

# SITE CLOSURE REQUEST

**Livingston Ridge Station  
NW ¼ of the NW ¼ of Section 6, Township 22 South, Range 32 East  
Lea County, New Mexico  
Latitude: North 32° 25' 35.9"  
Longitude: West 103° 43' 21.3"**

Prepared For:  
Link Energy  
5805 East Highway 80  
Midland, Texas 79701

ETGI Project # LI 2105

Prepared By:  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, New Mexico 88240

Plans - 34053  
facility - fPA C0602431202  
Inspect - epAC0602431319  
incident - nPA C0602431353  
application - pPA C0602431433

April 2004



April 20, 2004

Bureau of Land Management  
ATTN: Mr. Paul Evans  
620 East Greene Street  
Carlsbad, New Mexico 88220

RE: Link Energy Release  
Livingston Ridge Station  
NW $\frac{1}{4}$  of NW $\frac{1}{4}$ , Section 6, Township 22 South, Range 32 East  
Lea County, New Mexico

Dear Mr. Evans:

On behalf of Link Energy (formerly EOTT Energy) Environmental Technology Group, Inc. (ETGI) submits the following request for closure of the Livingston Ridge Station release site located in the NW $\frac{1}{4}$  of NW $\frac{1}{4}$ , Section 6, Township 22 South, Range 32 East. The Bureau of Land Management is the landowner and Link Energy is the surface lessee. For reference, a Site Location Map is attached as Figure 1.

ETGI conducted an emergency response on December 7, 2002 at 11:30 p.m. after receiving a request from Link Energy personnel that a release had occurred at the Livingston Ridge Pump Station due to a mechanical failure of the packing gland on one of the 1700-GASCO pumps. The pump was shutdown by Link Energy personnel and ETGI personnel began the assessment and cleanup of the site. Approximately 100 barrels of crude oil was released within a bermed area and approximately 75 barrels were recovered by a vacuum truck. The recovered crude oil was reintroduced back into the Link Energy pipeline on-site. Soil impacted by the release was excavated utilizing a backhoe and temporarily placed on 40-mil plastic lining on-site. The majority of impacted soil was contained inside the bermed area with a minimal area of impacted soil located along Highway C-29 right-of-way, as depicted on Figure 2, the Site Map.

The New Mexico State Engineer's Office (NMSEO) Water Well Data Base was accessed for information regarding the depth to groundwater in the site area and the existence of registered water wells in the area. No records were found during the database search indicating that the probability of shallow groundwater in the area was low. Based on the NMOCD soil classification system, no points would be assigned to the site as a result of this criterion. The NMSEO Roswell, New Mexico was contacted by telephone to request additional information that was possibly not available on the network database. Their search did not reveal any records of registered water wells in the site area. Based on the NMOCD soil classification system, no points would be assigned to the site as a result of this criterion. Review of topographic maps and area surveillance did not locate any surface water bodies within 1,000 feet of the site. An intermittent stream shown on Figure 1 is approximately 430 feet south of the site. At the time of site activities, no water or moisture was observed in this feature. Based on the NMOCD soil classification system, no points would be assigned to the site as a result of this criterion.

A NMOCD ranking score of <9 is assigned to the site with remedial action levels of:

Benzene	10 ppm
BTEX	50 ppm
TPH	5000 ppm

Upon completion of the excavation activities confirmation samples were collected from the excavation sidewalls and bottom ranging from a depth of eight inches below ground surface (bgs) to two and a half feet bgs. A review of laboratory analytical results generated from analysis of confirmation soil samples (S. Exc. 1, 2 and 3), indicate soil in the excavated areas is below the applicable NMOCD regulatory standards for BTEX and TPH concentrations as shown on Table 1, Concentrations of BTEX and TPH in Soil. Excavated soil was blended and shredded on-site and nitrogen enriched nutrients were added to enhance biodegradation rates and expedite the remediation process. Soil samples were collected from every 250 cubic yards of treated soil following the blending process. Review of the laboratory analytical results generated from analysis of samples collected from treated soil indicated that TPH and BTEX concentrations in stockpiles one and two (1 and 2) exceeded applicable NMOCD regulatory standards upon completion of the first blending procedure. Non-impacted soil obtained on-site was mixed with the impacted soil during a second blending procedure and further enhanced with nitrogen-enriched nutrients. Review of the laboratory analysis of confirmation samples collected following the second blending procedure indicated that TPH and BTEX concentrations in the soil composing these the stockpiles was below applicable NMOCD regulatory standards, Table 1. The treated soil was utilized as backfill material in the excavated areas and contoured to approximate the pre-release site configuration.

ETGI, on behalf of Link Energy, requests that the Livingston Ridge Station release site be considered closed by the NMOCD under New Mexico Title 19 standards.

Sincerely,



Camille Reynolds

Project Manager

ETGI

Hobbs, New Mexico

505-397-4882 office

505-397-4701 fax

505-631-3775 cell

cc: Larry Johnson, NMOCD, Hobbs, NM

Jeff Dann, Link Energy, Houston, TX

Jimmy Bryant, Link Energy, Midland, TX

ETGI, Midland, TX

**Attachments:**

Figures 1, 2 and 3

NMOCD C-141

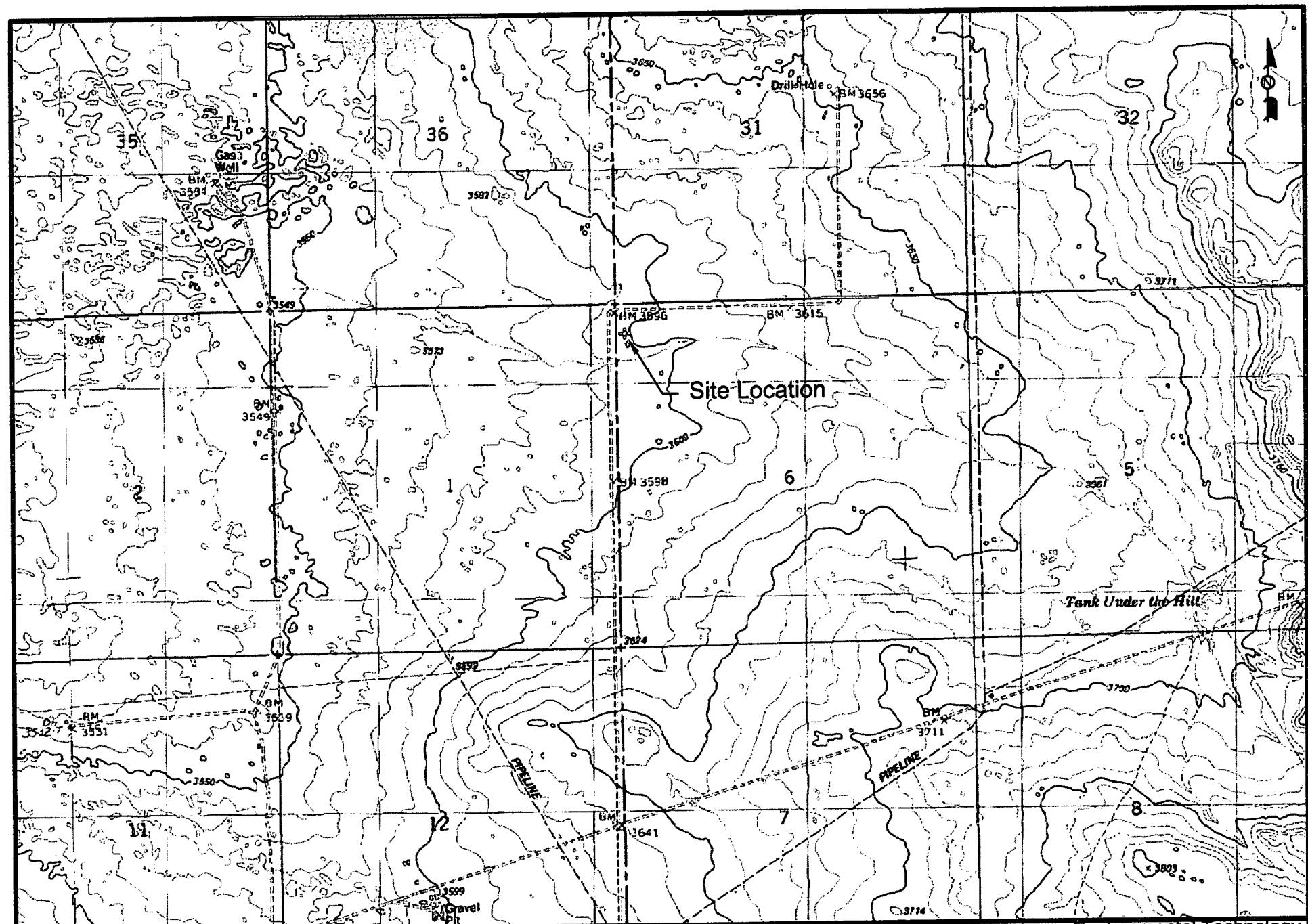
Table 1: Concentrations of BTEX and TPH in Soil

Record of Communication: NMSOE, December 9, 2001

NMOSE Data Base Water Well Search

Copies of Laboratory Reports

## **FIGURES**



NW1/4 NW1/4 Section 6, T22S, R32E

**Legend:**

### Intermittent Stream

2000 1000 0 1000 2000

Distance in Feet

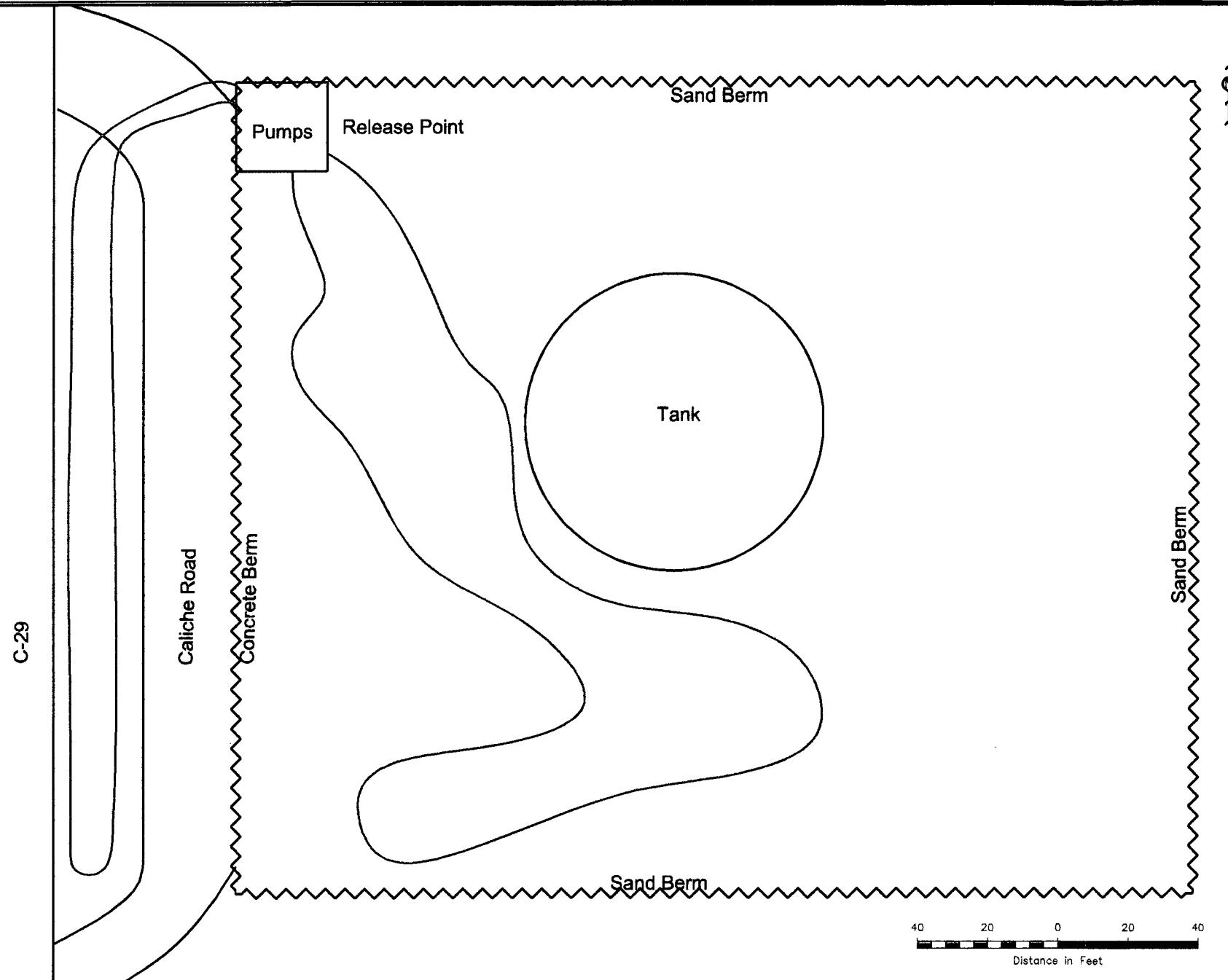
**Figure 1**  
**Site Location Map**

**Link Energy  
Livingston Ridge Station  
Lea County, NM**



## **Environmental Technology Group, Inc.**

Scale: 1" = 2000'	Prep By: JDJ	Checked By: KD
April 26, 2003		
ETGI Project #: LI 2105	Lat. N32° 25' 35.9 Long. W103° 43' 21.3'	



Legend:

- Extent of Surface Stain
- ~~~~ Impoundment Berm

NW1/4 NW1/4 Section 6, T22S, R32E

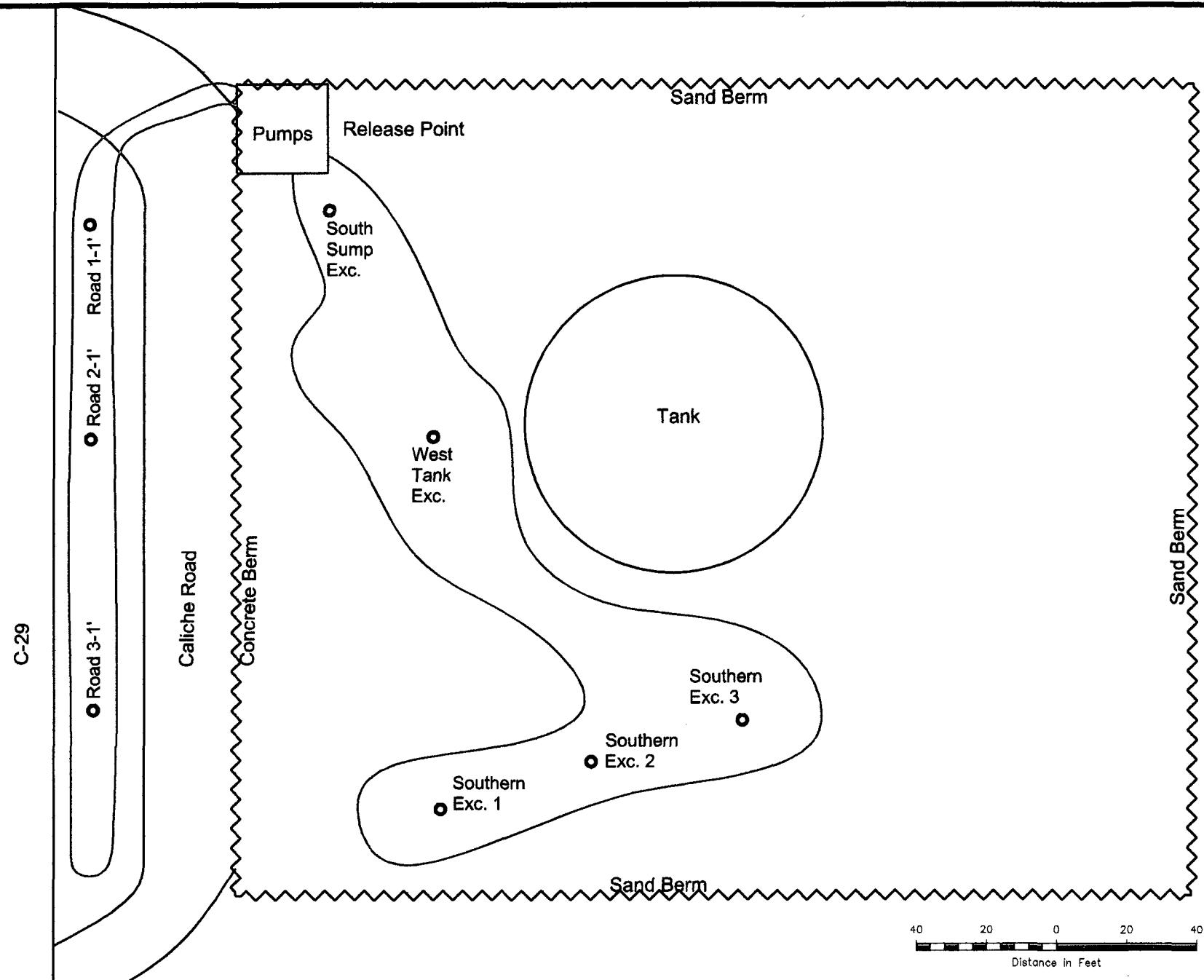
Figure 2  
Site Map

Link Energy  
Livingston Ridge Station  
Lea County, NM



Environmental Technology  
Group, Inc.

Scale: 1" = 40'	Prep By: JDJ	Checked By: KD
April 26, 2003		
ETGI Project #: LI 2105	Lat. N32° 25' 35.9 Long. W103° 43' 21.3"	



**Legend:**

- Extent of Surface Stain
- Sample Point
- Impoundment Berm

NW1/4 NW1/4 Section 6, T22S, R32E

Figure 3  
Sampling Locations

Link Energy  
Livingston Ridge Station  
Lea County, NM

**Environmental Technology Group, Inc.**



Scale: 1" = 40'	Prep By: JDJ	Checked By: KD
April 26, 2003		
ETGI Project #: LI 2105		Lat. N32° 25' 35.9 Long. W103° 43' 21.3"

**NMOCD 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 March 17, 1999

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: EOTT Energy LLC	Contact <input type="checkbox"/> Jimmie Bryant
Address: P. O. Box 1660	Telephone No. <input type="checkbox"/> 915-634-8786
Facility Name Livingston Ridge Station	Facility Type <input type="checkbox"/> Pumping Station

Surface Owner BLM/Eott Leasse	Mineral Owner BLM	Lease No. <input type="checkbox"/>
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### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
NW4/NW4	S6	T22S	R32E					Lea

### NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 100 BBL	Volume Recovered <input type="checkbox"/> 75 BBL
Source of Release 1700 GASO Pump	Date and Hour of Occurrence	Date and Hour of Discovery <input type="checkbox"/> December 7, 2002 2230
Was Immediate Notice Given?	If YES, To Whom? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	Larry Johnson, NMOCD, Hobbs Office
By Whom? <input type="checkbox"/> Ken Dutton, ETGI	Date and Hour <input type="checkbox"/> December 9, 2002	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*

300' + Gw Depth

N/A

Describe Cause of Problem and Remedial Action Taken.\*

Broken Stud on Packing Bland on the 1700 GASO Pump. Pump shut down and back-up pump put on-line. Stud and packing bland replaced, Monday, December 9, 2002.

Describe Area Affected and Cleanup Action Taken.\*

Containment area inside bermed area and Highway C-29 right-of-way area. Both areas were excavated and impacted soil placed on 60 mil plastic liner. Highway warning barrels were placed on C-29 to warn motorist of drop-off adjacent to the highway. Contaminated soil was blended to NMOCD regulatory standards.

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:   
Printed Name: Ken Dutton

OIL CONSERVATION DIVISION

Approved by  District Supervisor:

Title: Project Manager, Environmental Technology Group, Inc.

Approval Date:

Expiration Date:

Date: March 17, 2003

Phone: (505) 397-4882

Conditions of Approval:

Attached

\* Attach Additional Sheets if Necessary

**TABLE 1**  
**Concentrations of BTEX and TPH in Soil**

**TABLE 1**  
**CONCENTRATIONS OF BTEX AND TPH IN SOIL**

**LINK ENERGY**  
**LIVINGSTON RIDGE STATION**  
**LEA COUNTY, NEW MEXICO**  
**ETGI PROJECT #LI2105**

*Results are reported in mg/kg.*

SAMPLE LOCATION	SAMPLE DATE	Method: 8021B / 5030 BTEX					8015M		
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	GRO	DRO	TPH
BG 1	12/08/02	<0.025	<0.025	0.028	0.081	0.109	<10.0	<10.0	<10.0
BG 2	12/08/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
Road 1 1'	12/09/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
Road 2 1'	12/09/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
Road 3 1'	12/09/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
Southern Exc. 1	12/09/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	46.6	46.6
Southern Exc. 2	12/09/02	0.345	4.07	4.09	15.94	24.45	714	2390	3104
Southern Exc. 3	12/09/02	<0.025	<0.025	<0.025	<0.025	<0.025	14.9	13.3	28.2
Comp. Exc. Soil	12/09/02	4.21	29.5	19.9	76.5	130.11	4410	13000	17410
Comp. Exc. Soil	12/09/02	9.12	43.9	25.0	85.9	163.92	7210	27500	34710
South Sump Exc.	12/10/02	0.145	0.729	0.815	3.64	5.33	265	896	1161
West Tank Exc.	12/10/02	0.325	2.07	1.62	5.89	9.91	374	1780	2154
Shredded Soil #1	12/19/02	1.74	11.7	9.01	29.01	51.46	1290	3950	5240
Shredded Soil #2	12/19/02	0.547	5.77	5.51	20.08	31.91	1110	4750	5860
S/P 1	01/09/03	0.178	2.60	3.23	12.74	18.75	933	3800	4730
S/P 1	01/16/03	<0.025	0.030	0.075	0.327	0.432	<50.0	2140	2140
S/P 2	01/09/03	0.379	4.64	3.39	14.98	23.39	908	4520	5430
S/P 2	01/16/03	<0.025	0.104	0.18	1.178	1.46	165	3170	3335
S/P 3	01/16/03	0.027	0.13	0.281	1.53	1.97	308	3260	3568
NMOCD Standard	-	10.0	-	-	-	50.0	-	-	5,000

**RECORD OF COMMUNICATION  
STATE ENGINEER'S OFFICE**

RECORD OF COMMUNICATION  
Environmental Technology Group, Inc.

From:	R. EIDSON	To:	KEN FRESCOUEZ
With:	ETG I	With:	NM STATE ENGINEERS OFFICE
Date:	12/9/02	Time:	10:25

LIVINGSTON RIDGE STATION EMERGENCY RESPONSE EO 2105

CONTACTED MR. FRESCOUEZ ASKING HIM FOR INFORMATION ON  
AVARIOS DUE TO GROUNDWATER IN THE SITE AREA. HE STATED  
HIS DATABASE (AND MAP REVIEW) SHOWED NO RECORDS IN THE  
AREA (T 22 S, R 32 E, SEC. 6).

R. EIDSON

**NEW MEXICO STATE ENGINEER'S DATA BASE WATER  
WELL SEARCH**

New Mexico Office of the State Engineer  
Well Reports and Downloads

Township: 22S Range: 32E Sections: 6

NAD27 X: Y: Zone: Search Radius:

County: LE Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic  
All

Well / Surface Data Report Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 04/22/2004

(Depth Water in Feet)

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
-----	-----	-----	-----	------	---	---	-------	-----	-----	-----

No Records found, try again

**New Mexico Office of the State Engineer**  
**Well Reports and Downloads**

Township: 22S Range: 32E Sections: 4,5,6,7

NAD27 X: Y: Zone: Search Radius:

County: LE Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic  
All

Well / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

WELL / SURFACE DATA REPORT 04/22/2004

DB File Nbr      (acre ft per annum)  
Use      Diversion      Owner

Well Number

(qus)  
(qus)

No Records found, try again

## **ANALYTICAL RESULTS**

**COPY**

## **ANALYTICAL REPORT**

**Prepared for:**

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Project: Livingston Ridge Station  
PO#:  
Order#: G0205217  
Report Date: 12/12/2002

**Certificates**

US EPA Laboratory Code TX00158

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240  
 505-397-4701

Order#: G0205217  
 Project: EO 2105  
 Project Name: Livingston Ridge Station  
 Location: Lea County, NM

**COPY**

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample:	Matrix:	Date / Time	Date / Time	Container	Preservative
			Collected	Received		
	8015M 8021B/5030 BTEX					
0205217-08	Comp Exc Soil	SOIL	12/9/02 15:20	12/11/02 7:50	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX					
0205217-09	South Sump Exc	SOIL	12/10/02 13:00	12/11/02 7:50	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX					
0205217-10	BG 1	SOIL	12/8/02 10:31	12/11/02 7:50	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX					
0205217-11	BG 2	SOIL	12/8/02 10:36	12/11/02 7:50	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX					
0205217-12	West Tank Exc	SOIL	12/10/02 14:15	12/11/02 7:50	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX					

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

COPY

Lab ID: 0205217-01  
Sample ID: Road 1 1'

*8015M*

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	71%	70	130
1-Chlorooctadecane	74%	70	130

*8021B/5030 BTEX*

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02 11:56	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	36%	80	120
Bromofluorobenzene	99%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 12

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

**COPY**

Lab ID: 0205217-02  
Sample ID: Road 2 1'

*8015M*

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	69%	70	130
1-Chlorooctadecane	70%	70	130

*8021B/5030 BTEX*

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0004047-02		12/11/02 12:18	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	85%	80	120
Bromofluorobenzene	94%	80	120

DL = Diluted limit N/A = Not Applicable RL = Reporting Limit

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ENVIRONMENTAL LAB OF TEXAS, LTD. 12600 West 140 East, Odessa, TX 79765 Ph: 915-363-1800

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

COPY

Lab ID: 0205217-03

Sample ID: Road 3 1'

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	68%	70	130
1-Chlorooctadecane	70%	70	130

### 3021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	25	CK	8021B
		12:40				

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	90%	80	120
Bromofluorobenzene	95%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 3 of 12

**ENVIRONMENTAL LAB OF TEXAS**  
**ANALYTICAL REPORT**

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

**COPY**

Lab ID: 0205217-04  
Sample ID: Southern Exc 3

**8015M**

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	46.6	10.0
TOTAL, C6-C35	46.6	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	81%	70	130
1-Chlorooctadecane	87%	70	130

**8021B/5030 BTEX**

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0004047-02		12/11/02 13:02	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaaa-Toluene	90%	80	120
Bromofluorobenzene	95%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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ENVIRONMENTAL LAB OF TEXAS LTD. 12600 West 129 East, Odessa, TX 79765 Ph: 915-563-1800

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
 Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240

Order#: G0205217  
 Project: EO 2105  
 Project Name: Livingston Ridge Station  
 Location: Lea County, NM

COPY

Lab ID: 0205217-05  
 Sample ID: Southern Exc 2

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	714	50.0
DRO, >C12-C35	2390	50.0
TOTAL, C6-C35	3,104	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	14%	70	130
1-Chlorooctadecane	23%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	25	CK	8021B
		13:24				

Parameter	Result mg/kg	RL
Benzene	0.345	0.025
Ethylbenzene	4.09	0.025
Toluene	4.07	0.025
p/m-Xylene	11.0	0.025
o-Xylene	4.94	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	175%	80	120
Bromofluorobenzene	115%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 5 of 12

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
 Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240

Order#: G0205217  
 Project: EO 2105  
 Project Name: Livingston Ridge Station  
 Location: Lea County, NM

COPY

Lab ID: 0205217-06  
 Sample ID: Southern Exc 3

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	14.9	10.0
DRO, >C12-C35	13.3	10.0
TOTAL, C6-C35	28.2	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	75%	70	130
1-Chlorooctadecane	79%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	25	CK	8021B
		17:14				

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethybenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	87%	80	120
Bromofluoropenezene	93%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 6 of 12

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
 Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240

Order#: G0205217  
 Project: EO 2105  
 Project Name: Livingston Ridge Station  
 Location: Lea County, NM

COPY

Lab ID: 0205217-07  
 Sample ID: Comp Exc Soil

**8015M**

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		12/11/02	1	10	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	4410	100
DRO, >C12-C35	13000	100
TOTAL, C6-C35	17.410	100

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	13%	70	130
1-Chlorooctadecane	27%	70	130

**8021B/5030 BTEX**

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0004047-02		12/11/02 17:34	1	100	CK	8021B

Parameter	Result mg/kg	RL
Benzene	4.21	0.100
Ethybenzene	19.9	0.100
Toluene	29.5	0.100
p/m-Xylene	53.0	0.100
o-Xylene	23.5	0.100

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	634%	80	120
Bromofluorobenzene	125%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
 Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240

Order#: G0205217  
 Project: EO 2105  
 Project Name: Livingston Ridge Station  
 Location: Lea County, NM

**COPY**

Lab ID: 0205217-08  
 Sample ID: Comp Exc Soil

**3015M**

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	10	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	7210	100
IDRO, >C12-C35	27500	100
TOTAL, C6-C35	34710	100

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	17%	70	130
1-Chlorooctadecane	72%	70	130

**8021B/5030 BTEX**

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02 17:58	1	100	CK	8021B

Parameter	Result mg/kg	RL
Benzene	9.12	0.100
Ethybenzene	25.0	0.100
Toluene	43.9	0.100
p/m-Xylen	61.7	0.100
o-Xylene	24.2	0.100

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	925%	80	120
Bromofluorobenzene	153%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 8 of 12

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

**COPY**

Lab ID: 0205217-09  
Sample ID: South Sump Exc

**8015M**

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL	
GRO, C6-C12	265		10.0
DRO, >C12-C35	896		10.0
TOTAL, C6-C35	1,161		10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	96%	70	130
1-Chlorooctadecane	100%	70	130

**8021B/5030 BTEX**

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/12/02	1	25	CK	8021B
		8:12				

Parameter	Result mg/kg	RL	
Benzene	0.145		0.025
Ethylbenzene	0.815		0.025
Toluene	0.729		0.025
p/m-Xylene	2.79		0.025
o-Xylene	0.850		0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	199%	80	120
Bromoiodobenzene	118%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

**COPY**

Lab ID: 0205217-10

Sample ID: BG 1

*8015M*

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL	
GRO, C6-C12	<10.0	10.0	10.0
DRO, >C12-C35	<10.0	10.0	10.0
TOTAL, C6-C35	<10.0	10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	79%	70	130
1-Chlorooctadecane	85%	70	130

*8021B/5030 BTEX*

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0004047-02		12/12/02 13:13	1	25	CK	8021B

Parameter	Result mg/kg	RL	
Benzene	<0.025	0.025	0.025
Ethylbenzene	0.028	0.025	0.025
Toluene	<0.025	0.025	0.025
p/m-Xylene	0.081	0.025	0.025
o-Xylene	<0.025	0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	88%	80	120
Bromo fluoroobenzene	103%	80	120

DI = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

COPY

Lab ID: 0205217-11  
Sample ID: BG 2

*8015M*

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C25	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chloroocetane	88%	70	130
1-Chlorooctadecane	101%	70	130

*8021B/5030 BTEX*

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/12/02 8:54	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	82%	80	120
Bromofluorobenzene	92%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order #: G0205217  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea County, NM

COPY

Lab ID: 0205217-12  
Sample ID: West Tank Exc

**8015M**

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/11/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	374	10.0
DRO, >C12-C35	1,780	10.0
TOTAL, C6-C35	2,154	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	108%	70	130

**8021B/5030 BTEX**

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
0004047-02		12/12/02 9:15	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	0.325	0.025
Ethylbenzene	1.62	0.025
Toluene	2.07	0.025
p/m-Xylene	4.47	0.025
o-Xylene	1.42	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	156%	80	120
BromoFluorobenzene	118%	80	120

Approval: *Raland K. Tuttle* 12-12-02  
 Raland K. Tuttle, Lab Director, QA Officer      Date  
 Ceiley D. Keene, Org. Tech. Director  
 Jeanne McMurry, Inorg. Tech. Director  
 Sandra Biezugde, Lab Tech.  
 Sara Molina, Lab Tech.

DL = Diluted out   N/A = Not Applicable   RL = Reporting Limit

Page 12 of 12

## ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M

Order#: G0205217

**COPY**

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004046-02			<10.0		
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0205217-01	0	952	1030	108.2%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0205217-01	0	952	1020	107.1%	1.1%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004046-05		1000	877	87.7%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205217

COPY

<b>BLANK</b>		<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg	SOIL	0004047-02			<0.025		
Ethybenzene-mg/kg		0004047-02			<0.025		
Toluene-mg/kg		0004047-02			<0.025		
p/m-Xylene-mg/kg		0004047-02			<0.025		
o-Xylene-mg/kg		0004047-02			<0.025		
<b>MS</b>		<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg	SOIL	0205217-01	0	0.1	0.088	88%	
Ethybenzene-mg/kg		0205217-01	0	0.1	0.092	92%	
Toluene-mg/kg		0205217-01	0	0.1	0.090	90%	
p/m-Xylene-mg/kg		0205217-01	0	0.2	0.197	98.5%	
o-Xylene-mg/kg		0205217-01	0	0.1	0.093	93%	
<b>MSD</b>		<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg	SOIL	0205217-01	0	0.1	0.091	91%	3.4%
Ethybenzene-mg/kg		0205217-01	0	0.1	0.094	94%	2.2%
Toluene-mg/kg		0205217-01	0	0.1	0.094	94%	4.3%
p/m-Xylene-mg/kg		0205217-01	0	0.2	0.202	101%	2.5%
o-Xylene-mg/kg		0205217-01	0	0.1	0.096	96%	3.2%
<b>SRM</b>		<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg	SOIL	0004047-05		0.1	0.088	88%	
Ethybenzene-mg/kg		0004047-05		0.1	0.092	92%	
Toluene-mg/kg		0004047-05		0.1	0.091	91%	
p/m-Xylene-mg/kg		0004047-05		0.2	0.197	98.5%	
o-Xylene-mg/kg		0004047-05		0.1	0.094	94%	

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

# COPY

Prepared for:

Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205217

Project: Livingston Ridge Station

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
Road 1 1'	0205217-01	SOIL	12/09/2002	12/11/2002
Road 2 1'	0205217-02	SOIL	12/09/2002	12/11/2002
Road 3 1'	0205217-03	SOIL	12/09/2002	12/11/2002
Southern Exc 1	0205217-04	SOIL	12/09/2002	12/11/2002
Southern Exc 2	0205217-05	SOIL	12/09/2002	12/11/2002
Southern Exc 3	0205217-06	SOIL	12/09/2002	12/11/2002
Comp Exc Soil	0205217-07	SOIL	12/09/2002	12/11/2002
Comp Exc Soil	0205217-08	SOIL	12/09/2002	12/11/2002
South Sump Exc	0205217-09	SOIL	12/10/2002	12/11/2002
BG 1	0205217-10	SOIL	12/08/2002	12/11/2002
BG 2	0205217-11	SOIL	12/08/2002	12/11/2002
West Tank Exc	0205217-12	SOIL	12/10/2002	12/11/2002

Surrogate recoveries on the 8015M TPH are outside the control limits because they were diluted out.  
(0205217-05,07,08)

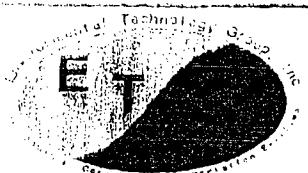
Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference from coeluting compounds. (0205217-05,07,08,09,12)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By:

  
Environmental Lab of Texas, Ltd.

Date: 12-12-02



For Use On **EOTT ENERGY CORP.**, Projects Only

4800 West Wall  
Midland, TX 79703  
Tel (915) 522-1139  
Fax (915) 520-4310

2540 West Marland  
Hobbs, NM 88242  
Tel (505) 397-4882  
Fax (505) 397-4701

**EOTT ENERGY CORP.**  
East Business 20  
TX 79702  
(815) 687-3400  
(815) 582-2781

5805  
Midland,  
Tel  
Fax

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

COC:207  
**RUSH**

## Project Manager

KEN DUTTON

EOTT Leak Number:

Finest Man

LIVINGSTON RIDGE STATION

ETGI Project Number:

E-02145

### Project Location

## Learn English Well

**Sampter Signature**

*Ken Hutton*

FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX		PRESERVATION METHOD		SAMPLING		6TEX 8021B/15030	TPH 41B / TX 1005	TPH 8035M GRDORO	PAH 827CC (810) New Mexico on Total Metals As Be Cd Cr Pb TCRP Media Ag As Ba Co Cr Pb TCLP Volatiles	TCRP Semi Volatiles	Volatile 8260S	Semi Volatiles 8270C	TDS 1EC 1	Cations/Anions 325 A/325 J	
			WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	NaHSO <sub>4</sub>	ICE	NONE							
01	ROND 1	1'	14	X				X				22/9	1455	X	X			
02	ROND 2	1'											1545					
03	ROND 3	1'											1510					
04	SOUTHERN EYC	1											1430					
05	SOUTHERN EYC	2											1440					
06	SOUTHERN EYC	3											1445					
07	COMP EYC SOIL												1515					
08	COMP EYC SOIL												1520					
09	SOUTH SLIMP EYC												12/10	134000				
10	BG 1												22/8	1030				
11	BG 2												22/8	1036				
12	WEST TANK. EYC												22/10	1415				

Relinquished by: Date: Time:  
*[Signature]* 10 Dec 02 1410

Received by: Date: 12/10/02 Time: 1426

REMARKS: 2115H - 24 HR TURN ABOARD

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received at the Royal Society by Mr. J. C. W. B. 1875

~~0.5C~~ 4oz Guts

Digitized by srujanika@gmail.com

**COPY**

## **ANALYTICAL REPORT**

**Prepared for:**

**KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240**

**Project: Livingston Ridge**

**PO#: EO 2105**

**Order#: G0205301**

**Report Date: 12/23/2002**

**Certificates**

**US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

Environmental Technology Group, Inc. Order#: G0205301  
2540 W. MARLAND Project: EO 2105  
HOBBS, NM 88240 Project Name: Livingston Ridge  
505-397-4701 Location: Lea Cty.

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>	<u>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0205301-01	Shredded Soil #1	SOIL	12/19/02 8:45	12/19/02 17:16	4 oz Glass	Ice
	<u>Lab Testing:</u>		Rejected: No	Temp: 0 C		
			8015M			
			8021B/5030 BTEX			
0205301-02	Shredded Soil #2	SOIL	12/19/02 8:50	12/19/02 17:16	4 oz Glass	Ice
	<u>Lab Testing:</u>		Rejected: No	Temp: 0 C		
			8015M			
			8021B/5030 BTEX			

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
 Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240

Order #: GU205301  
 Project: EO 2105  
 Project Name: Livingston Ridge  
 Location: Lea Cty.

Lab ID: 0205301-01  
 Sample ID: Shredded Soil #1

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/20/02	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	1290	50.0
DRO, >C12-C35	3950	50.0
TOTAL, C6-C35	5,240	50.0

Surrogates	% Recovered	QC Limits (%)
1-Chlorooctane	17%	70   130
1-Chlorooctadecane	28%	70   130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/22/02	1	0.025	RKT	8021B

Parameter	Result mg/kg	RL
Benzene	1.74	0.050
Toluene	11.7	0.050
Ethylbenzene	9.01	0.050
p/m-Xylene	19.1	0.050
o-Xylene	9.91	0.050

Surrogates	% Recovered	QC Limits (%)
aaa-Toluene	512%	80   120
Bromo fluoro benzene	129%	80   120

DL = Detected but N/A = Not Applicable RL = Reporting Limit

Page 1 of 2

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205301  
Project: EO 2105  
Project Name: Livingston Ridge  
Location: Lea Cty.

Lab ID: 0205301-02  
Sample ID: Shredded Soil #2

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/20/02	1	5	CK	8015M

Parameter	Result mg/kg	RL	
GRO, C6-C12	1110	50.0	
DRO, >C12-C35	4750	50.0	
TOTAL, C6-C35	5,360	50.0	

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	18%	70	130
1-Chlorooctadecane	32%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		12/22/02	1	0.025	RKT	8021B

Parameter	Result mg/kg	RL	
Benzene	0.547	0.050	
Toluene	5.77	0.050	
Ethybenzene	5.51	0.050	
p/m-Xylene	13.7	0.050	
o-Xylene	6.38	0.050	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	280%	80	120
BromoFluorobenzene	131%	80	120

Approve: Susan McMurry 12-23-02  
Randall K. Tuttle, Lab Director, QA Officer Date  
Cetey D. Keene, Org. Tech. Director  
Jeanne McMurry, Inorg. Tech. Director  
Vandra Biezugbe, Lab Tech.  
Lara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 2

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205301

<b>BLANK</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0004133-02			<0.025		
Toluene-mg/kg		0004133-02			<0.025		
Ethylbenzene-mg/kg		0004133-02			<0.025		
p/m-Xylene-mg/kg		0004133-02			<0.025		
o-Xylene-mg/kg		0004133-02			<0.025		
<b>CONTROL</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0004133-03		0.1	0.110	110%	
Toluene-mg/kg		0004133-03		0.1	.111	111%	
Ethylbenzene-mg/kg		0004133-03		0.1	.114	114%	
p/m-Xylene-mg/kg		0004133-03		0.2	.230	115%	
o-Xylene-mg/kg		0004133-03		0.1	.114	114%	
<b>CONTROL DUP</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0004133-04		0.1	0.112	112%	1.8%
Toluene-mg/kg		0004133-04		0.1	.114	114%	2.7%
Ethylbenzene-mg/kg		0004133-04		0.1	.117	117%	2.6%
p/m-Xylene-mg/kg		0004133-04		0.2	.237	118.5%	3.3%
o-Xylene-mg/kg		0004133-04		0.1	.117	117%	2.6%
<b>SRM</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0004133-05		0.05	0.049	98%	
Toluene-mg/kg		0004133-05		0.05	.049	98%	
Ethylbenzene-mg/kg		0004133-05		0.05	.049	98%	
p/m-Xylene-mg/kg		0004133-05		0.1	.105	105%	
o-Xylene-mg/kg		0004133-05		0.05	.049	98%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M

Order#: G0205301

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004131-02			<10		
<b>CONTROL</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004131-03		952	947	99.5%	
<b>CONTROL DUP</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004131-04		952	1043	109.6%	9.6%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004131-05		1000	1171	117.1%	

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

Prepared for:

Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0205301

Project: Livingston Ridge

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
Shredded Soil #1	0205301-01	SOIL	12/19/2002	12/19/2002
Shredded Soil #2	0205301-02	SOIL	12/19/2002	12/19/2002

Surrogate recoveries are outside the control limits because they were diluted out on TPH; BTEX surrogates out of historical range due to coeluting compounds.

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Glenn McMullen Date: 12-23-02  
Environmental Lab of Texas I, Ltd.

# Environmental Lab of Texas, Inc.

Local Client ID#1 and  
Emergency Contact #003

Phone: 916-563-1000  
Fax: 916-563-1713

COC # 217

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager

Ken Danner

Project Name: Divisadero Ridge

Sampling Unit:

ETCI

Project #: EO 2103

Company Address:

2510 W. Market

Project Loc: SCA ETY

City/State/Zip:

Hobbs NM 88240

PO #: L0 3145

Telephone No:

505-397-4882

Fax No: 505-397-7701

Sample Preparation:

Dairy Barn

Sample Number	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative							Matrix	Analysis						
					ICE	HNO <sub>3</sub>	H <sub>2</sub> O <sub>2</sub>	HACH	Hg SO <sub>4</sub>	Hg	Other Specie		TCD	TECD	FPD	FPD	FPD	FPD	
0805301-01	Site C DCL 3 SITE # 1	19 Dec 02	8:45	1	X							Soil	-20°C	-20°C	FPD	FPD	FPD	FPD	
02	Site C DCL 3 SITE # 2	19 Dec 02	8:50	1	X							Soil	-20°C	-20°C	FPD	FPD	FPD	FPD	

Specimen Received By	Date	Time	Received by	Date	Time	Sample Container intact?		Temperature Upon Receipt		Laboratory Comments	
						Received by ELOT	Received by Lab	Temp	Temp	Comments	Comments
<u>Ken Danner</u>	12/19/02	12:45		12/19/02	12:45					Rec 0.0°C	
<u>Ken Danner</u>	12/19/02	17:10	<u>Ken Danner</u>	12/19/02	17:10						

**COPY**

**ANALYTICAL REPORT**

**Prepared for:**

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Project: Livingston Station  
PO#:  
Order#: G0305433  
Report Date: 01/13/2003

**Certificates**

US EPA Laboratory Code TX00158

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240  
505-397-4701

Order#: G0305433  
Project: EO 2105  
Project Name: Livingston Station  
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time	Date / Time	Container	Preservative
			Collected	Received		
0305433-01	SP 1	SOIL	1/9/03 9:40	1/10/03 8:35	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: -0.5 C		
	8015M					
	8021B/5030 BTEX					
0305433-02	SP 2	SOIL	1/9/03 14:00	1/10/03 8:35	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: -0.5 C		
	8015M					
	8021B/5030 BTEX					

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0305433  
Project: EO 2105  
Project Name: Livingston Station  
Location: None Given

Lab ID: 0305433-01  
Sample ID: SP 1

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		1/10/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	933	10.0
DRO, >C12-C35	3.800	10.0
TOTAL, C6-C35	4.730	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	104%	70	130
1-Chlorooctadecane	146%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		1/11/03 15:42	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	0.178	0.025
Toluene	2.60	0.025
Ethylbenzene	3.23	0.025
p/m-Xylene	7.80	0.025
o-Xylene	4.94	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	146%	80	120
Bromofluorobenzene	148%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 2

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
 Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240

Order#:  
 Project:  
 Project Name:  
 Location:

G0305433  
 EO 2105  
 Livingston Station  
 None Given

Lab ID: 0305433-02  
 Sample ID: SP 2

*8015M*

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		1/10/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	908	10.0
DRO, >C12-C35	4,520	10.0
TOTAL, C6-C35	5,430	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	103%	70	130
1-Chlorooctadecane	138%	70	130

*8021B/5030 BTEX*

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0004321-02		1/11/03 16:24	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	0.379	0.025
Toluene	4.64	0.025
Ethylbenzene	3.39	0.025
p/m-Xylene	9.94	0.025
o-Xylene	5.04	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	161%	80	120
BromoFluorobenzene	124%	80	120

Approved: *Sara Molina* 01-13-03  
 Roland K. Tittle, Lab Director, QA Officer      Date  
 Ceiley O. Keene, Org. Tech. Director  
 Jeanne McMurray, Inorg. Tech. Director  
 Sandra Biezugge, Lab Tech.  
 Sara Molina, Lab Tech.

**ENVIRONMENTAL LAB OF TEXAS**  
**QUALITY CONTROL REPORT**

8015M

Order#: G0305433

<b>BLANK</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004323-02			<10.0		
<b>CONTROL</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004323-03		952	895	94.3%	
<b>CONTROL DUP</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004323-04		952	901	94.6%	0.7%
<b>SRM</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004323-05		1000	891	89.1%	

**ENVIRONMENTAL LAB OF TEXAS**  
**QUALITY CONTROL REPORT**

8021B/5030 BTEX

Order#: G0305433

<b>BLANK</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	SOIL	0004321-02			<0.025		
Toluene-mg/kg		0004321-02			<0.025		
Ethylbenzene-mg/kg		0004321-02			<0.025		
p/m-Xylene-mg/kg		0004321-02			<0.025		
o-Xylene-mg/kg		0004321-02			<0.025		
<b>MS</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	SOIL	0305435-12	0	0.1	0.102	102.%	
Toluene-mg/kg		0305435-12	0	0.1	0.108	108.%	
Ethylbenzene-mg/kg		0305435-12	0	0.1	0.113	113.%	
p/m-Xylene-mg/kg		0305435-12	0	0.2	0.234	117.%	
o-Xylene-mg/kg		0305435-12	0	0.1	0.110	110.%	
<b>MSD</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	SOIL	0305435-12	0	0.1	0.102	102.%	0.%
Toluene-mg/kg		0305435-12	0	0.1	0.105	105.%	2.8%
Ethylbenzene-mg/kg		0305435-12	0	0.1	0.113	113.%	0.%
p/m-Xylene-mg/kg		0305435-12	0	0.2	0.227	113.5%	3.%
o-Xylene-mg/kg		0305435-12	0	0.1	0.111	111.%	0.9%
<b>SRM</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	SOIL	0004321-05		0.1	0.101	101.%	
Toluene-mg/kg		0004321-05		0.1	0.105	105.%	
Ethylbenzene-mg/kg		0004321-05		0.1	0.106	106.%	
p/m-Xylene-mg/kg		0004321-05		0.2	0.227	113.5%	
o-Xylene-mg/kg		0004321-05		0.1	0.107	107.%	

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

Prepared for:

Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0305433

Project: Livingston Station

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
SP 1	0305433-01	SOIL	01/09/2003	01/10/2003
SP 2	0305433-02	SOIL	01/09/2003	01/10/2003

Surrogate recoveries on the 8015M TPH are outside control limits due to matrix interference from coeluting compounds. (0305433-01,02)

Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference from coeluting compounds. (0305433-01,02)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Deanne M. Murray Date: 01-13-03  
Environmental Lab of Texas 1, Ltd.



*Facilities Only* EOTT ENERGY CORP. Projects Only

4600 West Wall  
Midland, TX 79703  
Tel (915) 522-1139  
Fax (915) 520-4310

2540 West Maryland  
Hobbs, NM 88242  
Tel (505) 397-4882  
Fax (505) 397-4701

EOTT ENERGY CORP.  
East Business 20  
TX 79702  
(915) 687-3400  
(915) 582-2781

5805  
Hand.  
Tel  
Fax

#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

Picket Manager

KEN DUTTON

Project Name

LIVERPOOL STATION

#### Project Information

EOTT Leak Number:

**ETGI Project Number:**

卷之五

Sampler Signature: Walter Camos

LAB # (Lab Use Only)	FIELD CODE	# CONTAINERS		MATRIX	PRESERVATION METHOD		SAMPLING
		Volume/Amount	WATER		SOIL	AIR	
01 02	SP1 SP2	1 1		HCl HNO <sub>3</sub> NaHSO <sub>4</sub> ICE NONE	X X	1/9 9:40 1/9 14:00	† † X
							BTEX 5021B5030 TPH 412-17X-1005 TPH 8013M GRIDRO PAH 9270C (B100 New Mexico o Total Metals As Ba Cd Cr 2n Total Metals As Ba Cd Cr Pb TCLP Volatiles TCLP Sem. Volatiles Voranes 236H Sem. Voranes 236C 1775-85-1 1310-73-2

Renewing by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**REMARKS**

Mario Capo 7-9-03 1528

1 Day 2/9/03 15:28

REMARKS: PUSH TURN  
CALL KEN DUTTON W/VERBAL  
SOS 397-4882 A/C

Renewal date / Date / Times

Received at Lab by: Date: Time:

505 397-4882

-0.5°C  
Joe GAS

# ANALYTICAL REPORT

Prepared for:

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

**Project:** Livingston Ridge Station

**PO#:**

**Order#:** G0305493

**Report Date:** 01/20/2003

Certificates

US EPA Laboratory Code TX00158

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240  
 505-397-4701

Order#: G0305493  
 Project: EO 2105  
 Project Name: Livingston Ridge Station  
 Location: Lea Co., NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>		<u>Date / Time</u>		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0305493-01	Stock Pile One	SOIL	1/16/03 16:00	1/17/03 13:40	4 oz Glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M						
	8021B/5030 BTEX						
0305493-02	Stock Pile Two	SOIL	1/16/03 16:15	1/17/03 13:40	4 oz Glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M						
	8021B/5030 BTEX						
0305493-03	Stock Pile Three	SOIL	1/16/03 16:25	1/17/03 13:40	4 oz Glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M						
	8021B/5030 BTEX						

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0305493  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea Co., NM

Lab ID: 0305493-01  
Sample ID: Stock Pile One

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		1/17/03	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<50.0	50.0
DRO, >C12-C35	2140	50.0
TOTAL, C6-C35	2140	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	19%	70	130
1-Chlorooctadecane	20%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
0004393-02		1/20/03 9:31	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.030	0.025
Ethylbenzene	0.075	0.025
p/m-Xylene	0.216	0.025
o-Xylene	0.111	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	102%	80	120
Bromofluorobenzene	103%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 3

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
 Environmental Technology Group, Inc.  
 2540 W. MARLAND  
 HOBBS, NM 88240

Order#: G0305493  
 Project: EO 2105  
 Project Name: Livingston Ridge Station  
 Location: Lea Co., NM

Lab ID: 0305493-02  
 Sample ID: Stock Pile Two

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		1/17/03	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	165	50.0
DRO, >C12-C35	3170	50.0
TOTAL, C6-C35	3335	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	21%	70	130
1-Chlorooctadecane	25%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		1/20/03 9:52	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.104	0.025
Ethylbenzene	0.180	0.025
p/m-Xylene	0.511	0.025
o-Xylene	0.667	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	102%	80	120
Bromofluorobenzene	104%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

KEN DUTTON  
Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0305493  
Project: EO 2105  
Project Name: Livingston Ridge Station  
Location: Lea Co., NM

Lab ID: 0305493-03  
Sample ID: Stock Pile Three

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		1/17/03	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	308	50.0
DRO, >C12-C35	3260	50.0
TOTAL, C6-C35	3568	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	25%	70	130
1-Chlorooctadecane	27%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		1/20/03 10:13	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	0.027	0.025
Toluene	0.130	0.025
Ethylbenzene	0.281	0.025
p/m-Xylene	0.746	0.025
o-Xylene	0.736	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	109%	80	120
Bromofluorobenzene	111%	80	120

*Roland K. Tuttle* 1-20-03  
Approval: Roland K. Tuttle, Lab Director, QA Officer  
Leiley D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Jandra Biezugbe, Lab Tech.  
Cara Molina, Lab Tech.

**ENVIRONMENTAL LAB OF TEXAS**  
**QUALITY CONTROL REPORT**

8015M

Order#: G0305493

<b>BLANK</b>		SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg			0004382-02			<10.0		
<b>CONTROL</b>		SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg			0004382-03		1000	793	79.3%	
<b>CONTROL DUP</b>		SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg			0004382-04		1000	791	79.1%	0.3%
<b>SRM</b>		SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg			0004382-05		1000	795	79.5%	

**ENVIRONMENTAL LAB OF TEXAS**  
**QUALITY CONTROL REPORT**

8021B/5030 BTEX

Order#: G0305493

<b>BLANK</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0004393-02			<0.025		
Toluene-mg/kg		0004393-02			<0.025		
Ethylbenzene-mg/kg		0004393-02			<0.025		
p/m-Xylene-mg/kg		0004393-02			<0.025		
o-Xylene-mg/kg		0004393-02			<0.025		
<b>MS</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0305466-01	0	0.1	0.086	86%	
Toluene-mg/kg		0305466-01	0	0.1	0.089	89%	
Ethylbenzene-mg/kg		0305466-01	0	0.1	0.094	94%	
p/m-Xylene-mg/kg		0305466-01	0	0.2	0.202	101%	
o-Xylene-mg/kg		0305466-01	0	0.1	0.093	93%	
<b>MSD</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0305466-01	0	0.1	0.090	90%	4.5%
Toluene-mg/kg		0305466-01	0	0.1	0.092	92%	3.3%
Ethylbenzene-mg/kg		0305466-01	0	0.1	0.097	97%	3.1%
p/m-Xylene-mg/kg		0305466-01	0	0.2	0.206	103%	2%
o-Xylene-mg/kg		0305466-01	0	0.1	0.094	94%	1.1%
<b>SRM</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0004393-05		0.1	0.109	109%	
Toluene-mg/kg		0004393-05		0.1	0.110	110%	
Ethylbenzene-mg/kg		0004393-05		0.1	0.109	109%	
p/m-Xylene-mg/kg		0004393-05		0.2	0.228	114%	
o-Xylene-mg/kg		0004393-05		0.1	0.110	110%	

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

**Prepared for:**

Environmental Technology Group, Inc.  
2540 W. MARLAND  
HOBBS, NM 88240

Order#: G0305493

Project: Livingston Ridge Station

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
Stock Pile One	0305493-01	SOIL	01/16/2003	01/17/2003
Stock Pile Two	0305493-02	SOIL	01/16/2003	01/17/2003
Stock Pile Three	0305493-03	SOIL	01/16/2003	01/17/2003

Surrogate recoveries on the 8015M TPH are outside the control limits because they were diluted out.  
(0305493-01,02,03)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Roland E. Judd Date: 1-20-03  
Environmental Lab of Texas I, Ltd.

# Environmental Lab of Texas, Inc.

12600 West I-20 East  
Odessa, Texas 79763

Phone: 915-563-1800  
Fax: 915-563-1713

Project Manager: KEN DUTTON

Company Name: ETGI

Company Address: 2548 W MARLAND

City/State/Zip: HOBBS, NM 88240

Telephone No: (505) 397-4882

COC: 614

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: LIVINGSTON RIDGE STATION

Project #: EO 2105

Project Loc: LEA COUNTY, NM

PO #:

Sampler Signature: Ken Dutton

LAB # (lab use only)		FIELD CODE	Date Sampled	Time Sampled	No. of Containers
01		STOCK PILE ONE	16 JAN	1600	1 X
02		STOCK PILE TWO	16 JAN	1615	1 X
03		STOCK PILE THREE	16 JAN	1625	1 X

Analyze For:		TCPL TOTAL														
		Preservative			Matrix											
		Ice	HNO <sub>3</sub>	HCl	NaOH	T	H <sub>2</sub> SO <sub>4</sub>	None	Other (Specify)	Water	Sludge	Soil	Chlor (Specify)			
														TOX/CCL/SAP/EC		
														TPH/1B/1		
														TPH/TX/005/10CS		
														-PH-801SM-GRC/DRG		
														Volatile As Hg Cd Cr Ni Se I		
														Organics		
														Inorganics		
														TPH/EC/045/03		

Special Instructions:

PLEASE CALL KD w/VERBAL RESULTS

Released by:

Ken Dutton

Date

17 JAN 03 0850

Time

EL-2

Received by:

Released by:

Ken Dutton

Date

11/17/03 1318

Time

Nancy Cardell

Received by EL OT

Released by:

Ken Dutton

Date

11/17/03 1320

Time

BLT/HLS/t

Sample Contains Inert? Y N

Temperature Upon Receipt

Laboratory Comments:

1.5C  
40F Glitter

CRUSH TAT (Pre-Schedule)  
Standard CAT

Sample