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
1020 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 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

### Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes 
No

**Final Report** 

Form C-144

June 1, 2004

Type of action: Registration of a pit of	or below-grade tank [ Closure of a pit or below-grade	de tank 🗵
Operator: EOG Resources, Inc. Telephone:	432-6863600 e-mail address: Bgrigi	v@msn com
Address: P O Box 2267 Midland, TX 79702	t-nan addiess. <u>Dene</u>	yleansu.com
Facility or well name: Meramec A4 Fee #1H API #: 3	0-015-35380 IJ/L or Otr/Otr A	Sec 4 T 16S R 25E
	Longitude	i
Surface Owner: Federal  State  Private  Indian	Dong.tude	14.15.15.15.15.15.15.15.15.15.15.15.15.15.
Pit	Below-grade tank	
Type: Drilling 🛭 Production 🗌 Disposal 🗍	Volume:bbl Type of fluid:	
Workover	Construction material:	
Lined \( \sum \) Unlined \( \sum \)	Double-walled, with leak detection? Yes  If no	t explain why not
Liner type: Synthetic ⊠ Thickness 12 mil Clay □	Bodolo-Walled, Wall leak detection: 103 🖺 il lio	s oxplain why not.
Pit Volume 10300 bbl		
1 it Volume	Less than 50 feet	(20 points) XXX
Depth to ground water (vertical distance from bottom of pit to seasonal	50 feet or more, but less than 100 feet	(10 points)
high water elevation of ground water.)	100 feet or more	( 0 points)
-	AVV AVV OI INOIV	
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No	( 0 points) XXX
	Less than 200 feet	(20 points)
stance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points) XXX
Agation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	( 0 points)
		30 Points
	Ranking Score (Total Points)	30 Tomes
If this is a pit closure: (1) Attach a diagram of the facility showing the pit	's relationship to other equipment and tanks. (2) Indic	ate disposal location: (check the onsite box if
your are burying in place) onsite ☑ offsite ☐ If offsite, name of facility_	(3) Attach a general of	description of remedial action taken including
remediation start date and end date. (4) Groundwater encountered: No 🛛	Yes If yes, show depth below ground surface	ft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excava	ations.	
Additional Comments: A burial pit was constructed and lined with a 12 m	il impervious liner. The drilling pit contents were mix	xed with Elke Environmental Solidification
Product at a 20 (mud) to 1 (product) ratio to solidify the contents then place		
were analyzed and meet NMOCD standards. The site was then backfilled		The state of the s
were analyzed and meet revioce standards. The site was then backfined	will clear narive son and contoured to the area.	
	100 100 100 100 100 100 100 100 100 100	
I hereby certify that the information above is true and complete to the best	t of my knowledge and belief. I further certify that	the above-described pit or below-grade tank
has been/will be constructed or closed according to NMOCD guidelin	es □, a general permit □, or an (attached) alterna	ative OCD-approved plan 🗵.
1/8/27		
Date: Ret Some (Field S. A.	Simulation bottle	
Printed Name/Title Pro/ CHE-514 1760-146	Signature	of the mit on touch company in the c
Your certification and NMOCD approval of this application/closure does otherwise endanger public health or the environment. Nor does it relieve	the operator of its responsibility for compliance with	s of the pit of tank contaminate ground water or any other federal, state, or local laws and/or
rulations.		
Approval:	Accepted for reco	ord
Printed Name/Title	SignatureNMOCD	Date: 1ΔN 1 4 2008

# **Closure Report**

Prepared for EOG Resources

Meramec A 4 Fee #1H API # 30-015-35380 Eddy County, NM

Prepared by

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768 Phone (432) 366-0043 Fax (432) 366-0884

# Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768 Phone (432) 366-0043 Fax (432) 366-0884

December 26, 2007

New Mexico Oil Conservation Division Mr. Mike Bratcher 1301 West Grand Ave. Artesia, New Mexico 88210

Re: Drilling Pit Closure of EOG Resources – Meramec A4 Fee #1H

UL 'A' Sec. 4 T16S R25E Eddy County, NM

API # 30-015-35380

Mr. Mike Bratcher,

Elke Environmental was contracted by EOG Resources to complete the closure of the Meramec A4 Fee #1H drilling pit. As per the C-144 filed and signed by Mike Bratcher on 11-8-07 a burial pit was constructed and lined with 12 mil liner. The drilling mud was mixed with Elke Environmental Solidification Product at a 20(mud): 1(product) ratio and placed in the burial pit. The burial pit was capped with a 20 mil impervious liner then backfilled with clean native soil. 5 bottom points were analyzed and all points met NMOCD standards. The drilling pit was then backfilled with clean native soil and contoured to the surrounding area. If you have any questions about the enclosed report please contact me at the office.

Logan Anderson

Sincerely,

## **EOG** Resources

Meramec A4 Fee #1H Plat Map 100' 32° 57' 70.9" N 32° 57' 71.1" N 32° 57' 71.5" N 32° 57' 68.8" N 104° 28' 98.0" W 104° 28' 98.0" W 104° 28' 97.8" W 104° 28' 97.8" W TP5 ● TP4 TP2 ● 75' Burial Pit 20' TP1• **TP3** • 32° 57' 68.7" N 32° 57' 70.9" N 32° 57' 71.1" N 32° 57' 71.6" N 104° 28' 96.3" W 104° 28' 96.3" W 104° 28' 96.2" W 104° 28' 96.3" W 60'

**■** Wellhead

# Elke Environmental, Inc. P.O. Box 14167 Odessa, TX 79768

# Field Analytical Report Form

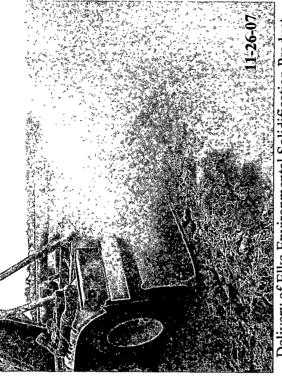
lient EOG Reso	ources		<del></del>	Analyst	Jason Jessu	p
te Meramec A	4 Fee #1H		, , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·		
Sample ID	Date	Depth	TPH / PPM	CI / PPM	PID / PPM	GPS
TP1	11-28-07	12'		211	9.1	32° 57' 69.4" N 104° 28' 96.4" W
TP2	11-28-07	12'		272	6.3	32° 57' 69.4" N 104° 28' 97.6" W
TP3	11-28-07	12'		276	13.9	32° 57' 71.2" N 104° 28' 96.4" W
TP4	11-28-07	12'		290	11.5	32° 57' 71.1" N 104° 28' 97.2" W
TP5	11-28-07	12'	`	269	7.9	32° 57' 70.3" N 104° 28' 97.6" W
·						
						AND SERVICE OF THE SE
,						
	· · · · · · · · · · · · · · · · · · ·					,
				,		

**Analyst Notes** 

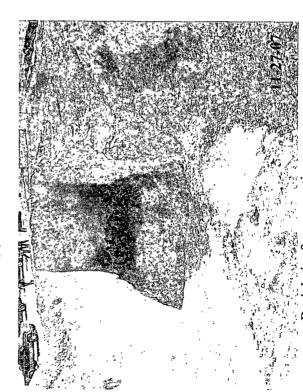
# EOG Resources - Meramec A 4 Fee #11



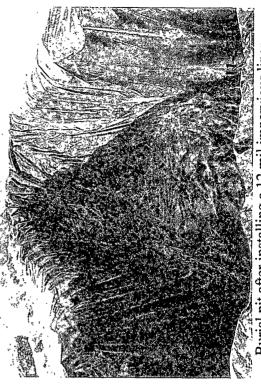
Drilling pit before closure.



Delivery of Elke Environmental Solidification Product.



Burial pit after excavation.



Burial pit after installing a 12 mil impervious liner.

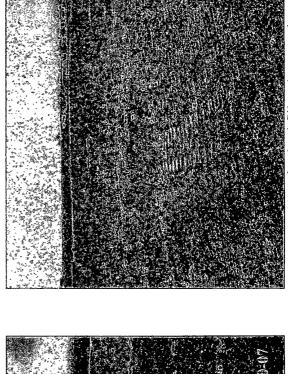
EOG Resources – Meramec A 4 Fee #1H



Mixing Elke Solidification Product with drilling mud.



20 mil impervious cap on the burial pit.



Site after backfill and contouring.

Site after backfill and contouring.

# **Analytical Report 293827**

for

Elke Environmental, Inc.

Project Manager: Logan Anderson
EOG Resouces

04-DEC-07



12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

Texas certification numbers: Houston, TX T104704215

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America Midland - Corpus Christi - Atlanta



04-DEC-07

Project Manager: Logan Anderson Elke Environmental, Inc. 4817 Andrews Hwy P.O. Box 14167 Odessa, tx 79768 Odessa, TX 79762

Reference: XENCO Report No: 293827

**EOG Resouces** 

Project Address: Meramec A4 FEE # 1H

#### Logan Anderson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 293827. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 293827 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully

Brent Barron, II

Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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# **Sample Cross Reference 293827**

#### Elke Environmental, Inc., Odessa, TX

#### **EOG Resouces**

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
TP #1 @ 12'	S	Nov-28-07 00:00	12 ft	293827-001
TP #2 @ 12'	S	Nov-28-07 00:00	12	293827-002
TP #3 @ 14'	S	Nov-28-07 00:00	12	293827-003
TP #4 @ 12'	S	Nov-28-07 00:00	12	293827-004
TP #5 @ 12'	S	Nov-28-07 00:00	12 ft	293827-005



# Certificate of Analis Summary 293827

#### Elke Environmental, Inc., Odessa, TX Project Name: EOG Resouces

Project Id:

Contact: Logan Anderson

Project Location: Meramec A4 FEE # 1H

Date Received in Lab: Fri Nov-30-07 04:21 pm

Report Date: 04-DEC-07

Project Manager: Brent Barron, II

								I toject min	MECT.	Dient Darron,		 
	Lab Id:	293827-0	001	293827-0	002	293827-0	03	293827-0	004	293827-0	05	
Anglinia Baguastad	Field Id:	TP #1 @	12'	TP #2 @	12'	TP #3 @	14'	TP #4 @	12'	TP #5 @	12'	
Analysis Requested	Depth:	12 ft		12		12		12		12 ft		
,	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Nov-28-07	00:00	Nov-28-07	00:00	Nov-28-07	00:00	Nov-28-07	00:00	Nov-28-07	00:00	
Percent Moisture	Extracted:			1								
1 ciccut Mosture	Analyzed:	Dec-03-07	14:27	Dec-03-07 1	14:27	Dec-03-07	14:27	Dec-03-07	14:27	Dec-03-07 1	4:27	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	
Percent Moisture		9,80	1.00	16.1	1.00	14.3	1.00	7.68	1.00	12.7	1.00	
TPH by SW8015 Mod	Extracted:	Dec-04-07	11:05	Dec-03-07 1	15:25	Dec-03-07	15:25	Dec-03-07	15:25	Dec-03-07 1	5:25	
11 11 by 5 W 5013 W 50	Analyzed:	Dec-04-07	14:51	Dec-03-07 1	19:40	Dec-03-07 2	20:07	Dec-03-07	20:34	Dec-03-07 2	1:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	 
C6-C12 Gasoline Range Hydrocarbons		ND	16.6	ND	17.9	ND	17.5	, ND	16.2	ND	17.2	
C12-C28 Diesel Range Hydrocarbons		ND	16.6	ND	17.9	ND	17.5	ND	16.2	ND	17.2	
C28-C35 Oil Range Hydrocarbons		ND	16.6	ND	17.9	ND	17.5	ND	16.2	ND	17.2	
Total TPH		· ND		ND		ND		ND		ND		
Total Chloride by EPA 325.3	Extracted:											
10mi Choime by El A 343.3	Analyzed:	Dec-01-07	13:30	Dec-01-07 1	3:30	Dec-01-07 1	3:30	Dec-01-07	3:30	Dec-01-07 1	3:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	,
Chloride		85.1	5.00	42.5	5.00	170	5.00	170	5.00	85.1	5.00	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Version 1 006

Odessa Laboratory Director

# XENCO Laboratories

#### **Flagging Criteria**

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix/chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte.

  The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- \* Outside XENCO'S scope of NELAC Accreditation

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# Form 2 - Surrogate Recoveries

**Project Name: EOG Resouces** 

Work Order #: 293827

Project ID:

Lab Batch #: 709696

Sample: 293827-002 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SU	RROGATE R	ECOVERY	STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	55.2	50.0	110	70-135	

Lab Batch #: 709696

Sample: 293827-003 / SMP

Batch:

Matrix: Soil

Units: mg/kg  TPH by SW8015 Mod  Analytes	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod	Amount Found [A]	True Amount · [B]	Recovery %R	Control Limits %R	Flags		
Analytes		}	[D]	ļ			
1-Chlorooctane	94.4	100	94	70-135			
o-Terphenyl	51.6	50.0	103	70-135			

Lab Batch #: 709696

Sample: 293827-004 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SU	RROGATE R	ECOVERY	STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes 1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	57.2	50.0	114	70-135	

Lab Batch #: 709696

Sample: 293827-005 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SU	RROGATE F	ECOVERY	STUDY	
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount {B}	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	, 101	70-135	
o-Terphenyl	55.1	50.0	, 110	70-135	

Lab Batch #: 709696

Sample: 502114-1-BKS / BKS

Batch: 1

Matrix: Solid

Units: mg/kg	SU	RROGATE F	RECOVERY	STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	, '	ł	[D]	}	
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	59.6	50.0	119	70-135	

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B
All results are based on MDL and validated for QC purposes.

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Form 2 - Surrogate Recoveries

**Project Name: EOG Resouces** 

Work Order #: 293827

Project ID:

Lab Batch #: 709696

Sample: 502114-1-BLK / BLK

Batch:

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1-Chlorooctane	106	100	106	70-135			
o-Terphenyl	58.7	50.0	117	70-135			

Lab Batch #: 709696

Sample: 502114-1-BSD / BSD

Batch:

Matrix: Solid

Units: mg/kg	SU	RROGATE R	ECOVERY	STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes		` '	[D]		
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	52.3	50.0	105	70-135	

Lab Batch #: 709717

Sample: 293827-001 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
Analytes 1-Chlorooctane	103	100	103	70-135			
o-Terphenyl	55.3	50.0	111	70-135			

Lab Batch #: 709717

Sample: 502142-1-BKS / BKS

Batch: Matrix: Solid

Units: mg/kg	SU	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctane	601	100	601	70-135	*				
o-Terphenyl	288	50.0	576	70-135	*				

Lab Batch #: 709717

Sample: 502142-1-BLK / BLK

Batch:

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane	521	100	521	70-135	*				
o-Terphenyl	285	50.0	570	70-135	*				

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Form 2 - Surrogate Recoveries

**Project Name: EOG Resouces** 

Work Order #: 293827

Project ID:

Lab Batch #: 709717

**Sample:** 502142-1-BSD / BSD

Batch:

Matrix: Solid

Units: mg/kg	SU	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctane	599	100	599	70-135	*				
o-Terphenyl .	288	50.0	576	70-135	*				

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution Surrogate Recovery [D] = 100 \* A / B
All results are based on MDL and validated for QC purposes.



# **Blank Spike Recovery**

**Project Name: EOG Resouces** 

Work Order #: 293827

Project ID:

Lab Batch #: 709561

Sample: 709561-1-BKS

Result

[A]

ND

Matrix: Solid

Date Analyzed: 12/01/2007

**Date Prepared:** 12/01/2007

100

Analyst: IRO

Reporting Units:	mg/kg	Ba	tch #: 1	BLANK /B	LANK SPI	KE REC	COVERY	STUDY
Total	Chloride by EPA 325.3		Blank	Spike	Blank	Blank	Control	

**Analytes** Chloride

Added Spike Spike Limits Flags [B] Result %R %R [C] [D]

96

75-125

95.7

Blank Spike Recovery [D] = 100\*[C]/[B]
All results are based on MDL and validated for QC purposes.



#### **BS/BSD Recoveries**

Project Name: EOG Resouces

Work Order #: 293827

Analyst: ASA

**Date Prepared:** 12/03/2007

Project ID:

Date Analyzed: 12/03/2007

Lab Batch ID: 709696

Sample: 502114-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	<b>(E)</b>	Result [F]	[G]				
C6-C12 Gasoline Range Hydrocarbons	ND	1000	830	83	1000	768	77	8	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	813	81	1000	755	76	7	70-135	35	

Analyst: ASA

Date Prepared: 12/04/2007

Date Analyzed: 12/04/2007

. Matrix: Solid

Lab Batch ID: 709717

Sample: 502142-1-BKS

Batch #: 1

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result (F)	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[-]	(C)	1-1	[25]	1203000 [2]	(0,				l
C6-C12 Gasoline Range Hydrocarbons	ND	1000	4360	436	- 1000	4140	414	5	70-135	35	Н
C12-C28 Diesel Range Hydrocarbons	ND	1000	4290	429	1000	4030	403	6	70-135	35	Н

Relative Percent Difference RPD = 200\*|(D-F)/(D+F)|Blank Spike Recovery [D] = 100\*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]
All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries

**Project Name: EOG Resouces** 

Work Order # 293827

Project ID:

Lab Batch ID: 709561

QC-Sample ID: 293827-004 S

Batch #:

Matrix: Soil

Date Analyzed: 12/01/2007

Date Prepared: 12/01/2007

Analyst: IRO

Dan audina Tinida

Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Total Chloride by EPA 325.3	Parent Sample	Spike	Spiked Sample Result	Sample	- 4	Duplicate Spiked Sample	-	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride	170	2000	2170	100	2000	2170	100	0	75-125	30	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B Relative Percent Difference RPD = 200\*(D-G)/(D+G) Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



# Sample Duplicate Recovery

**Project Name: EOG Resouces** 

Work Order #: 293827

Lab Batch #: 709659

Project ID:

Date Analyzed: 12/03/2007

**Date Prepared:** 12/03/2007

1

Analyst: IRO

QC- Sample ID: 293827-001 D

Batch #:

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

Reporting Omis. 70	SAMPLE	SAMPLE / SAMPLE DUPLICATE RECOVERY								
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag					
Analyte		[B]								
Percent Moisture	9.80	9.91	1	20						

Spike Relative Difference RPD 200 \* | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes.

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

beginning closure and 24 HOURS PRIOR to obtaining samples. Samples are to be obtained from pit area and analyses submitted to OCD prior to back-filling.

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

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

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

NOV 08 2007

Form C-144

June 1, 2004

# Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒ Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

		OCD-ARTESIA				
	432-6863600 e-mail address: <u>Bgr</u>	igry@msn.com				
Address: P O Box 2267 Midland, TX 79702						
Facility or well name: Meramec A4 Fee #1H API #: 30-015-35380 U/L or Qtr/Qtr A Sec 4 T 16S R						
	Longitude	NAD: 1927 🗍 1983 🗍				
Surface Owner: Federal  State  Private  Indian						
Pit San	Below-grade tank					
Type: Drilling   Production   Disposal	Volume:bbl Type of fluid:					
Workover    Emergency	Construction material:					
Lined 🖾 Unlined 🗌	Double-walled, with leak detection? Yes If	not, explain why not.				
Liner type: Synthetic Thickness 12 mil Clay						
Pit Volume 10300 bbl						
Depth to ground water (vertical distance from bottom of pit to seasonal	Less than 50 feet	(20 points) XXX				
high water elevation of ground water.)	50 feet or more, but less than 100 feet	(10 points)				
Mg. Hatts tro-tailer of Broadile Hatterly	100 feet or more	( 0 points)				
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)				
•	No	( 0 points) XXX				
water source, or less than 1000 feet from all other water sources.)	1					
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)				
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points) XXX				
	1000 feet or more	( 0 points)				
	Ranking Score (Total Points)	30 Points				
If this is a pit closure: (1) Attach a diagram of the facility showing the pit	's relationship to other equipment and tanks (2) Inc	dicate disposal location: (check the opsite box if				
your are burying in place) onsite 🛛 offsite 🔲 If offsite, name of facility_						
remediation start date and end date. (4) Groundwater encountered: No						
(5) Attach soil sample results and a diagram of sample locations and excavi	•	it. and anavir oality to leaves.				
		Landa Joseph Communication of the Communication				
Additional Comments: A burial pit will be constructed and lined with a I						
Product at a 20 (mud) to 1 (product) ratio to solidify the contents then pla	iced in the burial pit. The burial pit will be capped w	ith a 20 mil impervious liner then the site will be				
Backfilled with clean native soil and contoured to the area.						
Solidification						
NMOCD Artesia will be given 48 hrs. notice.						
I hereby certify that the information above is true and complete to the bes	st of my knowledge and belief. I further certify the	at the above-described pit or below-grade tank				
has been/will be constructed or closed according to NMOCD guideling						
Date: 11-8-07	Simular All					
Printed Name/Title Logan Anderson - Agent	Signature Civilian					
Your certification and NMOCD approval of this application/closure does otherwise endanger public health or the environment. Nor does it relieve regulations.						
Approval:	Signature Signed By Mile Be	BIOU A A COO				
NOTIFY OCD 24 HOURS PRIOR to	Signature Signed By W11/4 De	Marie NOV 0 8 2007				
A NOTIFY OCD 44 HOURS I MOUNT IN						