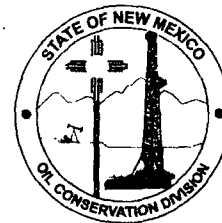


# New Mexico Energy, Minerals and Natural Resources Department

**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,

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-147



MAR 04 2008

OCD-ARTESIA

**Americo Energy Resources**

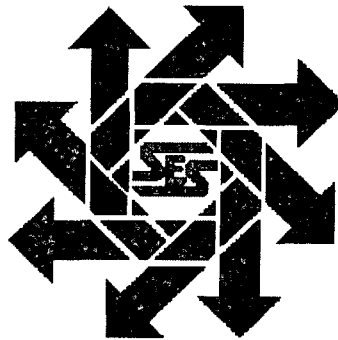
**East Shugart Unit #75**

**Work Plan**

**Unit A, Section 35, Township 18S, Range 31E**

**Eddy County, New Mexico**

**February 25, 2008**



**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***

*2RP-147*

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## I. Company Contacts

NAME	Company	Telephone	E-mail
Oscar Nosrati	Americo Energy	713-984-9700	<a href="mailto:Oscar.nosrati@americoenergy.com">Oscar.nosrati@americoenergy.com</a>
Brian Cuellar	SESI	505-390-7066	<a href="mailto:bcuellar@sesi-nm.com">bcuellar@sesi-nm.com</a>

## 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 A, Section 35, Township 18S, range 31E. On December 14, 2007 the strainer valve near the wellhead failed causing a release of approximately 350 barrels of produced water. A vacuum truck was utilized to recover 200 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 25, 2008 samples were retrieved utilizing 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:

Depth	AH#1	AH#2	AH#3
Surface	9676 ppm	<124 ppm	9676 ppm
1'	456 ppm	1596 ppm	5540 ppm
2'	1708 ppm	5540 ppm	--

On February 1, 2008 three test trenches were installed to further delineate the site. Grab samples were collected from each of the three trenches. Field analysis was performed on each sample to determine the chloride concentrations. The analysis results were as follows:

Depth	TT#1	TT#2	TT#3
2'	--	--	2104 ppm
3'	2260 ppm	5032 ppm	--
4'	--	--	1300 ppm
5'	5032 ppm	5463 ppm	--
6'	--	--	2432 ppm
7'	2432 ppm	1392 ppm	--
8'	--	--	2260 ppm
9'	2260 ppm	--	--
10'	1300 ppm	--	4236 ppm
11'	--	1048 ppm	--
12'	--	--	2432 ppm

On February 6, 2008 two boreholes were installed via auger rig to further delineate the site. Grab samples were collected at Borehole #1 & Borehole #3 in intervals of 5'. Fields analysis was performed to determine the chloride concentrations. The analysis results were as follows:

Depth	BH#1	BH#3
5'	--	--
10'	--	--
15'	<124 ppm	3876 ppm
20'	<124 ppm	416 ppm
25'	--	300 ppm

Confirmation samples were retrieved from Borehole #1 at 15' and Borehole #3 at 25'. These samples were transported under Chain of Custody to Argon Laboratory of Hobbs, New Mexico for analysis. The results of the analysis were as follows:

Date	Sample ID	Cl <sup>-</sup> mg/kg
2/6/08	BH #1 15'	110
2/6/08	BH #3 25'	210

#### 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. A 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 lined with a 20-mil impervious liner and backfilled with the blended soils. The area will be contoured to natural grade and seeded.

#### VI. Figures & Appendices

Figure 1 – Vicinity Map

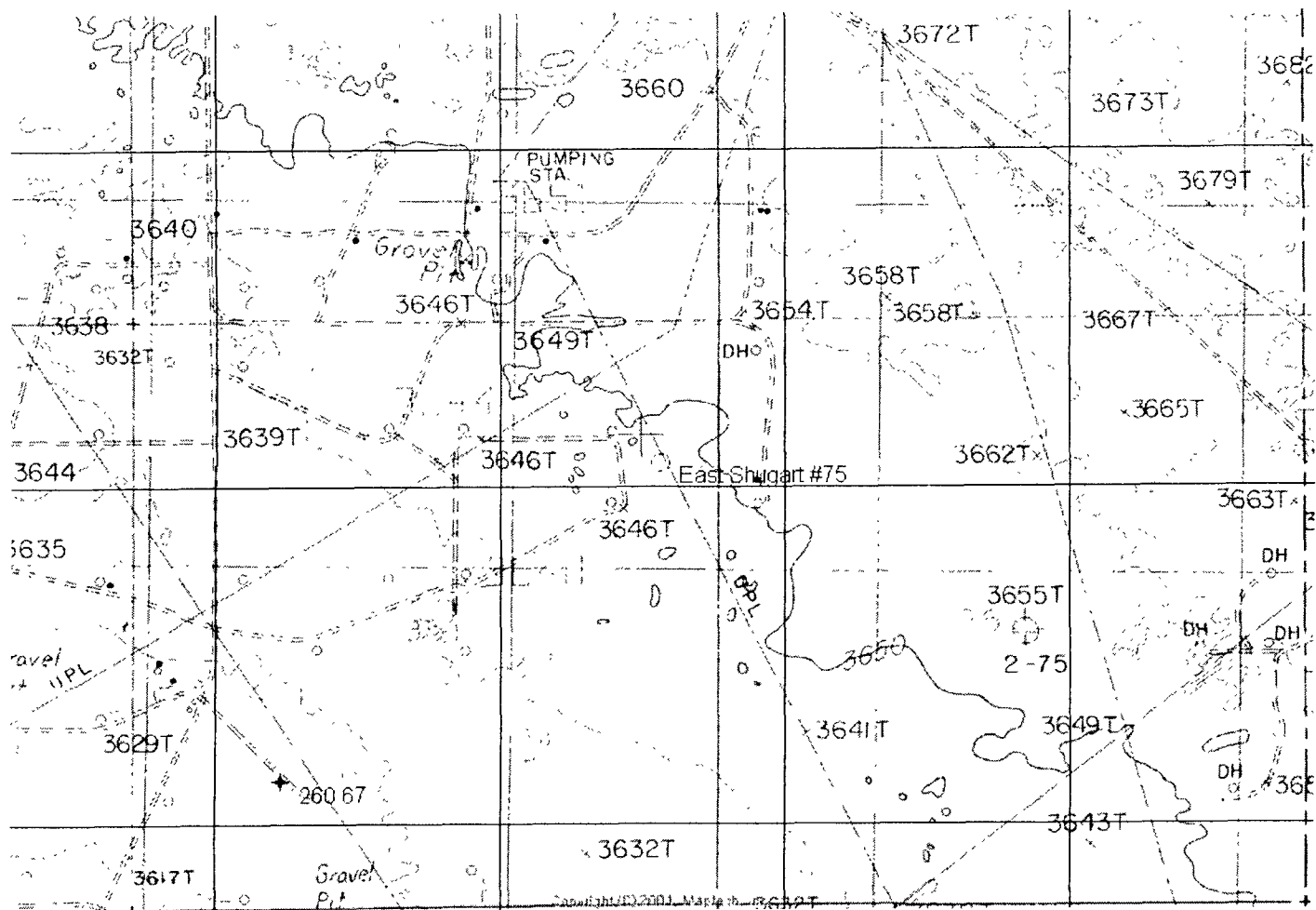
Figure 2 – Site Plan

Appendix A – C-141

Appendix B – Analytical Results

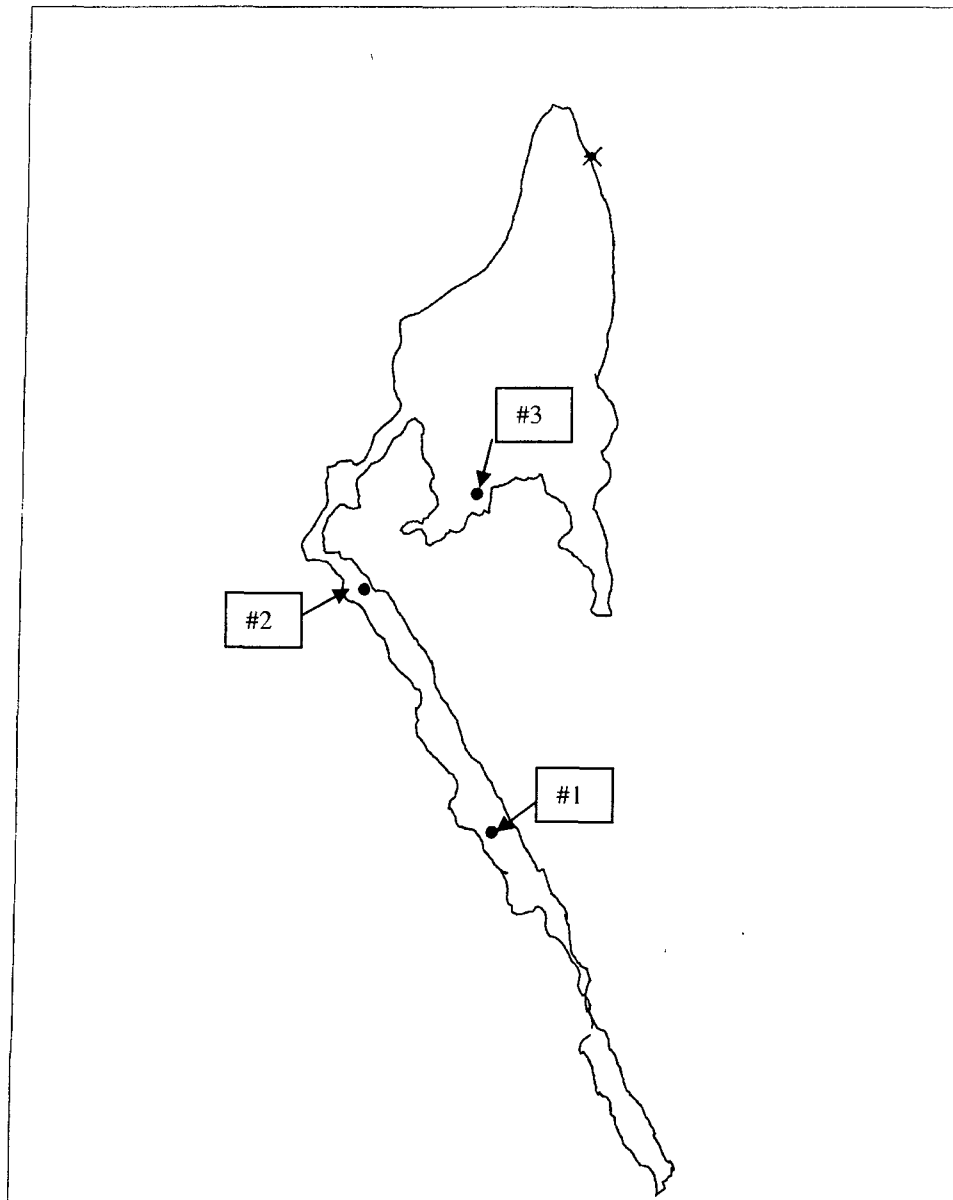
Appendix C – Site Photos

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



## **Figure 2 Site Plan**





## Americo East Shugart #75

Lat/Long  
WGS 1984



Scale 1:1,500  
0 175.0  
Feet

Site Plan.ssf  
1/30/2008  
GPS Pathfinder<sup>®</sup>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

30-015-28204

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Americo Energy Resources, LLC	Contact	Oscar Nosrati
Address	7575 San Felipe, Ste. 200, Houston, TX 77063	Telephone No.	713-984-9700
Facility Name	East Shugart Unit Well #75	Facility Type	Injection Well
Surface Owner	BLM	Mineral Owner	BLM
		Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	35	18 S	31 E	2,560	South	1,350	West	Eddy

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

NATURE OF RELEASE

Type of Release	Produced water with slight oil cut	Volume of Release	350 bbls.	Volume Recovered	200 bbls.
Source of Release	Blown 'Y' strainer valve near injection wellhead	Date and Hour of Occurrence	12/14/2007 2:00 am	Date and Hour of Discovery	12/14/2007 12 noon
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES To Whom?	Mike Bratcher		
By Whom?	Larry Wood	Date and Hour	12/14/2007 3:00 pm		
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 *					
Describe Cause of Problem and Remedial Action Taken. *					
The drain/bleed valve and its nipple blew off the injection line 'Y' strainer. The valve and nipple have been replaced.					
Describe Area Affected and Cleanup Action Taken. *					
An approximate area of 75' by 400' was affected by the release. A vacuum truck was brought onsite to remove recoverable liquids. Soil will be cleaned and tilled.					
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>Jeffrey Alan Keese</i>		OIL CONSERVATION DIVISION			
Printed Name: Jeffrey Alan Keese		Approved by District Supervisor <i>[Signature]</i>			
Title: Senior Engineer		Approval Date: JAN 07 2008			
E-mail Address: alan.keese@americoenergy.com		Conditions of Approval:			
Date: 12/21/2007 Phone: 713-984-9700		Attached <input type="checkbox"/>			

\* Attach Additional Sheets If Necessary

## **Appendix B**

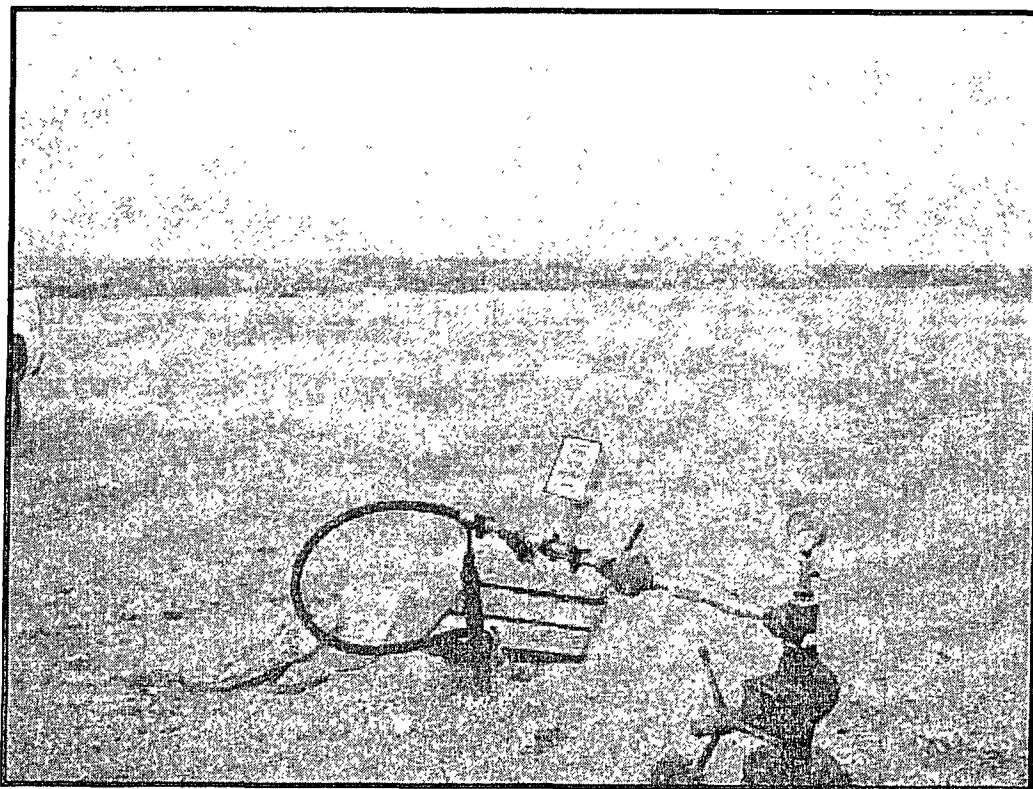
### **Analytical Results**

## **Appendix C**

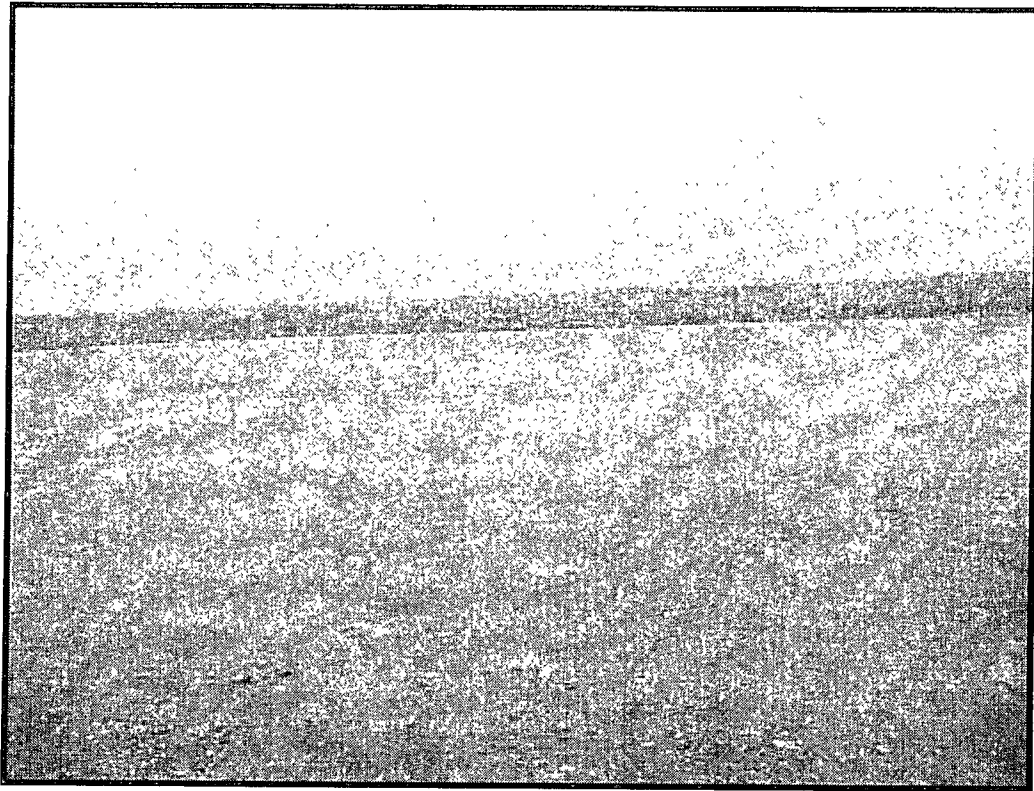
### **Site Photos**



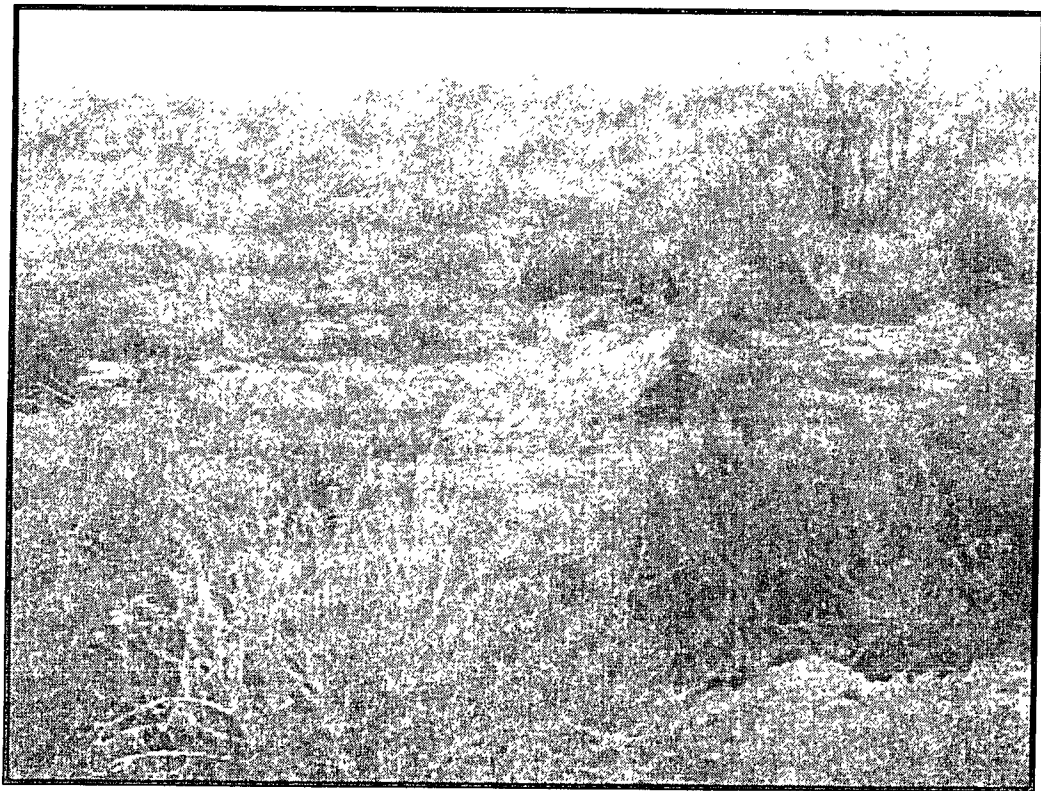
Well sign



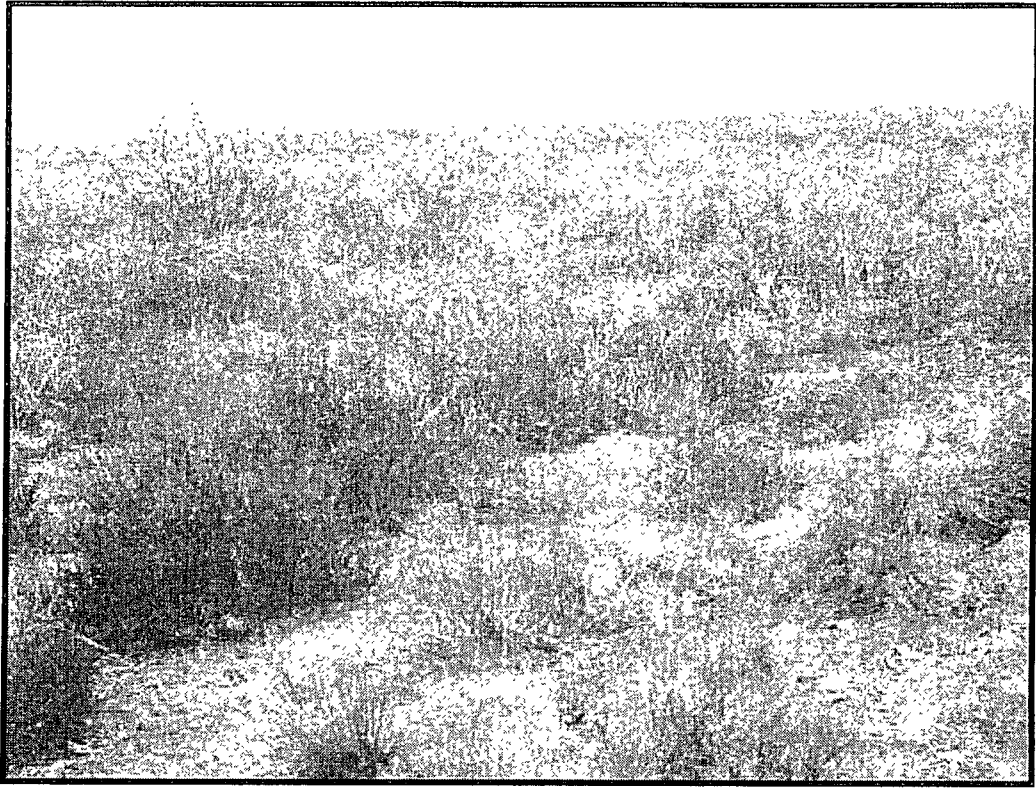
Injector well facing South



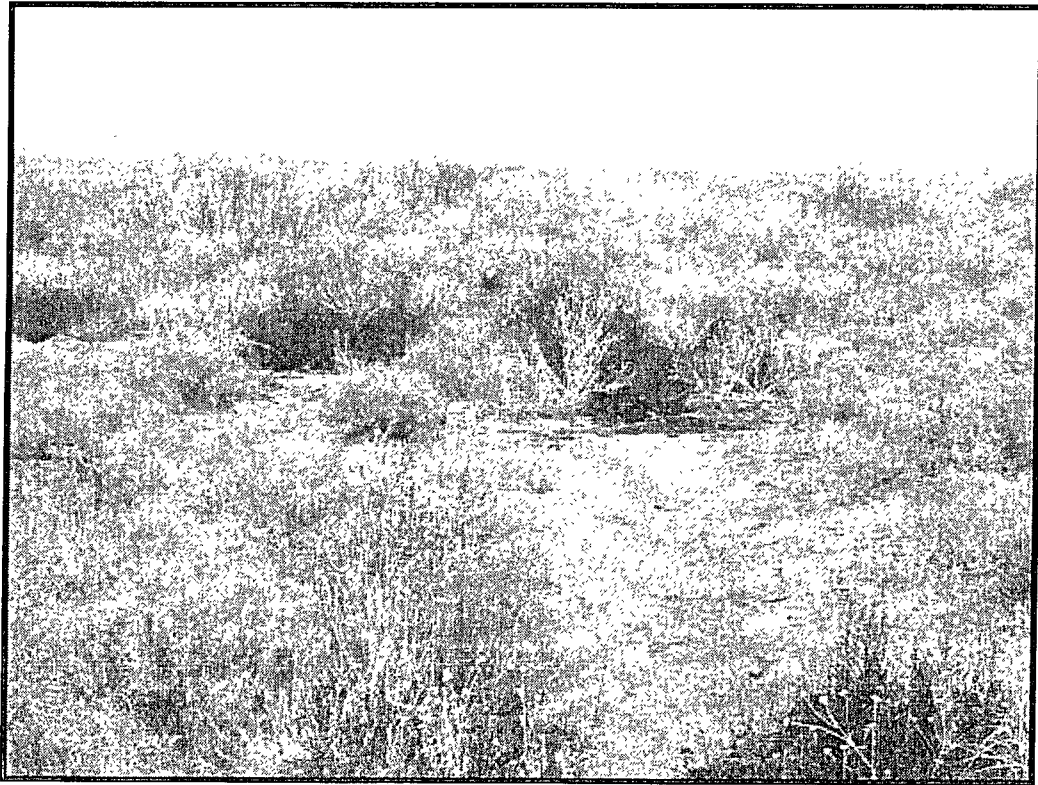
Well pad facing Southeast



Area 1 facing East

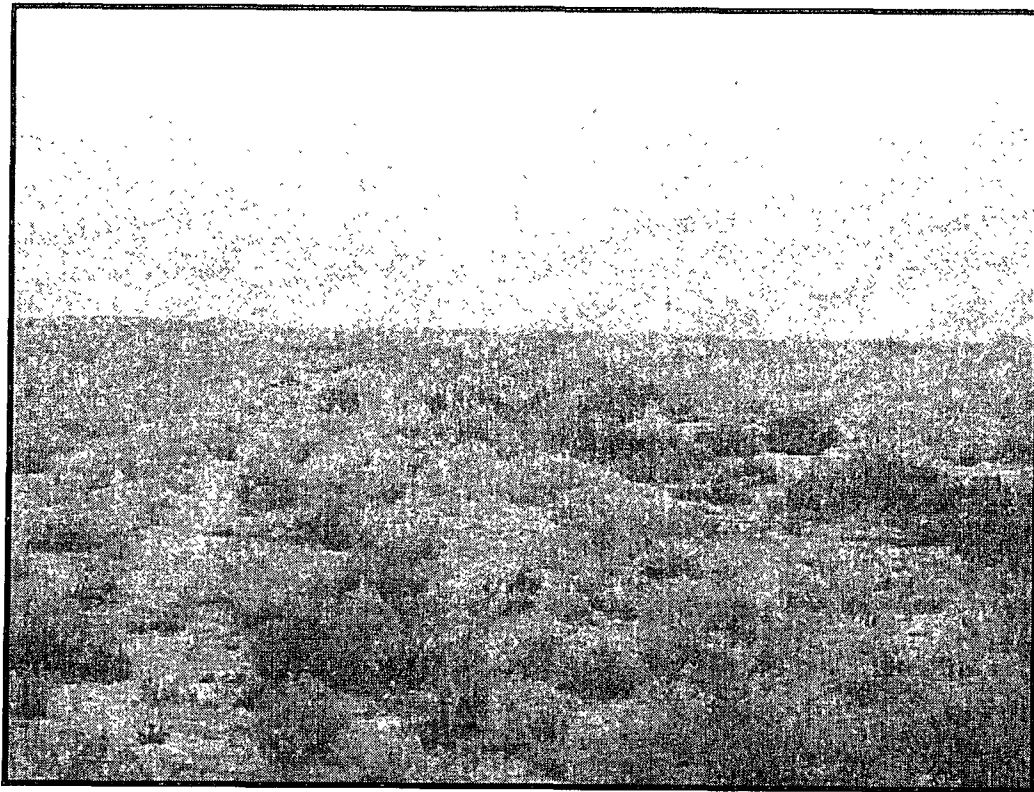


Area 1 facing East



Area 2 facing South

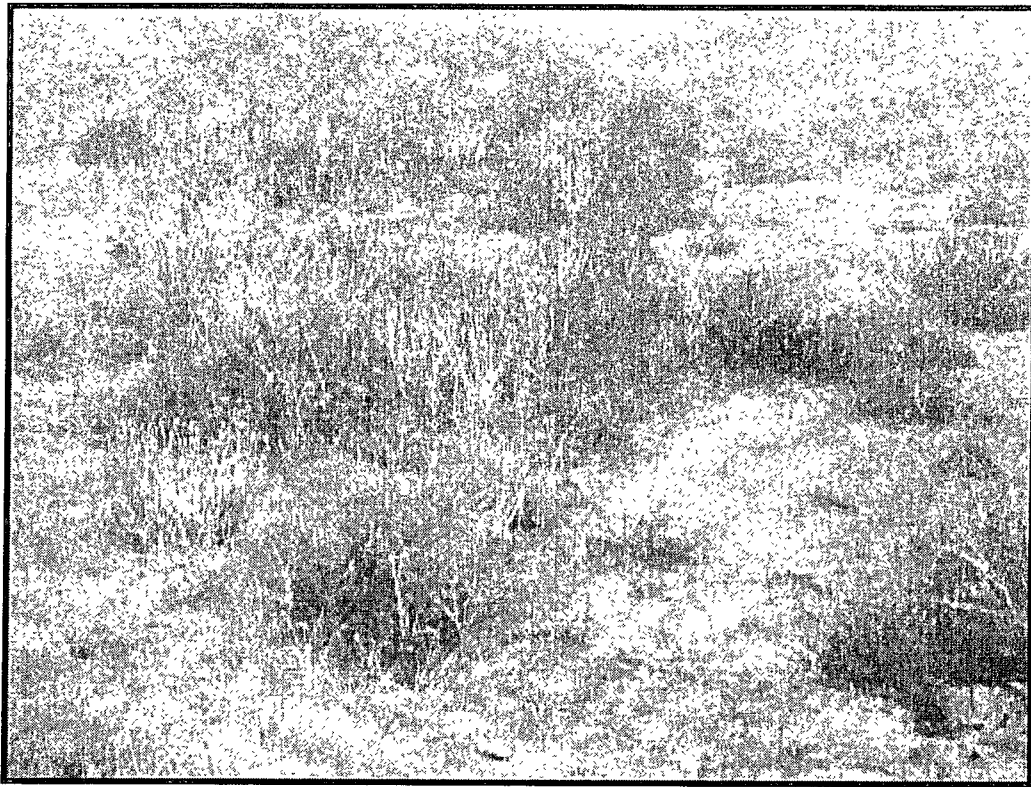




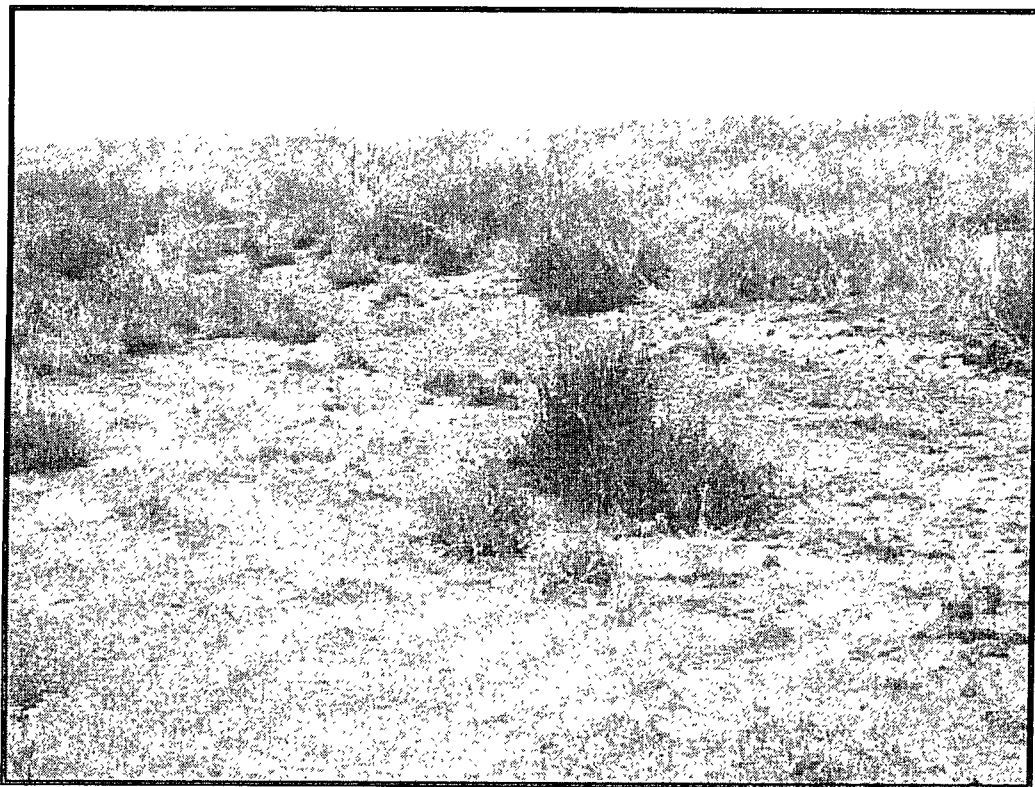
Area 2 facing East



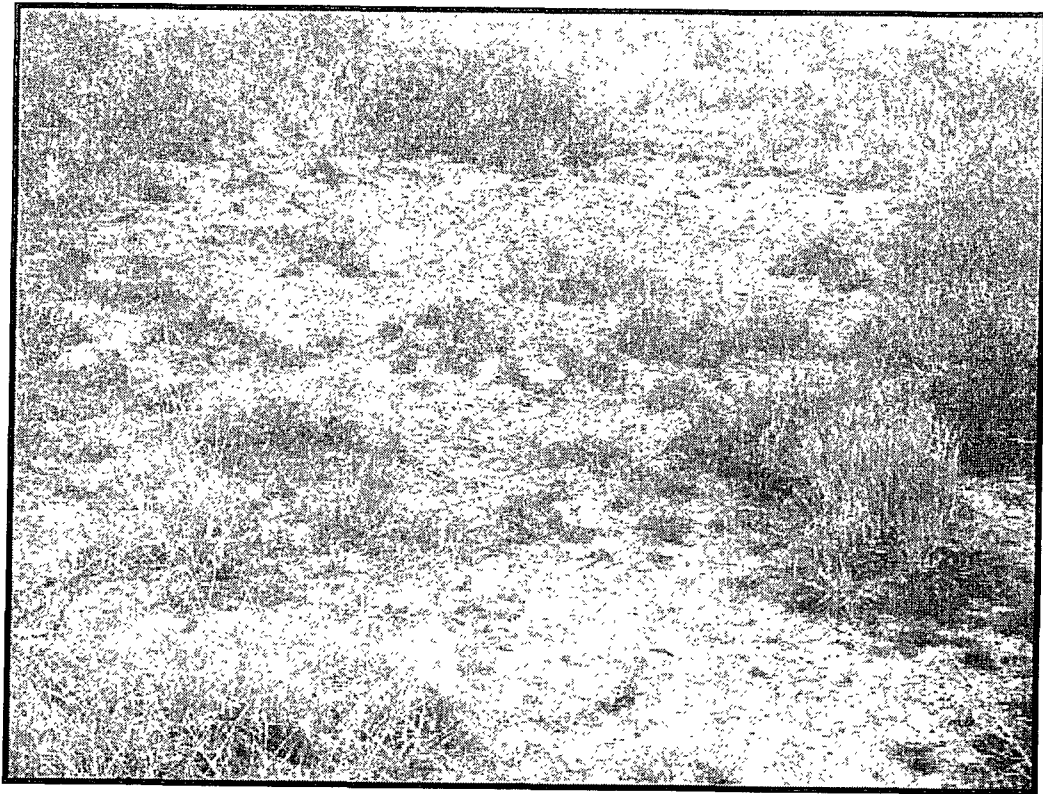
Area 2 facing East



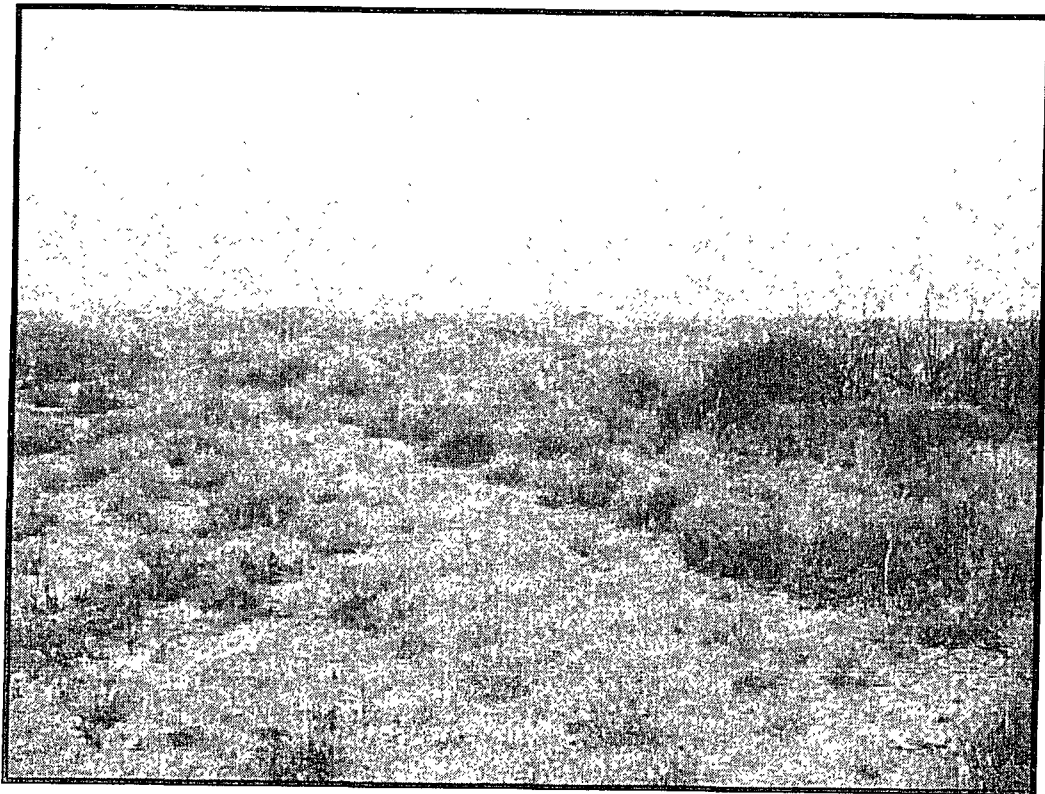
Area 2 facing East



Area 2 facing Southeast



Area 2 facing West



Area 2 facing West

# argon laboratories

11 February 2008

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

RE: East Shugart # 75 Project Data

AME-08-005

Enclosed are the results for sample(s) received on 02/07/08 13:23 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

(505)397-0295 (505)397-0296 [info@argonlabs.com](mailto:info@argonlabs.com)

## 1061

[illegible]

# Argon Laboratories Sample Receipt Checklist

Client Name: Safety & Environmental Solutions, Inc. Date & Time Received: 02/07/08 13:23  
Project Name: East Shugart Unit #15-75 Client Project Number: AME-08-005  
Received By: R.E. Matrix: Water ☐ Soil ☒ Sludge ☐  
Sample Carrier: Client ☒ Laboratory ☐ Fed Ex ☐ UPS ☐ Other ☐  
Argon Labs Project Number: C802005  
Shipper Container in good condition? N/A ☐ Yes ☒ No ☐ Samples received in proper containers? Yes ☒ No ☐  
Samples received under refrigeration? Yes ☒ No ☐ Samples received intact? Yes ☒ No ☐  
Chain of custody present? Yes ☒ No ☐ Sufficient sample volume for requested tests? Yes ☒ No ☐  
Chain of Custody signed by all parties? Yes ☒ No ☐ Samples received within holding time? Yes ☒ No ☐  
Do samples contain proper preservative? N/A ☒ Yes ☐ No ☐  
Chain of Custody matches all sample labels? Yes ☒ No ☐ Do VOA vials contain zero headspace? (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:



# argon laboratories

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

Project Number: AME-08-005  
Project Name: East Shugart # 75  
Project Manager: Bob Allen

Work Order No.:  
C802005

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH #3. 25'	C802005-01	Soil	02/06/08 11:25	02/07/08 13:23
BH #1. 15'	C802005-02	Soil	02/06/08 13:28	02/07/08 13:23

QC Officer Approval

Argon Laboratories, Inc.

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296  
email: info@argonlabs.com

Page 1 of 4

# argon laboratories

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

Project Number: AME-08-005  
Project Name: East Shugart # 75  
Project Manager: Bob Allen

Work Order No.:  
C802005

## Anions by Ion Chromatography - EPA Method 300.0

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
<b>BH #3. 25' (C802005-01) Soil Sampled: 02/06/08 11:25 Received: 02/07/08 13:23</b>							
Chloride	110	10	mg/kg	1	02/09/08	EPA 300.0	
<b>BH #1. 15' (C802005-02) Soil Sampled: 02/06/08 13:28 Received: 02/07/08 13:23</b>							
Chloride	210	10	mg/kg	1	02/09/08	EPA 300.0	

QC Officer Approval

Argon Laboratories, Inc.

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296  
email: info@argonlabs.com

Page 2 of 4



# argon laboratories

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

Project Number: AME-08-005  
Project Name: East Shugart # 75  
Project Manager: Bob Allen

Work Order No.:  
C802005

## Anions by Ion Chromatography - EPA Method 300.0 - Quality Control

### Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
---------	--------	--------------------	-------	----------------	------------------	------	-----	-------

#### Batch CR00019 - General Prep

##### Blank (CR00019-BLK1)

Prepared & Analyzed: 02/09/08

Chloride ND 10 mg/kg

##### LCS (CR00019-BS1)

Prepared & Analyzed: 02/09/08

Chloride 4.42 mg/kg 5.00 88

##### LCS Dup (CR00019-BSD1)

Prepared & Analyzed: 02/09/08

Chloride 4.36 mg/kg 5.00 87 1

##### Matrix Spike (CR00019-MS1)

Prepared & Analyzed: 02/09/08

Chloride 4.21 mg/kg 5.00 84

##### Matrix Spike Dup (CR00019-MSD1)

Prepared & Analyzed: 02/09/08

Chloride 4.58 mg/kg 5.00 92 8

QC Officer Approval

Argon Laboratories, Inc.

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296

email: info@argonlabs.com

Page 3 of 4

# argon laboratories

Safety & Environmental Solutions, Inc.

703 E. Clinton Ave

Hobbs, NM 88240

Project Number: AME-08-005

Project Name: East Shugart # 75

Project Manager: Bob Allen

Work Order No.:

C802005

## 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

QC Officer Approval

Argon Laboratories, Inc.

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296

email: info@argonlabs.com

Page 4 of 4

## 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 ResourcesOil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505Form C-141  
Revised October 10, 2003Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

## Release Notification and Corrective Action

30-015-28204

## OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Americo Energy Resources, LLC	Contact	Oscar Nosrati
Address	7575 San Felipe, Ste 200, Houston, TX 77063	Telephone No	713-984-9700
Facility Name	East Shugart Unit Well #75	Facility Type	Injection Well
Surface Owner	BLM	Mineral Owner	BLM
		Lease No.	

## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	35	18 S	31 E	2,560	South	1,350	West	Eddy

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

## NATURE OF RELEASE

Type of Release	Produced water with slight oil cut	Volume of Release	350 bbls.	Volume Recovered	200 bbls.
Source of Release	Blown 'Y' strainer valve near injection wellhead	Date and Hour of Occurrence	12/14/2007 2:00 am	Date and Hour of Discovery	12/14/2007 12 noon
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES To Whom?	Mike Bratcher		
By Whom?	Larry Wood	Date and Hour	12/14/2007 3:00 pm		
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 \*

Describe Cause of Problem and Remedial Action Taken.\*

The drain/bleed valve and its nipple blew off the injection line 'Y' strainer The valve and nipple have been replaced.

Describe Area Affected and Cleanup Action Taken.\*

An approximate area of 75' by 400' was affected by the release. A vacuum truck was brought onsite to remove recoverable liquids. Soil will be cleaned and tilled.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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>Jeffrey Alan Keese</i>	OIL CONSERVATION DIVISION	
Printed Name: Jeffrey Alan Keese	Approved by District Supervisor: <i>[Signature]</i>	
Title: Senior Engineer	Approval Date: JAN 07 2008	Expiration Date:
E-mail Address: alan.keese@americoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12/21/2007 Phone: 713-984-9700		

\* Attach Additional Sheets If Necessary

PSEB0807333588

2RP-147