

# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
**Reese Fullerton**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



Americo Energy Resources  
7575 San Felipe Suite 200  
Houston, TX 77063

March 5, 2008

Reference:

East Shugart	Unit 015	30-015-05687	F-34-18s-31e	Eddy County	New Mexico
East Shugart	Unit 042	30-015-27670	A-34-18s-31e	Eddy County	New Mexico
East Shugart	Unit 056	30-015-27949	G-35-18s-31e	Eddy County	New Mexico
East Shugart	Unit 072	30-015-28203	L-35-18s-31e	Eddy County	New Mexico
East Shugart	Unit 075	30-015-28204	K-35-18s-31e	Eddy County	New Mexico

Operator,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of remediation work plan proposals (plans) for remediation of releases of produced fluids that have occurred at the above referenced well sites. The plans were formulated and submitted to OCD by your agent, Safety & Environmental Solutions, Inc.

The plans are approved with the following stipulations:

- Notify OCD 24 hours prior to commencement of remediation activities.
- Notify OCD 24 hours prior to obtaining samples where analyses of samples obtained are to be submitted to OCD.
- Notify OCD 24 hours prior to installation of any liner or barrier.
- Representative samples are to be obtained from backfill material and analyses submitted to OCD.
- A Final Report C-141 and closure report for each site is to be submitted to OCD upon satisfactory completion of remedial activities. Work is to be completed and closure documents submitted to OCD not later than May 5, 2008.
- Like approval by BLM.

Please be advised that this approval does not relieve Americo Energy Resources of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, this approval does not relieve Americo Energy Resources of responsibility for compliance with any other federal, state, local laws and/or regulations.

If I can be of assistance, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Mike Bratcher".

Mike Bratcher  
NMOCD District 2  
1301 W. Grand Ave.  
Artesia, NM 88210  
(575) 748-1283 Ext.108  
[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)

2RP-122

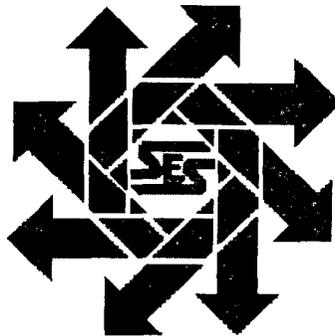


MAR 04 2008  
OCD-ARTESIA

**Americo Energy Resources  
East Shugart Unit #72  
Work Plan  
Unit L, Section 35, Township 18S, Range 31E  
Eddy County, New Mexico**

**February 25, 2008**

2RP-122



**Prepared for:**

**Americo Energy Resources  
7575 San Felipe, Ste 200  
Houston, TX 77063**

**By:**

***Safety & Environmental Solutions, Inc.  
703 E. Clinton Suite 102  
Hobbs, New Mexico 88240  
(575) 397-0510***

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**I. Company Contacts**

NAME	Company	Telephone	E-mail
Oscar Nosrati	Americo Energy	713-984-9700	Oscar.nosrati@americoenergy.com
Brian Cuellar	SESI	505-390-7066	bcuellar@sesi-nm.com

**II. Background**

Safety and Environmental Solutions, Inc. (SESI) was engaged by Americo Energy Resources to perform cleanup services at the East Shugart Unit #75 spill site. This is an injection well located in Unit L, Section 35, Township 18S, range 31E. On October 5, 2007 a trunk line failure caused the released of approximately 505 barrels of produce water. A vacuum truck was utilized to recover 240 barrels of fluid.

**III. Surface and Ground Water**

The closest groundwater of record is in Section 34 of the same Range and Township. The depth of water in this well was 261' in March of 1994.

**IV. Work Performed**

On January 24, 2008 samples were retrieved unitizing a hand auger in three areas of the spill. Grab samples were taken at the surface and at depths of 1' and 2' below ground surface. Field analysis was performed on each of the samples to determine the chloride concentrations. The results of the analysis were as follows:

Sample point	Chlorides
AH #1 Surface	656
AH #1 2'bgs	552
AH #2 Surface	772
AH #2 1 1/2'bgs	1,372
AH #3 Surface	1,372
AH #3 1'bgs	152

On February 12, 2008 a test trench was in installed in the area of Auger Hole #2 to further delineate the site. Grab samples were collected from the 4' and 6' depths. Field analysis was performed on each sample to determine the chloride concentrations. The analysis results were as follows:

Depth	TT#2
4'	476 ppm
6'	236 ppm

Confirmation samples were retrieved from TT #2 at 6'. This sample was transported under Chain of Custody to Argon Laboratory of Hobbs, New Mexico for analysis. The result of the analysis was as follows:

Date	Sample	Cl'
------	--------	-----

	ID	mg/kg
2/12/08	TT #2 6'	180

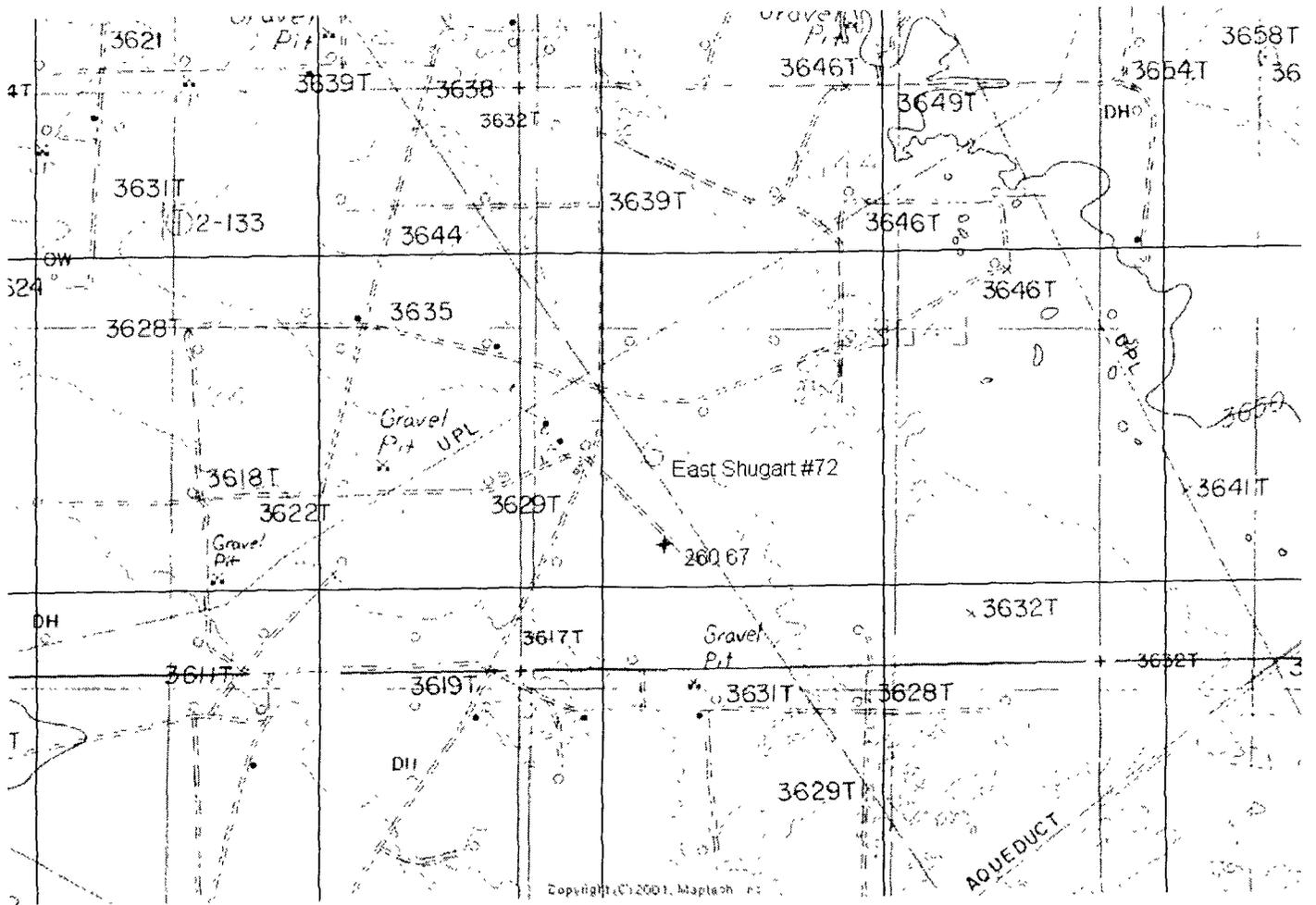
**V. Closure Plan**

It is requested that the top 4' be excavated from the spill area. The most highly contaminated soils will be transported to an NMOC approved facility for disposal. An like amount of clean soils from offsite will be blended with the remaining soils in order to bring the chloride concentrations to an acceptable level that will allow re-vegetation. The excavated area will then be backfilled with the blended soils. The area will be contoured to natural grade and seeded.

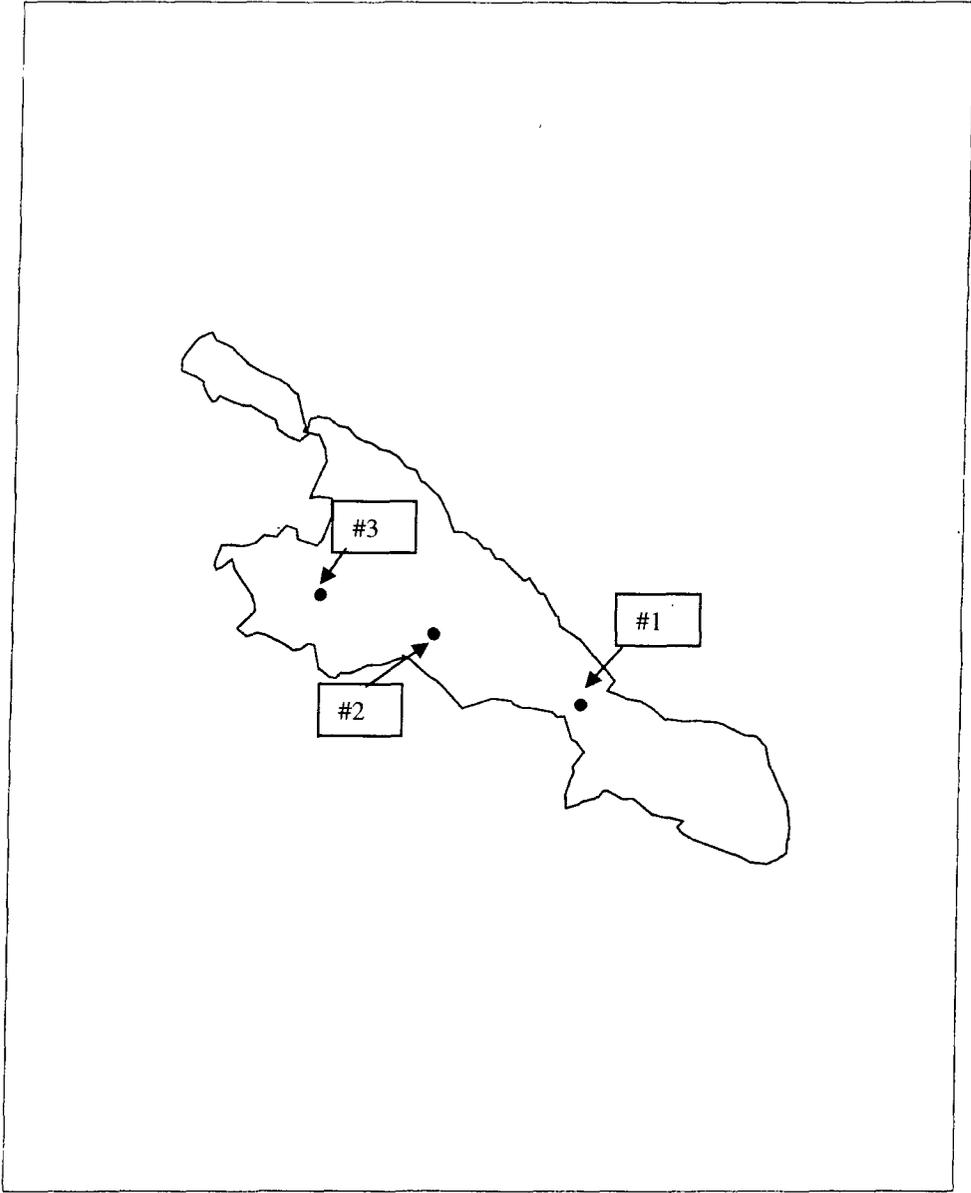
**VI. Figures & Appendices**

- Figure 1 – Vicinity Map
- Figure 2 – Site Plan
- Appendix A – C-141
- Appendix B – Analytical Results
- Appendix C – Site Photos

**Figure 1**  
**Vicinity Map**

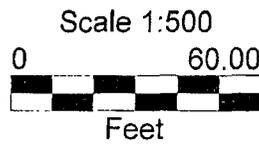


## **Figure 2 Site Plan**



## Americo East Shugart #72

Lat/Long  
WGS 1984



Site Plan.ssf  
1/30/2008  
GPS Pathfinder® Office  
 **Trimble**

**Appendix A**  
**C-141**

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**

**OPERATOR**

Initial Report  Final Report

Name of Company: Americo Energy Resources	Contact: Don Gray
Address: 7575 San Filipe Ste 200, Houston Tx 77063	Telephone No.: 713-984-9700
Facility Name: ESU # 72 -	Facility Type: Injection water line
Surface Owner: BLM	Mineral Owner: BLM
Lease No.: LC-03473	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	35	18-S	31-E	1650'	South	1150'	West	Eddy

Latitude 32.701350 Longitude 103.844550

**NATURE OF RELEASE**

Type of Release: Produced water and skim oil	Volume of Release: ~505 bbl	Volume Recovered: 240 bbl
Source of Release: 2' Trunk Line	Date and Hour of Occurrence: 10/5/07	Date and Hour of Discovery: 10/5/07
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Failure of the trunk line. The line was closed in.		
Describe Area Affected and Cleanup Action Taken.* The spill affected approximately 4,732 sq.ft. SESI has been contacted to delineate and compose workplan		
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: <i>Jerri Lee</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jerri Lee	Approved by District Supervisor:	
Title: Consultant/SESI	Approval Date:	Expiration Date:
E-mail Address: office@sesi-nm.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 1-31-08	Phone: 575-397-0510	

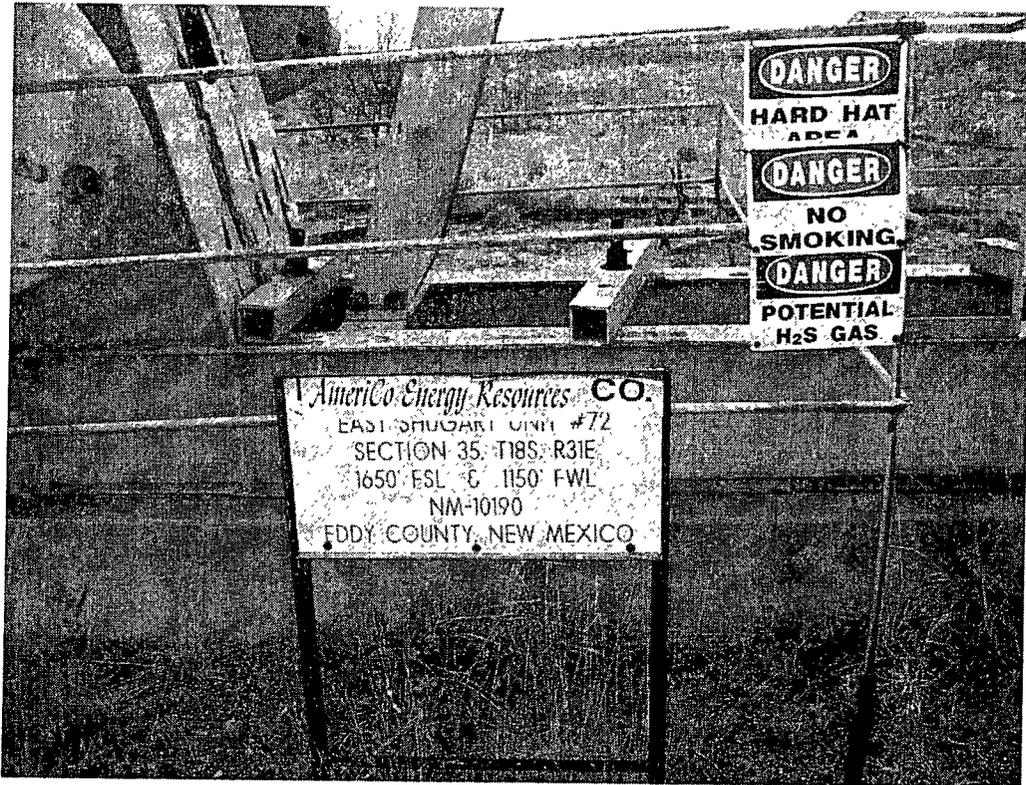
\* Attach Additional Sheets If Necessary

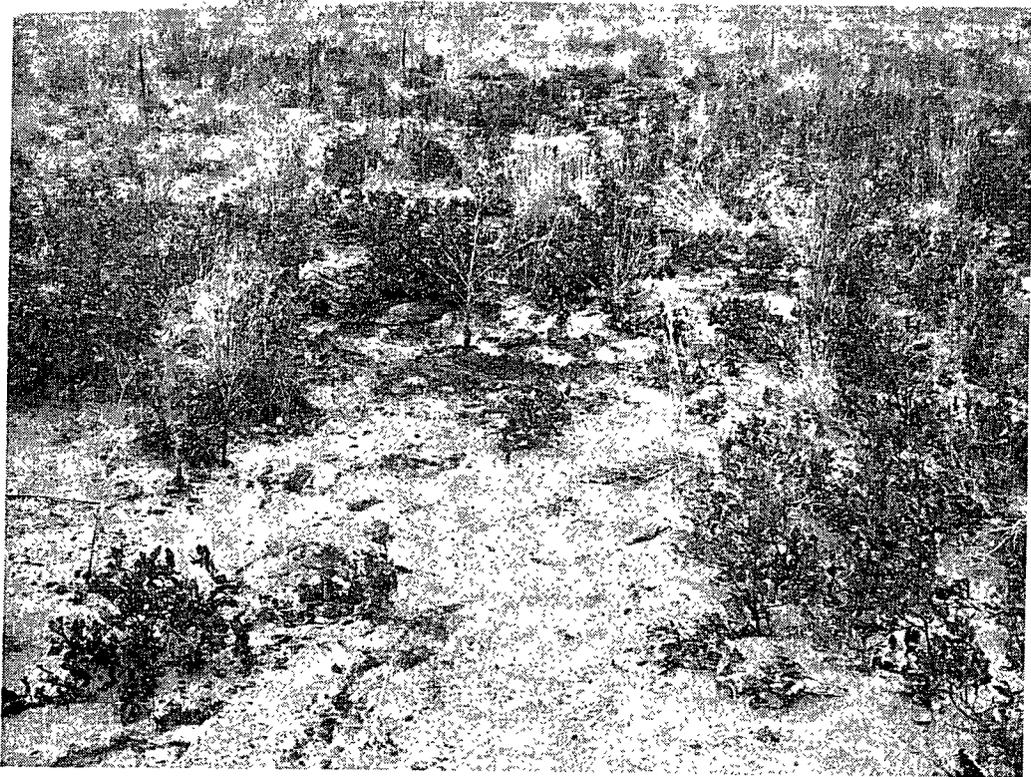
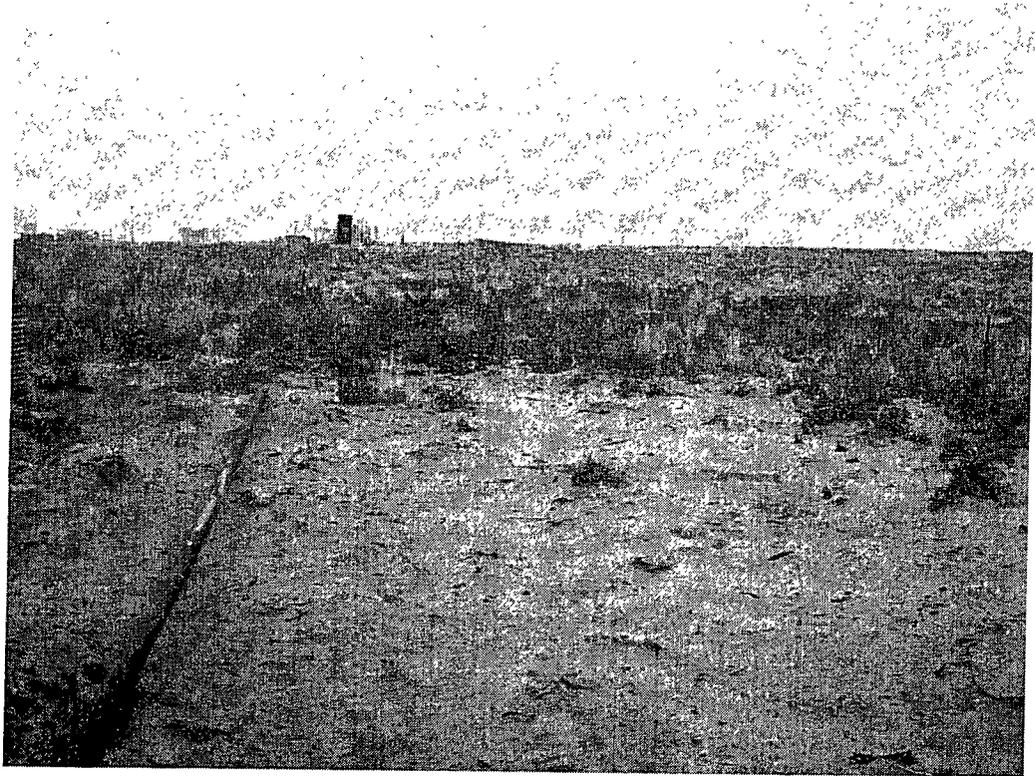
# **Appendix B**

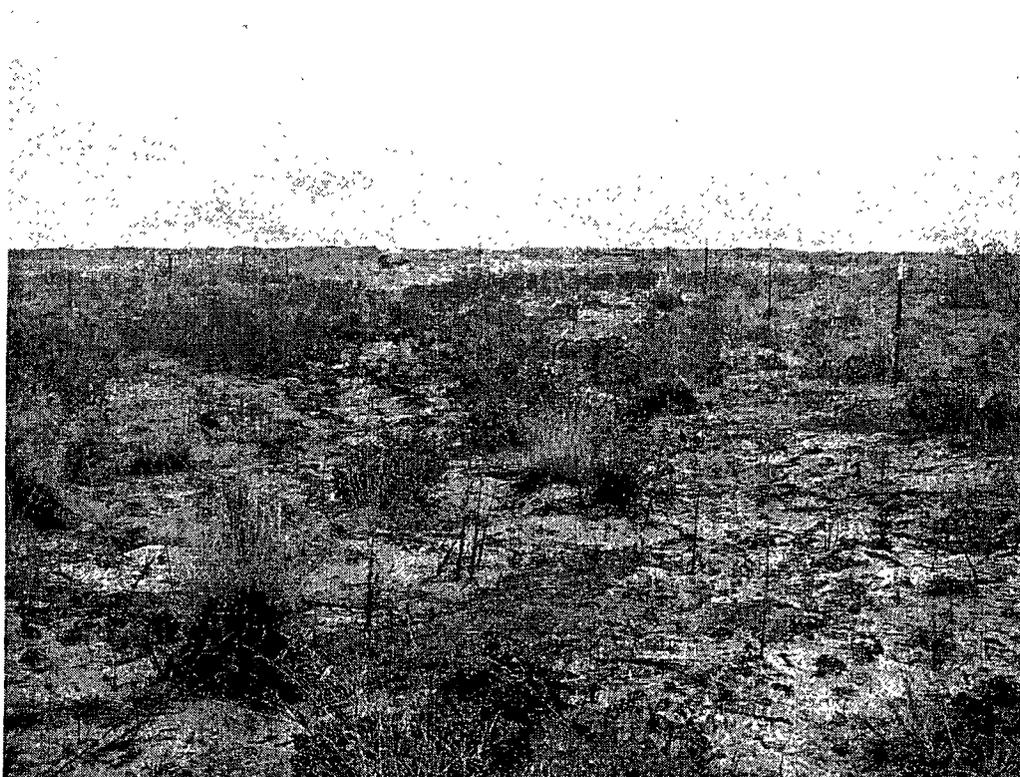
## **Analytical Results**

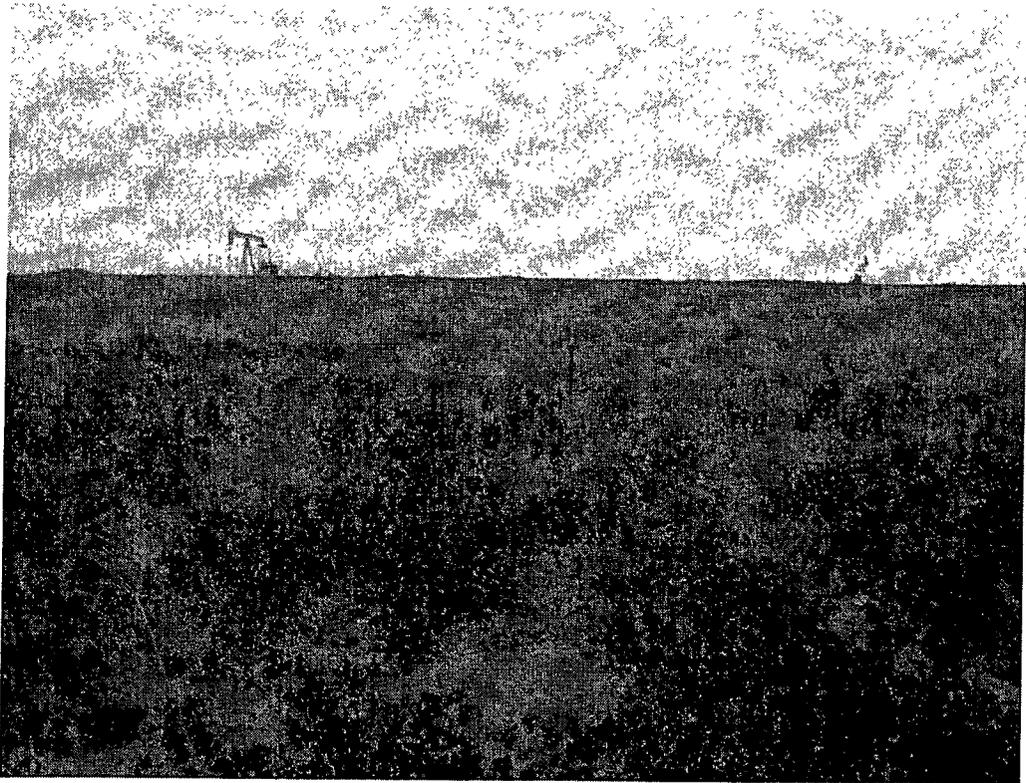
# **Appendix C**

## **Site Photos**









# argon laboratories

18 February 2008

Bob Allen  
Safety & Environmental Solutions, Inc.  
703 E. Clinton Ave  
Hobbs, NM 88240

RE: East Shugart Unit #72 Project Data

Enclosed are the results for sample(s) received on 02/12/08 15:50 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,



Hiram Cueto  
Lab Manager

# Argon Labs

2126 W. Mainland Ave. • P.O. Box 107 • Hobbs, NM 88240

(505) 397-0205 • (505) 397-0209 • Fax: (505) 397-0211

## CHAIN OF CUSTODY

1067

0802008

Project No: <b>AME-08-004</b> Project Title: <b>Americo East Shugart #72</b> Location: <b>Loco Hills, NM</b>					Client: <b>SLEEF</b> Address: <b>703 W Clinton</b> <b>Hobbs, NM 88240</b> Contact: Phone: <b>(575) 397-0510</b> Fax: <b>(575) 397-4366</b> Bill To:				
Sampler's Name: <b># Srac Kincaid</b> (print) Sampler's Signature: 					Client Address: <b>Same</b>				
TURN AROUND TIME RUSH <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> other <input type="checkbox"/> Standard (5 days) <input checked="" type="checkbox"/>					ANALYSIS <b>chlorides</b> <b>TPH 418.1</b>				
Sample ID: <b>SP#1</b> <b>JT #16' 2/12/08 0940</b>					COMMENTS: <b>-01</b>				
Date: <b>2/12/08</b> Time: <b>1550</b>					Relinquished By: <b>Janet Ellison</b> Date: <b>2/12/08</b> Time: <b>15:50</b>				
Relinquished By: _____ Date: _____ Time: _____					Relinquished By: _____ Date: _____ Time: _____				
Relinquished By: _____ Date: _____ Time: _____					Relinquished By: _____ Date: _____ Time: _____				

ANMGO2-2444

# Argon Laboratories Sample Receipt Checklist

Client Name: Safety & Environmental Solutions, Inc. Date & Time Received: 02/12/08 15:50

Project Name: Americo East Shugart Client Project Number: AME-08-004

Received By: JE Matrix: Water  Soil  Sludge

Sample Carrier: Client  Laboratory  Fed Ex  UPS  Other

Argon Labs Project Number: C802008

Shipper Container in good condition? Samples received in proper containers? Yes  No

N/A  Yes  No  Samples received intact? Yes  No

Samples received under refrigeration? Yes  No  Sufficient sample volume for requested tests? Yes  No

Chain of custody present? Yes  No  Samples received within holding time? Yes  No

Chain of Custody signed by all parties? Yes  No  Do samples contain proper preservative?  
N/A  Yes  No

Chain of Custody matches all sample labels? Do VOA vials contain zero headspace?  
Yes  No  (None submitted ) Yes  No

**ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW**

Date Client Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_

Contacted By: \_\_\_\_\_ Subject: \_\_\_\_\_

Comments:

Action Taken:

**ADDITIONAL TEST(S) REQUEST / OTHER**

Contacted By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Call Received By: \_\_\_\_\_

Comments:



Safety & Environmental Solutions, Inc  
703 E Clinton Ave  
Hobbs, NM 88240

Project Number: AME-08-004  
Project Name East Shugart Unit #72  
Project Manager: Bob Allen



Work Order No..  
C802008

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TT #1 6' bgs	C802008-01	Soil	02/12/08 09.40	02/12/08 15.50

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Approved By  
Argon Laboratories, Inc.

---

QC Officer



Safety & Environmental Solutions, Inc  
703 E Clinton Ave  
Hobbs, NM 88240

Project Number: AME-08-004  
Project Name: East Shugart Unit #72  
Project Manager: Bob Allen

Work Order No  
C802008

**ANALYSIS REPORT**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	----------	--------	-------

TT #1 6' bgs (C802008-01) Soil Sampled: 02/12/08 09:40 Received: 02/12/08 15:50

Chloride	180	40	mg/kg	4	02/13/08	EPA 300.0	
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Approved By  
Argon Laboratories, Inc

QC Officer



Safety & Environmental Solutions, Inc.	Project Number: AME-08-004	Work Order No. C802008
703 E Clinton Ave	Project Name: East Shugart Unit #72	
Hobbs, NM 88240	Project Manager: Bob Allen	

**BTEX EPA Method 8021B**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	----------	--------	-------

TT #1 6' bgs (C802008-01) Soil Sampled: 02/12/08 09:40 Received: 02/12/08 15:50

Benzene	ND	0.005	mg/kg	1	02/13/08	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr Rec.:		108 %			"	"	

Approved By  
Argon Laboratories, Inc.

QC Officer



Safety & Environmental Solutions, Inc	Project Number. AME-08-004	Work Order No.: C802008
703 E Clinton Ave	Project Name. East Shugart Unit #72	
Hobbs, NM 88240	Project Manager. Bob Allen	

**Total Recoverable Petroleum Hydrocarbons with Silica Gel Clean-Up by IR Spectrometry**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
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TT #1 6' bgs (C802008-01) Soil Sampled: 02/12/08 09:40 Received: 02/12/08 15:50

Total Petroleum Hydrocarbons	290	20	mg/kg	1	02/13/08	EPA 418.1	
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Approved By  
Argon Laboratories, Inc.

QC Officer

Safety & Environmental Solutions, Inc.

703 E. Clinton Ave  
Hobbs, NM 88240

Project Number AME-08-004

Project Name East Shugart Unit #72

Project Manager Bob Allen

Work Order No.

C802008

**ANALYSIS REPORT - Quality Control**

**Argon Laboratories**

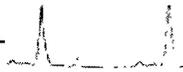
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
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**Batch CR00020 - General Prep**

<b>Blank (CR00020-BLK1)</b>				Prepared & Analyzed. 02/13/08				
Chloride	ND	10	mg/kg					
<b>LCS (CR00020-BS1)</b>				Prepared & Analyzed. 02/13/08				
Chloride	5.95		mg/kg	5.00		119		
<b>LCS Dup (CR00020-BSD1)</b>				Prepared & Analyzed. 02/13/08				
Chloride	5.99		mg/kg	5.00		120	0.7	
<b>Matrix Spike (CR00020-MS1)</b>				Prepared & Analyzed. 02/13/08				
Chloride	5.25		mg/kg	5.00		105		
<b>Matrix Spike Dup (CR00020-MSD1)</b>				Prepared & Analyzed. 02/13/08				
Chloride	5.30		mg/kg	5.00		106	0.9	

Approved By  
Argon Laboratories, Inc

QC Officer



Safety & Environmental Solutions, Inc	Project Number AME-08-004	Work Order No : C802008
703 E Clinton Ave	Project Name East Shugart Unit #72	
Hobbs, NM 88240	Project Manager: Bob Allen	

**BTEX EPA Method 8021B - Quality Control**

**Argon Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
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**Batch CR00024 - EPA 5030B**

**Blank (CR00024-BLK1)**

Prepared & Analyzed: 02/13/08

<i>Surrogate a,a,u-Trifluorotoluene</i>	0.0485		mg/kg	0.0500		97		
Benzene	ND	0.005	"					
Toluene	ND	0.005	"					
Ethylbenzene	ND	0.005	"					
Xylenes (total)	ND	0.010	"					

**LCS (CR00024-BS1)**

Prepared & Analyzed: 02/13/08

Toluene	0.052		mg/kg	0.0500		104		
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**LCS Dup (CR00024-BSD1)**

Prepared & Analyzed: 02/13/08

Toluene	0.055		mg/kg	0.0500		110	6	
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**Matrix Spike (CR00024-MS1)**

Prepared & Analyzed: 02/13/08

Benzene	0.044		mg/kg	0.0500		88		
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**Matrix Spike Dup (CR00024-MSD1)**

Prepared & Analyzed: 02/13/08

Benzene	0.045		mg/kg	0.0500		90	2	
---------	-------	--	-------	--------	--	----	---	--

Approved By  
Argon Laboratories, Inc

QC Officer



Safety & Environmental Solutions, Inc.	Project Number: AME-08-004	
703 E Clinton Ave	Project Name: East Shugart Unit #72	Work Order No
Hobbs, NM 88240	Project Manager: Bob Allen	C802008

**Total Recoverable Petroleum Hydrocarbons with Silica Gel Clean-Up by IR Spectrometry - Quality Control**

**Argon Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
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**Batch CR00023 - EPA 3550B**

**Blank (CR00023-BLK1)**

Prepared & Analyzed 02/13/08

Total Petroleum Hydrocarbons	ND	20	mg/kg					
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**LCS (CR00023-BS1)**

Prepared & Analyzed 02/13/08

Total Petroleum Hydrocarbons	52.5		mg/kg	50.0		105		
------------------------------	------	--	-------	------	--	-----	--	--

**LCS Dup (CR00023-BSD1)**

Prepared & Analyzed 02/13/08

Total Petroleum Hydrocarbons	57.0		mg/kg	50.0		114	8	
------------------------------	------	--	-------	------	--	-----	---	--

**Matrix Spike (CR00023-MS1)**

Prepared & Analyzed 02/13/08

Total Petroleum Hydrocarbons	48.1		mg/kg	50.0		96		
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**Matrix Spike Dup (CR00023-MSD1)**

Prepared & Analyzed 02/13/08

Total Petroleum Hydrocarbons	47.0		mg/kg	50.0		94	2	
------------------------------	------	--	-------	------	--	----	---	--

Approved By  
Argon Laboratories, Inc.

QC Officer



Safety & Environmental Solutions, Inc.

703 E. Clinton Ave

Hobbs, NM 88240

Project Number: AME-08-004

Project Name: East Shugart Unit #72

Project Manager: Bob Allen

Work Order No.

C802008

**Notes and Definitions**

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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Approved By  
Argon Laboratories, Inc.

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QC Officer