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

Release Notification and Corrective Action

30-045-26409

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	Phantom Ranch #1	Facility Type	Permanent Pit

Surface Owner Federal	Mineral Owner Federal	Lease No NM-4063

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	21	24N	8W	2060	North	1880	West	San Juan

Latitude 36.30156 N **Longitude** 107.6888 W

NATURE OF RELEASE

Type of Release Reporting Pit Sampling	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	

RCVD MAR 14'11

OIL CONS. DIV.
DIST. 3

If a Watercourse was Impacted, Describe Fully *

N/A

Describe Cause of Problem and Remedial Action Taken.*

During permanent pit closure a chloride and TPH impacts were discovered. A five-point composite sample tested 896-mg/kg chlorides and 910-mg/kg TPH which exceeds the threshold limits of 19.15.17.13. See attached "preliminary" sample results.

Describe Area Affected and Cleanup Action Taken * Contamination was addressed under the "spill rule", 19.15.30 Following preliminary sample analysis data, 88-yards of contaminated soil was hauled from site of release to Envirotech Landfarm Pit was then re-sampled and "confirmation" sample analysis data tested 1700-mg/kg Chlorides and <10-mg/kg TPH (8015 Mthd). The Chloride and TPH releases do not pose a threat to groundwater contamination. See attachments to "Final" C-141 and invoices #23219, 27657 and 27878. C-144 ranking= 10.

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 Bob Bell
Title VP Exploration	Approval Date 3-14-11 Expiration Date
E-mail Address kfagrelius@duganproduction.com	Conditions of Approval: nJK1122139627 Attached ☐
Date March 11,2011 Phone 505-325-1821	

* Attach Additional Sheets If Necessary

30

CARDINAL LABORATORIES

Preliminary Sample Analy

ANALYTICAL RESULTS FOR
DUGAN PRODUCTION CORP
ATTN: FRED CORNISH
4100 PIEDRAS ST
FARMINGTON NM 87401
FAX TO: (505) 325-4873

Receiving Date 11/06/09
Reporting Date 11/09/09
Project Number NOT GIVEN
Project Name EARTH PIT CLOSURE
Project Location NOT GIVEN

Sampling Date 11/03/09 & 11/04/09
Sample Type SOIL
Sample Condition COOL & INTACT @ 6°C
Sample Received By CK
Analyzed By ZL

LAB NO.	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE		11/06/09	11/06/09	11/06/09	11/06/09
H18672-1	ANABEL #1	<0.050	<0.050	<0.050	<0.300
H18672-2	MESA #2	<0.050	<0.050	<0.050	<0.300
H18672-3	PHANTON RANCH #1	<0.050	<0.050	<0.050	<0.300
H18672-4	JEFFERS FED 2-23	<0.050	<0.050	<0.050	<0.300
H18672-5	SLICKHORN GOLCH #2	<0.050	<0.050	<0.050	<0.300
Quality Control		0.046	0.043	0.046	0.132
True Value QC		0.050	0.050	0.050	0.150
% Recovery		92.0	86.0	92.0	88.0
Relative Percent Difference		6.3	8.7	6.3	7.2

METHODS BTEX - SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08 TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES Reported on wet weight

Chemist

Date 11/10/09

CARDINAL LABORATORIES

ANALYTICAL RESULTS FOR
DUGAN PRODUCTION CORP
ATTN: FRED CORNISH
4100 PIEDRAS ST
FARMINGTON, NM 87401
FAX TO: (505) 325-4873

Receiving Date: 11/06/09
Reporting Date: 11/09/09
Project Number: NOT GIVEN
Project Name: EARTH PIT CLOSURE
Project Location: NOT GIVEN

Sampling Date: 11/03/09 & 11/04/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: CK
Analyzed By: AB/HM

LAB NUMBER	SAMPLE ID	418.1 TOTAL TPH (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		11/09/09	11/09/09
H18672-1	ANABEL #1	<100	112
H18672-2	MESA #2	<100	144
H18672-3	PHANTON RANCH #1	910	896
H18672-4	JEFFERS FED 2-23	2,740	7,360
H18672-5	SLICKHORN GULCH #2	<100	< 16
Quality Control		318	500
True Value QC		300	500
% Recovery		106	100
Relative Percent Difference		3.0	<0.1

METHODS: EPA 418.1; Cl- Std. Methods 4500-Cl-B
*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.
Not accredited for Chloride and TPH 418.1

Chemist

11/10/09
Date

H18672 418.1 & Cl DUGAN

CHAIN OF CUSTODY RECORD

Green Analytical Laboratories

Page [illegible] of [illegible]

Client: [illegible] Production
Contact: Fred Cornish
Address: 400 [illegible] St
Farmington, NM 87401
Phone Number: 505-330-0429
Fax Number: 505-325-4873

NOTES
1) Ensure proper container packaging
2) Ship samples promptly following collection
3) Designate Sample Reject Disposition
PO#
Project Name: EARTH Pit Closure

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

GAL JOB: ______

Samplers Signature: Fred Cornish

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	Collected by (Init.)	Matrix Type From Table 1	No. of Containers	Sample Filtered ? Y/N	Unpreserved (Ice Only)	HNO3	HCL	H2SO4	NAOH	Other (Specify)	418.1	BTEX	Cl⁻							Comment
#3272																						
An [illegible] #1	11-3-09	12:45 PM		3									X	X	X							
Mesa #2	11-5-09	2:10 PM		3									X	X	X							
[illegible] Ranch #1	3	3:00 PM		3									X	X	X							
[illegible] Fed 2-23	11-4-09	12:50		3									X	X	X							
[illegible] #2	11-4-09	2:20		3									X	X	X							

Relinquished by	Date	Time	Received by	Date	Time
Fred Cornish			[signature]	11/5/09	3:41
Relinquished by			Received by: [signature]	11/6/09	8:30 am

( ) Return ( ) Dispose ( ) Store (30 Days)

6.0°C C+I

Phantom Ranch #1

CARDINAL Laboratories

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

Confirmation Samples

February 08, 2011

MIKE SANDOVAL

DUGAN PRODUCTION

P. O. BOX 420

FARMINGTON, NM 87499

RE: PIT CLOSURES

Enclosed are the results of analyses for samples received by the laboratory on 02/04/11 11:00.

Cardinal Laboratories is accredited through Texas NELAP for.

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

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:	02/04/2011	Sampling Date:	02/03/2011
Reported:	02/08/2011	Sampling Type:	Soil
Project Name:	PIT CLOSURES	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PHANTOM RANCH #1 (H100231-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.050**	0.050	02/07/2011	ND	2.17	108	2.00	13.2	
Toluene*	<0.050	0.050	02/07/2011	ND	2 17	109	2.00	14.0	
Ethylbenzene*	<0.050	0.050	02/07/2011	ND	2.18	109	2.00	12.7	
Total Xylenes*	<0 150	0.150	02/07/2011	ND	6 49	108	6.00	13.0	
Surrogate 4-Bromofluorobenzene (PIL	*89 0 %*	*70-130*							

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1700**	16 0	02/07/2011	ND	448	112	400	3.64	

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	02/07/2011	ND	1420	119	1190	0.702	

TPH 8015M mg/kg **Analyzed By: AB**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10 0	10.0	02/07/2011	ND	239	95.6	250	0 718	
DRO >C10-C28	<10 0	10.0	02/07/2011	ND	219	87.5	250	1 06	
Total TPH C6-C28	<10.0	10 0	02/07/2011						
Surrogate 1-Chlorooctane	*80 3 %*	*70-130*							
Surrogate 1-Chlorooctadecane	*91 6 %*	*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

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

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD

Page ____ of ____

Client: Dugan Prod
Contact: Mike Sandoval
Address:
Phone Number: 330-0429
FAX Number: 327-4093

NOTES
1) Ensure proper container packaging
2) Ship samples promptly following collection
3) Designate Sample Reject Disposition
PO#:
Project Name: Phantom Ranch #1
Samplers Signature:

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 #

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: Gasoline BTEX	Analyses Required: TPH 418.1	Analyses Required: TPH	Analyses Required: Cl-	Comments
H100231-Phantom Ranch #1	2-3-11	1:45															
2.																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Relinquished by	Date 2-3-11	Time 3:19	Received by	Date 2/3/11	Time 7:19
Relinquished by	Date	Time	Received by	Date 2/4/11	Time 11:00

0.5°c #26

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

Envirotech
5796 US Hwy 64
Farmington, NM 87401
Phone 505-632-0615
Fax 505-632-1865

envirotech

To
Dugan Production Corp
PO Box 420
Farmington, NM 87401

Invoice

Invoice Number 23219
Job 06094-0071
DATE March 25,2009

Phantom Ranch #1- accept exempt contaminated soil and oil from production stream

Ordered by Fred Cornish

Project Manager April Pohl

Employee	Staff Type	Description	Units	Rate	Total
03/12/2009					
Landfarm					
Paint Filter Test (LF)		BOL# 32986	4 00 EA	10 00	40 00
Chloride (LF)		BOL# 32986	4 00 EA	15 00	60 00
Contaminated Soil Receival		BOL# 32986	48 00 CY	18 00	864 00
		Landfarm Total:	**56.00**		**964.00**
		03/12/2009 Total:	**56.00**		**964.00**

Invoice Sub-total	964 00
Sales Tax	59 65
Amount due this Invoice	$1 023 65

All invoices are due upon receipt A late charge of 1 5% will be added to any unpaid balance after 30 days

This may not be the final bill - if charges are received after this invoice has been mailed you will receive a separate invoice for those costs

Envirotech
5796 US Hwy 64
Farmington, NM 87401
Phone 505-632-0615
Fax 505-632-1865

envirotech

To
Dugan Production Corp
PO Box 420
Farmington, NM 87401

Invoice

Invoice Number 27657
Job 06094-0089
DATE January 10,2011

Phantom Ranch #1 - accept exempt contaminated soil from closing earthen pit

Ordered by Mike Sandoval

Project Manager April Pohl

Employee	Staff Type	Description	Units		Rate	Total
01/05/2011						
Landfarm						
Paint Filter Test (LF)		BOL# 37430	1 00	EA	10 00	10 00
Chloride (LF)		BOL# 37430	1 00	EA	15 00	15 00
Contaminated Soil Receival		BOL# 37430	10 00	CY	18 00	180 00
Paint Filter Test (LF)		BOL# 37431	1 00	EA	10 00	10 00
Chloride (LF)		BOL# 37431	1 00	EA	15 00	15 00
Contaminated Soil Receival		BOL# 37431	10 00	CY	18 00	180 00
		Landfarm Total	**24.00**			**410.00**
		01/05/2011 Total	**24.00**			**410.00**

Invoice Sub-total	410 00
Sales Tax	25 88
Amount due this Invoice	$435 88

All invoices are due upon receipt A late charge of 1 5% will be added to any unpaid balance after 30 days

This may not be the final bill - if charges are received after this invoice has been mailed, you will receive a separate invoice for those costs

Envirotech
5796 US Hwy 64
Farmington, NM 87401
Phone 505-632-0615
Fax 505-632-1865

envirotech

To
Dugan Production Corp
PO Box 420
Farmington, NM 87401

Invoice

Invoice Number 27878
Job 06094-0096
DATE February 15,2011

Phantom Ranch #1 - Accept exempt soil from closing earthen pit

Ordered by Mike Sandoval

Project Manager April Pohl

Employee	Staff Type	Description	Units		Rate	Total
02/03/2011						
Landfarm						
Paint Filter Test (LF)		BOL# 37613	1 00	EA	10 00	10 00
Chloride (LF)		BOL# 37613	1 00	EA	15 00	15 00
Contaminated Soil Receival		BOL# 37613	20 00	CY	18 00	360 00
		Landfarm Total:	**22.00**			**385.00**
		02/03/2011 Total:	**22.00**			**385.00**

Invoice Sub-total	385 00
Sales Tax	24 30
Amount due this Invoice	$409 30

All invoices are due upon receipt A late charge of 1 5% will be added to any unpaid balance after 30 days

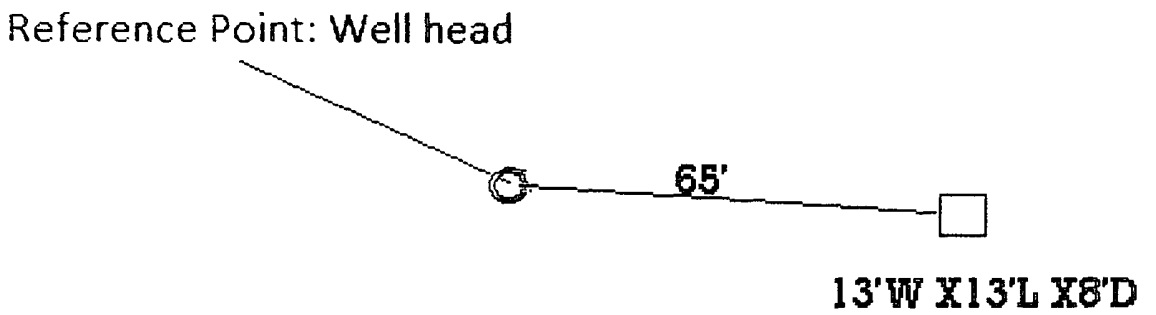
This may not be the final bill - if charges are received after this invoice has been mailed, you will receive a separate invoice for those costs

Dugan Production

Phantom Ranch #1

Seperator & Tank Pit

N



From Reference Point Go S 60 Degrees SE. For a Distance of 65' to Center of pit.

Permanent pit: Phantom Ranch #1
API number: 30-045-26409

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

Lease Name: Phantom Ranch #1						
API No. 30-045-26409						
Site Specific Infromation						
Depth to	**125-ft**	Distance to Surface	**700-ft**	Wellhead Protection Area	**>1,000-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	**0.308**	
TPH (mg/kg)		100	**1000**	5000	**<10.0**	
Chorides (mg/kg)		N A.	**N.A.**	N.A	**1700**	
Note: Analytical methods used for Benzene SW-846, BTEX SW-846, TPH 8015 and Chlorides 4500-C1-B						
C-144 ranking = 10. Chloride release does not pose a threat to groundwater contamination.						

Phantom Ranch #1 Hydrogeologic Report

The Phantom Ranch #1 is located on Federal land on the Chaco Slope area of the San Juan Basin, San Juan County, New Mexico. The area can be characterized as an arid, Nacimiento shale "Bad Lands" topography with sage brush flats bordered by low ridges forested by Juniper and Pinon trees.

A records search of the NM Office of the State Engineer –iWATERS database was conducted on a three square mile area centered on the Phantom Ranch #1 location (Exhibit 2) No water wells were located in the area of the below grade tank. 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. The below grade tank is not located in an arroyo; the nearest arroyo is 700-feet to the southeast (Exhibit 2).

The Nacimiento Formation extends from the surface down to a depth of 1065 feet. From surface down to 125-feet the section is mudstone / shale with a trace of silt. Thin silty sands inter-bedded with more dominant mudstones begin at 125-295-feet (may contain a small amount of water). Toward the middle and base of the unit (460-970), mud content decreases, sand content increases and the interval feet contains numerous sands (10-60 feet thick) that may contain marginal amounts of poor quality water.

The Nacimiento is a source of ground water for livestock purposes and more rarely domestic use in some areas near the outcrop. With depth and distance from the outcrop, water quality decreases quickly and may be useful for livestock only (Stone, 1983).

Based on electric open hole logs, the iWATERS database, literature reviewed, depth to ground water ranges from 25 - 50 feet below the surface in major arroyos in the area. Moving away from the wash ground water depth drops rapidly to greater than 200 feet below the surface. At the location of the below grade tank, lesser amounts of poor quality ground water might be found at depths of approximately 125-970 feet below the surface in laterally discontinuous sand intervals in the middle and lower Nacimiento Formation. A deeper source of ground water would include the Ojo Alamo interval; at a depth of 1065-1210 feet below the surface.

Due to the high silt content in the sands, poor water and reservoir quality and unpredictable nature of sand occurrence, there has not been any Nacimiento water wells drilled in the area of the subject below grade tank.

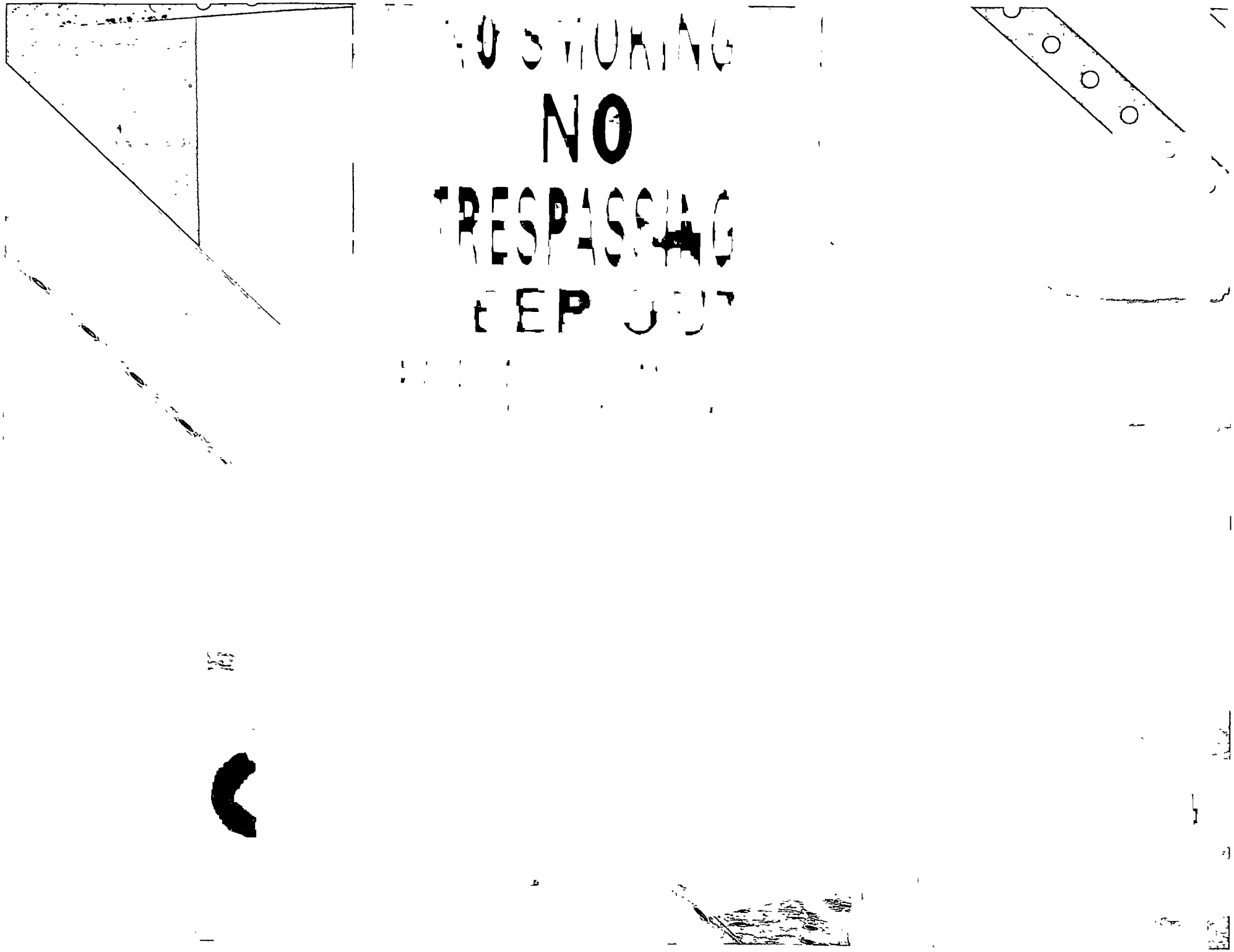
This Hydrogeologic Report was prepared by Mr. Kurt Fagrelius, Geologist for Dugan Production. Mr. Fagrelius has been employed as a geologist for Dugan for the past 31-years, received a MS in Geology from NMIMT in Socorro, NM and a BS in Geology from FLC in Durango, CO.

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.

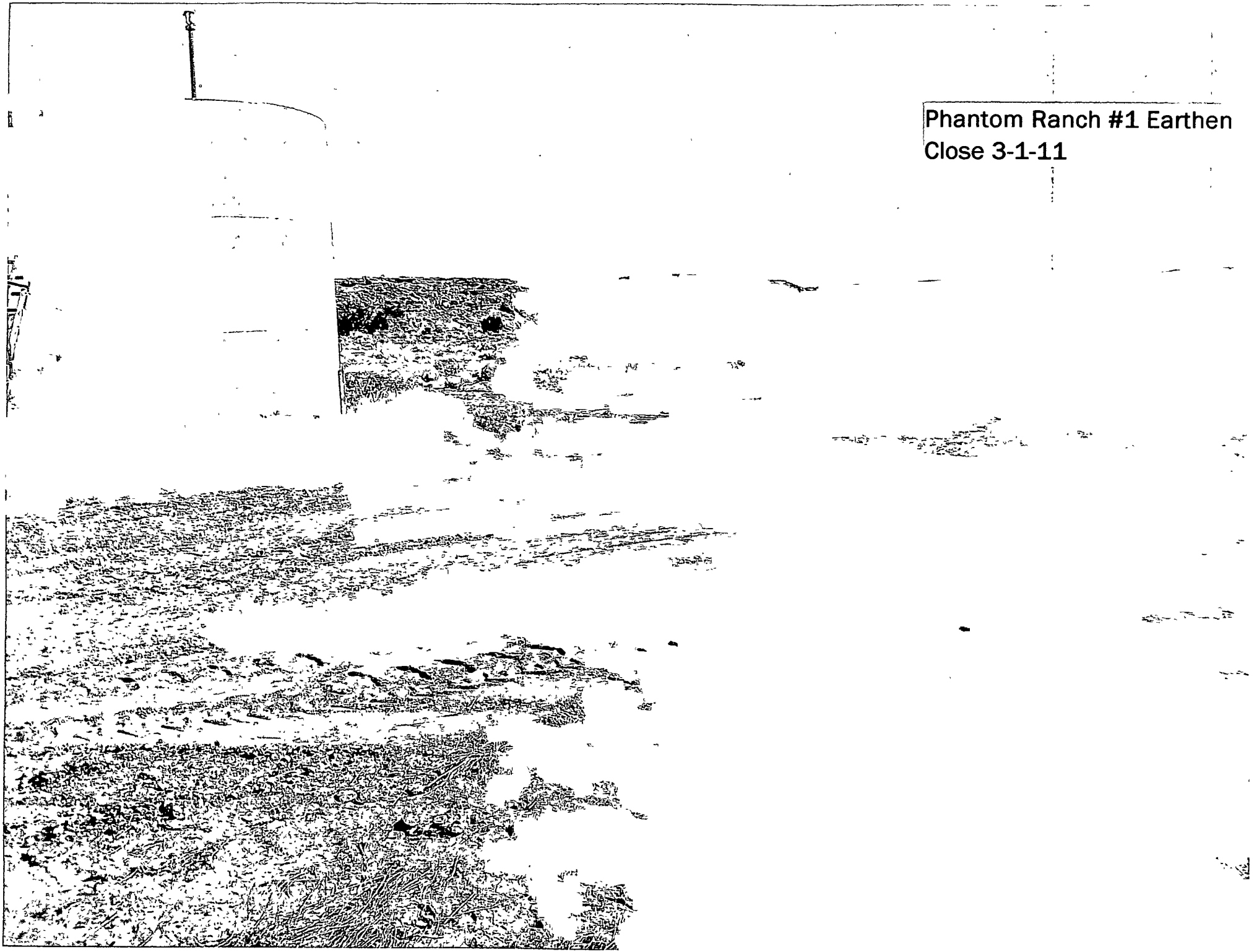
Brown, D.R., and Stone, W.J., 1979, Hydrogeology of Aztec quadrangle, San Juan County, New Mexico· New Mexico Bureau of Mines and Mineral Resources Hydrogeologic Sheet 1

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 Geological Survey, Atlas HA-720-B, Sheet 1 and 2.


NO
TRESPASSING

Phantom Ranch #1 Earthen
Close 3-1-11



Kurt Fagrelius

From: Kurt Fagrelius

Sent: Wednesday, February 23, 2011 5 15 PM

To: 'Powell, Brandon, EMNRD', Spencer, Bertha, Evan Rowland (erowland@slo state nm us), 'dave_mankiewicz@nm blm gov', 'Mark_Kelly@nm blm gov', 'lucas_vargo@blm gov'

Cc: Kurt Fagrelius, Johnny Lane, Mike Sandoval

Attachments: 72-Hr Notice to Close Permanent Pits 3-1 Thru 3-3-2011 xls

Dear Mr Brandon Powell, Ms Bertha Spencer, 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) Phantom Ranch #1
2) Marathon #1 (Separator)
3) Drip Tank #1 (600-ft from Greek's Fete #2)
4) Nice #1
5) Rainbow Seeker #1

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

Those highlighted in blue (#'s 1, 3 & 4) are located on Federal Surface, the one highlighted in red (#2) is located on Navajo Indian Alloted Surface and the one highlighted in black (#5) is on Private surface.

Permanent pits will be closed starting Tuesday, February 1, 2011 thru Thursday, February 3, 2011

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)

Dugan Production Corp. Permanent Pits to Close 3-1 thru 3-3-2011

Lease Name	Phantom Ranch #1	Marathon #1 Separator	Drip Tank #1 by Greek's Fete #2
API Number	30-045-26409	30-045-26436	N.A.
Surface Owner - Notice Sent	Federal	Indian Allotment	Federal
Location - UL, Sec , Twp, Rge	F-21-T24N-R8W	A-4-T23N-R10W	B-24-T30N-R15W
Latitude	36.30156 N	36.26132 N	36.80409 N
Longitude	107 6888 W	107.89362 W	107 36689 W
Benzene (<0 2 mg/kg)	<0.050 mg/kg	<0.100 mg/kg	<0.100 mg/kg
Betex (<50 mg/kg)	<0.150 mg/kg	<0.300 mg/kg	<0.300 mg/kg
TPH - Analytic Mthd-418.1 (<100 mg/kg)	<100 mg/kg	989 mg/kg	<100 mg/kg
TPH=GRO + DRO - Analytic Mthd-8015 (<1000 mg/kg)	<10.0 mg/kg	241 mg/kg	<10 mg/kg
Chlorides (<250 mg/kg)	1700 mg/kg	1070 mg/kg	672 mg/kg
Thresholds as per "Pit Rule" 19.15 17 NMAC are highlighted in red.			
Thresholds as per "Spill Rule" 19 15 30 NMAC are highlighted in blue.			

Dugan Production Corp. Permanent Pits to Close 3-1 thru 3-3-2011

Nice #1 Separator	Rainbow Seeker #1
30-045-26499	30-045-26406
Federal	Private
P-7-T30N-R14W	G-29-T31N-R13W
36 82378 N	36 87439 N
108.34379 W	108.22339 W
<0.050 mg/kg	<0.100 mg/kg
<0.150 mg/kg	<0 300 mg/kg
<100 mg/kg	545 mg/kg
11.4 mg/kg	31 mg/kg
1020 mg/kg	768 mg/kg

Kurt Fagrelius

From: postmaster@duganproduction com
Sent: Wednesday, February 23, 2011 5 16 PM
To: Kurt Fagrelius
Subject: Delivery Status Notification (Relay)

Attachments: ATT41863 txt, Untitled Attachment


ATT41863.txt (409 Untitled Attachment B)

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, February 23, 2011 5 16 PM
To: Kurt Fagrelius
Subject: Delivery Status Notification (Relay)

Attachments: ATT41872 txt, Untitled Attachment


ATT41872.txt (422 B) Untitled Attachment

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: Rowland, Evan [erowland@slo state nm us]
To: Kurt Fagrelius
Sent: Thursday, February 24, 2011 9 10 AM
Subject: Read

Your message

To. erowland@slo.state.nm us
Subject

was read on 2/24/2011 9.10 AM

Kurt Fagrelius

From: postmaster@duganproduction com
Sent: Wednesday, February 23, 2011 5 17 PM
To: Kurt Fagrelius
Subject: Delivery Status Notification (Relay)

Attachments: ATT41884 txt, Untitled Attachment


ATT41884.txt (396 Untitled Attachment B)

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.

Bertha.Spencer@bia.gov

Kurt Fagrelius

From: mkelly@blm gov
Sent: Thursday, February 24, 2011 5 58 AM
To: Kurt Fagrelius

Return Receipt

Your document:

was received by: Mark Kelly/FFO/NM/BLM/DOI

at: 02/24/2011 05:58:25 AM

Kurt Fagrelius

From: dmankiew@blm gov
Sent: Thursday, February 24, 2011 7 27 AM
To: Kurt Fagrelius

Return Receipt

Your document:

was received by: Dave Mankiewicz/FFO/NM/BLM/DOI

at: 02/24/2011 07:27:03 AM

Kurt Fagrelius

From: lvargo@blm gov
Sent: Friday, February 25, 2011 9 29 AM
To: Kurt Fagrelius

Return Receipt

Your document:

was received by: Lucas Vargo/FFO/NM/BLM/DOI

at: 02/25/2011 09:29:02 AM

Kurt Fagrelius

From: System Administrator
To: Kurt Fagrelius, Johnny Lane, Mike Sandoval
Sent: Wednesday, February 23, 2011 5 15 PM
Subject: Delivered Delivery Status Notification (Success)

Your message

To:	'Powell, Brandon, EMNRD', Spencer, Bertha, Evan Rowland (erowland@slo.state.nm.us); 'dave_mankiewicz@nm.blm gov', 'Mark_Kelly@nm.blm.gov'; 'lucas_vargo@blm.gov'
Cc	Kurt Fagrelius; Johnny Lane, Mike Sandoval
Subject:	
Sent.	2/23/2011 5:15 PM

was delivered to the following recipient(s):

Kurt Fagrelius on 2/23/2011 5:15 PM
Johnny Lane on 2/23/2011 5:15 PM
Mike Sandoval on 2/23/2011 5:15 PM

Kurt Fagrelius

From: Mike Sandoval
Sent: Thursday, February 24, 2011 6 33 AM
To: Kurt Fagrelius
Subject: Read
Attachments: Read_ txt

Kurt Fagrelius

From: Johnny Lane
Sent: Thursday, February 24, 2011 7 13 AM
To: Kurt Fagrelius
Subject: Read
Attachments: Read_ txt