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

30-045-26406

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	Rainbow Seeker #1	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
G	29	31N	13W	1510	North	1450	East	San Juan

Latitude 36.87439 N **Longitude** 108.2239 W

NATURE OF RELEASE

Type of Release Spill Clean-Up 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 N.A.
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 impact were discovered. A five-point composite sample tested 6000-mg/kg chloride and 108-mg/kg TPH which exceed the threshold limits of 19.15.17.13.C. 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, 144-yards of contaminated soil was hauled from site of release to IEI Landfarm. Pit was then re-sampled and "confirmation" sample analysis data tested 768-mg/kg Chloride and 31-mg/kg TPH (8015 Mthd). The Chloride and TPH releases do not pose a threat to groundwater contamination. See attachment to "Final" C-141 and invoice #158961, 15862 and 15892. C-144 ranking=0.

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 Pell	
Title: VP Exploration	Approval Date: 3/14/11	Expiration Date:
E-mail Address: kfagrelius@duganproduction.com	Conditions of Approval: nJK1122138710	Attached ☐
Date: 3/10/2011 Phone: 505-325-1821		

* Attach Additional Sheets If Necessary

31

CARDINAL Laboratories

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

Preliminary Sample Analy

August 17, 2010

MIKE SANDOVAL

DUGAN PRODUCTION

P. O. BOX 420

FARMINGTON, NM 87499

RE: PIT CLOSURES

Enclosed are the results of analyses for samples received by the laboratory on 08/10/10 9:30.

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:	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:	RAINBOW SEEKER #1 TANK PIT	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: RAINBOW SEEKER #1 (H020598-01)

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*	<0.050	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*	<0.150	0.150	08/13/2010	ND	3.15	105	3.00	5.79	

Surrogate: 4-Bromofluorobenzene (PII *117 %* *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	6000	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	**108**	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	122	10.0	08/11/2010	ND	163	81.5	200	1.77	

Surrogate: 1-Chlorooctane *80.5 %* *70-130*

Surrogate: 1-Chlorooctadecane *83.4 %* *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

Cardinal Laboratories

! =Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD

Client: Dugan Prod.
Contact: Mike Sandoval
Address:
Phone Number: 330-0929
FAX Number: 327-4043

NOTES:
1) Ensure proper container packaging.
2) Ship samples promptly following collection.
3) Designate Sample Reject Disposition. #1
PO# Rainbow seeker #1
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	BTEX	TPH 418.1	TPH 8015	Cl					Comments
H20598																						
1 Rainbow seeker #1	8-5-10	11:00		3	1								✓	✓	✓	✓						
2.																						
3.																						
4																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

Relinquished by:	Date: 8-6-10	Time: 4:33	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 COI #26

-1

Rainbow Seeker #1

Confirmation Sample Ar

CARDINAL Laboratories

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

January 11, 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 01/05/11 10:15.

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:	01/05/2011	Sampling Date:	01/04/2011
Reported:	01/11/2011	Sampling Type:	Soil
Project Name:	PIT CLOSURES	Sampling Condition:	Cool & Intact
Project Number:	EARTHEN PIT RAINBOW SEEKER #1	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: RAINBOW SEEKER #1 (H100023-01)

BTEX 8260B mg/kg **Analyzed By: CMS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/09/2011	ND	1.87	93.7	2.00	1.13	
Toluene*	<0.100	0.100	01/09/2011	ND	1.89	94.6	2.00	0.641	
Ethylbenzene*	<0.100	0.100	01/09/2011	ND	1.92	95.8	2.00	0.369	
Total Xylenes*	<0.300	0.300	01/09/2011	ND	5.45	90.8	6.00	1.33	

Surrogate Dibromofluoromethane	*114 %*	*80-120*
Surrogate Toluene-d8	*104 %*	*80-120*
Surrogate 4-Bromofluorobenzene	*110 %*	*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	**768**	16.0	01/07/2011	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	**545**	100	01/07/2011	ND	1140	114	1000	0.00	

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	01/10/2011	ND	250	100	250	4.93	
DRO >C10-C28	**31.0**	10.0	01/10/2011	ND	232	92.8	250	6.25	
Total TPH C6-C28	**31.0**	10.0	01/10/2011						

Surrogate. 1-Chlorooctane	*104 %*	*70-130*
Surrogate 1-Chlorooctadecane	*110 %*	*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: Nagan Prod.
Contact: Mike Sandoval
Address:
Phone Number: 330-0924
FAX Number: 327-4403

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

PO# Earthen Pit
Project Name: Rainbow Seeder #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/GSL 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: Earthen Pit	Analyses Required: BTEX	Analyses Required: TPH 418.1	Analyses Required: TPH 8015	Analyses Required: Cl-	Comments
HIDOD23																		
1 Rainbow Seeder #1	1-4-11	1:30																
2																		
3.																		
4.																		
5																		
6.																		
7.																		
8.																		
9.																		
10.																		

Relinquished by:	Date: 1-4-11	Time 3:32	Received by:	Date 1/4/11	Time 1532
Relinquished by:	Date:	Time:	Received by:	Date 1/5/11	Time 10:15

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

5°C #26

Industrial Ecosystems Inc.

Invoice Number: 15861
Invoice Date: Dec 31, 2010
Page: 1

Industrial Ecosystems Inc.
P.O. Box 1202
Flora Vista, NM 87415
PH: (505) 632-1782 Fax: (505) 632-1876

TAX I.D. #94-3200034

PLEASE REMIT PAYMENT TO:
Industrial Ecosystems, Inc.
PO Box 1202
Flora Vista, NM 87415

Sold To: DUGAN PRODUCTION CORP
709 E MURRAY DRIVE
FARMINGTON, NM 87499-0420

Location: MIKE SANDOVAL
RAINBOW SEEKER #1

Contact	Payment Terms	Due Date	Customer PO
MIKE SANDOVAL	Net 30 Days	1/30/11	

Quantity	Description	Unit Price	Extension
	DATE OF SERVICE: 12/28/10		
	IEI WO#15417		
	MATERIAL TRANSPORTED BY RALPH MILLER, D-07/T-75		
	DISPOSED OF SOIL		
1.00	CHLORIDE TEST	15.00	15.00
96.00	DISPOSAL PER YARD	17.50	1,680.00

APPROVED FOR PAYMENT BY

DUGAN PRODUCTION CORP

FOR BILLING INQUIRIES PLEASE CALL
(505) 632-1782

ACCOUNTS ARE DUE NET 30 DAYS PURCHASER AGREES TO PAY FINANCE CHARGES OF 1.5% PER MONTH (ANNUAL PERCENTAGE RATE OF 18%) OR A MINIMUM CHARGE OF .50 PER MONTH ACCOUNTS THAT HAVE BEEN PLACED FOR COLLECTION WILL BE CHARGED A $100.00 COLLECTION FEE IN ADDITION TO REASONABLE ATTORNEY FEES AND COLLECTION CHARGES

Subtotal	1,695.00
Sales Tax	107.00
Total Invoice Amount	1,802.00
TOTAL	**1,802.00**

RECEIVED
JAN 07 2011

2

IEI Industrial Ecosystems Inc.

Invoice Number: 15862
Invoice Date: Dec.31, 2010
Page: 1

Industrial Ecosystems Inc.
P.O. Box 1202
Flora Vista, NM 87415
PH: (505) 632-1782 Fax: (505) 632-1876
TAX I.D. #94-3200034

PLEASE REMIT PAYMENT TO:
Industrial Ecosystems. Inc.
PO Box 1202
Flora Vista. NM 87415

Sold To: DUGAN PRODUCTION CORP
709 E MURRAY DRIVE
FARMINGTON, NM 87499-0420

Location: MIKE SANDOVAL
RAINBOW SEEKER, #1

Contact	Payment Terms	Due-Date	Customer PO
MIKE SANDOVAL	Net 30 Days	1/30/11	

Quantity	Description	Unit Price	Extension
	DATE OF SERVICE: 12/29/10		
	IEI WO #15418		
	MATERIAL TRANSPORTED BY RALPH MILLER, D-07/T-75		
	DISPOSED OF SOIL		
24.00	DISPOSAL PER YARD	17.50	420.00

APPROVED FOR PAYMENT BY

DUGAN PRODUCTION CORP

FOR BILLING INQUIRIES PLEASE CALL
(505) 632-1782

ACCOUNTS ARE DUE NET 30 DAYS. PURCHASER AGREES TO PAY FINANCE CHARGES OF 1.5% PER MONTH (ANNUAL PERCENTAGE RATE OF 18%) OR A MINIMUM CHARGE OF .50 PER MONTH. ACCOUNTS THAT HAVE BEEN PLACED FOR COLLECTION WILL BE CHARGED A $100.00 COLLECTION FEE IN ADDITION TO REASONABLE ATTORNEY FEES AND COLLECTION CHARGES

Subtotal	420.00
Sales Tax	26.51
Total Invoice Amount	446.51
TOTAL	**446.51**

RECEIVED
JAN 07 2011

Industrial Ecosystems Inc.

Invoice Number: 15892
Invoice Date: Jan 7, 2011
Page: 1

Industrial Ecosystems Inc.
P.O. Box 1202
Flora Vista, NM 87415
PH: (505) 632-1782 Fax: (505) 632-1876
TAX I.D. #94-3200034

PLEASE REMIT PAYMENT TO:
Industrial Ecosystems, Inc.
PO Box 1202
Flora Vista, NM 87415

Sold To: DUGAN PRODUCTION CORP
709 E MURRAY DRIVE
FARMINGTON, NM 87499-0420

Location: MIKE SANDOVAL
RAINBOW SEEKER #1

Contact	Payment Terms	Due Date	Customer PO
MIKE SANDOVAL	Net 30 Days	2/6/11	

Quantity	Description	Unit Price	Extension
	DATE OF SERVICE: 1/3/11 - 1/4/11		
	IEI WO #1541		
	MATERIAL TRANSPORTED BY RALPH MILLER, D07		
	DISPOSED OF CONTAMINATED SOIL		
24.00	DISPOSAL PER YARD	17.50	420.00

FOR BILLING INQUIRIES PLEASE CALL
(505) 632-1782

ACCOUNTS ARE DUE NET 30 DAYS. PURCHASER AGREES TO PAY FINANCE CHARGES OF 1.5% PER MONTH (ANNUAL PERCENTAGE RATE OF 18%) OR A MINIMUM CHARGE OF .50 PER MONTH ACCOUNTS THAT HAVE BEEN PLACED FOR COLLECTION WILL BE CHARGED A $100.00 COLLECTION FEE IN ADDITION TO REASONABLE ATTORNEY FEES AND COLLECTION CHARGES

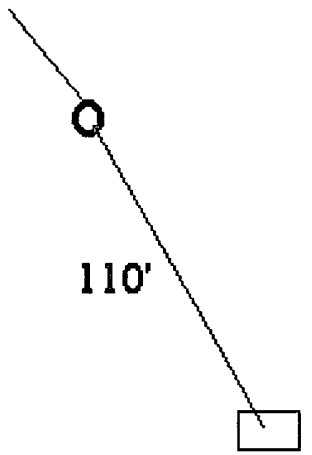
Subtotal	420.00
Sales Tax	26.51
Total Invoice Amount	446.51
TOTAL	**446.51**

Dugan Production

Rainbow Seeker #1

Seperator Pit

Reference Point: Well head



10'W X10'L X5'D

From Reference Point Go S. **20** degrees SE. For a Distance of **110'** to Center of Pit.

Permanent pit: Rainbow Seeker #1
API number: 30-045-26406

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: Rainbow Seeker #1						
API No.: 30-045-26406						
Site Specific Infromation						
Depth to	**425-ft**	Distance to Surface	**1,100-ft**	Wellhead Protection Area	**6,000-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**			**0**
Total Ranking Score					**Sample**	
		>19	**10 - 19**	0 - 9	**Analysis**	
Benzene (mg/kg)		10	**10**	10	**<0.050**	
BTEX (mg/kg)		50	**50**	50	**<0.150**	
TPH (mg/kg)		100	**1000**	5000	**108**	
Chorides (mg/kg)		N.A.	**N.A.**	N.A.	**6000**	
Note: Analytical methods used for Benzene SW-846, BTEX SW-846, TPH 418.1 and Chlorides 4500-C1-B.						
C-144 ranking = 0. Chloride release does not pose a threat to groundwater contamination.						

Rainbow Seeker #1 Hydrogeologic Report

The Rainbow Seeker #1 is located on Private land on the northwest rim of the San Juan Basin, in San Juan County, New Mexico. The area is characterized as an arid, "badlands" topography bordered on the west by a "hogback" of basin-ward dipping, rock outcrops covered with sage and isolated stands of juniper. To the east is an elevated, flat-lying dry mesa with sage and sparse grass. The area is poorly drained by arroyos that drain to the south and eventually into the La Plata River drainage. These arroyos carry minimal amounts of water during seasonal periods of rain and snow melt.

A records search of the NM Office of the State Engineer –iWATERS database was conducted on a three square mile area centered on the Rainbow Seeker #1 location (Exhibit 2). Six water wells were located 6,000 – 8,000 feet to the southeast and northeast. The wells were drilled to a depth of between 18 and 500 feet. The depth to ground water was reported from 2 to 70 feet. The wells are all located in the La Plata River valley, an area with irrigation ditches and stock ponds. The results of the search are shown on Exhibit 1.

The main source of water in the region is from irrigation water that is taken from the La Plata River and transported in unlined ditches to fields south and east (1-1/2 – 2 miles) of the below grade tank. Ground water may be encountered in valley-fill deposits in existing arroyos at shallow depths of approximately 20 – 70 feet below the surface. However, the below grade tank is not located in an arroyo; the closest arroyo is 1,100-feet to the southwest.

The Nacimiento Formation extends from the surface down to a depth of approximately 780-feet. From surface down to 425-feet the section is comprised of mudstone / shale with traces of silt. There is siltstone at 425-440, 580-600, 660-670 and 720-750 that has very poor reservoir quality but may contain marginal amounts of poor quality water. Shale content in the Nacimiento increases to the west toward the outcrop and recharge area (Stone, 1983).

The Nacimiento can be a source of ground water for livestock purposes and more rarely domestic use in some areas near the outcrop. But at the subject location there are not any sand layers in the section above the 425-foot depth. The Nacimiento is not expected to contain significant quantities of ground water in the area of the proposed below grade tank.

The underlying Ojo Alamo is from 780-858 feet, is very poorly developed in the area and is comprised of three 10-25 foot thick sands that could contain groundwater.

Based on electric open hole logs, the iWATERS database, literature reviewed, depth to ground water ranges from 25 - 50 feet below the surface in and along the major drainages in the area. Moving away from the rivers and washes, ground water depth drops rapidly to greater than 200 feet below the surface. At the location of the subject below grade tank, small amounts of ground water might be found at depths of approximately 425-750 feet from a thin, isolated siltstone stringers in the Nacimiento Formation. A deeper source of ground water would include the Ojo Alamo from 780-858 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.

RAINBOW SEEKER # 1

FEE LEASE

API # 30-045-26406

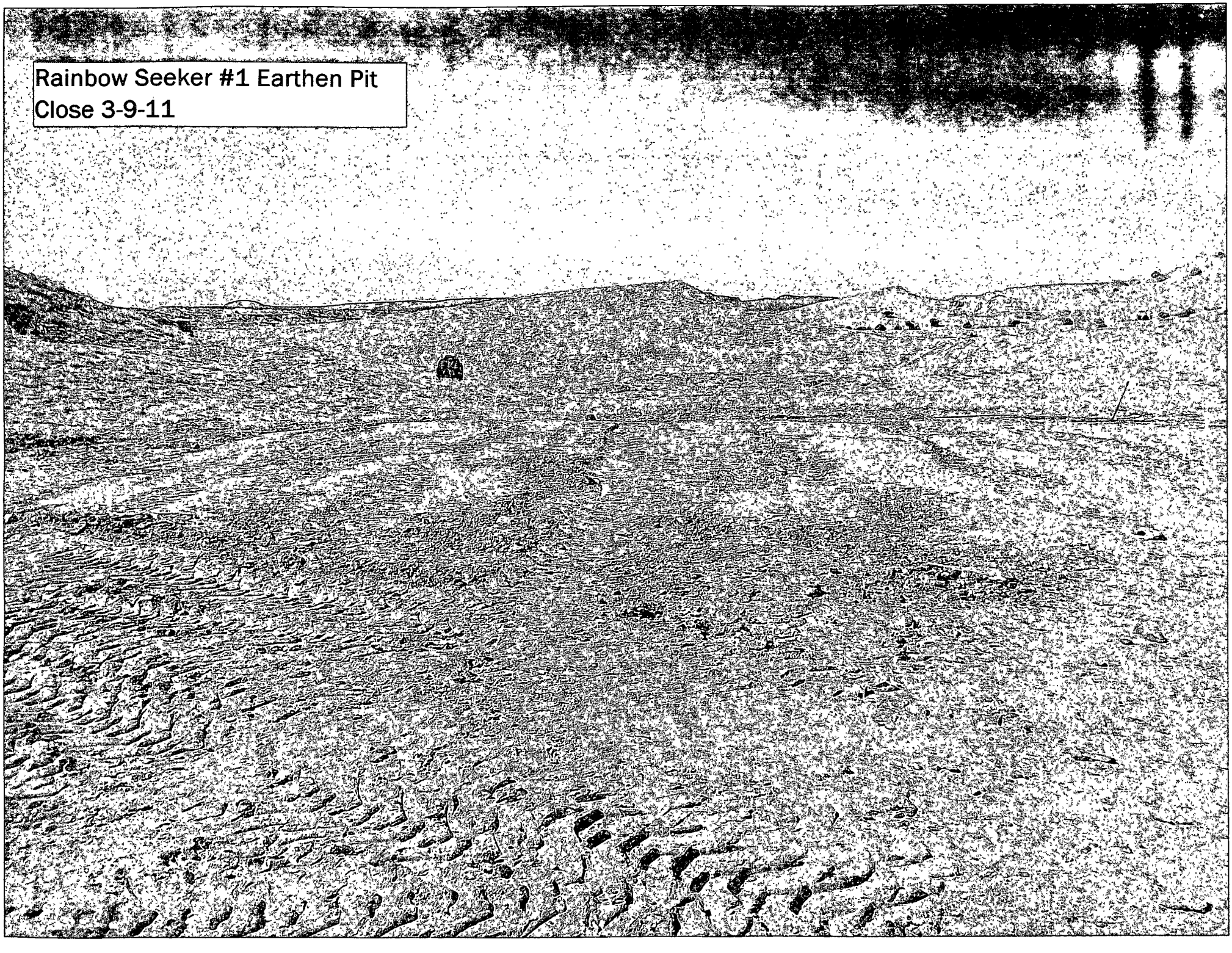
SW/4, NE/4, UNIT G

SEC. 29, T31N, R13W

LAT. 36° 52' 28" LONG. 108° 13' 24"

SAN JUAN COUNTY, NM

FOR EMERGENCY CALL (505)325-1823


Rainbow Seeker #1 Earthen Pit
Close 3-9-11

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 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.

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 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.

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