · · ·	7/20/2008		• • •		
Date to Close Pit by: (180-days from rig rele	F	12/20/2008		 	and off	

	i :	i			!	
Log Book o	f Daily inspe	ections during Drillin	g / workover ope	erations, v	weekly aft	ter rig is moved off.
Date:	Signature	Freeboard (> 2-ft.) Yes / No	Tears or Holes Yes / No		Trash Yes / No	Remarks
6/20/2008	KF	4'	No	No	No	Transferred Drlg Mud To West Fed Com #90
6/24/2008	KF	<b>4'</b>	No	No	No	Pit is drying out, see photos
7/1/2008	KF	- <b>4'</b> - <b>1</b>	No	No	No	Pit is drying out
7/18/2008	YP & KF	<b>4'</b>	No _	No	No	Pit is dry Sampled Contents
			• •		î	Sampled Western Fed Com 90 Pit also, Dry
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			gan Production C			
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Well Name	9: <u> </u>	Rish com	# 90.5			
Location:						
Drilling Op	erator: u	layne smit	In doillin	5_		·
Rig#:						
Spud Date		6-16-08				
Date :		6-20-08				
Rig Moved	l Off					
Date to Re	emove Liquid	s hv				
	rom rig relea					
Date to Cl	ose Pit by:					
1	from rig rele	ase)				
Log Book	of Daily inch	] ections during Drilling	/ workover oper	rations we	okly after	rig is moved off
LOG DOOK	THE PARTY IN STREET	Coloris during Diffice	i workover oper	ations, we	ekiy aitei	ng is moved on.
Date:	Signature	Freeboard (> 2-ft.)		Oil	Trash	Remarks
6-16-0>	Door	(es)/ No	(No	Yes /No	Yes / No	
6-17 11	17005	yes	No	NO	NO	
6-15	Doug	ye 9	~0	NO	NO	11-1-120-2
6-19		ye 5	NO	10	NO	Losi XX added 12013
6.20 11		Yes	No	10	NO	
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6-21-08	KF			A		Tiensfertowest Fed 80
8-22-08	KF	Swab 5-7	6k into pi	t and	pert	orète.
8-23-08	KF	Pull free u	to out of	Coit.	end 2,	low to de
		Check pit-		l		
						; ;
9-12-08	RF	Notify NMU	to of clusu.	re schr	dule 8,	nd check pit-dry
9-13-08	KF	Close pit.				
	CONTRACTOR CONTRACTOR AND ADDRESS OF		and the second s			
		· · · · · · · · · · · · · · · · · · ·				



### Chloride

Client: **Dugan Production** 06094-0003 Project #: Irish Com #90-S Sample ID: Date Reported: 07-22-08 Lab ID#: 46429 07-18-08 Date Sampled: Sample Matrix: Soil Date Received: 07-18-08 07-22-08 Preservative: Cool Date Analyzed: Condition: Intact Chain of Custody: 4818

Parameter

Concentration (mg/Kg)

**Total Chloride** 

202

Reference:

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

Mester (Deeter Review



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Dugan Production	Project #:	06094-0003
Sample ID:	Irish Com #90S	Date Reported:	07-24-08
Laboratory Number:	46429	Date Sampled:	07-18-08
Chain of Custody:	4818	Date Received:	07-18-08
Sample Matrix:	Soil	Date Analyzed:	07-23-08
Preservative:	Cool	Date Extracted:	07-22-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	4.1	0.9
Toluene	11.2	1.0
Ethylbenzene	115	1.0
p,m-Xylene	79.4	1.2
o-Xylene	7.6	0.9
Total BTEX	217	•

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery	
	Fluorobenzene	97.0 %	
	1,4-difluorobenzene	97.0 %	
	Bromochlorobenzene	97.0 %	

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid-Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

Analyst

hristun Wetes



# EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Dugan Production	Project #:	06094-0003
Sample ID:	Irish Com #90-S	Date Reported:	07-22-08
Laboratory Number:	46429	Date Sampled:	07-18-08
Chain of Custody No:	4818	Date Received:	07-18-08
Sample Matrix:	Soil	Date Extracted:	07-21-08
Preservative:	Cool	Date Analyzed:	07-21-08
Condition:	Intact	Analysis Needed:	TPH-418.1

			Det.
		Concentration	Limit
i	Parameter	(mg/kg)	(mg/kg)

**Total Petroleum Hydrocarbons** 

115

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Analyst

Mister Clasters Review



# EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Dugan Production	Project #:	06094-0003
Sample ID:	Irish Com #90S	Date Reported:	07-25-08
Laboratory Number:	46429	Date Sampled:	07-18-08
Chain of Custody No:	4818	Date Received:	07-18-08
Sample Matrix:	Soil	Date Extracted:	07-22-08
Preservative:	Cool	Date Analyzed:	07-23-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	8.2	0.2
Diesel Range (C10 - C28)	160	0.1
Total Petroleum Hydrocarbons	168	0.2

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Analyst

Mistur Moeter Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865



# **EPA METHOD 418.1 TOTAL PETROLEUM HYROCARBONS QUALITY ASSURANCE REPORT**

Client:

**QA/QC** 

Project #:

N/A

Sample ID:

**QA/QC** 

Date Reported:

07-22-08

Laboratory Number:

07-15-TPH.QA/QC 46228

Date Sampled:

N/A

Sample Matrix:

Freon-113

Date Analyzed:

07-21-08

Preservative: Condition:

N/A N/A Date Extracted: Analysis Needed: 07-21-08 TPH

Calibration

I-Cal Date 07-02-08 C-Cal Date

I-Cal RF:

C-Cal RF:

% Difference

Accept. Range

07-21-08

1.440

1,330

7.6%

+/- 10%

Blank Conc. (mg/Kg)

Concentration

**Detection Limit** 

ND

5.0

**Duplicate Conc. (mg/Kg)** 

TPH

Sample 115

**Duplicate** 132

% Difference 15.0%

Accept. Range +/- 30%

Spike Conc. (mg/Kg) Sample Spike Added Spike Result % Recovery Accept Range

TPH

115

2,000

1,990

94.1%

80 - 120%

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

QA/QC for Samples 46429 - 46431 and 46446 - 46448.

Analyst



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-23-BT QA/QC	Date Reported:	07-24-08
Laboratory Number:	46429	Date Sampled:	N/A
Sample Matrix:	Soîl	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-23-08
Condition:	N/A	Analysis:	BTEX

Calibration: and Detection Limits (ug/L)	EGALIRE:	C-CaliRF - Accept-Ranc	STATE OF THE PROPERTY OF THE PARTY OF THE PA	e≄.Blank Conc	e Defect. _ Limit
Benzene	1.1082E+008	1,1104E+008	0.2%	ND	0.1
Toluene	8.7519E+007	8.7694E+007	0.2%	ND	0.1
Ethylbenzene	6.7950E+007	6.8086E+007	0.2%	ND	0.1
p,m-Xylene	1.3882E+008	1.3909E+008	0.2%	ND	0.1
o-Xylene	6.6609E+007	6.6743E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)		uplicate.	%Diff	Accept Range	Detect Limit
Benzene	4.1	4.0	2.4%	0 - 30%	0.9
Toluene	11.2	10.9	2.7%	0 - 30%	1.0
Ethylbenzene	115	115	0.0%	0 - 30%	1.0
p,m-Xylene	79.4	78.2	1.5%	0 - 30%	1.2
o-Xylene	7.6	7.3	3.9%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample, Samo	unt Spiked Spik	ed Sample	% Recovery	Accept Range
Benzene	4.1	50.0	53.7	99.3%	39 - 150
Toluene	11.2	50.0	59.2	96.7%	46 - 148
Ethylbenzene	115	50.0	162	98.1%	32 - 160
p,m-Xylene	79.4	100	173 -	<b>96.5%</b>	46 - 148
o-Xylene	7.6	50.0	52.6	91.3%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 46429 - 46435 and 46446 - 46448.

Analyst

Review



# EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

# **Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	07-23-08 QA/QC	Date Reported:	07-25-08
Laboratory Number:	46429	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-23-08
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C+CallRF: 9	6 Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	1.0044E+003	1.0048E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.8504E+002	9.8544E+002	0.04%	0 - 15%

Blank Conc: (mg/L-mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample-	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	8.2	8.1	1.2%	0 - 30%
Diesel Range C10 - C28	160	159	0.6%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike/Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	8.2	250	254	98.5%	75 - 125%
Diesel Range C10 - C28	160	250	408	99.5%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 46429 - 46435 and 46446 - 46448.

Analyst

# CHAIN OF CUSTODY RECORD

\$ \$ \$ \$ \$ \$

	Relinquished by: (Signature)	Relinquished by: (Signature)	Molecular Attack	Doling John J. Franch Co.		Kurt Forchi				Western Federal 7-18	Natarfied Com#90 7-18	Irish Comthos 5-16	Sample No./ Sample Sandentification Date T	Client Phone No.:	Client Address:	Client: Dugan Froduction
ENVIROTECH			118.08 15:15	-[		ius				46431 1 1		46429 Soil 1-402	Sample Lab No. Sample No./Volume Preservative of Matrix Containers Macre Involume	Client No.: 06094- 0003	Yolena Patterson	
ENVIROTECH INC.	Received by: (Signature)	Received by: (Signature)	neceived by: (Signature)		61	80/	DR	0		\ \ \ \ \	5 5 5	< < < < < < < < < < < < < < < < < < <	TPH (I BTEX VOC ( RCRA Cation RCI TCLP PAH TPH (	Method	d 8021) 8260) Ills	ANALYSIS / PARAMETERS
-37/2			6	Date						χ	<b>ζ</b>	X	<del> </del>	le Cool le Intac		

5796 U.S. Highway 64 • Farmington, New Mexico 87401 • (505) 632-0615

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Payment Type Credit Account

Manual Ticket# Hauling Ticket#

Route

State Waste Code

1:40

Manifest Destination

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(I)

STATE OF NEW MEXICO
COUNTY OF SAN JUAN
I HEREBY CERTIFY THAT THE POREGOING

S A TRUE COPY OF THE ORIGINAL ON FILE IN MY
SAID OFFICE THIS 3 C CLERK
CLERK
DEPUTY

STATE OF NEW MEXICO }
COUNTY OF SAN JUAN }

# RECORDATION NOTICE OF PIT BURIAL

- In accordance with Section 19.15.17.13.F.1.f of the NMAC, operator hereby provides notice in the public record of an on-site burial of a temporary pit at the following location:

IN WITNESS WHEREOF, this Recordation Notice of Pit Burial has been executed on the date indicated below by the undersigned.

# **DUGAN PRODUCTION CORPORATION**

Kurt Fagrelius

Vice-President, Exploration

STATE OF NEW MEXICO

COUNTY OF SAN JUAN

200816226 10/23/2008 03:37 PM 1 of 1 B1484 P49 R \$9.00

San Juan County, NM FRAN HANHARDT

COUNTY STEED FIRE IN KI

My Commission Expires:

Notary Public



This document received as altered for recordation.

10-23-08

Submit To Appropri Two Copies	iate District O	ffice	State of New Mexico						Form C-105								
District I 1625 N. French Dr.,	Hobbs, NM 8	8240	Energy, Minerals and Natural Resources						July 17, 2008  1. WELL API NO.								
District II 1301 W. Grand Ave	nue, Artesia, N	NM 88210		Oi	l Conserva	tion	Divisi	าท		30-045-33725							
<u>District III</u> 1000 Río Brazos Rd	., Aztec, NM 8	87410			20 South S					2. Type of Lease  ☐ STATE ☐ FEE ☒ FED/INDIAN							
District IV 1220 S. St. Francis Dr., Santa Fc, NM 87505 Santa Fe, NM 87505								3. State Oil & Gas Lease No.									
WELLO	OMDI E	TION OR	PECC	MADI	ETION RE	DOE	T A NI	) LOG		Federal Lease NM-57580							
4. Reason for filit		. HON ON	NLCC	JIVIT L	LIONICE	.FOR	( ) AIN	LOG		5. Lease Name or Unit Agreement Name							
☐ COMPLETION	ON REPOR	RT (Fill in boxe	es #1 throu	igh #31	for State and Fe	e wells	only)			6. Well Num	ber:			<del></del> _			
C-144 CLOS #33; attach this an	d the plat to								nd/or	908				-	_		
7. Type of Compl  NEW V		VORKOVER	☐ DEEPI	ENING	□PLUGBAC:	к 🗆 і	DIFFERE	NT RESER	RVOII	R 🗆 OTHER							
8. Name of Opera	tor									9. OGRID		,					
Dugan Produ  10. Address of Op		р						70,111		11. Pool name	or W	ildcat					
P. O. Box 420		gton, NM 8	37499-04	120						Basin Fruitlan	d Con	1					
12.Location	Unit Ltr	Section	Towns	ship	Range	Lot		Feet from	ı the	N/S Line		from the	E/W L	₋ine	County		
Surface:															-		
вн:																	
13. Date Spudded	14. Date	T.D. Reached		Oate Rig 0/ <b>08</b>	Released		16	Date Com	plete	d (Ready to Proc	iuce)		. Elevati Γ, GR, e		and RKB,		
18. Total Measure	d Depth of V	Well			ck Measured Dep	pth	20	Was Dire	ction	al Survey Made	?				her Logs Run		
22. Producing Inte	erval(s), of th	nis completion	- Top, Bot	tom, Na	ame	-						L					
23.				CAS	ING REC	ORI	) (Rep	ort all s	trin	gs set in w	ell)		<del></del>				
CASING SIZ	Œ	WEIGHT LE	3./FT.		DEPTH SET			DLE SIZE		CEMENTIN		CORD	AN	MOUNT	PULLED		
	·																
								·									
24.				LIN	ER RECORD				725	<u> </u>	UBIN	VG RECO	ORD				
SIZE	TOP	В	OTTOM		SACKS CEM	ENT	SCREE	1	SI			EPTH SET		PACKI	ER SET		
	<del> </del>							·									
26. Perforation i	record (inter	val, size, and n	umber)		J		27. AC	ID, SHOT	<u>,</u> Γ, FR	ACTURE, CE	MEN	T, SQUE	EEZE, E	ETC.			
							DEPTH	INTERVA	L	AMOUNT AND KIND MATERIAL USED							
								<del></del>									
		·															
28.	:	15-1		1.751				TION		Twee							
Date First Product	ion	Produ	iction Meti	noa (Fia	owing, gas lift, p	umping	z - Size ar	d type pum	IP)	Well Status	(Proc	t. or Shut-i	in)				
Date of Test	Hours Tes	sted C	hoke Size		Prod'n For Test Period	. ]	Oil - Bb	1	Ga	s - MCF	Wa	ater - Bbl.		Gas - O	il Ratio		
Flow Tubing Press.	Casing Pr		alculated 2 our Rate	24-	Oil - Bbl.		Gas	- MCF	—— 	Water - Bbl.		Oil Grav	ity - AP	PI - (Cori	•.)		
29. Disposition of	Gas (Sold, u	sed for fuel, ve	ented, etc.)		<u> </u>						30. T	est Witnes	ssed By				
31, List Attachmer	nts											<del></del>					
32. If a temporary	pit was used	at the well, at	tach a plat	with the	e location of the	tempo	rary pit.								·		
33. If an on-site bu	•		-			•											
			•		Latitude	36.49	879	Longitue	de 1	08.18491		D 1927					
I hereby certify					<i>n sides of this</i> Printed	form	is true	and comp	olete	to the best o	f my	knowled	ge and	d belief			
Signature /	urt 1	regne	lin		Name Kurt F	Fagrel	ius Ti	le Vice-F	Presi	dent, Explora	ation	Date Ja	anuary	14, 20	09		
E-mail Addres	s kfagreli	us@duganp	roductio	n.com	1												

@istrict : PO.Box 1980, Hobbs, NM 88241-1980

District III

District [[ PO Drawer DD. Artesia, NM 88211-0719

1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088 State of New Mexico Energy, Minerals & Natural Resources Department

> Submit SION

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 8750492088 1

AMENDED REPORT

Fee Lease - 3 Copies

# WELL LOCATION AND ACREAGE DEDICATION PLAT

۵,	PI Numbe		7162	*Pool Coo 29 / 87		in Fruit. Co	³Pool Nam al / Waw Fr		and P.	.C. Sand		
'Property	Code				Property	y Name		*Well Number				
IRISH COM										905		
OGRID N	10 .			°Elevation								
00651	OGRID No . Operator Name  O06515 DUGAN PRODUCTION CORPORATION									6077		
					<sup>10</sup> Sunface	Location						
UL or lat no.	Sect 100	Township	Township Range Lot Idn Feet from the North/South line Feet from the East/W							County		
0	11	26N 13W 1200 SOUTH 1600 EAS							ST	SAN JUAN		
<sup>11</sup> Bottom Hole Location If Different From Surface												
UL or lot no.	Sect ion	Township	Range	Lat Idn	Feet from the	North/South line	Feet from the	. East/Wes	t line	County		
12 Dedicated Acres	320.0	Acres :			<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order Na.					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION











