Type of action:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-144 Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

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

# Proposed Alternative Method Permit or Closure Plan Application

Below grade tank registration

Modification to an exist	grade tank, or proposed alternative method
	rm C-144) per individual pit, below-grade tank or alternative request
lease be advised that approval of this request does not relieve the operator or its responsibility to	r of liability should operations result in pollution of surface water, ground water or the o comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator: Dugan Production Corp.	OGRID #:006515_
Address: PO Box 420, Farmington, NM 87499-0420	
Facility or well name: Monte Carlo Com #1	
	OCD Permit Number:
	30N Range 14W County: San Juan
Center of Proposed Design: Latitude 36.82517 Long	
Surface Owner:  Federal State Private Tribal Trust or	
☐ String-Reinforced	LLDPE   HDPE   PVC   Other Volume: bbl Dimensions: L x W x D Water lls, liner, 6-inch lift and automatic overflow shut-off er
4. Alternative Method:	
Ť	submitted to the Santa Fe Environmental Bureau office for consideration of approval.
5.  Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permaner)  ☐ Chain link, six feet in height, two strands of barbed wire at top (Institution or church)  ☐ Four foot height, four strands of barbed wire evenly spaced between the space of the sp	Required if located within 1000 feet of a permanent residence, school, hospital,

Form C-144 Released to Imaging: 10/2/2023 10:46:09 AM Oil Conservation Division

Page 1 of 6

30			
e 2 of	Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)		
raz	Screen □ Netting □ Other		
	✓ Monthly inspections (If netting or screening is not physically feasible)		
-	7.		
	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 19.15.16.8 NMAC		
	Variances 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:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.		
	9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	otable source	
	General siting		
	Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No	
	Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	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. (Does not apply to below grade tanks)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No	
	Within the area overlying a subsurface mine. (Does not apply to below grade tanks)  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No	
	<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</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. (Does not apply to below grade tanks) - FEMA map	Yes No	
	Below Grade Tanks		
	Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
M	Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
1:33 F	Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)		
7.71 5707	Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
7/07/6	Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No	
	- Visual inspection (certification) of the proposed site: Aerial photo: Satellite image		

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

36			
Page 3 of	Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
Pa	Temporary Pit Non-low chloride drilling fluid		
	Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any 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.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No	
	Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No	
	Within 300 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No	
	Permanent Pit or Multi-Well Fluid Management Pit		
	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 1000 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 spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.	Yes No	
	- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site		
	Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
	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 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.1 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 Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC		
	Previously Approved Design (attach copy of design) API Number: or Permit Number:		
12:11:33 PM	Multi-Well Fluid Management Pit 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 docattached.  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  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC		
3 12:	☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC ☐ Previously Approved Design (attach copy of design) API Number: or Permit Number:		

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	st: Subsection B of 19.15.17.9 NMAC st be attached to the application. Please indicate, by a check mark in the bo	ox, that the documents are
Siting Criteria Compliance Demonstration Climatological Factors Assessment Certified Engineering Design Plans - based Dike Protection and Structural Integrity Leak Detection Design - based upon the Liner Specifications and Compatibility A Quality Control/Quality Assurance Consecutive Operating and Maintenance Plan - based Freeboard and Overtopping Prevention I Nuisance or Hazardous Odors, including Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan	l upon the appropriate requirements of 19.15.17.12 NMAC Plan - based upon the appropriate requirements of 19.15.17.11 NMAC g H <sub>2</sub> S, Prevention Plan	
13. Proposed Closure: 19.15.17.13 NMAC		
	boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
☐ Alternative  Proposed Closure Method: Waste Excavat ☐ Waste Remova ☐ On-site Closur	al (Closed-loop systems only) e Method (Only for temporary pits and closed-loop systems) place Burial  On-site Trench Burial	fulti-well Fluid Management Pit
closure plan. Please indicate, by a check mar  ☐ Protocols and Procedures - based upon t ☐ Confirmation Sampling Plan (if applicat ☐ Disposal Facility Name and Permit Num ☐ Soil Backfill and Cover Design Specific ☐ Re-vegetation Plan - based upon the app	n Checklist: (19.15.17.13 NMAC) Instructions: Each of the following item is in the box, that the documents are attached.  the appropriate requirements of 19.15.17.13 NMAC  tole) - based upon the appropriate requirements of Subsection C of 19.15.17.13 there (for liquids, drilling fluids and drill cuttings) attons - based upon the appropriate requirements of Subsection H of 19.15.17 tropriate requirements of Subsection H of 19.15.17.13 NMAC appropriate requirements of Subsection H of 19.15.17.13 NMAC	3 NMAC
	ethods only): 19.15.17.10 NMAC demonstration of compliance in the closure plan. Recommendations of acc to certain siting criteria require justifications and/or demonstrations of equ	
Ground water is less than 25 feet below the bot NM Office of the State Engineer - iWA	ttom of the buried waste. ATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the NM Office of the State Engineer - iWA	bottom of the buried waste ATERS database search; USGS; Data obtained from nearby wells	Yes No NA
Ground water is more than 100 feet below the NM Office of the State Engineer - iWA	bottom of the buried waste. ATERS database search; USGS; Data obtained from nearby wells	Yes No NA
Within 100 feet of a continuously flowing water lake (measured from the ordinary high-water n - Topographic map; Visual inspection (continuously)		or playa Yes No
	chool, hospital, institution, or church in existence at the time of initial applica proposed site; Aerial photo; Satellite image	tion. Yes No
at the time of initial application.	ic fresh water well or spring used for domestic or stock watering purposes, in ATERS database; Visual inspection (certification) of the proposed site	existence Yes No
_	nunicipality; Written approval obtained from the municipality	Yes No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification m	nap; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or v	vithin a defined municipal fresh water well field covered under a municipal o	— —
Form C-144	Oil Conservation Division	Page 4 of 6

adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipal confirmation of the section of the secti		m the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the	NM EMNRD-Mining and Mineral I	Division	☐ Yes ☐ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; Nociety; Topographic map</li> </ul>	NM Bureau of Geology & Mineral Ro	esources; USGS; NM Geological	
Within a 100-year floodplain.			Yes No
- FEMA map			Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instiby a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon Proof of Surface Owner Notice - based upon the approced Construction/Design Plan of Burial Trench (if applical Construction/Design Plan of Temporary Pit (for in-plated Protocols and Procedures - based upon the appropriate Confirmation Sampling Plan (if applicable) - based upon Waste Material Sampling Plan - based upon the appropriate Soil Cover Design - based upon the appropriate required Re-vegetation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate required Site Reclamation Plan - based upon the appropriate Plan - based upon the	on the appropriate requirements of 19 priate requirements of Subsection E ble) based upon the appropriate requirements of 19.15.17.13 NMAC on the appropriate requirements of Subsection H of 19.15.17.13 NMAC on the appropriate requirements of Subsection H of 19.15.17.13 NMAC on the appropriate requirements of 19.15.17.13 NMAC on	9.15.17.10 NMAC of 19.15.17.13 NMAC irements of Subsection K of 19.15 on the appropriate requirements of 2 9.15.17.13 NMAC MAC in case on-site closure standards of 13 NMAC	5.17.11 NMAC F19.15.17.11 NMAC
	Regulatory Engineer	e to the best of my knowledge and	belief.
e-mail address: Kevin.Smaka@duganproduction.com	Telephone: 505-325-1821 x1		
18.  OCD Approval:  Permit Application (including closure	-		
OCD Representative Signature: Victoria Ven	• , —, —	` ,	0/02/2023
Title: Environmental Specialist	OCD Permit	Number: BGT1	
19. Closure Report (required within 60 days of closure complete Instructions: Operators are required to obtain an approved The closure report is required to be submitted to the division section of the form until an approved closure plan has been	closure plan prior to implementing n within 60 days of the completion o obtained and the closure activities	f the closure activities. Please do	
20.		<u> </u>	
Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site Closure M ☐ If different from approved plan, please explain.	fethod Alternative Closure Me	ethod Waste Removal (Close	ed-loop systems only)
21.  Closure Report Attachment Checklist: Instructions: Each 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 for plot Plan (for on-site closures and temporary pits)  Confirmation Sampling Analytical Results (if applicated Waste Material Sampling Analytical Results (required Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Techniq Site Reclamation (Photo Documentation)	private land only)  ble)  for on-site closure)	ached to the closure report. Pleas	se indicate, by a check
On-site Closure Location: Latitude	Longitude	NAD: [	1927 🔲 1983
Form C-144	Oil Conservation Division	Page :	5 of 6

Form C-144

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Operator Closure Certification:

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): \_\_\_\_\_\_\_ Title: \_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_

e-mail address:\_\_\_\_\_\_ Telephone:\_\_\_\_\_

### Tyra Feil

From: Kevin Smaka

Sent:Friday, September 15, 2023 2:08 PMTo:Barr, Leigh, EMNRD; Adeloye, Abiodun ACc:Tyra Feil; Carlos Ramos; Dalvin Harrison

**Subject:** BGT Closure Sampling

Dugan will be closing 2 BGTs and collecting soil samples this coming Wednesday, 9/20/23 @ 10:00 AM. We will be collecting samples from Dugan's Monte Carlo #1 wellsite and Dugan's Carpenter #1E well site.

Here are the sites information:

Monte Carlo #1 30-045-25866 K-07-30N-14W 1450 FSL 1450 FWL

Carpenter Com #1E 30-045-23613 F-25-30N-14W 1850 FNL 1480 FWL

The Monte Carlo #1 is a fee lease and a certified letter has been mailed to the land owner of our planned closure. A copy of that notice will be included in the closure report when the C-144 is filed.

Kevin Smaka P.E. Regulatory Engineer Dugan Production Corp 505-486-6207

### Below Grade Tank Closure Plan

Dugan Production Corp.

As directed by NMAC 19.15.17 the following plan/procedure has been prepared for closure of the below grade tank identified on the associated C-144.

- 1. Dugan will provide notice via-email to the NMOCD 72 hours prior to commencing closure activities. Dugan will also notify the appropriate surface owner by e-mail if possible or by certified letter.
- 2. Dugan will close the pit, drying pad or below-grade tank by first removing all contents and, if applicable, synthetic liners and transferring those materials to a division approved facility. In this case Dugan will haul solid waste to Envirotech (Permit # NM-01-0011). Liquid waste will be hauled to Dugan's Sanchez O'Brien SWD #1 (Permit # SWD-694). If needed the pit liner will be disposed of at Waste Management's Crouch Mesa facility.
- 3. Dugan will take a composite 5-point soil sample underneath the BGT liner, grabbing stained and wet soils. The samples will be taken to a local lab and analyzed for BTEX, TPH and Chlorides. If the sample results do not exceed the limits in the applicable portion of table 1, found in NMAC 19.15.17, Dugan will continue with closure by backfilling the BGT vault and commencing reclamation activities. In the event the sampling results exceed the limits in table 1 Dugan will further delineate and remediate the soils in the BGT vault until samples are in the limits established in Table 1.

TABLE I			
Depth Below bottom of pit to groundwater less than 10,000 mg/I TDS	Constituent	Method	Limit
	Chloride	EPA 9056	600 mg/kg
	TPH	Method 418.1	100 mg/kg
	BTEX	Method 8021B	50 mg/kg
<u>&lt;</u> 50 Feet	Benzene	Method 8021B	10 mg/kg
	Chloride	EPA 9056	10,000 mg/kg
	TPH	Method 418.1	2,500 mg/kg
	GRO + DRO	Method 8015	1,000 mg/kg
	BTEX	Method 8021B	50 mg/kg
51 feet - 100 feet	Benzene	Method 8021B	10 mg/kg
	Chloride	EPA 9056	20,000 mg/kg
	TPH	EPA 418.1	2,500 mg/kg
	GRO + DRO	Method 8015	1,000 mg/kg
	BTEX	Method 8021B	50 mg/kg
> 100 feet	Benzene	Method 8021B	10 mg/kg

- 4. All areas disturbed by the closure of pits and below-grade tanks, except areas reasonably needed for production operations or for subsequent drilling operations, shall be reclaimed as early and as nearly as practicable to their original condition or their final land use and shall be maintained to control dust and minimize erosion to the extent practicable.
- 5. Topsoil and subsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area then shall be reseeded in the first favorable growing season following closure of a pit, drying pad associated with a closed-loop system or below-grade tank.

- 6. Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.
- 7. Other regulatory requirements. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies on lands managed by those agencies shall supersede these provisions and govern the obligations of any operator subject to those provisions, provided that the other requirements provide equal or better protection of fresh water, human health and the environment.
- 8. The operator shall notify the division when reclamation and re-vegetation are complete.
- 9. Concerning soil cover designs for closures after site contouring, where the operator has removed the below-grade tank or drying pad contents and liner, and if necessary remediated the soil beneath the below-grade tank or drying pad liner to chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, shall consist of the background thickness of topsoil or one foot of suitable material, whichever is greater.
  - Dugan has elected to submit this closure plan without any depth to groundwater and citing information and has elected to have all sampling results conducted at the most stringent standards of table 1.
  - In the event samples exceed the allowable limits Dugan will review the results and
    correlate the results with actual groundwater data. The groundwater determination
    will also be submitted to the division. In the event the soil samples fall below the
    allowed limits in table 1 Dugan will proceed with closure and reclamation as outlined
    in this closure plan. If the samples exceed the limits Dugan will delineate and
    remediate the contaminated soil in question until it meets the thresholds
    established in table #1.



# dugan production corp.

September 13, 2023

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

Re:

Dugan Production Corp. previously submitted C-144's not in NMOCD database

Monte Carlo Com #1 (30-045-25866)

To Whom It May Concern,

Dugan Production Corp. (DPC) is submitting a Closure Plan for the referenced well and would like to also submit the C-144 Closure Plan that was submitted on 10/6/2008, (signed by Kurt Fagrelius). This document was not scanned into the NMOCD records and DPC is submitting now to reflect that it had been submitted in a timely manner as required by NMOCD rules.

Sincerely,

Kevin Smaka, PE

**Regulatory Engineer** 

1625 N. French Dr., Hobbs, NM 88240 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

Form C-144 July 21, 2008

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 Peri	mit or Closure Plan Application

Type of action:	X 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
	X Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system,
below-grade tank	s, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
I.
Operator: Dugan Production Corp. OGRID #: 006515
Address: 709 East Murray Drive, Farmington, New Mexico 87401
Facility or well name: Monte Carlo #1
API Number: 30-045-25866 OCD Permit Number:
U/L or Qtr/Qtr K Section 7 Township 30N Range 14W County: San Juan
Center of Proposed Design: Latitude 36.82517 North Longitude 108.35393 West NAD: X 1927 1983
Surface Owner: X Federal State Private Tribal Trust or Indian Allotment
2.
Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary:  Drilling  Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
3.
Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
Liner Seams:  Welded Factory Other
4.
4.  X Below-grade tank: Subsection I of 19.15.17.11 NMAC
4.    Subsection I of 19.15.17.11 NMAC   Volume: 95   bbl Type of fluid:   Producer H2O
4.    X   Below-grade tank:   Subsection   of 19.15.17.11   NMAC     Volume:   95   bbl   Type of fluid:   Producer   H2O     Tank Construction material:   Steel   (See Closure   Plan   #3)
4.
4.    Below-grade tank: Subsection I of 19.15.17.11 NMAC   Volume: 95   bbl Type of fluid: Producer H2O   Tank Construction material: Steel (See Closure Plan #3)   Secondary containment with leak detection   Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off   Visible sidewalls and liner   Visible sidewalls only   Other + leak detection
4.
A.
A.

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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, hospit institution or church)			
Four foot height, four strands of barbed wire evenly spaced between one and four feet			
X Alternate. Please specify 4' =3' Hog wire + Top Rail			
7.  Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)			
X Screen	£2		
Monthly inspections (If netting or screening is not physically feasible)			
8.			
Signs: Subsection C of 19.15.17.11 NMAC  X 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers			
Signed in compliance with 19.15.3.103 NMAC			
9.			
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.			
Please check a box if one or more of the following is requested, if not leave blank:	or c		
X Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.	office for		
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.			
Siting Criteria (regarding permitting): 19.15.17.10 NMAC  Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of 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 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 X No		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA		
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to permanent pits)	☐ Yes ☐ No ☒ NA		
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image			
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 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		
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	Yes X No		
Within a 100-year floodplain.	Yes X No		

facilities are required.

Disposal Facility Name:

Disposal Facility Name:

Yes (If yes, please provide the information below) \( \square\) No

Required for impacted areas which will not be used for future service and operations:

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or 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. Use attachment if more than two

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

Disposal Facility Permit Number:

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?

Disposal Facility Permit Number:

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Thereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.   Name (Print):   Kurt Fagrellus	19.	
Name (Print): Kurt Fagrelius   Date:   October 6, 2008	Operator Application Certification:	
Signature:   Date:   October 6, 2008		· · · · · · · · · · · · · · · · · · ·
e-mail address:	Name (Print): Kurt Fagrelius	Title: Vice President, Exploration
e-mail address:	Signature: Rurt Fagn Ci	Date: October 6, 2008
OCD Representative Signature:		Telephone: 505-325-1821(O), 505-320-8248(C)
OCD Representative Signature:   Approval Date:    Title:   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.  Closure Completion Date:    Closure Method:   Closure Completion Date:    It different from approved plan, please explain.  Closure Report Regarding Waste Removal Closure Method   Alternative Closure Method   Waste Removal (Closed-loop systems only)    It different from approved plan, please explain.  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 fluids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.  Disposal Facility Name:   Disposal Facility Permit Number:    Disposal Facility Name:   Disposal Facility Permit Number:    Disposal Facility Name:   Disposal Facility Permit Number:    Site Required for impacted areas which will not be used for future service and operations?    Site Required for impacted areas which will not be used for future service and operations?    Site Required for impacted areas which will not be used for future service and operations?    Site Required for impacted areas which will not be used for future service and operations?    Site Required for impacted areas which will not be used for future service and operations?    Site Required for impacted areas which will not be used for future service and operations?    Closure Report Attachment Checklist: Instructions: Each of the following		
Title:OCD Permit Number:	OCD Approval: Permit Application (including closure plan) Closure	Plan (only)
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NIMAC 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 controlled in the closure report is required to be submitted to the division within 60 days of the completion of the closure controlled in the closure plan has been obtained and the closure activities have been completed.  Closure Method:  Closure Method:  Closure Report Regarding Waste Removal Closure Method   Alternative Closure Method   Waste Removal (Closed-loop systems only)    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 than two facilities were utilized.  Disposal Facility Name:  Disposal Facility Permit Number:  Disposal Facility Name:  Disposal Facility Permit Number:  Disposal Facility Permit Number:  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) New Proof of Closure Notice (unface owner and division)  Required for impacted areas which will not be used for future service and operations:  Still Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rales 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 closu	OCD Representative Signature:	Approval Date:
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.    Closure Method:	Title:	OCD Permit Number:
Closure Method:	Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior The closure report is required to be submitted to the division within 60 days of	to implementing any closure activities and submitting the closure report.  The completion of the closure activities. Please do not complete this closure activities have been completed.
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.		Closure Completion Date:
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 than now facilities were utilized.    Disposal Facility Name:	Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Altern☐ If different from approved plan, please explain.	native Closure Method   Waste Removal (Closed-loop systems only)
Disposal Facility Name:    Disposal Facility Name:   Disposal Facility Permit Number:	Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, dr.	is That Utilize Above Ground Steel Tanks or Haul-off Bins Only: illing fluids and drill cuttings were disposed. Use attachment if more than
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   No   No   No   No   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   Acceptable of 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	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   No   No   No   No   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   Acceptable of 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	Disposal Facility Name:	Disposal Facility Permit Number:
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	☐ Site Reclamation (Photo Documentation) ☐ Soil Backfilling and Cover Installation	tions:
mark in the box, that the documents are attached.    Proof of Closure Notice (surface owner and division)     Proof of Closure 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   Longitude   NAD:   1927   1983     18.   Operator Closure Certification:     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:   Date:   October 6, 2008		
Operator Closure Certification:  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: Date: October 6, 2008	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)	
Operator Closure Certification:  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:	On-site Closure Location: LatitudeLong	itude NAD:
Signature: Date: October 6, 2008	Operator Closure Certification:  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 ements and conditions specified in the approved closure plan.
	Name (Print): Kurt Fagrelius	Title: Vice President, Exploration
e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821	Signature:	Date: October 6, 2008
	e-mail address: kfagrelius@duganproduction.com	Telephone:505-325-1821

### Monte Carlo #1 Hydrogeologic Report

The Monte Carlo #1 is located on Federal Lands on the northwest margin of the San Juan Basin, in San Juan County, New Mexico. The area is characterized as a Kirtland Shale "Badlands" area that is bordered by "Pinon Mesa" (1-1/2 miles east).

A records search of the NM Office of the State Engineer –iWATERS database was conducted on a three square mile area centered on the Monte Carlo #1 location (Exhibit 2). No water wells were located in the search area. The results of the search are shown on Exhibit 1.

The main source of stock water in the region is encountered in valley-fill deposits in existing arroyos at shallow depths of approximately 15-50 feet below the surface and stock tanks constructed on surface shale layers at the confluence and upper reaches of arroyos. The below grade tank is not located in an arroyo; the closest arroyo is 800 feet to the northwest (Exhibit 2).

The Kirtland Shale extends from the surface down to a depth of approximately 445 feet. The interval is comprised of an upper shale member, middle sandstone member (Farmington Ss.) and a lower shale member. The middle sandstone member is either absent or very poorly developed. The entire Kirtland section is comprised of siltstone and shale. Near the base of the interval (305-355') there is siltstone that may contain very minimal amounts of poor quality ground water.

Based on electric open hole logs, the iWATERS database and literature reviewed, depth to ground water ranges from 15-20 feet below the surface in major arroyos in the area. Moving away from the washes, depth to ground water drops rapidly to greater than 200 feet below the surface. At the location of the below grade tank, minimal amounts of poor quality ground water might be found in siltstone of the lower Kirtland between 305 and 355 feet below the surface. Additional sources of poor quality water would be Fruitland coal, sandstone and Pictured Cliffs Sandstone from 600-850 feet below the surface.

Excessive drilling depth, unpredictable variations in reservoir quality and water quality have discouraged the drilling of water wells in the in the subject area.

This Hydrogeologic Report was prepared by Mr. Kurt Fagrelius, Geologist for Dugan Production. Mr. Fagrelius has been employed as a geologist for Dugan for the past 31-years, received a MS in Geology from NMIMT in Socorro, NM and a BS in Geology from FLC in Durango, CO.

- Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.
- Brown, D.R., and Stone, W.J., 1979, Hydrogeology of Aztec quadrangle, San Juan County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrogeologic Sheet 1.
- Levings, G.W., Craigg, S.D., Dam, W.L. Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S.G.S., Atlas HA-720-A, Sheet 1 and 2.
- Thorn, C.R., Levings, G.W., Craigg, S.D., Dam, W.L., and Kernodle, J.M., 1990, Hydrogeology of the Ojo Alamo Sandstone in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S.G.S, Atlas HA-720-B, Sheet 1 and 2.

### New Mexico Office of the State Engineer **POD Reports and Downloads**

Township: 3	ON Range: 14W	Sections: 5,6,7,8,	17,10	
NAD27 X:	Y:	Zone:	Search Ra	dius:
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(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

Water (in feet) Well Water

Tws Rng Sec q q q Zone Column

No Records found, try again

POD Number

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# New Mexico Office of the State Engineer POD Reports and Downloads

	Towns	ship: 30N	Range: 15W	Sections: 1	,12,13			
	NAD27	X:	Y:	Zone:	5	Search Radi	us:	
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				COLUMN REPORT				

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### Siting Criteria for the Monte Carlo #1 Below Grade Tank

- 1. Ground water is not less than 50-feet below the bottom of the below grade tank. Ground water is greater than 100-feet below the bottom of the below grade tank (See Hydrogeologic Report).
- 2. The below grade tank is not within 300-feet of a continuously flowing water course, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from ordinary high water mark). See the attached Topographic map (Exhibit 2) and Visual Inspection Certification of the location and area around the subject below grade tank.
- 3. The below grade tank is not within 300-feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. See the attached Satellite Image (Exhibit 3) and Visual Inspection certification of the location and area around the subject below grade tank.
- 4. The below grade tank is not within 500-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. See the attached NM Office of the State Engineer iWATERS database search (Exhibit 4) and Visual Inspection certification of the location and area around the subject below grade tank.
- 5. The below grade tank is not located within the 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. See the attached Topographic map of the location and area around the subject below grade tank.
- 6. The below grade tank is not located within 500-feet of a wetland. See the attached Topographic map and Visual Inspection Certification of the location and area around the subject below grade tank.
- 7. The below grade tank is not located within the area overlying a subsurface mine. See the attached Mine, Mills and Quarry Map of New Mexico (New Mexico, EMND 2008) (Exhibit 5) showing the location and area around the subject pit.
- 8. The below grade tank is not located within an unstable area. See the attached Topographic map of the location and area around the subject below grade tank.
- 9. The below grade tank is not located within a 100-year floodplain area. See the attached FEMA map (Exhibit 6) of the 100-year floodplain showing the location and area around the subject pit.

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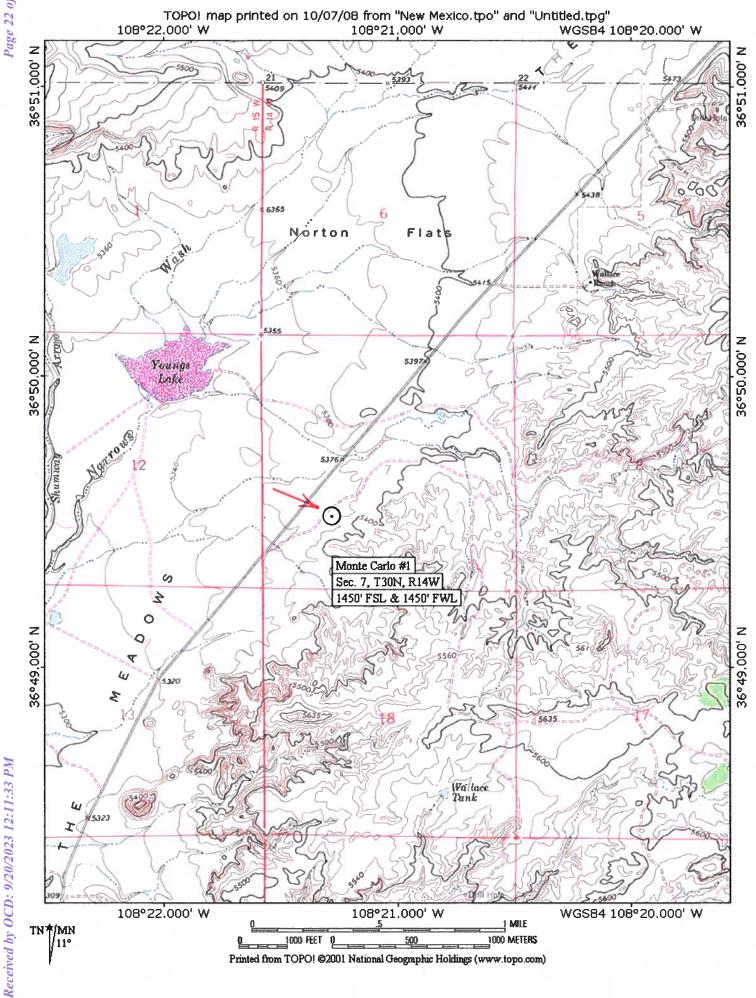
### Monte Carlo #1 Below Grade Tank Visual Inspection Certification

I, <u>Kurt Fagrelius</u>, Vice President of Exploration for Dugan Production Corp. 709 East Murray Drive, Farmington, New Mexico hereby certify that I or persons under my direct supervision, prepared the attached exhibits and conducted a Visual Inspection of the location and area around the Monte Carlo #1 below grade tank (August 4, 2008). The location of the Monte Carlo #1 below grade tank is in compliance with all siting criteria and standards for below grade tanks established by the State of New Mexico, Energy Minerals and Natural Resources Department 19.15.17.10 NMAC.

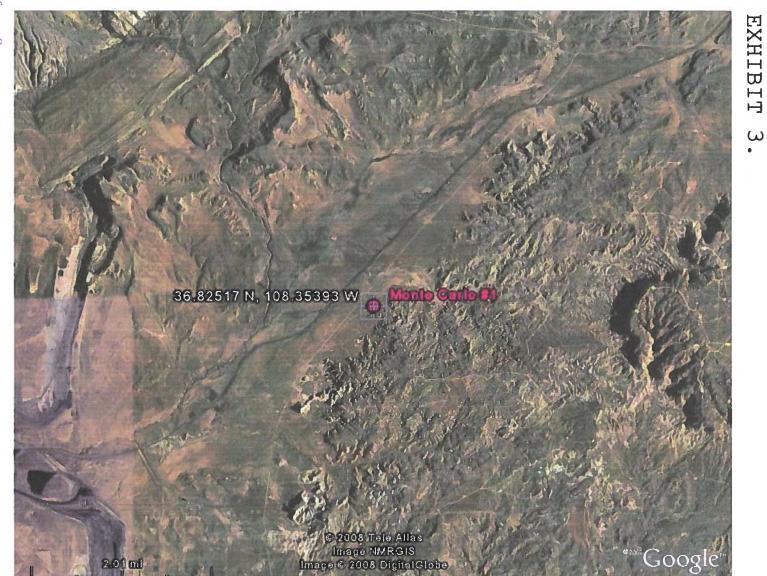
Kurt Faguelius

Kurt Faguelius

//-//-08 Date



Eye alt 41764 ft



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## New Mexico Office of the State Engineer POD Reports and Downloads

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POD	/ Surfac	e Data	Report		Avg	g Depth to Water	Repo	rt	Water	Column Report	
			i	Clear F	orm	iWATERS Me	nu	Help			
			0.700								

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

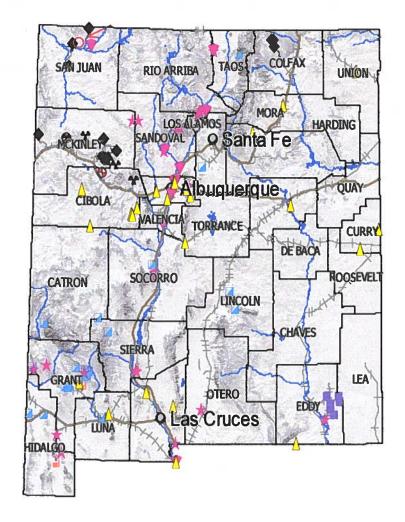
Depth Depth Water (in feet)

Tws Rng Sec q q q Zone X Y Well Water Column

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POD Number

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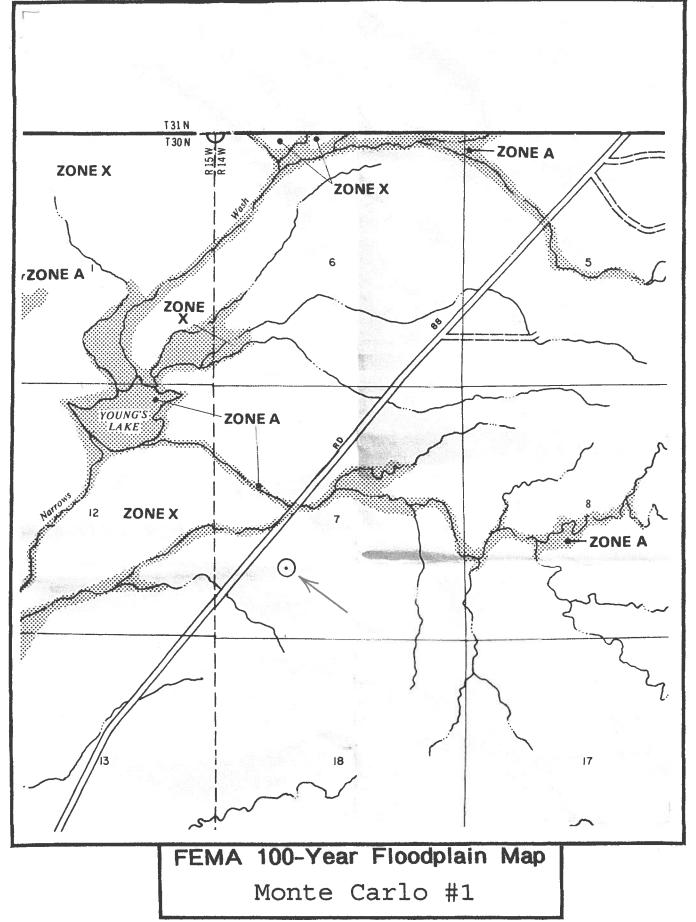
### Mine, Mills and Quarry Map of New Mexico

Dugan Production Corp.

Monte Carlo #1

Taken from the New Mexico Energy, Minerals and Natural Resources Department.

Mining and Minerals Division.

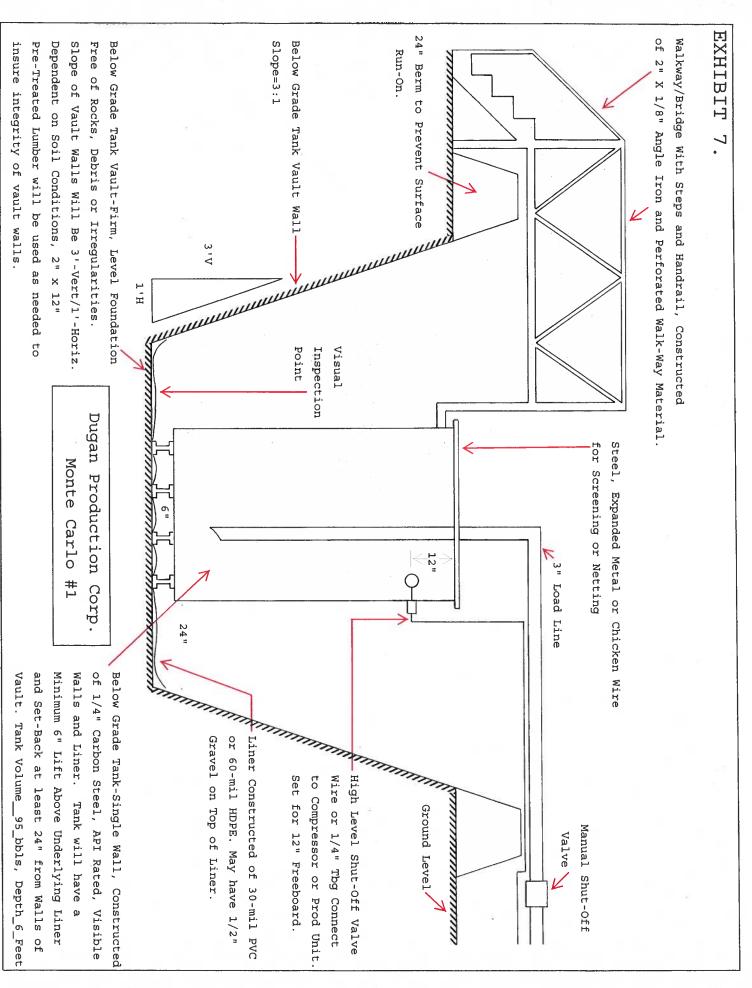


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### Monte Carlo #1 Below Grade Tank Design and Construction Plan

The Monte Carlo #1 below grade tank will be designed and constructed in accordance with the following requirements:

- 1. Below grade tank will be designed and constructed to contain liquids and solids, prevent contamination of fresh water and protect the public health and environment (Exhibit 7).
- 2. Stockpile topsoil prior to digging below grade tank vault, keep separate from subsoil and use as final cover and fill when closing below grade tank vault.
- 3. Sign-12" by 24" with operator name, lease name, well #, location (unit letter, qtr/qtr, Sect., Twp., and Rge.) and emergency phone #'s will be posted on location. Sign will be posted in a location where it can be easily read.
- 4. Fencing around the Monte Carlo #1 below grade tank will be constructed and operated in a manner that prevents unauthorized access and shall be maintained in good condition to protect the public and wildlife. Fencing will include a 4-foot hog wire fencing with two strands of barbed wire or top rail of re-bar or pipe on top. See the attached request for Administrative Approval. If the Monte Carlo #1 below grade tank were located within 1000 feet of a house, school, hospital or church, a chain link fence at least six feet in height with at least two strands of bared wire on top would be constructed.
- 5. The Monte Carlo #1 below grade tank will be covered with steel, expanded metal or chicken wire for screening or netting on top of the tank.
- 6. Monte Carlo #1 below grade tank will be designed and constructed to ensure the confinement of liquids and prevent unauthorized releases. Pit will be constructed with a firm, level foundation and interior slopes, smooth and free of rocks or sharp edges to prevent punctures, cracks or indentations of the liner or tank bottom. Slope walls of the below grade tank vault will be constructed with a 3'vertical x 1' horizontal slope to prevent collapse of the walls. Dependent on soil conditions, 2"x12" pre-treated lumber will be used as needed to insure integrity of vault walls. Properly operating, high level shut off valve and manual control valves will be installed (valve will close when fluid reaches 12 inches from top of tank) to prevent overflow of tank. Berms (24 inches in height) will be constructed around the perimeter of the below grade tank vault to prevent overflow of the tank vault in the event the high level shut off valve fails and the below grade tank overflows and also prevent the collection and entrapment of surface water.
- 7. Monte Carlo #1 below grade tank will be constructed of materials resistant to the tank's particular contents and resistant to damage from sunlight. Tank will be API rated and constructed of carbon steel with a wall thickness of 1/4".
- 8. Liner will be 30-mil flexible PVC or 60-mil HDPE, string reinforced, impervious material, resistant to UV light, hydrocarbons, salt, acidic or basic liquids. The liner will have a hydraulic conductivity less than 1 x 10-9 cm/sec. Liner compatibility will comply with EPA SW-846 Method 9090A. A specification sheet on properties of liner material to be used will be provided to the NMOCD prior to installation.



- 9. The Monte Carlo #1 below grade tank will be constructed with single walled sides and bottom, which will be open for visual inspection for leaks. The below grade tank will be elevated a minimum of 6-inches above the underlying ground surface and set back at least 24" from walls of vault. The below grade tank will be underlain with a geo-membrane liner designed to divert any leaked fluid to a visual inspection point. Liner may be covered with gravel.
- 10. The Monte Carlo #1 below grade tank will be equipped with a properly operating automatic high-level shut-off control device (valve will close when fluid reaches 12 inches from top of tank) and manual controls to prevent overflows.
- 11. Diversionary berms, ditches or sloping will be constructed as necessary to prevent overflow and the collection of surface water entrapment.
- 12. A walkway/bridge with steps and handrail, will be constructed of 2"x1/8" angle iron and perforated walkway material to provide personnel access to the top of below grade tank.

### Monte Carlo #1 Below Grade Tank Maintenance and Operation Plan

The Monte Carlo #1 below grade tank will be maintained and operated in accordance with the following requirements:

- 1. The Monte Carlo #1 below grade tank will be operated and maintained to contain liquids and solids and maintain the integrity of the tank / liner system or secondary containment system to prevent contamination of fresh water and protect public health and environment. Design features which include containment berms and high level shut off valves and manual shut off valves will be constructed to insure containment of liquids and solids (Exhibit 7). Steel tank will be set level, with a minimum of 6 inches of lift underlain by a liner (sloped to one corner) on top of a firm, smooth foundation bottom (vault floor) will be constructed providing visual leak detection to insure tank integrity.
- 2. All fluids collected in the below grade tank and below grade tank vault will be recycled, reused, reclaimed or disposed of in a manner approved by NMOCD rules.
- 3. Do not dispose of solid waste, trash, debris or hazardous material into the below grade tank or the below grade tank vault.
- 4. If the Monte Carlo #1 below grade tank develops a leak or if a penetration occurs below the liquids surface, all liquid will be removed above the damage or leak line within 48-hours. The NMOCD office will be notified within 48-hours of the discovery. The below grade tank / liner system or secondary containment system will then be either modified, retrofitted or replaced in accordance with Subsection I of 19.15.17.11 NMAC. If applicable, the replacement or retrofit below grade tank / liner system or secondary containment system will meet the design and construction requirements of rule 19.15.17.11 NMAC.

In the event a spill or undesirable event occurs, the provisions of rule 19.15.3.116 NMAC may apply. If considered a "Major Release" (any fluid greater than 25-bbls; any volume which results in fire, or will reach a water course, or may endanger public health, or results in substantial property or environmental damage; any gas greater than 500-mcf; any volume detrimental to water or exceeding established standards) verbal notice will be provided to the NMOCD Santa Fe Environmental Bureau Chief (Wayne Price at 505-476-3490) and Aztec District OCD (Brandon Powell at 505-334-6178) offices within 24-hours of discovery of leak, plus written notice will be provided to the NMOCD Aztec and Santa Fe Environmental Bureau within 15-days after discovery, using C-141. If considered a "Minor Release" (any fluid greater than 5-bbls but less than or equal to 25-bbls or any gas greater than 50-mcf but less than 500-mcf, written notice using Form C-141 will be provided to the NMOCD Santa Fe Environmental Bureau Chief in Santa Fe and the Aztec District OCD office. The Bureau of Land Management will be notified in accordance with the provisions of BLM NTL-3A.

- 5. Below grade tank will be constructed and operated in a manner that prevents the tank from over flow and prevents surface water from entering the pit. Diversion berms will be constructed around the sides of pit and an automatic high level shut-off will be installed.
- 6. Any measurable oil will be continuously removed from the Monte Carlo #1 below grade tank to prevent a significant accumulation of oil overtime.

7. The Monte Carlo #1 below grade tank will be inspected at least monthly and records of each inspection will be maintained for five years. The below grade monitoring report to be used, is shown below. Integrity inspections of fencing, berms, below grade tank, screening, below grade tank, vault slopes and leak detection will be made and recorded. Any solid waste, trash, debris or hazardous material in the below grade tank or below grade tank vault will be noted and removed. High level shut off valve and manual shut off valve will be tested to insure valves are operating properly. Freeboard and fluid levels in the below grade tank will be recorded, monitored and removed (See #2, Maintenance and Operation Plan) as needed. Records wills be used to assist in scheduling frequency of future fluid removal.

				Record Int	Record Integrity			Note a	nd Pick-Up	Check for Pr	oper Operation	Freeboard	Fluid Level	Signature
Date	Fence	Berms	Tank	Tank	Vault	Leak	Tank	Vault	Location	High Level	Manual	Minimum 12"		1100
				Screen	Slopes	Detect.				Shut off valve	Shut off valve		Bottom - Up	
	-				1									
			-					-						
					-									
	-													
					-									
lo/Yr	<del>                                     </del>	G = Gr	od. F	= Fair, P	= Poor		γ.	= Yes	N = No	G = Gnod	. 8 = Bad	Foot 8	Inches	Monitor's

8. Adequate freeboard will be maintained to prevent overtopping of the Monte Carlo #1 below grade tank. High level shut off valves will close when fluid reaches 12 inches from top of tank.

### Monte Carlo #1 Below Grade Tank Closure Plan-Methods, Procedures and Protocols

1. Comply with deadlines for closure of a pit or below grade tank 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.

BGT	Permitted under 19.15.17	12/16/2013	failed integrity replc	60-days after cessation
Temporary Pit	Permitted under 19.15.17	Prior to closure	Upon drlg rig release	6-mos after rig release
Permanent Pit	Permitted under 19.15.17	60-Days prior to close		
Registered and Lined		<u></u>		
Does not comply w/19.15.17	Comply w/in 18-mos of aprvl	Apple		
Permanent Pit-Design and Constr	Permit Apple by 12-16-2008	12/16/2008 submit w/permit		60-days after cessation
				60 days offer
Permitted and lined	,	request	,,,	
Does not comply w/19.15.17	Comply w/in 18-mos of aprvl	submit w/mod	w/apprvd design	cessation
Permanent Pit-Design and Constr	Mod. Rqust by 12-16-2008	12/16/2008	failed integrity replc	60-days after
to comply w/19.15.17			<del>.</del>	
BGT-Not Aprvd Design Nor Retrofit	NA	12/16/2008	6/16/2013	6/16/2013
to Comply w/19.15.17	Mod. Rqust by 9-16-2008	***		<del></del>
BGT-Not Aprvd Design Nor Retrofit	Not Permtd under 19.15.17	12/31/2008	6/16/2013	6-16-2013
			wappiva design	
3017 p. vd. 300igii	Applc. by 9-16-2008	12/10/2000	w/apprvd design	
BGT-Aprvd. Design	Not Permtd under 19.15.17	12/16/2008	failed integrity replc	
Permanent Pit - Unlined	Permitted with NMOCD	12-16-2008	6-16-2010	6-16-2011
Permanent Pit - Unlined or Lined	Not permitted with NMOCD	7/16/2008	6-16-2008	12/16/2008
Temporary Pit - Unlined	Not Permtd under 19.15.17	7/16/2008	Upon drlg rig release	9/16/2008
Existing On June 16, 2008	Permit Applc. Submittal or  Modification Request	File Closure Plan By	Stop Use By	Close By

- 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).
- 3. The Monte Carlo #1 below grade tank is not an approved design under rule 19.15.17. Upon approval of this application, the existing below grade tank will be closed and a new below grade tank that complies with the design requirements of rule 19.15.17 as illustrated in the design plan (Exhibit 7) will be constructed.

- 4. Below grade tank will be closed within 60-days after cessation of use or by 6-16-2013 whichever comes first.
- 5. Closure notice will be provided by certified mail to surface owner prior to closing the below grade tank. Proof of notice will be provided to the Environmental Bureau in the NMOCD Santa Fe office and attached to the final closure report.
- 6. Remove all liquid from below grade tank prior to closure and dispose of at the Dugan Production operated Sanchez O'Brien SWD #1 salt water disposal well (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.
- 7. All solids from the below grade tank and all solids removed from the below grade tank vault will be excavated, hauled to and disposed of at either the Envirotech facility (permit #NM-01-0011) facility 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.
- 8. Remove below grade tank and obtain prior approval from the NMOCD to dispose (in an approved NMOCD facility), recycle, reuse or reclaim the tank. Documentation of the final disposition of the tank will be provided to the NMOCD in the final closure report.
- 9. Remove pit liner system, if applicable and dispose of only the pit liner material at an NMOCD approved, solid waste facility (Waste Management's Crouch Mesa facility, San Juan County, New Mexico) in accordance with subparagraph (m) of Paragraph (1) of Subsection D of 19.15.9.712.
- 10. On site equipment associated with the below grade tank will be removed unless it is needed for some other purpose.
- 11. 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)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
GRO/DRO	EPA SW-846 8015M	NS
Chlorides	EPA 300.1	250 or Background

- 12. The NMOCD will be notified of the testing results on form C-141.
- 13. If it is determined that a release has occurred, rule 19.15.3.116 NMAC and 19.15.1.19 NMAC will be complied with as required.

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- 14. 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 below grade tank vault will be backfilled with compacted, non-waste containing, earthen material.
- 15. Stockpiled sub-surface soil will be used to backfill below grade tank vault 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.
- 16. Stockpiled surface soil will be used as a cover over the backfilled below grade tank vault and disturbed area no longer needed for production operations. The soil cover will include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site whichever is greater. The soil cover will be constructed to the site's existing grade and prevent water collection or ponding and erosion of the cover material.
- 17. Disturbed areas will be seeded the first growing season after the below grade tank 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 NMOCD 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 successive 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.
- 18. The NMOCD will be notified within 60-days of closure of the below grade tank. 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)
- 19. The NMOCD will be notified once successful re-vegetation has been achieved.

### Monte Carlo #1 Below Grade Tank Request for Administrative Approval

Administrative approval is hereby requested for an alternative to the fencing design for the Monte Carlo #1 below grade tank.

The request for administrative approval cited above is needed to help minimize environmental impact and increase safety and protect wildlife and public health. The alternative proposed will protect fresh water, public health, safety and the environment more effectively than the design and construction specifications established by the State of New Mexico, Energy Minerals and Natural Resources Department do in rule 19.15.17.11 NMAC.

1. The proposed alternative fencing design will include T-posts spaced 10-feet apart. Hog wire / field fence 4-feet in height will be strung tightly and anchored to the top and bottom of each T-post. Small holes (3" high X 6" wide) in the hog-wire will be located at ground level with increasing larger holes (up to 7" high X 6" wide) located at the top of the fence. Anchor braces will be put at all four corners to strengthen and tighten the fence. Two strands of barbed wire or a pipe / re-bar top rail will be constructed above the hog wire. This fence design (developed over the last 30-years) has proven to be very effective controlling unauthorized access to below grade tanks.

The existing rule (19.15.17.11.D.3) would require the operator to fence the below grade tank with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between on foot and four feet above the ground level. The proposed fencing alternative would provide better security against unauthorized access to below grade tanks. The smaller holes in hog-wire (3" X 6" up to 7" X 6") is more effective at controlling unauthorized access by the public and wildlife than 4-strands of barbed wire spaced 12" apart.

The proposed fence around the below grade tank will be constructed and operated in a manner that prevents unauthorized access and shall maintain the fence in good condition to protect the public and wildlife.

The request for administrative approval cited above is needed to help minimize environmental impact, increase safety and protect wildlife and public health. The alternatives proposed will protect fresh water, public health, safety and the environment more effectively than the design and construction specifications established by the State of New Mexico, Energy Minerals and Natural Resources Department do in rule 19.15.17.11 NMAC.

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

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

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

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

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

CONDITIONS

Action 267424

### **CONDITIONS**

Operator:	OGRID:
DUGAN PRODUCTION CORP	6515
PO Box 420	Action Number:
Farmington, NM 87499	267424
	Action Type:
	[C-144] Below Grade Tank Plan (C-144B)

### CONDITIONS

Created By	Condition	Condition Date
vvenegas	NMOCD has reviewed the closure plan submitted by [6515] DUGAN PRODUCTION CORP for a BGT associate with well 30-045-25866 MONTE CARLO COM #001. The closure Plan has been approved with the following conditions of approval: The operator must meet the requirements of the rule, NMAC 19.15.17.13 Closure and Site Reclamation Requirements. If it is determined that a release has occurred, the operator must follow all applicable requirements of 19.15.29 NMAC which includes electronically filing a C-141 Form via OCD Permitting. The BGT closure report must include the automated/assigned Incident Number provided upon C-141 Form submittal. The operator should comply with NMAC 19.15.29 Releases, to delineate, remediate and close the incident.	10/2/2023