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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

30-045-08965

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Dugan Production Corp.	Contact	Kurt Fagrelius
Address	P.O. Box 420	Telephone No.	505-325-1821
Facility Name	Frank W. Pyle #2	Facility Type	Permanent Pit

Surface Owner Private	Mineral Owner Private	Lease No. FEE

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	34	30N	15W	740	South	1980	West	San Juan

Latitude 36.76551 N **Longitude** 108.40605 W

NATURE OF RELEASE

Type of Release Spill Cleanup and pit closure	Volume of Release Unknown	Volume Recovered Unknown
Source of Release Below grade permanent pit release	Date and Hour of Occurrence ?	Date and Hour of Discovery Unknown
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

RCVD DEC 6'10
OIL CONS. DIV.
DIST. 3

Describe Cause of Problem and Remedial Action Taken.*

During permanent pit closure a chloride impact was discovered. A five-point composite sample tested 912-mg/kg chlorides which exceeds the threshold limits as per subsection B of 19.15.17.13(B)(1)(b). See attached sample results.

Describe Area Affected and Cleanup Action Taken.*Contamination was addressed under the "spill rule", 19.15.30. C-144 ranking=10. The chloride release does not pose a threat to contamination of groundwater. See attachment to "Final C-141".

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Kurt Fagrelius	OIL CONSERVATION DIVISION
Printed Name: Kurt Fagrelius	Approved by District Supervisor: Jonathan D. Kelly
Title: VP Exploration	Approval Date: 1/11/2012 Expiration Date:
E-mail Address: kfagrelius@duganproduction.com	Conditions of Approval: Attached ☐
Date: November 24, 2010 Phone: 505-325-1821	

* Attach Additional Sheets If Necessary

nJK1201148415

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received:	08/10/2010	Sampling Date:	08/05/2010
Reported:	08/17/2010	Sampling Type:	Soil
Project Name:	PIT CLOSURES	Sampling Condition:	Cool & Intact
Project Number:	FRANK W PYLE #2 TANK PIT	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: FRANK W PYLE #2 (H020599-01)

BTEX 8021B mg/kg **Analyzed By: ZL**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2010	ND	0.917	91.7	1.00	7.96	
Toluene*	**0.055**	0.050	08/13/2010	ND	0.981	98.1	1.00	16.9	
Ethylbenzene*	<0.050	0.050	08/13/2010	ND	0.977	97.7	1.00	4.07	
Total Xylenes*	**0.188**	0.150	08/13/2010	ND	3.15	105	3.00	5.79	

Surrogate: 4-Bromofluorobenzene (PII 94.8 % *80-120*

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**912**	16.0	08/11/2010	ND	432	108	400	0.00	

TPH 418.1 mg/kg **Analyzed By: AB**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	08/12/2010	ND	970	95.1	1020	1.82	

TPH 8015M mg/kg **Analyzed By: AB** **QM-05**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/11/2010	ND	162	80.8	200	0.217	
DRO >C10-C28	<10.0	10.0	08/11/2010	ND	163	81.5	200	1.77	

Surrogate: 1-Chlorooctane 79.3 % *70-130*

Surrogate: 1-Chlorooctadecane 87.4 % *70-130*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received:	08/10/2010	Sampling Date	08/05/2010
Reported	08/17/2010	Sampling Type	Soil
Project Name:	PIT CLOSURES	Sampling Condition.	Cool & Intact
Project Number	FRANK W PYLE #2 TANK PIT	Sample Received By:	Jodi Henson
Project Location.	NOT GIVEN		

Sample ID: FRANK W PYLE #2 (H020599-01)

BTEX 8021B mg/kg **Analyzed By ZL**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2010	ND	0 917	91 7	1.00	7 96	
Toluene*	**0.055**	0.050	08/13/2010	ND	0.981	98 1	1.00	16 9	
Ethylbenzene*	<0 050	0.050	08/13/2010	ND	0 977	97 7	1 00	4.07	
Total Xylenes*	**0.188**	0.150	08/13/2010	ND	3 15	105	3.00	5 79	

Surrogate 4-Bromofluorobenzene (PI 94 8 % 80-120

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**912**	16.0	08/11/2010	ND	432	108	400	0 00	

TPH 418.1 mg/kg **Analyzed By: AB**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	08/12/2010	ND	970	95.1	1020	1.82	

TPH 8015M mg/kg **Analyzed By: AB** **QM-05**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/11/2010	ND	162	80 8	200	0.217	
DRO >C10-C28	<10.0	10 0	08/11/2010	ND	163	81 5	200	1 77	

Surrogate 1-Chlorooctane 79 3 % 70-130

Surrogate 1-Chlorooctadecane 87 4 % 70-130

Cardinal Laboratories

* =Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

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

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD

Client: Dugan Prod
Contact: Mike Sandoval
Address:

Phone Number: 330-0924
FAX Number: 327-4043

NOTES:
1) Ensure proper container packaging.
2) Ship samples promptly following collection.
3) Designate Sample Reject Disposition.

PO# Frank W Pyle #2
Project Name: Tank pit

Table 1. – Matrix Type
1 = Surface Water, 2 = Ground Water
3 = Soil/Sediment, 4 = Rinsate, 5 = Oil
6 = Waste, 7 = Other (Specify)

FOR GAL USE ONLY
GAL JOB #

Samplers Signature:

Lab Name: Green Analytical Laboratories (970) 247-4220 FAX (970) 247-4227
Address: 75 Suttle Street, Durango, CO 81303

Sample ID	Collection: Date	Collection: Time	Misc: Collected by: (Init.)	Misc: Matrix Type From Table 1	Misc: No. of Containers	Misc: Sample Filtered ? Y/N	Preservative(s): Unpreserved (Ice Only)	Preservative(s): HNO3	Preservative(s): HCL	Preservative(s): H2SO4	Preservative(s): NAOH	Preservative(s): Other (Specify)	Analyses Required: Tank Pit	Analyses Required: BTEX	Analyses Required: TPH 418.1	Analyses Required: TPH 8015	Analyses Required: Cl	Comments
H20599													✓	✓	✓	✓	✓	
1. Frank W Pyle #2	8-5-10	10:30		3	1													
2.																		
3.																		
4.																		
5																		
6.																		
7.																		
8.																		
9.																		
10.																		

Relinquished by:	Date: 8-6-10	Time: 4:31	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by: Jodi Henson	Date: 8/10/10	Time: 9:30

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

5°C CoC #26

Permanent pit: Frank W. Pyle #2
API number: 30-045-08965

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 four-feet of compacted, non-waste containing, earthen material will be used as backfill.

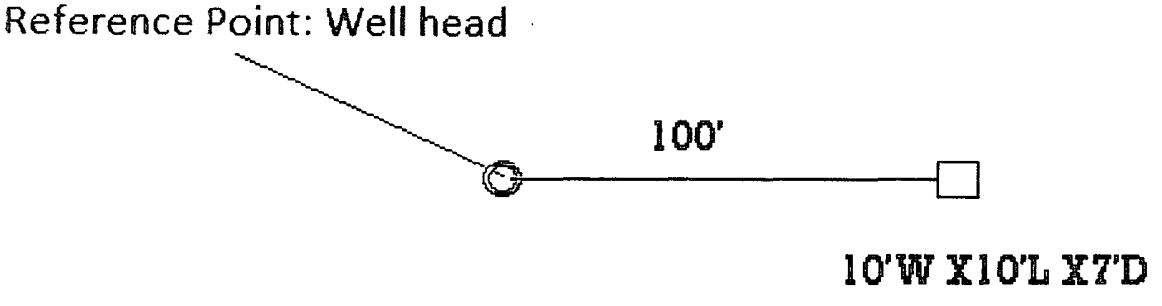
2. Stockpiled surface soil will be used as a cover over the backfilled pit and disturbed area no longer needed for production operations. The soil cover will include either the background thickness of top soil or one-foot of suitable material to establish vegetation at the site whichever is greater.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

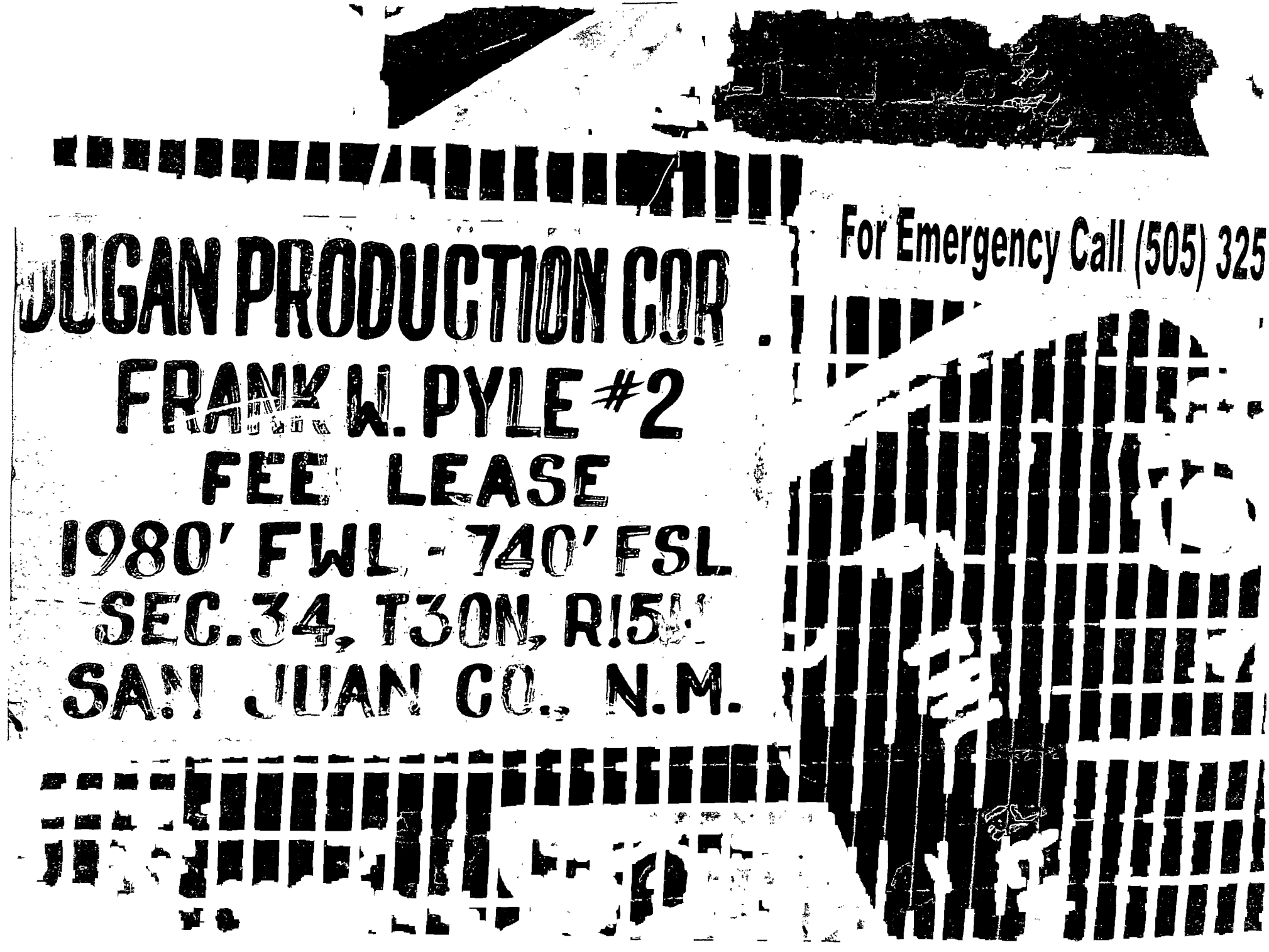
Kurt Fagrelius
VP – Exploration, Dugan Production Corp.
Farmington, New Mexico 87401
505-325-1821 (O), 505-320-8248 (C)
kfagrelius@duganproduction.com

Dugan Production
Frank Pyle #2
Tank Pit

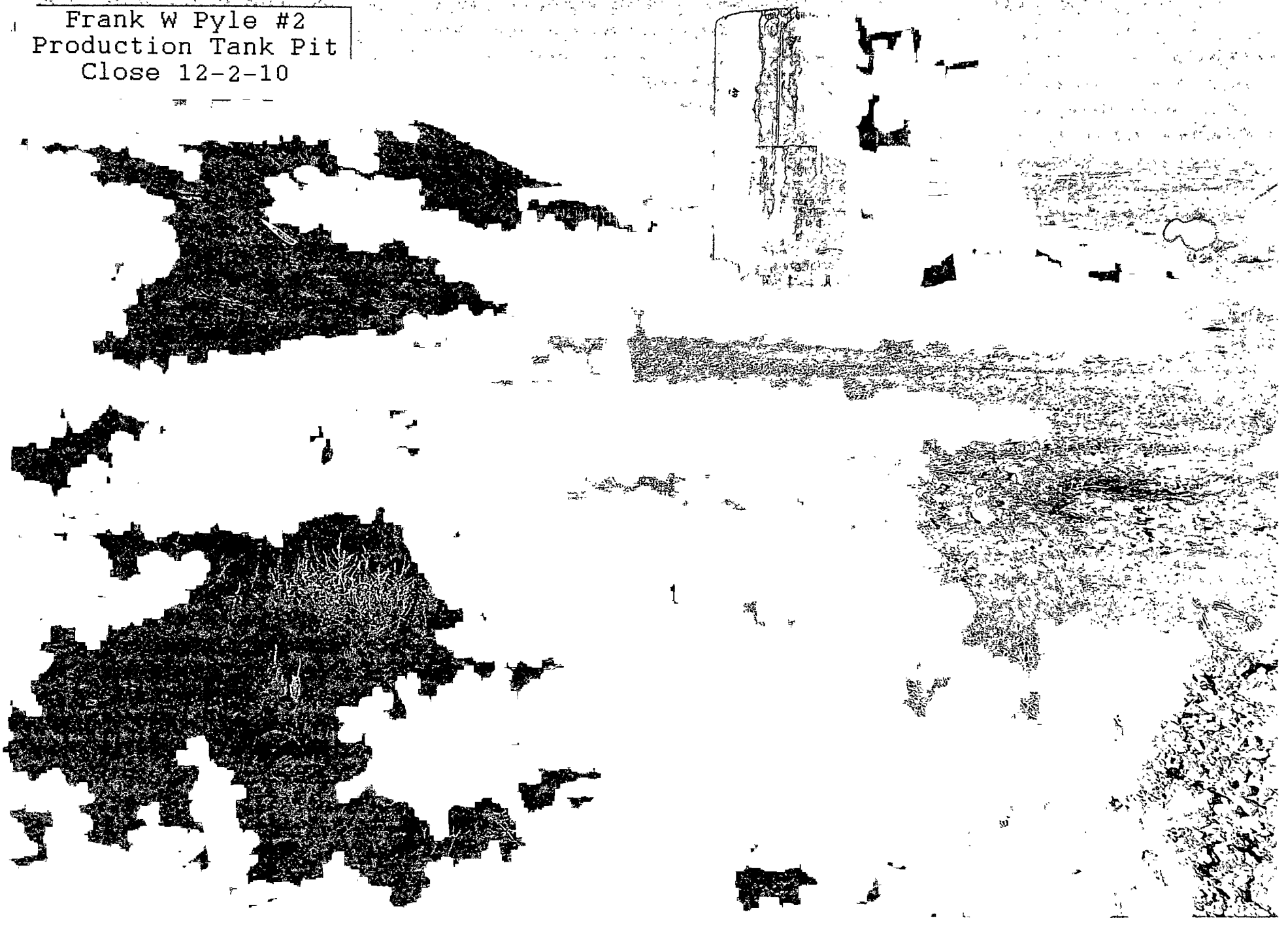


From Reference Point Go Due E. For
a Distance of 100' to Center of Pit.

Lease Name: Frank W Pyle #2						
API No.: 30-045-08965.						
Site Specific Infromation						
Depth to	**245-ft**	Distance to Surface	**600-ft**	Wellhead Protection Area	**> 1000-ft**	
Groundwater		Water Body		Distance from Water Source		
Total Ranking Score						
Depth to	Ranking	Distance to Surface	Ranking	Wellhead Protection Area	Ranking Score	Total Ranking
Groundwater	Score	Water Body	Score	Distance from Water Source	Yes =20, No=0	Score
<50-feet	20	<200-feet	20	<1000-feet from water source	**0**	
50 - 99	10	200 - 1000	**10**	<200-feet domestic water	**0**	
>100-feet	**0**	>1000-feet	0			**10**
			Total Ranking Score		**Sample**	
		>19	**10 - 19**	0 - 9	**Analysis**	
Benzene (mg/kg)		10	**10**	10	**<0.050**	
BTEX (mg/kg)		50	**50**	50	**0.188**	
TPH (mg/kg)		100	**1000**	5000	**<100**	
Chorides (mg/kg)		N.A.	**N.A.**	N.A.	**912**	
Note: Analytical methods used for Benzene SW-846, BTEX SW-846; TPH 418.1 and Chlorides 4500-C1-B.						
C-144 ranking = 10. Chloride release does not pose a threat to groundwater contamination.						


JUGAN PRODUCTION COR
FRANK W. PYLE #2
FEE LEASE
1980' FWL - 740' FSL
SEC. 34, T30N, R15
SAN JUAN CO., N.M.
For Emergency Call (505) 325

Frank W Pyle #2
Production Tank Pit
Close 12-2-10



Kurt Fagrelius

From: Kurt Fagrelius

Sent: Wednesday, November 24, 2010 9:07 AM

To: Powell, Brandon, EMNRD; Evan Rowland (erowland@slo.state.nm.us); dave_mankiewicz@nm.blm.gov; Mark_Kelly@nm.blm.gov, lucas_vargo@blm.gov; Kurt Fagrelius

Cc: Mike Sandoval; Johnny Lane

Subject: 72-Hour Notice to Close Permanent Pits

Attachments: 72-Hour Notice to Close 11-30 to 12-2-2010.xls

Mr. Brandon Powell, Mr Evan Rowland. Mr. Dave Mankiewicz, Mr. Mark Kelly and Mr. Lucas Vargo,

Dugan Production Corp. is hereby giving notice that Dugan will be closing the permanent pits on the following well pads:

1) Anderson A #1
2) Hill #1
3) April Surprise #8 (Prod Tank)
4) Sly Slav #1 (Prod Tank)
5) Sly Slav #1 (Sep Tank)
6) Frank W. Pyle # 2

Site specific and soil analysis information for each permanent pit is included in the enclosed attachment.

Those highlighted in blue (#'s 1, 2 and 4 - 6) are located on Private Surface; and that highlighted in red (# 3) is located on Federal surface.

Permanent pits will be closed starting Tuesday November 30, 2010 thru Thursday December 2, 2010.

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

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

Frank W. Pyle #2 Hydrogeologic Report

The Frank W. Pyle #2 is located on Federal land on the flats below "Pinon Mesa" on the northwest margin of the San Juan Basin, in San Juan County, New Mexico. The area is characterized as a flat grassy area on the Kirtland Shale that is bordered by "Pinon Mesa" (2-miles east), "Badlands" topography to the east and the San Juan Coal Company surface "open pit" mine directly to the north (Exhibit 3).

A records search of the NM Office of the State Engineer –iWATERS database was conducted on a three square mile area centered on the Frank W. Pyle #2 location (Exhibit 2). Three water wells were located in the search. The closest two are 7,500-feet to the north (total depth 231 & 234 feet, depth to water was not reported). The third is 7,600-feet to the southwest in the San Juan River valley (total depth 41-feet, depth to water 22-feet). 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 ponds constructed on surface shale at the confluence and upper reaches of arroyos. The below grade tank is not located in an arroyo; the closest arroyo is 600-feet to the north (Exhibit 2).

The Fruitland Formation extends from the surface down to 245-feet. The interval has been mined (open pit) to a depth of 245-feet by the San Juan Coal Company 300-feet to north (Exhibit 3). The section has been breeched by nearby mining and is not expected to contain groundwater.

The underlying Pictured Cliffs Sandstone extends from 245 to 370 feet and should contain 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 subject below grade tank, poor quality ground water might be found in the Pictured Cliffs Sandstone interval at a depth of 245-370 feet below the surface.

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. Geological Survey, 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.

Dugan Production Corp. Permanent Pits to be Closed on November 8, 2010

Lease Name	Anderson A #1	Hill #1	April Surprise #8	Sly Slav #1 Prod Tnk
API Number	30-039-05324	30-039-22962	30-045-29419	30-045-25354
Surface Owner - Notice Sent	Private	Private	Federal	Private
Location - UL, Sec., Twp, Rge	B-25-24N-2W	A-16-25N-2W	P-30-24N-9W	0-13-30N-15W
Latitude	36.25489 N	36.40289 N	36.27977	36.8092 N
Longitude	107.89304 W	107.04875 W	107.8221 W	108.36433 W
C-144 Ranking Score	N.A. - Close under pit rule standards	N.A. - Close under pit rule standards	N.A. - Close under pit rule standards	N.A. - Close under pit rule standards
Benzene (mg/kg)	<0.050	<0.050	<0.050	<0.050
Betex (mg/kg)	<0.150	0.424	<0.150	<0.150
TPH (mg/kg) - Analy Mthd	<100 - 418.1	<100 - 418.1	<100 - 418.1	<100 - 418.1
Chlorides (mg/kg)	32	96	16	64
Total Yards Contaminated Soil Hauled to Landfarm	N.A.	N.A.	24-yds	N.A.

Dugan Production Corp. Permanent Pits to be Closed on November 8, 2010

Sly Slav #1 Sep Tnk	Frank W. Pyle #2
30-045-25354	30-045-08965
Private	Private
0-13-30N-15W	N-34-30N-15W
36.8092 N	36.76551 N
108.36433 W	108.40605 W
20	10
<0.050	<0.050
<0.150	0.188
<100 - 418.1	<100 - 418.1
736	912
N.A.	N.A.

Kurt Fagrelius

From: postmaster@duganproduction.com
Sent: Wednesday, November 24, 2010 9:07 AM
To: Kurt Fagrelius
Subject: Delivery Status Notification (Relay)

Attachments: ATT22691.txt; 72-Hour Notice to Close Permanent Pits


ATT22691.txt (407 B)


72-Hour Notice to Close Perman...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

Brandon.Powell@state.nm.us

Kurt Fagrelius

From: postmaster@duganproduction.com
Sent: Wednesday, November 24, 2010 9.07 AM
To: Kurt Fagrelius
Subject: Delivery Status Notification (Relay)

Attachments: ATT22700.txt, 72-Hour Notice to Close Permanent Pits


ATT22700.txt (422 B)


72-Hour Notice to Close Perman...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

erowland@slo.state.nm.us

Kurt Fagrelius

From: Mark_Kelly@blm.gov
Sent: Tuesday, November 30, 2010 6:49 AM
To: Kurt Fagrelius
Subject: 72-Hour Notice to Close Permanent Pits

Return Receipt

Your document:	72-Hour Notice to Close Permanent Pits
was received by:	Mark Kelly/FFO/NM/BLM/DOI
at:	11/30/2010 06:49:05 AM

Kurt Fagrelius

From: Lucas_Vargo@blm.gov
Sent: Wednesday, November 24, 2010 10:01 AM
To: Kurt Fagrelius
Subject: 72-Hour Notice to Close Permanent Pits

Return Receipt

Your document:	72-Hour Notice to Close Permanent Pits
was received by:	Lucas Vargo/FFO/NM/BLM/DOI
at:	11/24/2010 10:01:00 AM