

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, subput to the appropriate NMOCD District Office.

For permanent pits and exceptions subtait to the permanent pits and exceptions subtait to the permanent pits and exceptions.

For permanent pits and exceptions subtain to the Santa fee Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

### Proposed Alternative Method Permit or Closure Plan Application

Experimental 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
Lasse 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 neuronment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances
Operator: Dugan Production Corp. OGRID#: 006515
Address: 709 East Murray Drive, Farmington, New Mexico 87401
Facility or well name: Nok 10 #4
1000000000000000000000000000000000000
11/Lor Otr/Otr A Section 13 Township 27N Range 12W County: San Juan
Center of Proposed Design: Latitude 36.57977 North Longitude 108.05655 West NAD: X1927 1983
Surface Owner: [ ] Federal [ ] State [ ] Private 🔀 Tribal Trust or Indian Allotment
2.
Temporary: Drilling Workover
Permanent Emergency Cavitation P&A
Lined X Unfined Liner type: Thickness mil LLDPE HDPF PVC Other
String-Reinforced
l iner Seams: ☐ Welded ☐ Factory ☐ Other
Closed-loop System: Subsection II 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
l iner Seams:
Below-grade tank: Subsection Lof 19.15.17 11 NMAC
Volume: bbl Type of fluid:
Link's onstruction material:
1 Secondary containment with leak detection [ ] Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
Visible adexalls and finer [] Visible sidewalls only [] Other
mer ripe Thickness mil [] HDPF [] PVC [] Other
Nternative Method
Control of the specific respect to respect to the Suntated to the Santated by ironnerial Buseau office for consideration of approval.

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify 4'= 3'Hog Wire + One Strand Barbed Wire	. hospital.
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)	
Signs: Subsection C of 19.15.17.11 NMAC  12"x 24". 2" lettering. providing Operator's name, site location, and emergency telephone numbers  Signed in compliance with 19.15.3.103 NMAC	
Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acce, 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.	opriate district approval.
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
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
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 indicage, by a check mark in the box, that the documents are outsiched.    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 Permit Number:
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 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: X Waste Excavation and Removal
Waste Removal (Closed-loop systems only)
On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  ☑ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  ☑ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  ☑ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  ☑ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  ☑ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids,		
facilities are required.		
Disposal Facility Name:	Disposal Facility Permit Number:	
Disposal Facility Name:	Disposal Facility Permit Number:	// // // // // // // // // // // // //
Will any of the proposed closed-loop system operations and associated activities o  ☐ Yes (If yes, please provide the information below) ☐ No	ccur on or in areas that will not be used for future serv	vice and operations?
Required for impacted areas which will not be used for future service and operation  Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection  Site Reclamation Plan - based upon the appropriate requirements of Subsection	e requirements of Subsection H of 19.15.17.13 NMA L of 19.15.17.13 NMAC	C
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may requi considered an exception which must be submitted to the Santa Fe Environmenta demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC	re administrative approval from the appropriate dist. I Bureau office for consideration of approval. Justi	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Database search; USG	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; Database search;	a obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; USGS; Database search; USGS; Database search; USGS; USGS; USGS; U	a obtained from nearby wells	<ul><li>☐ Yes ☐ No</li><li>☐ NA</li></ul>
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	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 - 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
18.  On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the a Construction/Design Plan of Temporary Pit (for in-place burial of a drying performed protocols and Procedures - based upon the appropriate requirements of 19.1 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	uirements of 19.15.17.10 NMAC  Subsection F of 19.15.17.13 NMAC  propriate requirements of 19.15.17.11 NMAC  ad) - based upon the appropriate requirements of 19.5  5.17.13 NMAC  uirements of Subsection F of 19.15.17.13 NMAC  Subsection F of 19.15.17.13 NMAC  Irill cuttings or in case on-site closure standards cannot of 19.15.17.13 NMAC  I of 19.15.17.13 NMAC	15.17.11 <b>NMA</b> C

Operator Application Certification:
The reby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.  From: (Prime): Flact Paggelius Fifte: Vice President, Exploration
Signature: 1240 1240 109-39-2008
e-mail address: rfagrelius@duganproduction.com [elephone: 505-325-1821 (0), 505-320-8248 (C)
OCD Approval: Permit Application (including closure plan)  Closure Plan (only) OCD Conditions (see attachment)
O( )) Representative Signature: Approval Date: Z < / >
Fitle: Number: OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Date soil analysis did not meet "pit rule" standards (19.15.17)  Release will be handled under "spill rule" (19.15.30).
Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)  If different from approved plan, please explain.
23.  Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more that two facilities were utilized.
Disposal Facility Name: Disposal Facility Permit Number:
Disposal Facility Name: Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?  Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations:  Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice (surface owner and division)  Proof of Deed Notice (required for on-site closure)  Plot Plan (for on-site closures and temporary pits)  Confirmation Sampling Analytical Results (if applicable)  Waste Material Sampling Analytical Results (required for on-site closure)  Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation)  On-site Closure Location: Latitude 36.57977 N Longitude 108.05655 W NAD: ▼1927 □ 1983
Operator Closure Certification:  The way a verification and attachments and attachments and with this also were apport in two accounts and appropriate to the host of my knowledge and
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print): Kurt Fagrelius  Title: Vice President, Exploration
Signature: Kurt Fagrelius Date: 10-11-10
e-mail address: kfagrelius @duganproduction.com lelephone: 505-325-1821 (0), 505-320-8248 (C)

## **Kurt Fagrelius**

From: Kurt Fagrelius

Sent: Monday, September 13, 2010 5:17 PM

'Powell, Brandon, EMNRD'; 'brad.a.jones@state.nm.us.'; 'bertha.spencer@bia.gov'; 'dave\_mankiewicz@nm.blm.gov'

Subject: Tonkin #4 Permanent Pit Closure Notice

Mr. Brandon Powell, Mr. Brad Jones and Mr. Dave Mankiewicz, つからなられた

We are giving notice that Dugan will be closing the permanent pit on Dugan Production Corp.'s "Tonkin #4"; API #30-045-06574 on Federal Lease SF-079115; on Tribal Trust Surface; Location Unit A of S13, T27N, R12W; on September 16, 2010.

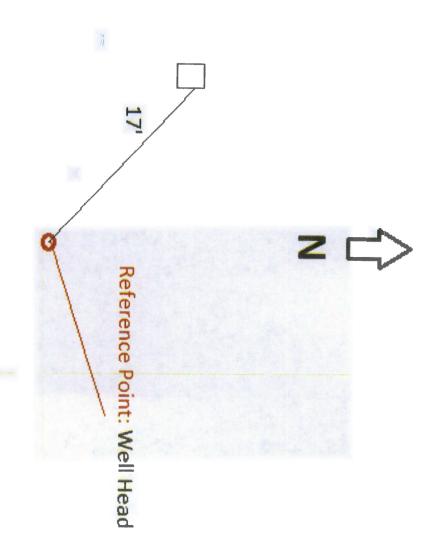
This permanent pit will be closed according to the guidelines of the "Spill Rule" (19.15.30 NMAC). Sample testing results were not within acceptable limits of the pit rule and are as follows: Benzene - <0.050 mg/kg, BTEX - 0.150 mg/kg, TPH - 627 mg/kg and Chloride 16 mg/kg. NM State Form C-141 with analytical results will be included with the C-144 final closure report and submitted to the Santa Fe office of the NMOCD, and the cleanup of contamination will be addressed under guidelines of the spill rule with a final C-141 sent to the NMOCD district office.

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

Sincerely,

Kurt Fagrelius
Dugan Production Corp.
709 East Murray Drive
Farmington, New Mexico 87401
505-325-1821 (O), 505-320-8248 (C)
kfagrelius@duganproduction.com

Dugan Production
Tonkin # 4
Seperator Pit



From Reference Point Go N 20 degrees N.W. For a Distance of 17' to Center of Pit.

#### Tonkin #4 Permanent Pit Closure Report-Methods, Procedures and Protocols

1. Comply with deadlines for closure of a permanent pit established by the State of New Mexico, Energy Minerals and Natural Resources Department 19.15.17.13 NMAC, or an earlier date if required by the NMOCD in the case of imminent danger to fresh water, public health or the environment.

Existing	Permit Applc. Submittal or	File Closure Plan	Stop Use By	Close By
On June 16, 2008	Modification Request	Ву		
Temporary Pit - Unlined	Not Permtd under 19.15.17	7/16/2008	Upon drlg rig release	9/16/2008
		41.2		
Permanent Pit - Unlined or Lined	Not permitted or Registered	7/16/2008	6-16-2008	12/16/2008
	with NMOCD			
Permanent Pit – Unlined	Permitted or Registered with	12-16-2008	6-16-2010	6-16-2011
	NMOCD			
BGT-Aprvd. Design	Not Permtd under 19.15.17	12/16/2008	fail integrity replc	
A	Applc. by 9-16-2008		w/apprvd design	
BGT-Not Aprvd Design Nor Retrofit	Not Permtd under 19.15.17	12/16/2008	6/16/2013	6-16-2013
to Comply w/19.15.17	Mod. Rgust by 9-16-2008			
BGT-Not Aprvd Design Nor Retrofit	NA	12/16/2008	6/16/2013	6/16/2013
to comply w/19.15.17				
Permanent Pit-Design and Constr	Mod. Rqust by 12-16-2008	12/16/2008	fail integrity replc	60-days after cessation
Termanent Fit-Design and Consti	Wiod. 11qust by 12-10-2000	submit w/mod	lail integrity repic	Cessation
Does not comply w/19.15.17	Comply w/in 18-mos of aprvl	request	w/apprvd design	
permitted and lined	- 141		· · · · · · · · · · · · · · · · · · ·	
				60-days after
Permanent Pit-Design and Constr	Permit Apple by 12-16-2008	12/16/2008		cessation
		submit w/permit		
Does not comply w/19.15.17	Comply w/in 18-mos of aprvl	Applc		
Registered and Lined		7.00		
		60-Days prior to		
Permanent Pit	Permitted under 19.15.17	close		
			Upon drlg rig	6-mos after
Temporary Pit	Permitted under 19.15.17	Prior to closure	release	rig release
BGT	Permitted under 19.15.17	12/16/2013	failed integrity replc	60-days after cessation
		or prior to closure	w/apprvd design	

- 2. The Tonkin #4 permanent pit is an approved design registered under rule 50, but was not permitted under rule 19.15.17. The permanent pit is not in use; it was taken out of commission on 1/14/2008 but has not been closed yet. This report serves as the closure plan and final closure report for the pit.

  Permanent pit was closed on 8-10-10 (date soil analysis did not meet "pit rule" standards (19.15.17). Release will be handled under "spill rule" (19.15.30).
- 3. 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). *Notification is attached (sent 9-13-10 via e-mail)*.

4. Provide the Environmental Bureau in the NMOCD Santa Fe office a closure plan with this notice. Upon approval of this closure plan, provide the Environmental Bureau in the NMOCD Santa Fe office a proposed schedule for closure at least 60-days prior to closing the permanent pit.

10/29/2008 and 11/15/2008 e-mails to NMOCD Santa Fe office.

- 5. Proof of closure notice will be provided by certified mail to surface owner prior to closing the permanent pit. Proof of notice will be attached to final closure report.

  The closure notification was sent to the surface owner via e-mail (9-13-10), prior to closing the permanent pit (See attached e-mail). Well is located on Tribal Trust surface, certified mail is not required per BLM/OCD MOU.
- 6. Remove all liquid from the permanent pit prior to closure and dispose of at the Dugan Production operated Sanchez O'Brien #1 SWD (permit SWD-694) 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.

Permanent pit did not have any fluids in it to be hauled.

7. All solids from the permanent pit will be excavated, hauled to and disposed of at either the Envirotech facility (permit #NM-01-0011) located in Section 6, Township 26 North, Range 10 West or the IEI facility (permit NM-01-0010B) located in Section 2, Township 29 North, Range 12 West.

Nothing was hauled from this permanent pit.

8. Remove pit liner system, if applicable and dispose of in a NMOCD approved facility (Waste Management's Crouch Mesa facility).

\*Permanent pit did not have a liner system.\*

9. On site equipment associated with the permanent pit will be removed unless it is needed for some other purpose.

10. Collect at a minimum, a five point, composite sample; also, collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for Benzene, BTEX, TPH, GRO/DRO and chlorides to demonstrate that Benzene, BTEX, TPH, GRO/DRO and chlorides do not exceed the standards as specified in 19.15.17.13.E or the background chloride concentration, whichever is greater.

Components	Test Method	Limit (mg/kg)	Results (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2	<0.050
BTEX	EPA SW-846 8021B or 8260B	50	<0.150
TPH	EPA SW-846 418.1	100	627
GRO/DRO	EPA SW-846 8015M	NS	<20.0
Chlorides	EPA 300.1	250 or Background	16

11. The NMOCD will be notified of the testing results on form C-141.

C-141 with results of sample analysis is attached. Sample analyses exceeded limits

permissible under 19.15.17.13. TPH tested 627-mg/kg, exceeding the limit of 100-mg/kg.

- 12. If it is determined that a release has occurred, rules 19.15.3.116 NMAC and 19.15.1.19 NMAC will be complied with as required.
  - A release of TPH did occur. Contamination will be addressed under the "spill rule" 19.15.30
- 13. If the sampling results demonstrate that a release has not occurred, or that any release does not exceed the concentrations specified above or background concentrations, the pit will be backfilled with compacted, non-waste containing, earthen material. *There was a release of TPH*.
- 14. Stockpiled sub-surface soil will be used to backfill pit and re-contour (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 permanent pit and re-contour. A minimum of four-feet of compacted, non-waste containing, earthen material was used as backfill.
- 15. Stockpiled surface soil will be used as a cover over the backfilled pit and disturbed area 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 over the backfilled permanent pit and disturbed area no longer needed for production operations. The soil cover included background thickness of topsoil (which was greater than 1-foot thick) to establish vegetation at the site. The soil cover was constructed to the site's existing grade and will prevent water collection or ponding and erosion of the cover material.
- 16. 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 reseeded. The seeding method will be to drill on contour whenever possible.

  Disturbed areas will be seeded the first growing season after the pit is closed.

  Seeding will be accomplished by drilling on contour whenever possible or by other division approved methods. BLM stipulated seed mixes will be used on all Federal lands and OCD approved seed mixes (administratively approved if required) will be used on all State or private lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two consecutive growing seasons. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. Seeding or planting will be continued until successful vegetative growth occurs.
  - This provision will/has been accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.
- 17. The NMOCD will be notified within 60-days of closure of the permanent pit. The closure report will be filed on form C-144 and will include the following:
  - a. Proof of Closure Notice (surface owner and division)
  - b. Confirmation Sampling Analytical Results (if applicable)
  - c. Disposal Facility Name and Permit Number
  - d. Soil Backfilling and Cover Installation

- e. Re-vegetation Application Rates and Seeding Technique f. Site Reclamation (Photo Documentation)
- 18. The NMOCD will be notified once successful re-vegetation has been achieved. The Aztec District office of the OCD will be notified after each re-seeding operation and after successful re-vegetation has been achieved.

Permanent pit: Tonkin #4 API number: 30-045-06574

Results of sample analysis on the five-point composite sample collected on the subject permanent pit exceeded limits permissible under the "pit rule" (19.15.17.13.C) (see attached C-141 with analytic results).

The Environmental Bureau of the Oil Conservation Division (OCD) in Santa Fe is hereby provided a C-144 (closure report) and an "initial" C-141 (release notification) with analytic results of soil testing. The closure date on the C-144 (box 21) shows the date that the soil analysis did not meet pit rule standards. Also, this letter hereby provides notice that the subject permanent pit will be closed according to the requirements of the "spill rule" (19.15.30).

The OCD district office in Aztec is hereby provided a copy of the "initial report" C-141 (release notification) with analytic results of soil testing and also notice that the subject permanent pit will be closed according to the requirements of the "spill rule" (19.15.30). Assessment, clean-up and remediation of the reported spill will be done in accordance with the spill rule under the authority of the Aztec District office of the OCD. The "final report" C-141 with photo documentation of site reclamation will be sent to the Aztec District office of the OCD.

Following clean-up of the reported release and determination that the release is not a threat to groundwater contamination, the permanent pit will be closed in accordance with the approved C-144 (closure plan) and will include the following:

- 1. Stockpiled sub-surface soil will be used to backfill pit and re-contour (to a final or intermediate cover that blends with the surrounding topography). A minimum of fourfeet of compacted, non-waste containing, earthen material will be used as backfill.
- 2. Stockpiled surface soil will be used as a cover over the backfilled pit and disturbed area 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. The soil cover will be constructed to the sites existing grade and prevent water collection or ponding and erosion of the cover material.
- 3. Disturbed areas will be seeded the first growing season after the pit is closed. Seeding will be accomplished by drilling on contour whenever possible or by other division approved methods. BLM stipulated seed mixes will be used on all Federal lands and OCD approved seed mixes (administratively approved if required) will be used on all State or private lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two consecutive growing seasons. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. Seeding or planting will be continued until successful vegetative growth occurs.
- 4. The Aztec District office of the OCD will be notified after each re-seeding operation and after successful re-vegetation has been achieved.

Kurt Fagrelius VP – Exploration, Dugan Production Corp. Farmington, New Mexico 87401 505-325-1821 (O), 505-320-8248 (C) kfagrelius@duganproduction.com District I .
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Dugan Production Corp.

Name of Company

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

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

**OPERATOR** 

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back

Kurt Fagrelius

Form C-141

side of form

Final Report

Revised October 10, 2003

#### **Release Notification and Corrective Action**

Contact

Address		P.O. Bo:	x 420		]	Telephone No. 505-325-1821					
Facility Nar		Tonkin :			F	Facility Type Permanent Pit					
Surface Ow	ner '	Tribal '	Trust	Mineral C	Owner	Federa	1	Lease N	lo. SF-079115		
				LOCA	ATION	OF REI	EASE				
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Line	County		
A	13	27N	12W	900	No	rth	900	East	San Juan		
			Lat	titude 36.57	977 1	N Longitud	e 108.0565	55_W			
					URE	OF RELI					
Type of Rele		orting P			1		Release Unkno		ecovered Unknown		
Was Immedia			perman	ent pit re	rease		our of Occurrence	Date and	Hour of Discovery Unknown		
was minicula	ate Notice (		Yes	No 🛚 Not Re	equired	If YES, To	N/A	Ą			
By Whom?						Date and H	our	-			
Was a Water	course Read					If YES, Vo	lume Impacting th	ne Watercourse.			
			Yes X	No							
If a Watercou	irse was Im	pacted, Descr	ibe Fully.*								
N/A											
14/ F	7										
Describe Cau	se of Proble	em and Remed	dial Action	ı Taken *							
					act wa	s discov	vered. A f	ive-point co	omposite sample		
									old limits as per		
							sample resu				
Describe Area	a Affected	and Cleanup A	Action Tak	en.*							
Contami	nation	will be	addres	reed under	tho "	anill m	le" 19.15.3				
Concain	macion	will be	audres	ssed under	the "s	spili ru	ie" 19.15.3	30.			
I hereby certi	fy that the i	nformation gi	ven above	is true and comp	lete to the	e best of my	knowledge and ur	nderstand that purs	uant to NMOCD rules and		
regulations at	I operators or the envir	are required to	o report an	d/or file certain re	elease no	otifications an	id perform correct	ive actions for rele	ases which may endanger eve the operator of liability		
should their o	perations h	ave failed to a	dequately	investigate and re	emediate	contamination	on that pose a thre	at to ground water.	surface water, human health		
or the environ	ment. In a	ddition, NMO	CD accep	tance of a C-141	report do	es not relieve	the operator of re	esponsibility for co	ompliance with any other		
federal, state,											
	// /			_			OIL CONS	SERVATION	<u>DIVISION</u>		
Signature: /	Turl	Fzgr	Ni	~							
Printed Name					A	Approved by	District Superviso	r:			
- Imica i taille											
Title:	VP Ex	xplorat:	lon		A	Approval Date	2:	Expiration I	Date:		
E-mail Addre	ss: kfagi	relius@du	ıganpro	duction.com	m C	Conditions of	Approval:				
									Attached		
Attach Addit	ional Shar	te If Necessi	Phone:	505-325-1	82						
Tuach Auull	ionai Silet	is it inecessi	aı y								



August 10, 2010

MIKE SANDOVAL

**DUGAN PRODUCTION** 

P. O. BOX 420

FARMINGTON, NM 87499

RE: PIT CLOSURES

Enclosed are the results of analyses for samples received by the laboratory on 08/05/10 10:10.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Celey & Keine





#### Analytical Results For:

DUGAN PRODUCTION
MIKE SANDOVAL
P. O. BOX 420
FARMINGTON NM, 87499
Fax To: (505) 327-4043

Received:

08/05/2010

Reported:

08/10/2010

Project Name: Project Number: PIT CLOSURES TONKIN #4

Project Location:

NOT GIVEN

Sampling Date:

08/03/2010

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: TONKIN #4 (H020550-01)

OTEX 00210:	mg/	icg	A service of	15页型						
Analyte	Result	Reporting Limit	Anatyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie	
Benzene*	<0.050	0.050	08/07/2010	ND	1.11	111	1.00	0.713		
Toluene*	<0.050	0.050	08/07/2010	ND	1.12	112	1.00	1.65		
Ethylbenzene*	<0,050	0.050	08/07/2010	ND	1.13	113	1.00	1.59		
Total Xylenes*	<0.150	0.150	08/07/2010	ND	3.35	112	3.00	1,34		
Surrogate: 4-Bromofluorobenzene (PIL	84.1	% 80-120								
Chiloride, attitional-e	mg/	kg	Amphyme	d By: HOL					QM-07	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie	
Chloride	16.0	16.0	08/09/2010	ND	432	108	400	0.00		
TPH 418.1	ing/	'kg	Andre	d by Ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifle	
TPH 418.1	627	100	08/06/2010	ND	971	95.2	1020	2.18		
TPH 8015M	ing/	ing	Anthrop	é Byr Ath					Q14-05	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie	
GRO C6-C10	<10.0	10.0	08/08/2010	ND	157	78.7	200	0.202		
DRO >C10-C28	<10.0	10.0	08/08/2010	ND	152	76.2	200	0.648		
Surrogate: 1-Chlorooctane	73.5	% 70-130		٧						
Surrogate: 1-Chlorooctadecane	93.3	% 70-130								

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Dismages. Cardinal's flability and clients exclusive remedy for any claim artisting, whether based in contract or toot, shall be limbted to the amount paid by client for analyses. All claims, lockeding those for negligence and any other cause whatesoever shall be deemed walvest unless made in writing and received by Client's whithin thirty (30) days after completion of the applicable service. In no evers shall Cardinal be flabile for incidental or consequential damages including, without familiation, business interruptions, loss of use, or loss of use analysis of use of use analysis. In the use of use of use analysis of use of use

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

PLEASE MOTE: Liability and Demages. Curdinal's liability and client's exclusive remady for any dain artsing, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and inny other cause whelsoever shall be deemed valved unless reads in writing and noctived by Cardinal within thinly (30) days after completion, of the applicable service. In no event shall Cardinal be liable for incidents or consequential densityes, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurved by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approved of Cardinal Laboratories.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



Address

# CHAIN OF CUSTODY RECORD

Page\_\_\_\_\_of

FOR GAL USE ONLY GAL JOB #

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C	/	2
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Ensure
proper
container
packa
gin

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

Project Name: 1 + closures

Table 1. - Matrix Type

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

Samplers Signature:

6 =Waste, 7 =Other (Specify) 1 =Surface Water, 2 =Ground Water

•										8				
Relinquistied by:	10. Relinquished by:	9.	SS	~.]	6.	5	4	(J3	2.	12 W 2	Sample ID		Address: 75 Suttle 3	Lab Name: Green Ana
						Appendix and appendix appendix and appendix and appendix and appendix appendix and appendix appendix appendix and appendix appendix appendix and appendix				8-3-10 9.55	Date Time	Collection	75 Suttle Street, Durango, CO 81303	Green Analytical Laboratories
Date:	Daire										Collected by: (Init.)  Matrix Type From Table I  No. of Containers  Sample Filtered ? Y/N	Miscellaneous	903	(970) 247-4220 F
Time: Received	Time:										Unpreserved (Ice Only) HNO3 HCL H2SO4 NAOH Other (Specify)	Preservative(s)		FAX (970) 247-4227
A-Chan										× × × ×	8015 418.1 BTEX CI			Analyses Required
Date: (1/0 Time: 102	_							THE CASE OF THE CA	*** The state of t		Comments			:

\*Sample Reject [ ; Return [ ] Dispose [ ] Store (30 Days)

#26 5.5° C+IBB