2R - 53

# REPORTS DATE:

JAN 2005



January 10, 2005

Mr. Ed Martin
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe. New Mexico 87505

Re:

Plains All American Preliminary Site Investigation and Remediation Plan

Ballard Greyburg 5-Inch Release Site

EMS No.: 2004-00192

SW/4, SW/4 Section 10, T18S, R29E

**Eddy County, New Mexico** 

Dear Mr. Martin:

Please find attached for your approval a Preliminary Site Investigation and Remediation Plan, dated December 14, 2004, for the Ballard Greyburg 5-Inch release site located in the SW/4, SW/4, Section 10, T18S, and R29E in Eddy County, New Mexico. The proposed Remediation Plan details site activities conducted to date and future activities for remediation and closure of the site.

Should you have any questions or comments, please contact me at (505) 441-0965.

jugnolds

Sincerely,

Camille Reynolds

**Remediation Coordinator** 

Plains All American

# Basin Environmental Service Technologies, LLC

P. O. Box 301 Lovington, New Mexico 88260 kesiten@basinen.com

Office: (505) 396-2378 Fax: (505) 396-1429



# PRELIMINARY SITE INVESTIGATION REPORT and REMEDIATION PLAN

PLAINS MARKETING, L.P.

Ballard Grayburg 5"

Eddy County, New Mexico

Plains EMS # 2004-00192

UNIT M (SW/SW), Section 10, Township 18S, Range 29E

Latitude, Longitude 32°, 45', 27.1" North, 104°, 04', 12.0" West

Prepared For:

Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, Texas 77002

Prepared By:
Basin Environmental Service Technologies, LLC
P. O. Box 301
Lovington, New Mexico 88260

14 December 2004

Ken Dutton

Basin Environmental Service Technologies, LLC

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### INTRODUCTION

Allstate Environmental Services, LLC (Allstate) responded to a pipeline release for Plains Marketing L.P. (Plains), located on the Ballard Grayburg 5" Pipeline on 2 September 2004. The Ballard Grayburg 5" Pipeline was clamped and the saturated impacted soils were excavated and stockpiled on a poly liner. Basin Environmental Service Technologies, LLC (Basin), will perform subsequent remediation of the site at the request of Plains.

This site is located in Unit M (SW/SW), Section 10, Township 18 South, Range 29 East, in Eddy County, New Mexico (topographic Site Location Map is attached as Figure 1). The latitude is 32°, 45′, 27.1″ North and the longitude is 104°, 04′, 12.0″ West. The site is characterized by a right-of-way for the pipeline in a pasture utilized for cattle grazing. The visible surface stained area includes the release point covering an area approximately 22 feet long by 23 feet wide. The site is located approximately 21 feet from a plugged and abandoned Yates Petroleum well location. Approximately 80 barrels of crude oil were released from the Plains Pipeline and 0 barrels were recovered.

An Emergency One-Call was initiated 2 September 2004 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

Mr. James Amos, Bureau of Land Management (BLM), Carlsbad, New Mexico Office, was verbally notified 2 September 2004. Mr. Van Barton, New Mexico Oil Conservation Division (NMOCD), Artesia, New Mexico District 2 was verbally notified of the release on 2 September 2004.

# **SUMMARY OF FIELD ACTIVITIES**

On 2 September 2004, Allstate employees Ken Dutton and Adam Martinez arrived at the Ballard Grayburg 5" Pipeline release to repair and contain the crude oil pipeline release under the direction of Plains operations personnel. After the release had been contained utilizing a pipeline repair clamp, excavation of the impacted soil was accomplished (see Figure 2, Site Map). The release point was excavated to approximately 22 feet long by 23 feet wide and 12 feet below ground surface (bgs). All excavated soil was placed on a poly liner for future remedial action. A temporary fence was erected to prevent grazing cattle access to the excavated area.

On 18 October 2004, Basin employee, Ken Dutton, utilizing Straub Corporation, Stanton, Texas, initiated vertical and horizontal delineation of the site (see Figure 2, Site Map). Initially soil borings were to be installed; however, once deeper crude oil impact was indicated, a recovery well, at the release point and monitoring wells were installed (soil boring logs are attached as Appendix D). Soil samples were collected at 5 feet intervals and screened with a Photoionization Detector (PID), calibrated 18 October 2004. The selected soil samples were analyzed for benzene, toluene,

ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO). During attempts to install an up gradient monitoring well, the drillers lost circulation at two different locations due to suspected caverns in the limestone thus preventing the installation of an up gradient well. Two down gradient monitoring wells were installed and after developing and purging in accordance with EPA and NMOCD protocols, groundwater samples were collected and analytical results indicated concentrations of BTEX were below laboratory detection levels (see Table 2, Water Chemistry). A hydrocarbon absorbent sock was installed in the recovery well to absorb the limited amount of crude oil noted on the groundwater.

# NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION

A search of the New Mexico State Engineers database revealed no water depth information for that section. However, a phone call, placed by Ken Dutton (Basin), to the State Engineers' Office, Roswell, New Mexico, revealed that a non-domestic livestock water well in the SE $\frac{1}{4}$  of the SW $\frac{1}{4}$  Section 10, Township 18 South, Range 29 East had water depth information, which was 245 feet bgs total depth and 205 feet bgs to groundwater. There are no surface water bodies or water wells within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of 0 –9, which sets the remediation levels at:

Benzene:

10 ppm

BTEX:

50 ppm

TPH:

5000 ppm

# DISTRIBUTION OF HYDROCARBONS IN THE USATURATED ZONE

The release point area has been excavated to a depth of approximately 12 feet bgs and evidence of crude oil impact still exist on the floor and sidewalls of the excavation. PID readings indicated elevated concentrations of Volatile Organic Compounds (VOC) remain. Horizontal and vertical delineation of the site was initiated on 18 October 2004. A recovery well, at the release point, and two down gradient monitoring wells were installed once crude oil impact of groundwater was discovered. Two attempts to install an up gradient monitoring well proved futile due to drilling into limestone caverns and loosing circulation. PID field screenings were utilized to determine which soil samples were to be submitted to the laboratory for analysis. Selected soil samples were analyzed for concentrations of BTEX and TPH. Laboratory data sheets and chain-of-custody forms are attached (Appendix C).

Recovery Well 1, as depicted on the Site Map (Figure 2), was installed at the release point. Soil samples collected at the 5, 15, 25, 35, 60, 75, 95, 115, 135, 155, 175 and 185 feet bgs were analyzed. Analytical results indicated BTEX concentrations exceeded NMOCD regulatory standards at 5, 15, 25, 35, 60 and 95 feet bgs.

Analytical results indicated TPH concentrations exceeded NMOCD regulatory standards 15, 25, 35, 60, 75 and 95 feet bgs at 5070 mg/kg, 7920 mg/kg, 5290 mg/kg, 10,400 mg/kg, 12,900 mg/kg and 12,100 mg/kg, respectively. Analytical results indicated BTEX concentrations were below NMOCD regulatory standards at 75, 115, 135, 155, 175 and 185 feet bgs. Analytical results indicated that TPH concentrations were below NMOCD regulatory standards at 5, 115, 135, 155, 175 and 185 feet bgs. The deepest soil impact documented above NMOCD standards was the soil sample collected from a depth of 95 feet bgs.

Monitoring Well 2, as depicted on the Site Map (Figure 2), was installed down gradient of the release point. Soil samples collected at 15, 60, 95, 135 and 195 feet bgs were analyzed. Analytical results indicated that BTEX and TPH concentrations were not detected above the laboratory method detection limits.

Monitoring Well 3, as depicted on the Site Map (Figure 2), was installed down gradient of the release point. Soil samples collected at 15, 60, 95, 135 and 195 feet bgs were analyzed. Analytical results indicated that BTEX and TPH concentrations were not detected above the laboratory method detection limits.

Soil Boring 1, as depicted on the Site Map (Figure 2), was installed up gradient of the release point. Soil samples collected at 15, 35, 60, 75, and 90 feet bgs were analyzed. Analytical results indicated that BTEX and TPH concentrations were not detected above the laboratory method detection limits. Soil Boring 1 was terminated at 95 feet bgs after drilling into a limestone cavern and loosing air circulation. Soil Boring 1 was sealed with bentonite chips.

Soil Boring 2, as depicted on the Site Map (Figure 2), was installed up gradient of the release point. Soil samples collected at 15, 35, 60, 75, 90 and 105 feet bgs were analyzed. Analytical results indicated that BTEX and TPH concentrations were not detected above laboratory method detection limits. Soil Boring 2 was terminated at 105 feet bgs after drilling into a limestone cavern and loosing air circulation. Soil Boring 2 was sealed with bentonite chips.

# DISTRIBUTION OF HYDROCARBONS IN THE SATURATED ZONE

Groundwater was encountered at a depth of approximately 189 feet bgs in the recovery and monitoring wells. Recovery well 1 has a measured thickness of 0.04 feet of free phase hydrocarbon on the groundwater. A hydrocarbon absorbent sock was installed in the recovery well. Analytical results of the soil and groundwater samples indicated there was no hydrocarbon impact on the groundwater in Monitoring Well 1 and Monitoring Well 2 (see Water Chemistry, Table 3).

# RECOMMENDATIONS FOR REMEDIATION/CLOSURE

Approximately 50 cubic yards of impacted soil has been excavated and stockpiled on-site resulting from the emergency response and pipeline repair. Based on the soil

delineation investigation, the release point will require further excavation. archeological study of the site will be performed in accordance with BLM directives prior to excavation activities. Once the archeological study is completed and Plains has authorization to excavate, Plains proposes to excavate the hydrocarbonimpacted soil at the release point to a depth of approximately 12 feet bgs. Based on the available data and the extent of the surface stained soil, we anticipate the excavation will be approximately 40 feet by 40 feet in size. The excavated soils will be placed on a poly liner to prevent contamination of the surrounding area. It is estimated that approximately 711 cubic yards of impacted soil will be excavated. The excavated soils will be transported to the Plains Lea Station Land Farm. Due to the remote area of this location and lack of receptors it is recommended that an impermeable barrier consisting of a 40-ml poly liner be permanently installed at the base of the excavation to inhibit vertical migration of contaminates in soil left in place below the cap. The barrier will extend a minimum of four feet beyond the edges of soil impacted above NMOCD remedial thresholds. A 6-inch layer of fine sand will be installed beneath and above the 40-ml poly liner to prevent degrading the integrity of the poly liner. Installation of the 40-ml poly liner at a depth of 20 feet bgs will protect the barrier from erosion and human intrusion for a term sufficient to allow natural biodegradation of contaminates in the soil. After the barrier has been installed, the excavation will be backfilled with indigenous soil approved by the NMOCD and BLM. Once backfilling has occurred, the area will be contoured to the original rangeland surrounding the site and reseeded with approved BLM grass seed.

The analytical results from the initial groundwater samples collected from MW-2 and MW-3 indicated that the BTEX concentrations are below the regulatory standards established by NMOCD. It is recommended that four (4) consecutive sampling events be performed and if the groundwater samples remain below NMOCD regulatory standards the monitoring wells be plugged and abandoned pursuant to NMOCD protocols. The recovery well will be gauged monthly and in conjunction with quarterly sampling events to ascertain the level of phase-separated hydrocarbons on the groundwater. The crude oil absorbent sock, placed in recovery well 1, will be inspected on a monthly basis and replaced as required.

### **QA/QC PROCEDURES**

## Soil Sampling

Soil samples were delivered to Environmental Lab of Texas, Inc. in Odessa, Texas for BTEX, TPH analyses using the methods described below. Soil samples were analyzed for BTEX, TPH-GRO/DRO within fourteen days following the collection date.

The soil samples were analyzed as follows:

BTEX concentrations in accordance with EPA Method 8021B, 5030

 TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO

# **Groundwater Sampling**

The groundwater monitoring wells were developed utilizing the Environmental Protection Agency (EPA) protocol of approximately nine well volumes of groundwater or until the monitoring wells are dry using an electrical Grundfos Pump. Within forty-eight hours of development, the monitoring wells were measured and purged of approximately three well volumes utilizing an electrical Grundfos Pump. Groundwater samples were collected using a disposable Teflon sampler and the groundwater samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purged water was collected in a polystyrene tank and disposed of at a licensed New Mexico disposal facility. Groundwater samples were delivered to Environmental Lab of Texas, Odessa, Texas for analysis of BTEX and Total Dissolved Solids (TDS) concentrations using the methods described below. All samples were analyzed within approved holding times following the collection date.

- BTEX concentrations in accordance with EPA Method 8260B/5030
- TDS concentrations in accordance with EPA Method 160.1

# **Decontamination Of Equipment**

Cleaning of the sampling equipment will be the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment will be cleaned with Liqui-Nox® detergent and rinsed with distilled water.

# **Laboratory Protocol**

The laboratory will be responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures will be either transmitted with the laboratory reports or are on file at the laboratory.

### LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this Preliminary Investigation Report and Work Plan to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin

Environmental Service Technologies, LLC, has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC, also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, L.P. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and Plains Marketing, L.P.

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**TABLES** 

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# TABLE 1

# SOIL CHEMISTRY, SOIL BORINGS/MONITOR AND RECOVERY WELLS

TABLE 1, PAGE 1

SOIL CHEMISTRY

PLAINS MARKETING, L.P. BALLARD GRAYBURG 5" EDDY COUNTY, NEW MEXICO PLAINS EMS NO: 2004-00206

| SAMPLE   | SAMPLE | SAMPLE SAMPLE |                 | METHOD: E | METHOD: EPA SW 846-8021B, 5030 | 3021B, 5030 |          | METHOD: 8015M | : 8015M                                | TOTAL   |
|----------|--------|---------------|-----------------|-----------|--------------------------------|-------------|----------|---------------|--|---------|
| LOCATION | DEPTH  | DATE          | BENZENE TOLUENE | TOLUENE   | ETHYL-                         | M,P-        | O-XYLENE | GRO           | DRO                                    | ТРН     |
|          | (BGS)  |               |                 |           | BENZENE XYLENES                | XYLENES     |          |               | ************************************** |         |
|          |        |               | (mg/kg)         | (mg/kg)   | (mg/kg)                        | (mg/kg)     | (mg/kg)  | (mg/kg)       | (mg/kg)                                | (mg/kg) |
| RW-1     | 5      | 10/18/04      | 0.032           | 0.148     | 0.187                          | 0.836       | 0.441    | 424           | 3400                                   | 3820    |
| RW-1     | 15'    | 10/18/04      | 0.078           | 0.462     | 1.70                           | 3.11        | 2.02     | 918           | 4150                                   | 5070    |
| RW-1     | 25'    | 10/18/04      | 0.077           | 0.844     | 4.23                           | 5.85        | 3.44     | 1360          | 6560                                   | 7920    |
| RW-1     | 35,    | 10/18/04      | 0.238           | 0.747     | 3.09                           | 4.59        | 2.71     | 979           | 4310                                   | 5290    |
| RW-1     | .09    | 10/18/04      | 0.027           | 0.318     | 2.03                           | 3.12        | 2.06     | 1710          | 8650                                   | 10400   |
| RW-1     | 75'    | 10/18/04      | <0.025          | 0.494     | 1.90                           | 1.89        | 2.31     | 1850          | 11000                                  | 12900   |
| RW-1     | 92.    | 10/18/04      | 0.028           | 0.387     | 2.83                           | 4.14        | 2.6      | 2130          | 9970                                   | 12100   |
| RW-1     | 115    | 10/18/04      | <0.025          | 0.063     | 0.349                          | 0.519       | 0.389    | 381           | 3070                                   | 3450    |
| RW-1     | 135'   | 10/18/04      | <0.025          | 0.122     | 0.655                          | 0.994       | 0.672    | 393           | 2150                                   | 2540    |
| RW-1     | 155'   | 10/18/04      | <0.025          | 0.048     | 0.289                          | 0.424       | 0.297    | 285           | 2420                                   | 2700    |
| RW-1     | 175'   | 10/18/04      | <0.025          | 0.134     | 0.725                          | 1.15        | 0.768    | 503           | 2500                                   | 3000    |
| RW-1     | 185'   | 10/18/04      | <0.025          | 0.069     | 0.308                          | 0.503       | 0.332    | 247           | 1580                                   | 1830    |
| MW-2     | 15'    | 10/19/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0                                  | <10.0   |
| MW-2     | .09    | 10/19/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0                                  | <10.0   |
| MW-2     | 95,    | 10/20/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0                                  | <10.0   |
| MW-2     | 135    | 10/20/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0                                  | <10.0   |
| MW-2     | 195'   | 10/20/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0                                  | <10.0   |
|          |        |               |                 |           |                                |             |          |               |  |         |

TABLE 1, PAGE 2

SOIL CHEMISTRY

PLAINS MARKETING, L.P. BALLARD GRAYBURG 5" EDDY COUNTY, NEW MEXICO PLAINS EMS NO: 2004-00206

| SAMPLE   | SAMPLE | SAMPLE SAMPLE |                 | METHOD: E | METHOD: EPA SW 846-8021B, 5030 | 3021B, 5030 |          | METHOD: 8015M | ): 8015M | TOTAL   |
|----------|--------|---------------|-----------------|-----------|--------------------------------|-------------|----------|---------------|----------|---------|
| LOCATION | DEPTH  | DATE          | BENZENE TOLUENE | TOLUENE   | ETHYL-                         | M,P-        | O-XYLENE | GRO           | DRO      | HGL     |
|          | (BGS)  |               |                 |           | BENZENE XYLENES                | XYLENES     |          |               |          |         |
|          |        |               | (mg/kg)         | (mg/kg)   | (mg/kg)                        | (mg/kg)     | (mg/kg)  | (mg/kg)       | (mg/kg)  | (mg/kg) |
| MW-3     | 15'    | 10/20/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| MW-3     | -09    | 10/20/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| MW-3     | 92.    | 10/20/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| MW-3     | 135'   | 10/20/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| MW-3     | 195'   | 10/21/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-1     | 15'    | 10/19/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-1     | 35,    | 10/19/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-1     | .09    | 10/19/04      | <0.025          | <0.025    | <0.025                         | 0.041       | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-1     | 75'    | 10/19/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-1     | ,06    | 10/19/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-2     | 15'    | 10/22/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-2     | 35'    | 10/22/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-2     | ,09    | 10/22/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-2     | ,5/    | 10/22/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-2     | .06    | 10/22/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
| SB-2     | 105'   | 10/22/04      | <0.025          | <0.025    | <0.025                         | <0.025      | <0.025   | <10.0         | <10.0    | <10.0   |
|          |        |               |                 |           |                                |             |          |               |          |         |

# TABLE 2 WATER CHEMISTRY

TABLE 2

**GROUND WATER CHEMISTRY** 

PLAINS MARKETING, L.P. BALLARD GRAYBURG 5" EDDY COUNTY, NEW MEXICO PLAINS EMS NO. 2004-00206

| SAMPLE LOCATION | SAMPLE   |   | METHODS: | EPA SW 8 | METHODS: EPA SW 846-8021B, 5030 | 30        | Method: |
|-----------------|----------|---|----------|----------|---------------------------------|-----------|---------|
|                 | DATE     | BENZENE TOLUENE                         | TOLUENE  | ETHYL-   | M,P.                            | O-XYLENES | 160.1   |
|                 |          | *************************************** |          | BENZENE  | XYLENES                         |           | TDS     |
|                 |          | (mg/L)                                  | (mg/L)   | (mg/L)   | (mg/L)                          | (mg/L)    | (mg/L)  |
| MW-2            | 12/04/04 | <0.001                                  | <0.001   | <0.001   | <0.001                          | <0.001    | 7730    |
| MW-3            | 12/04/04 | <0.001                                  | <0.001   | <0.001   | <0.001                          | <0.001    | 8530    |
|                 |          |   |          |          |                                 |           |         |

**FIGURES** 

# FIGURE 1 SITE LOCATION MAP

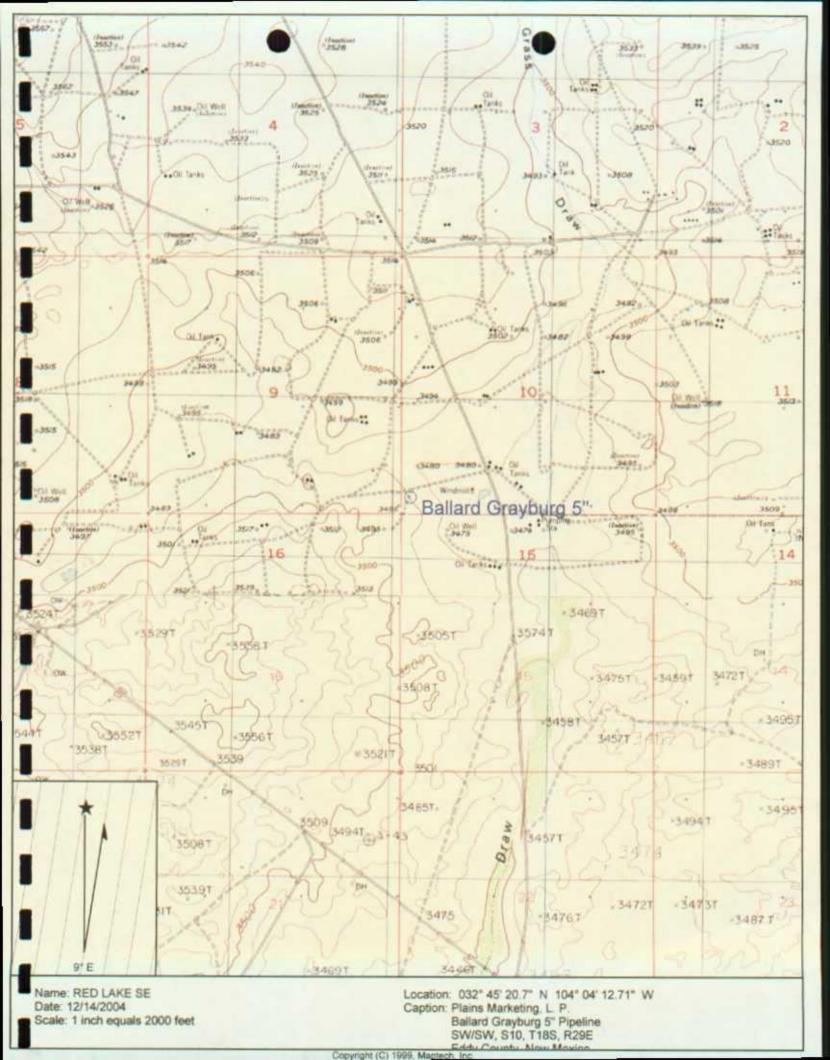


FIGURE 2

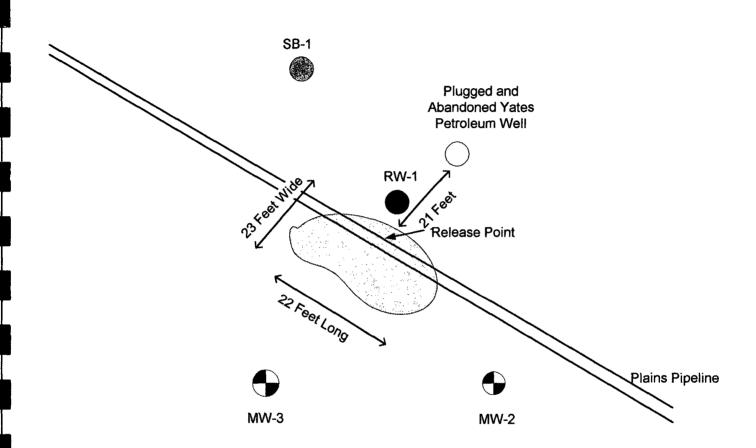
SITE MAP

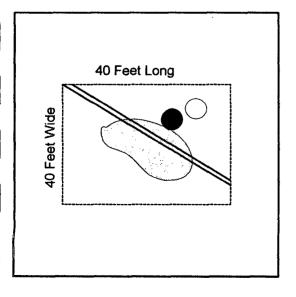
Plains Marketing, L.P.
Ballard Grayburg 5"
Unit M, S10, T18S, R29E
Eddy County, New Mexico







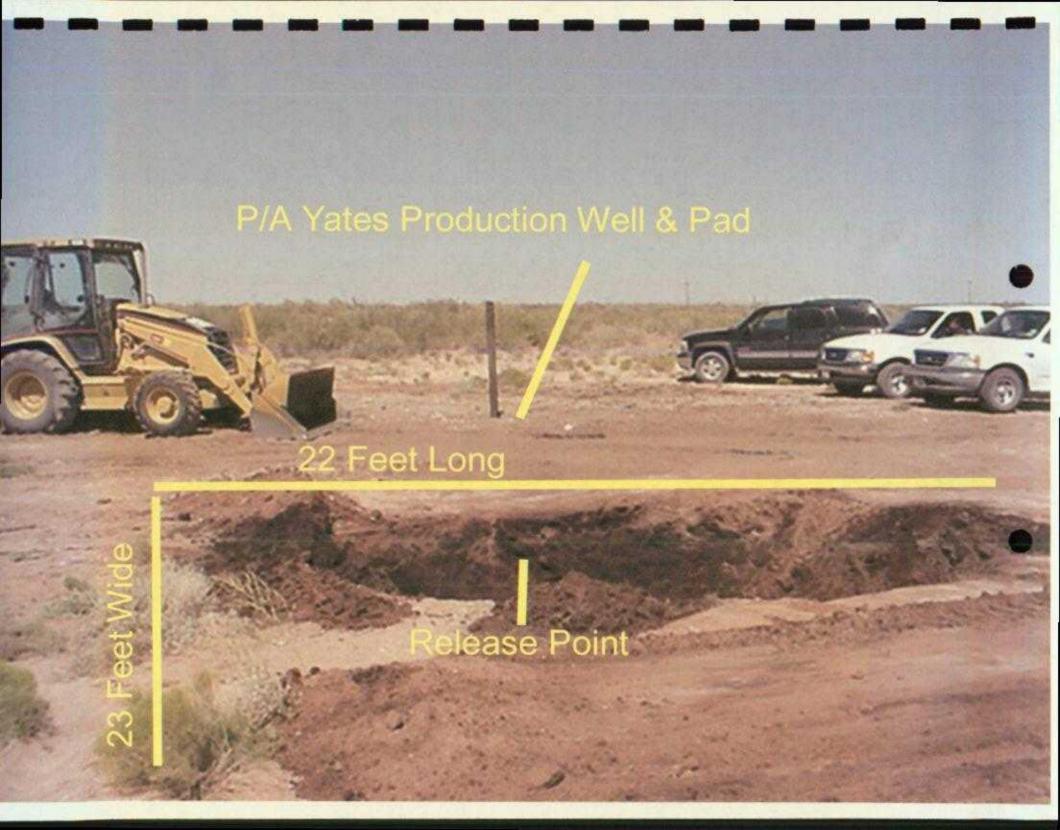


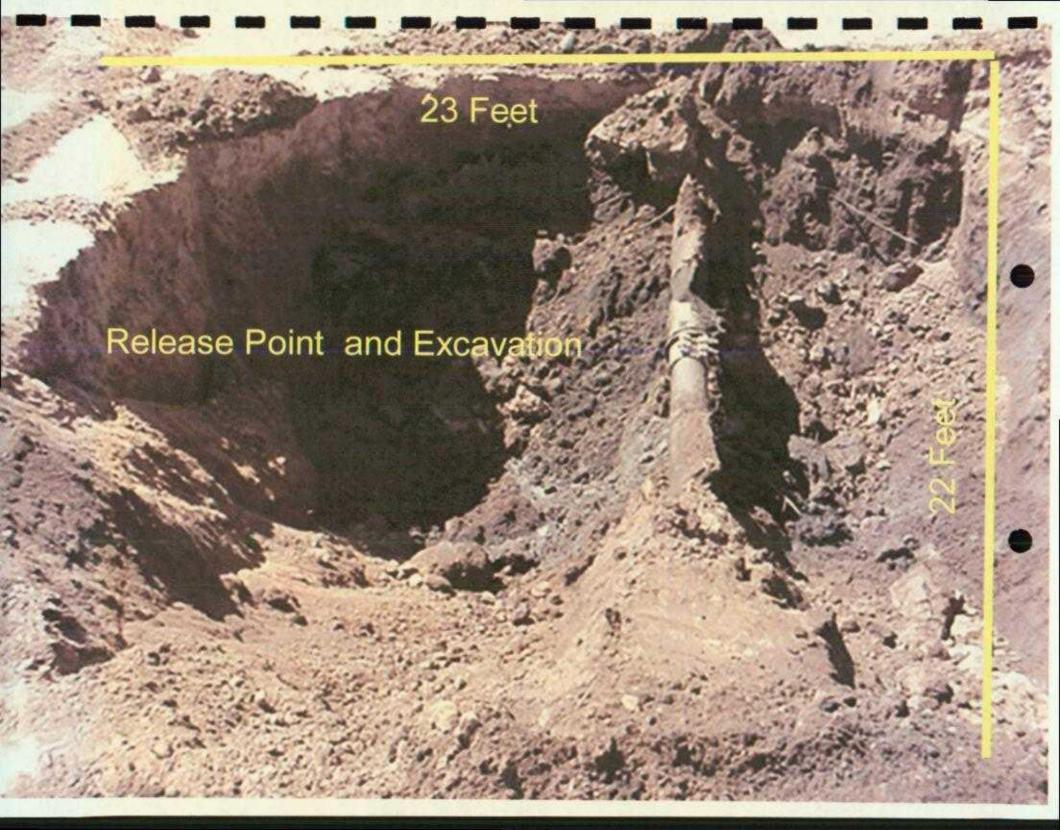


Estimated Extent of Soil Excavation

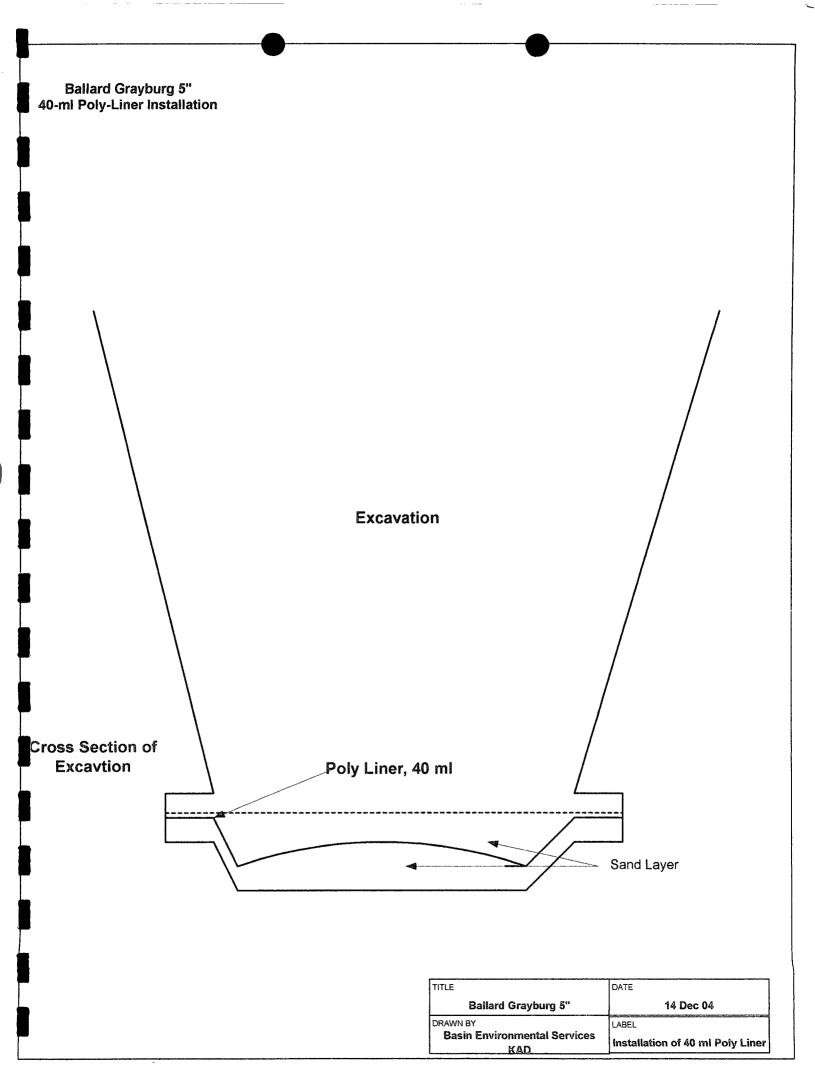
| TITLE               | DRAWN BY             |
|---------------------|----------------------|
| Ballard Grayburg 5" | Basin Environmental  |
| DESCRIPTION         | Service Technologies |
| Site Map, Figure 2  | kad                  |

# FIGURE 3 DIGITAL PHOTOGRAPHS





# FIGURE 4 INSTALLATION OF 40-ml POLY-LINER



**APPENDICES** 

# **APPENDIX A**

NEW MEXICO OFFICE OF THE STATE ENGINEER WATER WELL DATABASE REPORT

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Time of the pure trigules

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

| Township: 188       | Range: 29E Sections: 10 |                       |
|---------------------|-------------------------|-----------------------|
| NAD27 X:            | Y: Zone:                | Search Radius:        |
| County: Ba          | asin: Z Nu              | mber: Suffix:         |
| Owner Name: (First) | (Last)<br>© All         | Non-Domestic Domestic |
| Well / Surfa        | ce Data Report Avg De   | pth to Water Report   |
|                     | Water Column Report     |                       |
| -                   | Clear Form WATERS Menu  | Help                  |

### WATER COLUMN REPORT 09/22/2004

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

Well Number

Tws Rng Sec q q q Zone X Y Well Water

No Records found, try again

# New Mexico Office of the State Engineer Well Reports and Downloads Township: 18S Range: 29E Sections: 3,15,9,11 NAD27 X: Y: Zone: Search Radius: County: Search Radius: Number: Suffix: Owner Name: (First) (Last) Number: One-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 09/22/2004

(Dopth Water in Feet) Bsn Tws Rng Sec Zone X Y Wells Min Max Avg

No Records found, try again

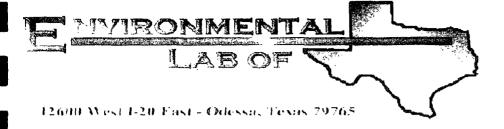
.... ....... Only of the build biginess

# APPENDIX B BLM REPORT OF UNDESIRABLE EVENT CHECKLIST

(3e14 13e1) Louis NN 2162-7 Louis NN 2163-7

| REPORT OF UNDESTRABLE EVENT CHECKLIST  |
|--|
| Date of Occurrence: $06.00$  |
| uare reported to blm: $9-2-04$ time reported: $13.00$  |
| WENT OFFICE REPORTED TO (RESOURCE AREA/DISTRICT OFFICE/OTHER): Carls local   |
| LUCATION: SECTION: 10 T. 185 R. 29E MERIDIAN: NM Prime Meridie   |
| COUNTY: Eclely STATE: NM WELL NAME: 5 Inch GATHERING IN  |
| GPENATOR: PTAINS   |
| SULFACE OWNERSHIP: BLM HINERAL OWNERSHIP: BLM  |
| LEASE NU.: 9618555 UNIT/CA NO.: RIGHT-OF-WAY NO.: <u>LCC57579</u>  |
| TYPE OF EVENT, CIRCLE APPROPRIATE ITEM(S): BLOWOUT, FIRE, FATALITY, INJURY, PROPERTY DAMAGE, GIL SPILL, SALTWATER SPILL, TOXIC FLUID SPILL, DIL AND SALTWATER SPILL, OIL AND TOXIC FLUID SPILL, SALTWATER AND TOXIC FLUID SPILL, UAS VENTING, UNCONTROLLED FLOW OF WELL BORE FLUIDS, OR OTHER (SPECIFY): |
| cause of event: External Corrasion of 5 unch   |
| gothering line   |
| CAUSE AND EATENT OF PERSONAL INSUREES/CAUSE OF DEATH(S): NOME  |
| EFFEUTS OF EVENT: CRUIDS COLL COMMITTEE OF DOLL  |
| ACTION TAKEN TO CONTROL THE EVENT: Clamp placed on line.   |
| impacted Doil Stock Billed on Diastic  |
| LENGTH OF TIME TO CONTROL EVENT AND SUBSEQUENT CLEAN-UP: 9 hours   |
| YOLUHN(S) OF PEUZOS (SPECIFY): DESCHAPGED: 80 barrels crucle oil   |
| CONSUMED: 80 harrels crucle AZCOVERZO: C harrels crude oil   |
| OTHER FEDERAL, STATE, AND LOCAL COVERNMENT AGENCIES NOTIFIED (INCLUDE NAMES AND DATE   |
| G-2-04 at 1432.  |
| AUTION THAT HAS BEEN ON WILL BE TAKEN TO PREVENT RECURRENCE: C. C.Complias   |
| place on the lage  |
| SIONED Lamicole daymolds   |
| 17704 mater Kemediation Cooxumita  |
| Plains Cell Comission  |

# APPENDIX C ENVIRONMENTAL LABORATORY OF TEXAS ANALYTICAL RESULTS



# **Analytical Report**

# Prepared for:

Ken Dutton
Basin Environmental Services
P.O. Box 301
Lovington, TX 88260

Project: Ballard-Grayburg 5 Inch Project Number: EMS:2004-00206 Location: Eddy County, NM

Lab Order Number: 4J26001

Report Date: 11/01/04

Basin Environmental Services

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

# ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| RW-1 5'   | 4J26001-01    | Soil   | 10/18/04 12:53 | 10/25/04 17:25 |
| RW-1 15'  | 4J26001-02    | Soil   | 10/18/04 13:17 | 10/25/04 17:25 |
| RW-1 25'  | 4J26001-03    | Soil   | 10/18/04 13:41 | 10/25/04 17:25 |
| RW-1 35'  | 4J26001-04    | Soil   | 10/18/04 13:56 | 10/25/04 17:25 |
| RW-1 60'  | 4J26001-05    | Soil   | 10/18/04 14:30 | 10/25/04 17:25 |
| RW-1 75'  | 4J26001-06    | Soil   | 10/18/04 14:41 | 10/25/04 17:25 |
| RW-1 95'  | 4J26001-07    | Soil   | 10/18/04 15:00 | 10/25/04 17:25 |
| RW-1 115' | 4J26001-08    | Soil   | 10/18/04 15:34 | 10/25/04 17:25 |
| RW-1 135' | 4J26001-09    | Soil   | 10/18/04 16:07 | 10/25/04 17:25 |
| RW-1 155' | 4J26001-10    | Soil   | 10/18/04 16:41 | 10/25/04 17:25 |
| RW-1 175' | 4J26001-11    | Soil   | 10/18/04 17:11 | 10/25/04 17:25 |
| RW-1 185' | 4J26001-12    | Soil   | 10/18/04 17:26 | 10/25/04 17:25 |
| SB-1 15'  | 4J26001-13    | Soil   | 10/19/04 12:27 | 10/25/04 17:25 |
| SB-1 35'  | 4J26001-14    | Soil   | 10/19/04 12:46 | 10/25/04 17:25 |
| SB-1 60'  | 4J26001-15    | Soil   | 10/19/04 13:04 | 10/25/04 17:25 |
| SB-1 75'  | 4J26001-16    | Soil   | 10/19/04 13:15 | 10/25/04 17:25 |
| SB-1 90'  | 4J26001-17    | Soil   | 10/19/04 13:38 | 10/25/04 17:25 |
| MW-2 15'  | 4J26001-18    | Soil   | 10/19/04 15:29 | 10/25/04 17:25 |
| MW-2 60'  | 4J26001-19    | Soil   | 10/19/04 16:29 | 10/25/04 17:25 |
| MW-2 95'  | 4J26001-20    | Soil   | 10/20/04 08:39 | 10/25/04 17:25 |
| MW-2 135' | 4J26001-21    | Soil   | 10/20/04 09:29 | 10/25/04 17:25 |
| MW-3 15'  | 4J26001-22    | Soil   | 10/20/04 12:36 | 10/25/04 17:25 |
| MW-3 60'  | 4J26001-23    | Soil   | 10/20/04 13:19 | 10/25/04 17:25 |
| MW-3 95'  | 4J26001-24    | Soil   | 10/20/04 13:46 | 10/25/04 17:25 |
| MW-3 135' | 4J26001-25    | Soil   | 10/20/04 14:25 | 10/25/04 17:25 |
| MW-3 195' | 4J26001-26    | Soil   | 10/21/04 09:30 | 10/25/04 17:25 |
| SB-2 15'  | 4J26001-27    | Soil   | 10/22/04 08:47 | 10/25/04 17:25 |
| SB-2 35'  | 4J26001-28    | Soil   | 10/22/04 09:04 | 10/25/04 17:25 |
| SB-2 60'  | 4J26001-29    | Soil   | 10/22/04 09:27 | 10/25/04 17:25 |
| SB-2 75'  | 4J26001-30    | Soil   | 10/22/04 09:38 | 10/25/04 17:25 |
| SB-2 90'  | 4J26001-31    | Soil   | 10/22/04 09:53 | 10/25/04 17:25 |
| SB-2 105' | 4J26001-32    | Soil   | 10/22/04 10:09 | 10/25/04 17:25 |
| MW-2 195' | 4J26001-33    | Soil   | 10/20/04 14:15 | 10/25/04 17:25 |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

Project: Ballard-Grayburg 5 Inch

Fax: (505) 396-1429

P.O. Box 301

Lovington TX, 88260

Project Number: EMS:2004-00206 Project Manager: Ken Dutton

Reported: 11/01/04 16:44

Organics by GC

#### **Environmental Lab of Texas**

| Environmental Lab of Texas        |        |                    |                |          |         |          |           |           |       |  |  |  |
|-----------------------------------|--------|--------------------|----------------|----------|---------|----------|-----------|-----------|-------|--|--|--|
| Analyte                           | Result | Reporting<br>Limit | Units          | Dilution | Batch   | Prepared | Analyzed  | Method    | Note  |  |  |  |
| RW-1 5' (4J26001-01) Soil         |        |                    |                | Ditation | Daten   | Trepared | Anaryzeu  | Mediod    | 11010 |  |  |  |
|                                   |        |                    |                |          |         |          |           | EDA 9031D |       |  |  |  |
| Benzene                           | 0.0322 | 0.0250             | mg/kg dry<br>" | 25       | EJ42716 | 10/26/04 | 10/26/04  | EPA 8021B |       |  |  |  |
| Toluene                           | 0.148  | 0.0250             | 11             | 11       | "       | "        | "         | 11        |       |  |  |  |
| Ethylbenzene                      | 0.187  | 0.0250             | "<br>N         | "        |         | "        |           | 14        |       |  |  |  |
| Xylene (p/m).                     | 0.836  | 0.0250             | ,,             | "        | "       |          |           | u         |       |  |  |  |
| Xylene (0)                        | 0.441  | 0.0250             |                |          |         |          | "         |           |       |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene |        | 116%               | 80-1           |          | "       | "        | "         | H         |       |  |  |  |
| Surrogate: 4-Bromofluorobenzene   |        | 102 %              | 80-1           |          | "       | "        | "         | "         |       |  |  |  |
| Gasoline Range Organics C6-C12    | 424    | 10.0               | mg/kg dry      | 1        | EJ42604 | 10/26/04 | 10/26/04  | EPA 8015M |       |  |  |  |
| Diesel Range Organics >C12-C35    | 3400   | 10.0               | "              | н        | **      | "        | **        |           |       |  |  |  |
| Total Hydrocarbon C6-C35          | 3820   | 10.0               | *              | ч        |         | "        |           |           |       |  |  |  |
| Surrogate: 1-Chlorooctane         |        | 99.8 %             | 70-1           | 30       | "       | "        | н         | n         |       |  |  |  |
| Surrogate: 1-Chlorooctadecane     |        | 97.8 %             | 70-1           | 30       | "       | u        | n         | n         |       |  |  |  |
| RW-1 15' (4J26001-02) Soil        |        |                    |                |          |         |          |           |           |       |  |  |  |
| Benzene                           | 0.0787 | 0.0250             | mg/kg dry      | 25       | EJ42716 | 10/26/04 | 10/26/04  | EPA 8021B |       |  |  |  |
| Toluene                           | 0.462  | 0.0250             | **             | 11       | tt      | н        | п         | **        |       |  |  |  |
| Ethylbenzene                      | 1.70   | 0.0250             | *              | н        | "       | **       | n         | u         |       |  |  |  |
| Xylene (p/m)                      | 3.11   | 0.0250             | n              | 11       | **      | **       | н         | н         |       |  |  |  |
| Xylene (0)                        | 2.02   | 0.0250             | "              | 11       | н       | 11       | H         |           |       |  |  |  |
| Surrogate. a,a,a-Trifluorotoluene |        | 149 %              | 80-1           | 20       | "       | "        | "         | п         | S-0   |  |  |  |
| Surrogate: 4-Bromofluorobenzene   |        | 111%               | 80-1           | 20       | "       | "        | "         | "         |       |  |  |  |
| Gasoline Range Organics C6-C12    | 918    | 10.0               | mg/kg dry      | 1        | EJ42604 | 10/26/04 | 10/26/04  | EPA 8015M |       |  |  |  |
| Diesel Range Organics >C12-C35    | 4150   | 10.0               | n              | 11       | 11      | n        | n         | **        |       |  |  |  |
| Total Hydrocarbon C6-C35          | 5070   | 10.0               | "              | 11       | * "     | 11       | Ħ         | u         |       |  |  |  |
| Surrogate: 1-Chlorooctane         |        | 120 %              | 70-1           | 30       | "       | n        | "         | "         |       |  |  |  |
| Surrogate: 1-Chlorooctadecane     |        | 87.6 %             | 70-1           | 30       | "       | "        | "         | · ·       |       |  |  |  |
| RW-1 25' (4J26001-03) Soil        |        |                    |                |          |         |          |           |           |       |  |  |  |
| Benzene                           | 0.0771 | 0.0250             | mg/kg dry      | 25       | EJ42716 | 10/26/04 | 10/26/04  | EPA 8021B |       |  |  |  |
| Toluene                           | 0.844  | 0.0250             | Ħ              | **       | н       | 11       | н         | n         |       |  |  |  |
| Ethylbenzene                      | 4.23   | 0.0250             | **             | ч        | "       | u        | **        | **        |       |  |  |  |
| Xylene (p/m)                      | 5.85   | 0.0250             | **             | w        | n       | 11       | и         | H         |       |  |  |  |
| Xylene (o)                        | 3.44   | 0.0250             | "              | **       | "       | u        | 11        | **        |       |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene |        | 172 %              | 80-1           | 20       | 11      | "        | n         | "         | S-0   |  |  |  |
| Surrogate: 4-Bromofluorobenzene   |        | 104 %              | 80-1           | 20       | "       | "        | "         | "         |       |  |  |  |
| Gasoline Range Organics C6-C12    | 1360   | 50.0               | mg/kg dry      | .5       | EJ42604 | 10/26/04 | 10/26/04  | EPA 8015M |       |  |  |  |
| Diesel Range Organics >C12-C35    | 6560   | 50.0               | u              | ,        | н       | 11       | II.       | 11        |       |  |  |  |
| Total Hydrocarbon C6-C35          | 7920   | 50.0               | 10             | **       | **      | 11       | <b>51</b> | μ         |       |  |  |  |

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 3 of 27

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Organics by GC

#### **Environmental Lab of Texas**

| Analyte                           | Result | Reporting<br>Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|--------|--------------------|-----------|----------|---------|----------|----------|-----------|-------|
| RW-1 25' (4J26001-03) Soil        |        | ····               |           | Dilution | Daten   | Trepared | Anaryzou | wend      | Notes |
| Surrogate: 1-Chlorooctane         |        | 23.0 %             | 70-       | 130      | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M | S-06  |
| Surrogate: 1-Chlorooctadecane     |        | 21.2 %             | 70-       | 130      | "       | "        | "        | n         | S-06  |
| RW-1 35' (4J26001-04) Soil        |        |                    |           |          |         |          |          |           |       |
| Benzene                           | 0.238  | 0.0250             | mg/kg dry | 25       | EJ42716 | 10/26/04 | 10/26/04 | EPA 8021B |       |
| Toluene                           | 0.747  | 0.0250             | 4         | "        |         | N        | u        | **        |       |
| Ethylbenzene                      | 3.09   | 0.0250             | **        | 11       | н       | 11       | и        | u         |       |
| Xylene (p/m)                      | 4.59   | 0.0250             | n         | ır       | 11      | n        | **       | H         |       |
| Xylene (o)                        | 2.71   | 0.0250             | n         | ır       | n       | Ħ        | 11       | и         |       |
| Surrogate: a,a,a-Trifluorotoluene |        | 220 %              | 80-       | 120      | "       | n        | "        | "         | S-04  |
| Surrogate: 4-Bromofluorobenzene   |        | 99.1 %             | 80-       | 120      | "       | "        | #        | n         |       |
| Gasoline Range Organics C6-C12    | 979    | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 4310   | 10.0               | 17        | 11       | "       | 11       | n        | n         |       |
| Total Hydrocarbon C6-C35          | 5290   | 10.0               | и         | "        | n       | •        | **       | If        |       |
| Surrogate: 1-Chlorooctane         |        | 114%               | 70-       | 130      | "       | n        | n        | "         |       |
| Surrogate: 1-Chlorooctadecane     |        | 85.8 %             | 70-       | 130      | "       | n        | "        | "         |       |
| RW-1 60' (4J26001-05) Soil        |        |                    |           |          |         |          |          |           |       |
| Benzene                           | 0.0275 | 0.0250             | mg/kg dry | 25       | EJ42716 | 10/26/04 | 10/27/04 | EPA 8021B |       |
| Toluene                           | 0.318  | 0.0250             | **        | •        | n       | e        | "        | 17        |       |
| Ethylbenzene                      | 2.03   | 0.0250             | н         | n        | **      | й        | u        | 11        |       |
| Xylene (p/m)                      | 3.12   | 0.0250             | **        | **       | n       | н        | u ·      | n         |       |
| Xylene (o)                        | 2.06   | 0.0250             |           | "        | 11      | 11       | 11       | tt        |       |
| Surrogate: a,a,a-Trifluorotoluene |        | 106 %              | 80-       | 120      | "       | "        | п        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |        | 97.9 %             | 80-       | 120      | "       | "        | n        | "         |       |
| Gasoline Range Organics C6-C12    | 1710   | 50.0               | mg/kg dry | 5        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 8650   | 50.0               | n         | "        | **      | 11       | n        | п         |       |
| Total Hydrocarbon C6-C35          | 10400  | 50.0               | "         | •        | 11      | 11       | 15       | 35        |       |
| Surrogate: 1-Chlorooctane         |        | 24.4 %             | 70-       | 130      | н       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane     |        | 19.8 %             | 70-       | 130      | n       | "        | n        | n         | S-06  |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton

4-00206 **Reported:** on 11/01/04 16:44

Fax: (505) 396-1429

# Organics by GC Environmental Lab of Texas

|                                   |        | n .                |           |          |         |          |          |           | <u> </u>                              |
|-----------------------------------|--------|--------------------|-----------|----------|---------|----------|----------|-----------|---------------------------------------|
| Analyte                           | Result | Reporting<br>Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes                                 |
| RW-1 75' (4J26001-06) Soil        |        |                    |           |          |         |          |          |           |                                       |
| Benzene                           | ND     | 0.100              | mg/kg dry | 100      | EJ42716 | 10/26/04 | 10/27/04 | EPA 8021B |                                       |
| Toluene                           | 0.494  | 0.100              | 11        | п        | **      | "        | **       | 11        |                                       |
| Ethylbenzene                      | 1.90   | 0.100              | n         | **       | н       | **       | "        | n         |                                       |
| Xylene (p/m)                      | 2.89   | 0.100              | u         | n        | n       | **       | "        | **        |                                       |
| Xylene (o)                        | 2.31   | 0.100              | **        | **       | н       | "        | tt       | 11        |                                       |
| Surrogate: a,a,a-Trifluorotoluene |        | 116%               | 80-1      | 20       | "       | "        | п        | n.        |                                       |
| Surrogate: 4-Bromofluorobenzene   |        | 108 %              | 80-1      | 20       | "       | "        | n        | n         |                                       |
| Gasoline Range Organics C6-C12    | 1850   | 50.0               | mg/kg dry | 5        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |                                       |
| Diesel Range Organics >C12-C35    | 11000  | 50.0               | n         | 10       | **      | u        | **       | "         |                                       |
| Total Hydrocarbon C6-C35          | 12900  | 50.0               | n         | **       | 11      | "        | 11       | 11        |                                       |
| Surrogate: 1-Chlorooctane         |        | 24.6 %             | 70-1      | 30       | "       | "        | "        | "         | S-06                                  |
| Surrogate: 1-Chlorooctadecane     |        | 36.8 %             | 70-1      | 30       | n       | "        | "        | "         | S-06                                  |
| RW-1 95' (4J26001-07) Soil        |        |                    |           |          |         |          |          |           |                                       |
| Benzene                           | 0.0288 | 0.0250             | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/27/04 | EPA 8021B |                                       |
| Toluene                           | 0.387  | 0.0250             | н         | n        | n       | "        | "        | n         |                                       |
| Ethylbenzene                      | 2.83   | 0.0250             | n         | **       | **      | 11       | н        | н         |                                       |
| Xylene (p/m)                      | 4.14   | 0.0250             | "         | u        | u-      | **       | n        | Ħ         |                                       |
| Xylene (o)                        | 2.60   | 0.0250             | "         | **       | п       | n        |          | **        |                                       |
| Surrogate: a,a,a-Trifluorotoluene |        | 104 %              | 80-1      | 20       | "       | "        | п        | п         |                                       |
| Surrogate: 4-Bromofluorobenzene   |        | 101 %              | 80-1      | 20       | "       | "        | "        | n         |                                       |
| Gasoline Range Organics C6-C12    | 2130   | 50.0               | mg/kg dry | 5        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |                                       |
| Diesel Range Organics >C12-C35    | 9970   | 50.0               | **        | **       | u       | 11       | **       | n         |                                       |
| Total Hydrocarbon C6-C35          | 12100  | 50.0               | **        | **       | н       | n        | **       | **        |                                       |
| Surrogate: 1-Chlorooctane         |        | 27.0 %             | 70-1      | 30       | "       | "        | "        | 11        | S-06                                  |
| Surrogate: 1-Chlorooctadecane     |        | 32.2 %             | 70-1      | 30       | n       | n        | н        | n         | S-06                                  |
| RW-1 115' (4J26001-08) Soil       |        |                    |           |          |         |          |          |           |                                       |
| Benzene                           | ND     | 0.0250             | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/27/04 | EPA 8021B | · · · · · · · · · · · · · · · · · · · |
| Toluene                           | 0.0634 | 0.0250             | н         | **       | 51      | **       | •        | •         |                                       |
| Ethylbenzene                      | 0.349  | 0.0250             | **        | 17       | н       | n        | **       | u .       |                                       |
| Xylene (p/m)                      | 0.519  | 0.0250             | n         | **       | 11      | "        | u        | H         |                                       |
| Xylene (o)                        | 0.389  | 0.0250             | n         |          | "       | **       | 11       | 16        |                                       |
| Surrogate: a,a,a-Trifluorotoluene |        | 92.1 %             | 80-1      | 20       | "       | "        | "        | "         |                                       |
| Surrogate: 4-Bromofluorobenzene   |        | 99.7 %             | 80-1      | 20       | "       | "        | u        | "         |                                       |
| Gasoline Range Organics C6-C12    | 381    | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |                                       |
| Diesel Range Organics >C12-C35    | 3070   | 10.0               | 11        | •        | "       | **       | 11       | n         |                                       |
| Total Hydrocarbon C6-C35          | 3450   | 10.0               | 11        | n        | н       | 11       | **       | и         |                                       |

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The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

# Organics by GC Environmental Lab of Texas

|                                   |            | Reporting |           |          |         |          |          |           |                                       |
|-----------------------------------|------------|-----------|-----------|----------|---------|----------|----------|-----------|---------------------------------------|
| Analyte                           | Result     | Limit     | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Note                                  |
| RW-1 115' (4J26001-08) Soil       |            |           |           |          |         |          |          |           | · · · · · · · · · · · · · · · · · · · |
| Surrogate: 1-Chlorooctane         |            | 99.0 %    | 70-       | 130      | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |                                       |
| Surrogate: 1-Chlorooctadecane     |            | 93.8 %    | 70-       | 130      | "       | "        | "        | "         |                                       |
| RW-1 135' (4J26001-09) Soil       |            |           |           |          |         |          |          |           |                                       |
| Benzene                           | J [0.0220] | 0.0250    | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/27/04 | EPA 8021B |                                       |
| Toluene                           | 0.122      | 0.0250    | "         | "        | "       | n        | **       | 11        |                                       |
| Ethylbenzene                      | 0.655      | 0.0250    | 11        | 11       | "       | "        | **       | **        |                                       |
| Xylene (p/m)                      | 0.994      | 0.0250    | 11        | **       | **      | "        | ,,       | н         |                                       |
| Xylene (o)                        | 0.672      | 0.0250    | 11        | н        | "       | "        | 11       | n         |                                       |
| Surrogate: a,a,a-Trifluorotoluene |            | 105 %     | 80-       | 120      | "       | n        | n        | n         |                                       |
| Surrogate: 4-Bromofluorobenzene   |            | 98.2 %    | 80-       | 120      | **      | n        | n        | Ħ         |                                       |
| Gasoline Range Organics C6-C12    | 393        | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |                                       |
| Diesel Range Organics >C12-C35    | 2150       | 10.0      | 11        | **       | **      | "        |          | **        |                                       |
| Total Hydrocarbon C6-C35          | 2540       | 10.0      | n         | "        | н       | n        | 10       | и         |                                       |
| Surrogate: 1-Chlorooctane         |            | 96.4 %    | 70-       | 130      | "       | "        | "        | n         |                                       |
| Surrogate: 1-Chlorooctadecane     |            | 88.4 %    | 70-       | 130      | Ħ       | *        | n        | "         |                                       |
| RW-1 155' (4J26001-10) Soil       |            |           |           |          |         |          |          |           |                                       |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/28/04 | EPA 8021B |                                       |
| Toluene                           | 0.0485     | 0.0250    | 11        | **       | "       | "        | Ħ        | 11        |                                       |
| Ethylbenzene                      | 0.289      | 0.0250    | и         | **       | lt .    | II .     | n        | n         |                                       |
| Xylene (p/m)                      | 0.424      | 0.0250    | n         |          | **      | n        | n        | н         |                                       |
| Xylene (o)                        | 0.297      | 0.0250    | н         | *        | **      | н        | 11       | p         |                                       |
| Surrogate: a,a,a-Trifluorotoluene |            | 86.8 %    | 80-       | 120      | ,,      | "        | "        | "         |                                       |
| Surrogate: 4-Bromofluorobenzene   |            | 97.7 %    | 80-1      | 120      | "       | "        | "        | "         |                                       |
| Gasoline Range Organics C6-C12    | 285        | 10.0      | mg/kg dry | i        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |                                       |
| Diesel Range Organics >C12-C35    | 2420       | 10.0      | 11        |          | n       | и        | **       | u         |                                       |
| Total Hydrocarbon C6-C35          | 2700       | 10.0      | 11        | **       | **      | 11       | **       | n         |                                       |
| Surrogate: 1-Chlorooctane         |            | 101 %     | 70-       | 130      | n       | n        | "        | n         |                                       |
| Surrogate: 1-Chlorooctadecane     |            | 107 %     | 70-       | 130      | "       | n        | "        | n         |                                       |

P.O. Box 301 Lovington TX, 88260 Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

Reported: 11/01/04 16:44

# Organics by GC Environmental Lab of Texas

|                                   |                     | EM VII OII         |                |          |         |          |                |           |       |
|-----------------------------------|---------------------|--------------------|----------------|----------|---------|----------|----------------|-----------|-------|
| Analyte                           | Result              | Reporting<br>Limit | Units          | Dilution | Batch   | Prepared | Analyzed       | Method    | Notes |
| RW-1 175' (4J26001-11) Soil       |                     |                    |                | Dilution | Baten   | Trepared | 7 that y zeu   | Withou    | 11010 |
|                                   | Y 10 01741          | 0.0050             |                | 25       |         |          | 10/25/04       | EPA 8021B |       |
| Benzene                           | J [0.0174]<br>0.134 | 0.0250             | mg/kg dry<br>" | 25       | EJ42905 | 10/27/04 | 10/27/04       | EFA 8021B |       |
| Toluene                           | 0.725               | 0.0250<br>0.0250   | 10             | 11       |         | "        |                | n         |       |
| Ethylbenzene<br>Vylone (n/m)      | 1.15                | 0.0250             | п              |          | "       | "        |                | **        |       |
| Xylene (p/m)<br>Xylene (o)        | 0.768               | 0.0250             | н              | н        | **      | ,,       | t <del>r</del> | 11        |       |
|                                   | 0.708               | 89.8 %             | 80-1           | 20       | **      | "        |                | n         |       |
| Surrogate: a,a,a-Trifluorotoluene |                     | 92.6 %             | 80-1           |          | "       | "        | a              | n         |       |
| Surrogate: 4-Bromofluorobenzene   | 503                 | 10.0               | mg/kg dry      | 1        |         | 10/26/04 | 10/27/04       | EPA 8015M |       |
| Gasoline Range Organics C6-C12    | 2500                | 10.0               | mg/kg cny      | 1        | EJ42604 | 10/26/04 | 10/26/04       | H 8013141 |       |
| Diesel Range Organics >C12-C35    | 3000                |                    | **             | ,,       |         |          | 11             | H.        |       |
| Total Hydrocarbon C6-C35          | 3000                | 10.0               | 70-1           |          | "       | "        | "              | 11        |       |
| Surrogate: 1-Chlorooctane         |                     | 107 %              | 70-1<br>70-1   |          | ,,      | ,,       | ,,             | "         |       |
| Surrogate: 1-Chlorooctadecane     |                     | 101 %              | /0-1           | 30       |         |          | ,,             |           |       |
| RW-1 185' (4J26001-12) Soil       |                     |                    |                |          |         |          |                |           |       |
| Benzene                           | ND                  | 0.0250             | mg/kg dry      | 25       | EJ42905 | 10/27/04 | 10/27/04       | EPA 8021B |       |
| Toluene                           | 0.0690              | 0.0250             | 11             | 11       | 11      | 11       | u              | н         |       |
| Ethylbenzene                      | 0.308               | 0.0250             | n              | **       | n       | n        | n              | R         |       |
| Xylene (p/m)                      | 0.503               | 0.0250             | **             | 11       | ц       | 11       | #              | н         |       |
| Xylene (o)                        | 0.332               | 0.0250             | **             | н        | n       | "        | **             | н         |       |
| Surrogate: a,a,a-Trifluorotoluene |                     | 83.3 %             | 80-1           | 20       | "       | "        | "              | "         |       |
| Surrogate: 4-Bromofluorobenzene   |                     | 96.2 %             | 80-1           | 20       | "       | "        | "              | "         |       |
| Gasoline Range Organics C6-C12    | 247                 | 10.0               | mg/kg dry      | 1        | EJ42604 | 10/26/04 | 10/26/04       | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 1580                | 10.0               | 11             | и        | 17      | "        | **             | 17        |       |
| Total Hydrocarbon C6-C35          | 1830                | 10.0               | **             | u        | **      | "        | u              | 11        |       |
| Surrogate: 1-Chlorooctane         |                     | 93.6 %             | 70-1           | 30       | 11      | "        | n              | "         |       |
| Surrogate: 1-Chlorooctadecane     |                     | 95.2 %             | 70-1           | 30       | "       | "        | н              | "         |       |
| SB-1 15' (4J26001-13) Soil        |                     |                    |                |          |         |          |                |           |       |
| Benzene                           | ND                  | 0.0250             | mg/kg dry      | 25       | EJ42905 | 10/27/04 | 10/28/04       | EPA 8021B |       |
| Toluene                           | ND                  | 0.0250             | 11             | и        | **      | 16       | н              | **        |       |
| Ethylbenzene                      | ND                  | 0.0250             | н              |          | 19      | ti.      | 19             | **        |       |
| Xylene (p/m)                      | ND                  | 0.0250             | ч              | **       | n       | 11       | ti             | 17        |       |
| Xylene (o)                        | ND                  | 0.0250             | 11             | **       | n       | 11       | 11             | u         |       |
| Surrogate: a,a,a-Trifluorotoluene |                     | 80.9 %             | 80-1           | 20       | "       | n        | "              | n         |       |
| Surrogate: 4-Bromofluorobenzene   |                     | 86.7 %             | 80-1           |          | "       | "        | n              | "         |       |
| Gasoline Range Organics C6-C12    | ND                  | 10.0               | mg/kg dry      | 1        | EJ42604 | 10/26/04 | 10/26/04       | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND                  | 10.0               | н              | u        | "       | 11       | n              | 17        |       |
| Total Hydrocarbon C6-C35          | ND                  | 10.0               | **             | 11       | n       | 11       | 11             | "         |       |
|                                   |                     |                    |                |          |         |          |                |           |       |

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P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Organics by GC

### Environmental Lab of Texas

| Analyte                           | Result      | Reporting<br>Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|-------------|--------------------|-----------|----------|---------|----------|----------|-----------|-------|
| SB-1 15' (4J26001-13) Soil        |             |                    |           |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane         |             | 93.4 %             | 70-1      | 30       | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane     |             | 94.6 %             | 70-1      | 30       | n       | n        | "        | "         |       |
| SB-1 35' (4J26001-14) Soil        |             |                    |           |          |         |          |          |           |       |
| Benzene                           | ND          | 0.0250             | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/27/04 | EPA 8021B | ,     |
| Toluene                           | ND          | 0.0250             |           | 17       | "       | н        | "        | **        |       |
| Ethylbenzene                      | ND          | 0.0250             | 11        | 11       | *       | **       | *        | n         |       |
| Xylene (p/m)                      | ND          | 0.0250             | **        | "        | **      | 11       | **       | n         |       |
| Xylene (o)                        | ND          | 0.0250             | "         | "        | n       | н        | "        |           |       |
| Surrogate: a,a,a-Trifluorotoluene |             | 80.9 %             | 80-1      | 20       | "       | "        | 11       | n         |       |
| Surrogate: 4-Bromofluorobenzene   |             | 103 %              | 80-1      | 20       | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND          | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND          | 10.0               | "         | 15       | •       | "        | 11       | H         |       |
| Total Hydrocarbon C6-C35          | ND          | 10.0               | "         | **       | 16      | ч        | н        | 11        |       |
| Surrogate: 1-Chlorooctane         |             | 95.8 %             | 70-1      | 30       | "       | "        | 11       | н         |       |
| Surrogate: 1-Chlorooctadecane     |             | 95.4 %             | 70-1      | 30       | н       | "        | n        | "         |       |
| SB-1 60' (4J26001-15) Soil        |             |                    |           |          |         |          |          |           |       |
| Benzene                           | ND          | 0.0250             | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/28/04 | EPA 8021B |       |
| <b>Foluene</b>                    | J [0.00851] | 0.0250             | w         | n        | 11      | 11       | **       | w         | J     |
| Ethylbenzene                      | J [0.0226]  | 0.0250             | "         | #        | "       | п        | ***      | Ħ         | j     |
| Xylene (p/m)                      | 0.0417      | 0.0250             | **        | н        | н       | н        | n        | Ħ         |       |
| Xylene (o)                        | J [0.0178]  | 0.0250             | "         | н        | н       | n        | н        | "         | J     |
| Surrogate: a,a,a-Trifluorotoluene |             | 83.9 %             | 80-1      | 20       | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |             | 91.8 %             | 80-1      | 20       | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND          | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND          | 10.0               | 11        |          | n       | "        | "        | 11        |       |
| Total Hydrocarbon C6-C35          | ND          | 10.0               | **        | **       | **      | н        | "        | u         |       |
| Surrogate: 1-Chlorooctane         |             | 102 %              | 70-1      | 30       | "       | "        | "        | n         | ···   |
| Surrogate: 1-Chlorooctadecane     |             | 108 %              | 70-1      | 30       | "       | "        | "        | n         |       |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

**Reported:** 11/01/04 16:44

# Organics by GC Environmental Lab of Texas

| Analyte                           | Result | Reporting<br>Limit | Units     | Dibution | Ratah   | Dranged  | Ancherod | Mathad    | Mare |
|-----------------------------------|--------|--------------------|-----------|----------|---------|----------|----------|-----------|------|
|                                   | Vesnii | Limit              | Oilles    | Dilution | Batch   | Prepared | Analyzed | Method    | Note |
| SB-1 75' (4J26001-16) Soil        |        |                    |           |          |         |          |          |           |      |
| Benzene                           | ND     | 0.0250             | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/28/04 | EPA 8021B |      |
| Toluene                           | ND     | 0.0250             | "         | 17       | n       | н        | 11       | "         |      |
| Ethylbenzene                      | ND     | 0.0250             | n         | "        | **      | #        | 11       | 11        |      |
| Xylene (p/m)                      | ND     | 0.0250             | **        | **       | n       | "        | **       | 11        |      |
| Xylene (o)                        | ND     | 0.0250             | н         | *        | **      | "        | "        | II.       |      |
| Surrogate: a,a,a-Trifluorotoluene |        | 87.3 %             | 80-1      | 20       | "       | "        | "        | n         |      |
| Surrogate: 4-Bromofluorobenzene   |        | 102 %              | 80-1      | 20       | "       | "        | "        | n         |      |
| Gasoline Range Organics C6-C12    | ND     | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | "         | и        | "       | **       | u        | и         |      |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | H         | u        | н       | 11       | "        | **        |      |
| Surrogate: 1-Chlorooctane         |        | 107 %              | 70-1      | 30       | "       | "        | ,,       | "         |      |
| Surrogate: 1-Chlorooctadecane     | d      | 115 %              | 70-1      | 30       | "       | "        | "        | "         |      |
| SB-1 90' (4J26001-17) Soil        |        |                    |           |          |         |          |          |           |      |
| Benzene                           | ND     | 0.0250             | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/28/04 | EPA 8021B |      |
| Toluene                           | ND     | 0.0250             | Ħ         | 11       | н       | 11       | **       | и         |      |
| Ethylbenzene                      | ND     | 0.0250             | **        | **       | H       | н        | **       | **        |      |
| Xylene (p/m)                      | ND     | 0.0250             | n         | н        | н       | "        | "        | "         |      |
| Xylene (o)                        | ND     | 0.0250             | 11        | 17       | **      | ч        | 17       | н         |      |
| Surrogate: a,a,a-Trifluorotoluene |        | 84.7 %             | 80-1      | 20       | "       | "        | "        | "         |      |
| Surrogate: 4-Bromofluorobenzene   |        | 96.8 %             | 80-1      | 20       | "       | "        | ,,       | n         |      |
| Gasoline Range Organics C6-C12    | ND     | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | и         | **       | "       | "        | u        |           |      |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | n         | n        | "       | 14       | n        | н         |      |
| Surrogate: 1-Chlorooctane         |        | 86.2 %             | 70-1      | 30       | "       | u u      | "        | ***       |      |
| Surrogate: 1-Chlorooctadecane     |        | 103 %              | 70-1      | 30       | "       | "        | "        | "         |      |
| MW-2 15' (4J26001-18) Soil        |        |                    |           |          |         |          |          |           |      |
| Benzene                           | ND     | 0.0250             | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/28/04 | EPA 8021B |      |
| Toluene                           | ND     | 0.0250             | н         | ,,       | 11      | H        | 11       | •         |      |
| Ethylbenzene                      | ND     | 0.0250             | n         | **       | "       | O.       | *        | U         |      |
| Xylene (p/m)                      | ND     | 0.0250             | "         | **       | n       | 11       | **       | tt.       |      |
| Xylene (o)                        | ND     | 0.0250             |           | **       | н       | н        | n        | н         |      |
| Surrogate: a,a,a-Trifluorotoluene |        | 80.2 %             | 80-1      | 20       | #       | "        | n n      | "         |      |
| Surrogate: 4-Bromofluorobenzene   |        | 95.9 %             | 80-1      |          | "       | "        | n        | "         |      |
| Gasoline Range Organics C6-C12    | ND     | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | "         | 11       | **      | 11       | **       | н         |      |
| Total Hydrocarbon C6-C35          | ND     | 10.0               |           | "        | *       | н        | н        | н         |      |

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P.O. Box 301 Lovington TX, 88260 Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

Reported: 11/01/04 16:44

# Organics by GC Environmental Lab of Texas

|                                   | D 1        | Reporting | # t- ha   |          |         | _        |          |           |       |
|-----------------------------------|------------|-----------|-----------|----------|---------|----------|----------|-----------|-------|
| Analyte                           | Result     | Limit     | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
| MW-2 15' (4J26001-18) Soil        |            |           |           |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane         |            | 94.8 %    | 70        | 130      | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane     |            | 102 %     | 70        | 130      | n       | "        | "        | n         |       |
| MW-2 60' (4J26001-19) Soil        |            |           |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/28/04 | EPA 8021B |       |
| Toluene                           | J [0.0128] | 0.0250    | #         | "        | "       | u        | "        | u .       |       |
| Ethylbenzene                      | J [0.0232] | 0.0250    | н         | 11       | "       | 11       | 11       | н         |       |
| Xylene (p/m)                      | 0.0702     | 0.0250    | н         | **       | "       | 11       | 11*      | **        |       |
| Xylene (o)                        | J [0.0154] | 0.0250    | "         | 11       | 11      | n        | et       | **        |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 83.8 %    | 80-       | 120      | "       | ,,       | "        | Ħ         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 104 %     | 80-       | 120      | "       | "        | "        | н         |       |
| Gasoline Range Organics C6-C12    | ND         | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND         | 10.0      | "         | 11       | n       | "        | Ħ        | н         |       |
| Total Hydrocarbon C6-C35          | ND         | 10.0      | **        |          | n       | 16       | H        | n         |       |
| Surrogate: 1-Chlorooctane         |            | 93.2 %    | 70-       | 130      | "       | n        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 98.6 %    | 70-       | 130      | n       | ,,       | "        | 11        |       |
| MW-2 95' (4J26001-20) Soil        |            |           |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EJ42905 | 10/27/04 | 10/28/04 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250    | **        | ıı       | **      | n        | "        | it.       |       |
| Ethylbenzene                      | ND         | 0.0250    | **        | u        | n       | "        | n        | "         |       |
| Xylene (p/m)                      | ND         | 0.0250    | n         | н        | 11      | n        | n        | н         |       |
| Xylene (o)                        | ND         | 0.0250    | "         | н        | 11      | n        | "        | n         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 80.9 %    | 80-       | 120      | "       | "        | "        | n         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 98.8 %    | 80-       | 120      | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND         | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/26/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND         | 10.0      | u         | 11       | n       | п        | н        | (I        |       |
| Total Hydrocarbon C6-C35          | ND         | 10.0      | n         | n        | **      | 19       | "        | 11        |       |
| Surrogate: 1-Chlorooctane         |            | 94.4 %    | 70        | 130      | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 103 %     | 70        | 130      | "       | "        | n        | n         |       |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch
Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

# Organics by GC Environmental Lab of Texas

|                                   |        | Reporting |           |          |         |          |          |           |      |
|-----------------------------------|--------|-----------|-----------|----------|---------|----------|----------|-----------|------|
| Analyte                           | Result | Limit     | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Note |
| MW-2 135' (4J26001-21) Soil       |        |           |           |          |         |          |          |           |      |
| Benzene                           | ND     | 0.0250    | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/28/04 | EPA 8021B |      |
| Toluene                           | ND     | 0.0250    | н         | ŧ        | n       | Ħ        | 11       | **        |      |
| Ethylbenzene                      | ND     | 0.0250    | 11        | 11       | •       | 17       | **       | **        |      |
| Xylene (p/m)                      | ND     | 0.0250    | "         | "        | n       | "        | #        | n         |      |
| Xylene (o)                        | ND     | 0.0250    | 11        | "        | 11      | **       | tt.      | •         |      |
| Surrogate: a,a,a-Trifluorotoluene |        | 82.5 %    | 80-1      | 20       | "       | "        | "        | "         |      |
| Surrogate: 4-Bromofluorobenzene   |        | 91.1 %    | 80-1      | 20       | "       | "        | n        | "         |      |
| Gasoline Range Organics C6-C12    | ND     | 10.0      | mg/kg dry | I        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | ND     | 10.0      | 11        | 11       | и       | "        | *        | 11        |      |
| Total Hydrocarbon C6-C35          | ND     | 10.0      | n         | ,,       | 11      | ,        | n        | "         |      |
| Surrogate: 1-Chlorooctane         |        | 80.2 %    | 70-1      | 30       | "       | "        | "        | "         |      |
| Surrogate: 1-Chlorooctadecane     |        | 89.0 %    | 70-1      | 30       | u       | n        | n        | "         |      |
| MW-3 15' (4J26001-22) Soil        |        |           |           |          |         |          |          |           |      |
| Benzene                           | ND     | 0.0250    | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/28/04 | EPA 8021B |      |
| Toluene                           | ND     | 0.0250    | n         | 11       | н       | **       | 11       | u         |      |
| Ethylbenzene                      | ND     | 0.0250    | **        | **       | **      | и        | **       | u         |      |
| Xylene (p/m)                      | ND     | 0.0250    | 11        | н        | 11      | **       | **       | 0         |      |
| Xylene (o)                        | ND     | 0.0250    | ч         | 11       | **      | u        | 11       | •         |      |
| Surrogate: a,a,a-Trifluorotoluene |        | 80.1 %    | 80-1      | 20       | "       | "        | "        | "         |      |
| Surrogate: 4-Bromofluorobenzene   |        | 86.2 %    | 80-1      | 20       | "       | n        | "        | "         |      |
| Gasoline Range Organics C6-C12    | ND     | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | ND     | 10.0      | 11        | "        | ft      | "        | **       | и         |      |
| Total Hydrocarbon C6-C35          | ND     | 10.0      | *         | **       | 11      | 11       | н        | н         |      |
| Surrogate: 1-Chlorooctane         |        | 90.8 %    | 70-1      | 30       | "       | "        | n.       | "         |      |
| Surrogate: 1-Chlorooctadecane     |        | 99.2 %    | 70-1      | 30       | "       | "        | "        | #         |      |
| MW-3 60' (4J26001-23) Soil        |        |           |           |          |         |          |          |           |      |
| Benzene                           | ND     | 0.0250    | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/28/04 | EPA 8021B |      |
| Toluene                           | ND     | 0.0250    | *         | "        | 11      | n        | u        |           |      |
| Ethylbenzene                      | ND     | 0.0250    | #         | **       | n       | 11       | ij       | **        |      |
| Xylene (p/m)                      | ND     | 0.0250    | u         | n        | **      | **       | **       | н         |      |
| Xylene (o)                        | ND     | 0.0250    | **        | 11       | n       | *1       | н        | н         |      |
| Surrogate: a,a,a-Trifluorotoluene |        | 80.6 %    | 80-1      | 20       | "       | "        | "        | "         |      |
| Surrogate: 4-Bromofluorobenzene   |        | 86.0 %    | 80-1      | 20       | "       | "        | "        | "         |      |
| Gasoline Range Organics C6-C12    | ND     | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | ND     | 10.0      | 11        | **       | 11      | н        | n        | n         |      |
| Total Hydrocarbon C6-C35          | ND     | 10.0      | **        | п        | н       | 0        |          | **        |      |

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Lovington TX, 88260

P.O. Box 301

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Organics by GC

#### **Environmental Lab of Texas**

| Analyte                           | Result                                 | Reporting<br>Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|--|--------------------|-----------|----------|---------|----------|----------|-----------|-------|
| MW-3 60' (4J26001-23) Soil        | ······································ |                    |           |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane         |  | 93.2 %             | 70-1      | 30       | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane     |  | 99.2 %             | 70-1      | 30       | "       | n        | п        | tf        |       |
| MW-3 95' (4J26001-24) Soil        |  |                    |           |          |         |          |          |           |       |
| Benzene                           | ND                                     | 0.0250             | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/28/04 | EPA 8021B |       |
| Toluene                           | ND                                     | 0.0250             | **        | "        | и       | "        | **       | н         |       |
| Ethylbenzene                      | ND                                     | 0.0250             | u         | "        | u       | 11       | **       | u         |       |
| Xylene (p/m)                      | ND                                     | 0.0250             | u         | "        | **      | 11       | 11       | "         |       |
| Xylene (o)                        | ND                                     | 0.0250             | n         | 11       | w       | w        | n        | n         |       |
| Surrogate: a,a,a-Trifluorotoluene |  | 82.2 %             | 80-1      | 20       | "       | "        | п        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |  | 98.1 %             | 80-1      | 20       | "       | "        | n        | n         |       |
| Gasoline Range Organics C6-C12    | ND                                     | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND                                     | 10.0               | н         | *        | **      | 11       | tt       | 10        |       |
| Total Hydrocarbon C6-C35          | ND                                     | 10.0               | 11        | tr       | "       | 11       | 11       | It.       |       |
| Surrogate: 1-Chlorooctane         |  | 95.6 %             | 70-1      | 30       | "       | "        | "        | n .       |       |
| Surrogate: 1-Chlorooctadecane     |  | 101 %              | 70-1      | 30       | "       | "        | "        | "         |       |
| MW-3 135' (4J26001-25) Soil       |  |                    |           |          |         |          |          |           |       |
| Benzene                           | ND                                     | 0.0250             | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/28/04 | EPA 8021B |       |
| Toluene                           | ND                                     | 0.0250             | "         | **       |         | n        | u        | 11        |       |
| Ethylbenzene                      | ND                                     | 0.0250             | "         | "        | 19      |          | 11       | n         |       |
| Xylene (p/m)                      | ND                                     | 0.0250             | "         | †1       | 11      | 11       | 11       | н         |       |
| Xylene (o)                        | ND                                     | 0.0250             | **        | **       | н       | н        | 19       | н         |       |
| Surrogate: a,a,a-Trifluorotoluene |  | 81.9 %             | 80-1      | 20       | #       | n        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |  | 98.4 %             | 80-1      | 20       | "       | "        | ,,       | " .       |       |
| Gasoline Range Organics C6-C12    | ND                                     | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND                                     | 10.0               | н         | **       | n       | 11       | 11       | "         |       |
| Total Hydrocarbon C6-C35          | ND                                     | 10.0               | **        | "        | **      | 9        | ıt       | **        |       |
| Surrogate: 1-Chlorooctane         |  | 83.8 %             | 70-1      | 30       | **      | "        | #        | "         |       |
| Surrogate: 1-Chlorooctadecane     |  | 97.0 %             | 70-1      | 30       | "       | "        | "        | н         |       |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

Reported: 11/01/04 16:44

## Organics by GC Environmental Lab of Texas

|                                   | <b>.</b> . | Reporting | ** .      |          |         |          |          |           |     |
|-----------------------------------|------------|-----------|-----------|----------|---------|----------|----------|-----------|-----|
| Analyte                           | Result     | Limit     | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Not |
| MW-3 195' (4J26001-26) Soil       |            |           |           |          |         |          |          |           |     |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/28/04 | EPA 8021B |     |
| Toluene                           | ND         | 0.0250    | "         | Ħ        | "       | **       | n        | и         |     |
| Ethylbenzene                      | ND         | 0.0250    | **        | "        | **      | 11       | **       | н         |     |
| Xylene (p/m)                      | ND         | 0.0250    | n         | "        | **      | Ħ        | 19       | "         |     |
| Xylene (o)                        | ND         | 0.0250    | **        |          | ***     | "        | 11       | H1        |     |
| Surrogate: a,a,a-Trifluorotoluene |            | 81.3 %    | 80-1      | 20       | "       | "        | "        | u         |     |
| Surrogate: 4-Bromofluorobenzene   |            | 97.2 %    | 80-1      | 20       | "       | "        | n        | "         |     |
| Gasoline Range Organics C6-C12    | ND         | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |     |
| Diesel Range Organics >C12-C35    | ND         | 10.0      | "         | 11       | 11      | Ü        | 51       | "         |     |
| Total Hydrocarbon C6-C35          | ND         | 10.0      | H         | 11       | н       | 0        | 19       | н         |     |
| Surrogate: 1-Chlorooctane         |            | 92.4 %    | 70-1      | 30       | "       | n        | "        | "         |     |
| Surrogate: 1-Chlorooctadecane     |            | 101 %     | 70-1      | 30       | "       | "        | Ħ        | "         |     |
| SB-2 15' (4J26001-27) Soil        |            |           |           |          |         |          |          |           |     |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/28/04 | EPA 8021B |     |
| Toluene                           | ND         | 0.0250    | "         | 1*       | **      | "        | и        | ti .      |     |
| Ethylbenzene                      | ND         | 0.0250    | **        | "        | **      | **       | **       | "         |     |
| Xylene (p/m)                      | ND         | 0.0250    | 19        | "        | **      | **       | ,        | н         |     |
| Xylene (o)                        | ND         | 0.0250    | н         | "        | **      | **       | 17       | "         |     |
| Surrogate: a,a,a-Trifluorotoluene |            | 80.0 %    | 80-1      | 20       | "       | "        | "        | n         |     |
| Surrogate: 4-Bromofluorobenzene   |            | 88.4 %    | 80-1      | 20       | "       | "        | "        | "         |     |
| Gasoline Range Organics C6-C12    | ND         | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |     |
| Diesel Range Organics >C12-C35    | ND         | 10.0      | "         | *        | 11      | **       | u        | n         |     |
| Total Hydrocarbon C6-C35          | ND         | 10.0      | **        | H        | 11      | n        | и        | 11        |     |
| Surrogate: 1-Chlorooctane         |            | 91.4 %    | 70-1      | 30       | "       | "        | "        | rr        |     |
| Surrogate: 1-Chlorooctadecane     |            | 97.4 %    | 70-1      | 30       | "       | "        | "        | n         |     |
| SB-2 35' (4J26001-28) Soil        |            |           |           |          |         |          |          |           |     |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/29/04 | EPA 8021B |     |
| Toluene                           | ND         | 0.0250    | "         | 11       | **      | "        | n        | it        |     |
| Ethylbenzene                      | ND         | 0.0250    | н         | "        | n       | "        | ır       | н         |     |
| Xylene (p/m)                      | ND         | 0.0250    | и         | н        | 11      | **       | n        | 19        |     |
| Kylene (o)                        | ND         | 0.0250    |           | н        | 11      | "        | 'n       | н         |     |
| Surrogate: a,a,a-Trifluorotoluene |            | 83.4 %    | 80-1      | 20       | "       | "        | "        | n         |     |
| Surrogate: 4-Bromofluorobenzene   |            | 96.5 %    | 80-1      | 20       | "       | "        | "        | "         |     |
| Gasoline Range Organics C6-C12    | ND         | 10.0      | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |     |
| Diesel Range Organics >C12-C35    | ND         | 10.0      | ••        | **       | **      | 11       | If       | 11        |     |
| Fotal Hydrocarbon C6-C35          | ND         | 10.0      | 11        | **       | 0       | ч        | **       | ,,        |     |

Environmental Lab of Texas

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P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206
Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

# Organics by GC Environmental Lab of Texas

| Amaluta                               | Result | Reporting<br>Limit | Units     | <b>5</b> 9.7 | B . I        | <b>.</b>      |          | A4 4 1         | 37.   |
|---------------------------------------|--------|--------------------|-----------|--------------|--------------|---------------|----------|----------------|-------|
| Analyte<br>SB-2 35' (4J26001-28) Soil | Result | Limit              | Ollits    | Dilution     | Batch        | Prepared      | Analyzed | Method         | Notes |
|                                       |        | 101.0/             | 70        | 120          |              |               |          |                |       |
| Surrogate: 1-Chlorooctane             |        | 101 %              |           | 130          | EJ42604<br>" | 10/26/04<br>" | 10/27/04 | EPA 8015M<br>" |       |
| Surrogate: 1-Chlorooctadecane         |        | 107 %              | 70-       | 130          | "            | "             | ,        | "              |       |
| SB-2 60' (4J26001-29) Soil            |        |                    |           |              |              |               |          |                |       |
| Benzene                               | ND     | 0.0250             | mg/kg dry | 25           | EK40101      | 10/28/04      | 10/29/04 | EPA 8021B      |       |
| Toluene                               | ND     | 0.0250             | 11        | 11           | **           | tt.           | "        | v              |       |
| Ethylbenzene                          | ND     | 0.0250             | n         |              | **           | "             | н        | "              |       |
| Xylene (p/m)                          | ND     | 0.0250             | н         | "            | ч            | n             | u        | **             |       |
| Xylene (o)                            | ND     | 0.0250             | *         | "            | n            | **            | n        | D.             |       |
| Surrogate: a,a,a-Trifluorotoluene     |        | 86.1 %             | 80-       | 120          | "            | "             | "        | n              |       |
| Surrogate: 4-Bromofluorobenzene       |        | 103 %              | 80-       | 120          | "            | n             | "        | •              |       |
| Gasoline Range Organics C6-C12        | ND     | 10.0               | mg/kg dry | 1            | EJ42604      | 10/26/04      | 10/27/04 | EPA 8015M      |       |
| Diesel Range Organics >C12-C35        | ND     | 10.0               | *         | "            | **           | n             | "        | **             |       |
| Total Hydrocarbon C6-C35              | ND     | 10.0               | ,         | "            | н            | n             | "        | n              |       |
| Surrogate: 1-Chlorooctane             |        | 102 %              | 70-       | 130          | "            | n             | "        | n              |       |
| Surrogate: 1-Chlorooctadecane         |        | 109 %              | 70-       | 130          | "            | "             | "        | n              |       |
| SB-2 75' (4J26001-30) Soil            |        |                    |           |              |              |               |          |                |       |
| Benzene                               | ND     | 0.0250             | mg/kg dry | 25           | EK40101      | 10/28/04      | 10/29/04 | EPA 8021B      |       |
| Toluene                               | ND     | 0.0250             | 11        | n            | 11           | **            | 11       | н              |       |
| Ethylbenzene                          | ND     | 0.0250             | **        | н            | 11           | н             | **       | **             |       |
| Xylene (p/m)                          | ND     | 0.0250             | **        | н            | **           | **            | 11       | н              |       |
| Xylene (o)                            | ND     | 0.0250             | TF        | n            | н            | 11            | 11       | н              |       |
| Surrogate: a,a,a-Trifluorotoluene     |        | 84.1 %             | 80-       | 120          | "            | "             | н        | "              |       |
| Surrogate: 4-Bromofluorobenzene       |        | 101 %              | 80-       | 120          | "            | "             | н        | "              |       |
| Gasoline Range Organics C6-C12        | ND     | 10.0               | mg/kg dry | 1            | EJ42604      | 10/26/04      | 10/27/04 | EPA 8015M      |       |
| Diesel Range Organics >C12-C35        | ND     | 10.0               | **        | 11           | **           | "             |          | н              |       |
| Total Hydrocarbon C6-C35              | ND     | 10.0               | "         | "            | 11           | n             | н        | н              |       |
| Surrogate: 1-Chlorooctane             |        | 89.4 %             | 70-       | 130          | "            | n             | "        | "              |       |
| Surrogate: 1-Chlorooctadecane         |        | 96.4 %             | 70-       | 130          | "            | "             | "        | 11             |       |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Orgânics by GC Environmental Lab of Texas

| Analyte                           | Result | Reporting<br>Limit | Units     | Dil di   | Detail  | Duran I  | Amedica : 3                           | Made I    | <b>37</b> .    |
|-----------------------------------|--------|--------------------|-----------|----------|---------|----------|---------------------------------------|-----------|----------------|
|                                   | Result | Limit              | Units     | Dilution | Batch   | Prepared | Analyzed                              | Method    | Notes          |
| SB-2 90' (4J26001-31) Soil        |        |                    |           |          |         |          | · · · · · · · · · · · · · · · · · · · |           |                |
| Benzene                           | ND     | 0.0250             | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/29/04                              | EPA 8021B |                |
| Toluene                           | ND     | 0.0250             | n         | "        | "       | "        | **                                    | •         |                |
| Ethylbenzene                      | ND     | 0.0250             | n         | "        | "       | "        | "                                     | "         |                |
| Xylene (p/m)                      | ND     | 0.0250             | n         | ıı       | **      | 11       | "                                     | H         |                |
| Xylene (o)                        | ND     | 0.0250             | н         |          | n       |          |                                       | 17        |                |
| Surrogate: a,a,a-Trìfluorotoluene |        | 85.8 %             | 80-1      | 20       | "       | "        | "                                     | "         |                |
| Surrogate: 4-Bromofluorobenzene   |        | 104 %              | 80-1      | 20       | "       | "        | "                                     | "         |                |
| Gasoline Range Organics C6-C12    | ND ·   | 10.0               | mg/kg dry | i        | EJ42604 | 10/26/04 | 10/27/04                              | EPA 8015M |                |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | н         | "        | **      | **       | n                                     | a         |                |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | 11        | *        | 11      | **       | 13-                                   | 17        |                |
| Surrogate: 1-Chlorooctane         |        | 96.2 %             | 70-1      | 30       | "       | u        | "                                     | "         |                |
| Surrogate: 1-Chlorooctadecane     |        | 101 %              | 70-1      | 30       | "       | "        | "                                     | "         |                |
| SB-2 105' (4J26001-32) Soil       |        |                    |           |          |         |          |                                       |           |                |
| Benzene                           | ND     | 0.0250             | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/29/04                              | EPA 8021B |                |
| Toluene                           | ND     | 0.0250             | 11        | n        | **      | н        | 11                                    | **        |                |
| Ethylbenzene                      | ND     | 0.0250             | п         | "        | **      | **       | "                                     | **        |                |
| Xylene (p/m)                      | ND     | 0.0250             | **        | n        | 11      | n        | "                                     | **        |                |
| Xylene (o)                        | ND     | 0.0250             | n         | "        | **      | "        | tf                                    | **        |                |
| Surrogate: a,a,a-Trifluorotoluene |        | 82.3 %             | 80-1      | 20       | "       | "        | 11                                    | "         |                |
| Surrogate: 4-Bromofluorobenzene   |        | 86.4 %             | 80-1      | 20       | "       | "        | ,,                                    | "         |                |
| Gasoline Range Organics C6-C12    | ND     | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04                              | EPA 8015M |                |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | n         | п        | "       | 19       | 14                                    | 11        |                |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | H         | ,,       | "       | 11:      | 11                                    | **        |                |
| Surrogate: 1-Chlorooctane         |        | 80.2 %             | 70-1      | 30       | "       | "        | n                                     | и         | •              |
| Surrogate: 1-Chlorooctadecane     |        | 84.6 %             | 70-1      |          | "       | "        | H                                     | u .       |                |
| MW-2 195' (4J26001-33) Soil       |        |                    |           |          |         |          |                                       |           |                |
| Benzene                           | ND     | 0.0250             | mg/kg dry | 25       | EK40101 | 10/28/04 | 10/29/04                              | EPA 8021B | <del>* *</del> |
| Toluene                           | ND     | 0.0250             | "         | "        | "       | n        | v                                     |           |                |
| Ethylbenzene                      | ND     | 0.0250             | 11        | n        | u       | н        | u                                     | n         |                |
| Xylene (p/m)                      | ND     | 0.0250             | n         | 11       | "       | u        | u                                     | H         |                |
| Xylene (o)                        | ND     | 0.0250             | n         | n        | 11      | "        | 11                                    | a         |                |
| Surrogate: a,a,a-Trifluorotoluene |        | 81.9 %             | 80-1      | 20       | n       | "        | n n                                   | n .       |                |
| Surrogate: 4-Bromofluorobenzene   |        | 87.0 %             | 80-1      |          | "       | "        | "                                     | "         |                |
| Gasoline Range Organics C6-C12    | ND     | 10.0               | mg/kg dry | 1        | EJ42604 | 10/26/04 | 10/27/04                              | EPA 8015M |                |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | "         | н        | н       | 0        | п                                     | п         |                |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | 11        | 11       | **      | н        | "                                     | ,,        |                |

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

P.O. Box 301 Lovington TX, 88260 Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Organics by GC

#### **Environmental Lab of Texas**

| Analyte                       | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-2 195' (4J26001-33) Soil   |        |                    |       |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane     |        | 88.8 %             | 70-   | 130      | EJ42604 | 10/26/04 | 10/27/04 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane |        | 99.6 %             | 70-   | 130      | "       | "        | "        | n         |       |

P.O. Box 301 Lovington TX, 88260 Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

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| Analyte                     | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------------------|--------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| RW-1 5' (4J26001-01) Soil   |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 6.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 15' (4J26001-02) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 7.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 25' (4J26001-03) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 7.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 35' (4J26001-04) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 9.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 60' (4J26001-05) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 5.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 75' (4J26001-06) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 6.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 95' (4J26001-07) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 5.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 115' (4J26001-08) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 13.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 135' (4J26001-09) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 2.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 155' (4J26001-10) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 12.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| RW-1 175' (4J26001-11) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 12.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

| Analyte                     | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes          |
|-----------------------------|--------|--------------------|-------|----------|---------|----------|----------|---------------|----------------|
| RW-1 185' (4J26001-12) Soil | ACOURT |                    |       | Dimini   | Бакп    | ricpareu | Analyzed | Method        | notes          |
| % Moisture                  | 11.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation | <del>- ,</del> |
| SB-1 15' (4J26001-13) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 5.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation | -              |
| SB-1 35' (4J26001-14) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 5.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| SB-1 60' (4J26001-15) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 3.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| SB-1 75' (4J26001-16) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 5.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| SB-1 90' (4J26001-17) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 11.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| MW-2 15' (4J26001-18) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 4.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| MW-2 60' (4J26001-19) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 4.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| MW-2 95' (4J26001-20) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 3.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| MW-2 135' (4J26001-21) Soil |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 12.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |
| MW-3 15' (4J26001-22) Soil  |        |                    |       |          |         |          |          |               |                |
| % Moisture                  | 13.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |                |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

Reported: 11/01/04 16:44

| Analyte                     | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------------------|--------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| MW-3 60' (4J26001-23) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 5.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| MW-3 95' (4J26001-24) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 5.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| MW-3 135' (4J26001-25) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 13.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| MW-3 195' (4J26001-26) Soil |        |                    |       |          |         |          | _        |               |       |
| % Moisture                  | 15.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| SB-2 15' (4J26001-27) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 3.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| SB-2 35' (4J26001-28) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 3.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| SB-2 60' (4J26001-29) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 2.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| SB-2 75' (4J26001-30) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 4.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| SB-2 90' (4J26001-31) Soil  |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 3.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| SB-2 105' (4J26001-32) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 1.0    |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |
| MW-2 195' (4J26001-33) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture                  | 14.0   |                    | %     | 1        | EJ42701 | 10/26/04 | 10/27/04 | % calculation |       |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Organics by GC - Quality Control Environmental Lab of Texas

| Analyte                                 | Result | Reporting<br>Limit | Units     | Spike<br>Level | Source<br>Result | %REC        | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---|--------|--------------------|-----------|----------------|------------------|-------------|----------------|-----|--------------|-------|
| Batch EJ42604 - Solvent Extraction (GC) |        |                    |           |                |                  |             |                |     |              |       |
| Blank (EJ42604-BLK1)                    |        |                    |           | Prepared &     | k Analyzed:      | 10/26/04    |                |     |              |       |
| Gasoline Range Organics C6-C12          | ND     | 10.0               | mg/kg wet |                |                  |             |                |     |              |       |
| Diesel Range Organics >C12-C35          | ND     | 10.0               | n         |                |                  |             |                |     |              |       |
| Total Hydrocarbon C6-C35                | ND     | 10.0               | II        |                |                  |             |                |     |              |       |
| Surrogate: 1-Chlorooctane               | 39.6   |                    | mg/kg     | 50.0           |                  | 79.2        | 70-130         |     |              |       |
| Surrogate: 1-Chlorooctadecane           | 41.0   |                    | *         | 50.0           |                  | 82.0        | 70-130         |     |              |       |
| Blank (EJ42604-BLK2)                    |        |                    |           | Prepared: 1    | 10/26/04 A       | nalyzed: 10 | /27/04         |     |              |       |
| Gasoline Range Organics C6-C12          | ND     | 10.0               | mg/kg wet |                |                  |             |                |     |              |       |
| Diesel Range Organics >C12-C35          | ND     | 10.0               | 11        |                |                  |             |                |     |              |       |
| Total Hydrocarbon C6-C35                | ND     | 10.0               | 11        |                |                  |             |                |     |              |       |
| Surrogate: 1-Chlorooctane               | 39.7   |                    | mg/kg     | 50.0           |                  | 79.4        | 70-130         |     |              |       |
| Surrogate: 1-Chlorooctadecane           | 40.3   |                    | u         | 50.0           |                  | 80.6        | 70-130         |     |              |       |
| LCS (EJ42604-BS1)                       |        |                    |           | Prepared &     | Analyzed:        | 10/26/04    |                |     |              |       |
| Gasoline Range Organics C6-C12          | 455    | 10.0               | mg/kg wet | 500            |                  | 91.0        | 75-125         |     |              |       |
| Diesel Range Organics >C12-C35          | 486    | 10.0               | "         | 500            |                  | 97.2        | 75-125         |     |              |       |
| Total Hydrocarbon C6-C35                | 941    | 10.0               | "         | 1000           |                  | 94.1        | 75-125         |     |              |       |
| Surrogate: 1-Chlorooctane               | 45.7   |                    | mg/kg     | 50.0           |                  | 91.4        | 70-130         |     |              |       |
| Surrogate: 1-Chlorooctadecane           | 40.1   |                    | 10        | 50.0           |                  | 80.2        | 70-130         |     |              |       |
| LCS (EJ42604-BS2)                       |        |                    |           | Prepared: 1    | 0/26/04 Aı       | nalyzed: 10 | /27/04         |     |              |       |
| Gasoline Range Organics C6-C12          | 434    | 10.0               | mg/kg wet | 500            |                  | 86.8        | 75-125         |     |              |       |
| Diesel Range Organics >C12-C35          | 488    | 10.0               | U         | 500            |                  | 97.6        | 75-125         |     |              |       |
| Total Hydrocarbon C6-C35                | 922    | 10.0               | 11        | 1000           |                  | 92.2        | 75-125         |     |              |       |
| Surrogate: 1-Chlorooctane               | 45.8   |                    | mg/kg     | 50.0           |                  | 91.6        | 70-130         |     |              |       |
| Surrogate: I-Chlorooctadecane           | 41.7   |                    | "         | 50.0           |                  | 83.4        | 70-130         |     |              |       |
| Calibration Check (EJ42604-CCV1)        |        |                    |           | Prepared &     | Analyzed:        | 10/26/04    |                |     |              |       |
| Gasoline Range Organics C6-C12          | 488    |                    | mg/kg     | 500            |                  | 97.6        | 80-120         |     |              |       |
| Diesel Range Organics >C12-C35          | 519    |                    | 19        | 500            |                  | 104         | 80-120         |     |              |       |
| Total Hydrocarbon C6-C35                | 1010   |                    | п         | 1000           |                  | 101         | 80-120         |     |              |       |
| Surrogate: 1-Chlorooctane               | 48.3   |                    | "         | 50.0           |                  | 96.6        | 70-130         |     |              |       |
| Surrogate: 1-Chlorooctadecane           | 45.0   |                    | <b>w</b>  | 50.0           |                  | 90.0        | 70-130         |     |              |       |

P.O. Box 301 Lovington TX, 88260 Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Organics by GC - Quality Control Environmental Lab of Texas

|   |        | Reporting             |           | Spike      | Source      | 0/550       | %REC   | nen         | RPD   | • • • • |
|---|--------|-----------------------|-----------|------------|-------------|-------------|--------|-------------|-------|---------|
| Analyte                                 | Result | Limit                 | Units     | Level      | Result      | %REC        | Limits | RPD         | Limit | Notes   |
| Batch EJ42604 - Solvent Extraction (GC) |        |                       |           |            |             |             |        | <del></del> |       |         |
| Calibration Check (EJ42604-CCV2)        |        |                       |           | Prepared & | k Analyzed: | 10/26/04    |        |             |       |         |
| Gasoline Range Organics C6-C12          | 489    |                       | mg/kg     | 500        |             | 97.8        | 80-120 |             |       |         |
| Diesel Range Organics >C12-C35          | 488    |                       | n         | 500        |             | 97.6        | 80-120 |             |       |         |
| Total Hydrocarbon C6-C35                | 977    |                       | "         | 1000       |             | 97.7        | 80-120 |             |       |         |
| Surrogate: 1-Chlorooctane               | 41.7   |                       | "         | 50.0       |             | 83.4        | 70-130 |             |       |         |
| Surrogate: 1-Chlorooctadecane           | 39.9   |                       | "         | 50.0       |             | 79.8        | 70-130 |             |       |         |
| Matrix Spike (EJ42604-MS1)              | Sou    | rce: 4 <b>J2</b> 6001 | -17       | Prepared & | k Analyzed: | 10/26/04    |        |             |       |         |
| Gasoline Range Organics C6-C12          | 573    | 10.0                  | mg/kg dry | 562        | ND          | 102         | 75-125 |             |       |         |
| Diesel Range Organics >C12-C35          | 584    | 10.0                  | п         | 562        | ND          | 104         | 75-125 |             |       |         |
| Total Hydrocarbon C6-C35                | 1160   | 10.0                  | "         | 1120       | ND          | 104         | 75-125 |             |       |         |
| Surrogate: 1-Chlorooctane               | 55.0   |                       | mg/kg     | 50.0       |             | 110         | 70-130 |             |       |         |
| Surrogate: 1-Chlorooctadecane           | 50.3   |                       | "         | 50.0       |             | 101         | 70-130 |             |       |         |
| Matrix Spike (EJ42604-MS2)              | Sou    | rce: 4J26001          | -21       | Prepared:  | 10/26/04 A  | nalyzed: 10 | /27/04 |             |       |         |
| Gasoline Range Organics C6-C12          | 536    | 10.0                  | mg/kg dry | 568        | ND          | 94.4        | 75-125 |             |       |         |
| Diesel Range Organics >C12-C35          | 611    | 10.0                  | ч         | 568        | ND          | 108         | 75-125 |             |       |         |
| Total Hydrocarbon C6-C35                | 1150   | 10.0                  |           | 1140       | ND          | 101         | 75-125 |             |       |         |
| Surrogate: 1-Chlorooctane               | 46.4   |                       | mg/kg     | 50.0       |             | 92.8        | 70-130 |             |       |         |
| Surrogate: 1-Chlorooctadecane           | 44.5   |                       | H         | 50.0       |             | 89.0        | 70-130 |             |       |         |
| Matrix Spike Dup (EJ42604-MSD1)         | Sou    | rce: 4J26001          | -17       | Prepared & | Analyzed:   | 10/26/04    |        |             |       |         |
| Gasoline Range Organics C6-C12          | 567    | 10.0                  | mg/kg dry | 562        | ND          | 101         | 75-125 | 1.05        | 20    |         |
| Diesel Range Organics >C12-C35          | 584    | 10.0                  | u         | 562        | NĐ          | 104         | 75-125 | 0.00        | 20    |         |
| Total Hydrocarbon C6-C35                | 1150   | 10.0                  | **        | 1120       | ND          | 103         | 75-125 | 0.866       | 20    |         |
| Surrogate: 1-Chlorooctane               | 54.5   |                       | mg/kg     | 50.0       |             | 109         | 70-130 |             |       |         |
| Surrogate: 1-Chlorooctadecane           | 51.8   |                       | n         | 50.0       |             | 104         | 70-130 |             |       |         |
| Matrix Spike Dup (EJ42604-MSD2)         | Sou    | rce: 4J26001          | -21       | Prepared:  | 10/26/04 A  | nalyzed: 10 | /27/04 |             |       |         |
| Gasoline Range Organics C6-C12          | 550    | 10.0                  | mg/kg dry | 568        | ND          | 96.8        | 75-125 | 2.58        | 20    |         |
| Diesel Range Organics >C12-C35          | 589    | 10.0                  | 10        | 568        | ND          | 104         | 75-125 | 3.67        | 20    |         |
| Total Hydrocarbon C6-C35                | 1140   | 10.0                  | 17        | 1140       | ND          | 100         | 75-125 | 0.873       | 20    |         |
| Surrogate: 1-Chlorooctane               | 46.7   |                       | mg/kg     | 50.0       |             | 93.4        | 70-130 |             |       |         |
| Surrogate: 1-Chlorooctadecane           | 44.8   |                       | n         | 50.0       |             | 89.6        | 70-130 |             |       |         |

Project: Ballard-Grayburg 5 Inch

Fax: (505) 396-1429

P.O. Box 301 Lovington TX, 88260 Project Number: EMS:2004-00206 Project Manager: Ken Dutton

Reported: 11/01/04 16:44

### Organics by GC - Quality Control Environmental Lab of Texas

|                                   | D1:    | Reporting     | T Y-14-   | Spike       | Source      | 0/BEC       | %REC   | DDD                                    | RPD   | N7-4 ·  |
|-----------------------------------|--------|---------------|-----------|-------------|-------------|-------------|--------|--|-------|---------|
| Analyte                           | Result | Limit         | Units     | Level       | Result      | %REC        | Limits | RPD                                    | Limit | Notes   |
| Batch EJ42716 - EPA 5030C (GC)    |        |               |           |             |             |             |        |  | ***** |         |
| Blank (EJ42716-BLK1)              |        |               |           | Prepared: 1 | 0/26/04 A   | nałyzed: 10 | /27/04 |  |       | <u></u> |
| Benzene                           | ND     | 0.0250        | mg/kg wet |             |             |             |        |  |       |         |
| Toluene                           | ND     | 0.0250        | н         |             |             |             |        |  |       |         |
| Ethylbenzene                      | ND     | 0.0250        | н         |             |             |             |        |  |       |         |
| Xylene (p/m)                      | ND     | 0.0250        | u         |             |             |             |        |  |       |         |
| Xylene (o)                        | ND     | 0.0250        | H         |             |             |             |        |  |       |         |
| Surrogate: a,a,a-Trifluorotoluene | 87.0   |               | ug/kg     | 100         | ,           | 87.0        | 80-120 |  |       |         |
| Surrogate: 4-Bromofluorobenzene   | 103    |               | "         | 100         |             | 103         | 80-120 |  |       |         |
| LCS (EJ42716-BS1)                 |        |               |           | Prepared &  | : Analyzed: | 10/26/04    |        |  |       |         |
| Benzene                           | 115    |               | ug/kg     | 100         |             | 115         | 80-120 | ······································ |       |         |
| Toluene                           | 108    |               | n         | 100         |             | 108         | 80-120 |  |       |         |
| Ethylbenzene                      | 105    |               | н         | 100         |             | 105         | 80-120 |  |       |         |
| Xylene (p/m)                      | 240    |               | "         | 200         |             | 120         | 80-120 |  |       |         |
| Xylene (o)                        | 115    |               | н         | 100         |             | 115         | 80-120 |  |       |         |
| Surrogate: a,a,a-Trifluorotoluene | 111    |               | "         | 100         |             | 111         | 80-120 |  |       |         |
| Surrogate: 4-Bromofluorobenzene   | 119    |               | n         | 100         |             | 119         | 80-120 |  |       |         |
| Calibration Check (EJ42716-CCV1)  |        |               |           | Prepared: 1 | 0/26/04 A   | nalyzed: 10 | /27/04 |  |       |         |
| Benzene                           | 99.0   |               | ug/kg     | 100         |             | 99.0        | 80-120 | ,                                      |       |         |
| Toluene                           | 92.9   |               | "         | 100         |             | 92.9        | 80-120 |  |       |         |
| Ethylbenzene                      | 96.9   |               | 17        | 100         |             | 96.9        | 80-120 |  |       |         |
| Xylene (p/m)                      | 218    |               | "         | 200         |             | 109         | 80-120 |  |       |         |
| Xylene (o)                        | 104    |               | 11        | 100         |             | 104         | 80-120 |  |       |         |
| Surrogate: a,a,a-Trifluorotoluene | 103    |               | "         | 100         |             | 103         | 80-120 |  |       |         |
| Surrogate: 4-Bromofluorobenzene   | 114    |               | #         | 100         |             | 114         | 80-120 |  |       |         |
| Matrix Spike (EJ42716-MS1)        | Sou    | rce: 4J25002- | -01       | Prepared: 1 | 0/26/04 Aı  | nalyzed: 10 | /27/04 |  |       |         |
| Benzene                           | 88.8   |               | ug/kg     | 100         | ND          | 88.8        | 80-120 |  |       |         |
| Toluene                           | 91.2   |               | ч         | 100         | ND          | 91.2        | 80-120 |  |       |         |
| Ethylbenzene                      | 97.3   |               | 11        | 100         | ND          | 97.3        | 80-120 |  |       |         |
| Xylene (p/m)                      | 220    |               | "         | 200         | ND          | 110         | 80-120 |  |       |         |
| Xylene (o)                        | 106    |               | u         | 100         | ND          | 106         | 80-120 |  |       |         |
| Surrogate: a,a,a-Trifluorotoluene | 104    |               | н         | 100         |             | 104         | 80-120 |  |       |         |
| Surrogate: 4-Bromofluorobenzene   | 118    |               | "         | 100         |             | 118         | 80-120 |  |       |         |

Project: Ballard-Grayburg 5 Inch

P.O. Box 301

Project Number: EMS:2004-00206

Fax: (505) 396-1429

Reported: 11/01/04 16:44

Lovington TX, 88260

Project Manager: Ken Dutton

### Organics by GC - Quality Control **Environmental Lab of Texas**

|                                   | n 1    | Reporting     | Y 734 -   | Spike      | Source      | 0/DEC       | %REC   | חמת  | RPD<br>Limit | <b>NT</b> |
|-----------------------------------|--------|---------------|-----------|------------|-------------|-------------|--------|------|--------------|-----------|
| Analyte                           | Result | Limit         | Units     | Level      | Result      | %REC        | Limits | RPD  | Limit        | Notes     |
| Batch EJ42716 - EPA 5030C (GC)    |        |               |           |            |             |             |        |      |              |           |
| Matrix Spike Dup (EJ42716-MSD1)   | Sour   | rce: 4J25002- | -01       | Prepared:  | 10/26/04 A  | nalyzed: 10 | /27/04 |      |              |           |
| Benzene                           | 92.0   |               | ug/kg     | 100        | ND          | 92.0        | 80-120 | 3.54 | 20           |           |
| Toluene                           | 93.6   |               |           | 100        | ND          | 93.6        | 80-120 | 2.60 | 20           |           |
| Ethylbenzene                      | 102    |               | н         | 100        | ND          | 102         | 80-120 | 4.72 | 20           |           |
| Xylene (p/m)                      | 233    |               |           | 200        | ND          | 116         | 80-120 | 5.31 | 20           |           |
| Xylene (o)                        | 113    |               | n         | 100        | ND          | 113         | 80-120 | 6.39 | 20           |           |
| Surrogate: a,a,a-Trifluorotoluene | 104    |               | #         | 100        |             | 104         | 80-120 |      |              |           |
| Surrogate: 4-Bromofluorobenzene   | 118    |               | "         | 100        |             | 118         | 80-120 |      |              |           |
| Batch EJ42905 - EPA 5030C (GC)    |        |               |           |            |             |             |        |      |              |           |
| Blank (EJ42905-BLK1)              |        |               |           | Prepared & | z Analyzed: | 10/27/04    |        |      |              |           |
| Benzene                           | ND     | 0.0250        | mg/kg wet |            |             |             |        |      |              |           |
| Toluene                           | ND     | 0.0250        | n         |            |             |             |        |      |              |           |
| Ethylbenzene                      | ND     | 0.0250        | 11        |            |             |             |        |      |              |           |
| Xylene (p/m)                      | ND     | 0.0250        | В         |            |             |             |        |      |              |           |
| Xylene (o)                        | ND     | 0.0250        | "         |            |             |             |        |      |              |           |
| Surrogate: a,a,a-Trifluorotoluene | 81.0   |               | ug/kg     | 100        |             | 81.0        | 80-120 |      |              |           |
| Surrogate: 4-Bromofluorobenzene   | 85.4   |               | н         | 100        |             | 85.4        | 80-120 |      |              |           |
| LCS (EJ42905-BS1)                 |        |               |           | Prepared & | z Analyzed: | 10/27/04    |        |      |              |           |
| Benzene                           | 88.7   |               | ug/kg     | 100        |             | 88.7        | 80-120 |      |              |           |
| Toluene                           | 90.0   |               | **        | 100        |             | 90.0        | 80-120 |      |              |           |
| Ethylbenzene                      | 98.9   |               | P         | 100        |             | 98.9        | 80-120 |      |              |           |
| Xylene (p/m)                      | 223    |               | **        | 200        |             | 112         | 80-120 |      |              |           |
| Xylene (o)                        | 110    |               | 11        | 100        |             | 110         | 80-120 |      |              |           |
| Surrogate: a,a,a-Trifluorotoluene | 93.8   |               | н         | 100        |             | 93.8        | 80-120 |      |              |           |
| -                                 |        |               |           |            |             |             |        |      |              |           |

100

119

Surrogate: 4-Bromofluorobenzene

119

80-120

Project: Ballard-Grayburg 5 Inch

P.O. Box 301

Project Number: EMS:2004-00206

Fax: (505) 396-1429

Reported:
11/01/04 16:44

Lovington TX, 88260

Project Manager: Ken Dutton

nics by GC - Quality Control

### Organics by GC - Quality Control Environmental Lab of Texas

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

| Batch EJ42905 - | EPA 5030C ( | GC) |
|-----------------|-------------|-----|
|-----------------|-------------|-----|

| Calibration Check (EJ42905-CCV1)  |           |           | Prepared: 1 | 10/27/04 A | nalyzed: 1 | 0/28/04 |
|-----------------------------------|-----------|-----------|-------------|------------|------------|---------|
| Benzene                           | 90.6      | ug/kg     | 100         |            | 90.6       | 80-120  |
| Toluene                           | 90.9      | H         | 100         |            | 90.9       | 80-120  |
| Ethylbenzene                      | 93.5      | u         | 100         |            | 93.5       | 80-120  |
| Xylene (p/m)                      | 211       | **        | 200         |            | 106        | 80-120  |
| Xylene (o)                        | 102       | n         | 100         |            | 102        | 80-120  |
| Surrogate: a,a,a-Trifluorotoluene | 100       | "         | 100         |            | 100        | 80-120  |
| Surrogate: 4-Bromofluorobenzene   | 107       | н         | 100         |            | 107        | 80-120  |
| Matrix Spike (EJ42905-MS1)        | Source: 4 | J26001-16 | Prepared: 1 | 10/27/04 A | nalyzed: 1 | 0/28/04 |
| Benzene                           | 91.1      | ug/kg     | 100         | ND         | 91.1       | 80-120  |
| Toluene                           | 93.9      | n         | 100         | ND         | 93.9       | 80-120  |
| Ethylbenzene                      | 105       | н         | 100         | ND         | 105        | 80-120  |

| Toluene                           | 93.9 | 11 | 100 | ND | 93.9 | 80-120 |
|-----------------------------------|------|----|-----|----|------|--------|
| Ethylbenzene                      | 105  | *  | 100 | ND | 105  | 80-120 |
| Xylene (p/m)                      | 238  | "  | 200 | ND | 119  | 80-120 |
| Xylene (o)                        | 118  | "  | 100 | ND | 118  | 80-120 |
| Surrogate: a,a,a-Trifluorotoluene | 106  | "  | 100 |    | 106  | 80-120 |
| Surrogate: 4-Bromofluorobenzene   | 118  | "  | 100 |    | 118  | 80-120 |
|                                   |      |    |     |    |      |        |

| Matrix Spike Dup (EJ42905-MSD1)   | Source: 4 | J26001-16 | Prepared: | 10/27/04 A | nalyzed: 1 | 0/28/04 |      |    |
|-----------------------------------|-----------|-----------|-----------|------------|------------|---------|------|----|
| Benzene                           | 88.7      | ug/kg     | 100       | ND         | 88.7       | 80-120  | 2.67 | 20 |
| Toluene                           | 91.9      | 11        | 100       | ND         | 91.9       | 80-120  | 2.15 | 20 |
| Ethylbenzene                      | 99.8      | **        | 100       | ND         | 99.8       | 80-120  | 5.08 | 20 |
| Xylene (p/m)                      | 225       | H.        | 200       | ND         | 112        | 80-120  | 6.06 | 20 |
| Xylene (o)                        | 110       | 19        | 100       | ND         | 110        | 80-120  | 7.02 | 20 |
| Surrogate: a,a,a-Trifluorotoluene | 98.8      | "         | 100       |            | 98.8       | 80-120  |      |    |
| Surrogate: 4-Bromofluorobenzene   | 118       | "         | 100       |            | 118        | 80-120  |      |    |

#### Batch EK40101 - EPA 5030C (GC)

| Blank (EK40101-BLK1)              |      |        |           | Prepared & Ana | lyzed: 10/28/04 |        |      |
|-----------------------------------|------|--------|-----------|----------------|-----------------|--------|------|
| Benzene                           | ND   | 0.0250 | mg/kg wet |                |                 |        |      |
| Toluene                           | ND   | 0.0250 | н         |                |                 |        |      |
| Ethylbenzene                      | ND   | 0.0250 | 17        |                |                 |        |      |
| Xylene (p/m)                      | ND   | 0.0250 | n         |                |                 |        |      |
| Xylene (o)                        | ND   | 0.0250 | 11        |                |                 |        |      |
| Surrogate: a,a,a-Trifluorotoluene | 83.7 |        | ug/kg     | 100            | 83.7            | 80-120 | <br> |
| Surrogate: 4-Bromofluorobenzene   | 98.7 |        | "         | 100            | 98.7            | 80-120 |      |

P.O. Box 301

Lovington TX, 88260

Project: Ballard-Grayburg 5 Inch

Project Number: EMS:2004-00206 Project Manager: Ken Dutton Fax: (505) 396-1429

Reported: 11/01/04 16:44

### Organics by GC - Quality Control Environmental Lab of Texas

| Batch EK40101 - EPA 5030C (GC)   | Analyte                           | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC        | %REC<br>Limits | RPD   | RPD<br>Limit | Notes |
|--|-----------------------------------|--------|--------------------|-------|----------------|------------------|-------------|----------------|-------|--------------|-------|
| Prepared & Analyzed: 10/28/04   September     |                                   | Result | Diffit             | Onto  | 20,01          | - Tresure        | 70100       | Diffino        |       | Dillit       | rotes |
| Benizone   |                                   |        |                    |       |                |                  |             | · · · ·        |       |              |       |
| Tolucine   |                                   |        |                    |       |                | Analyzed:        |             |                |       |              |       |
| Ethylbenzene   |                                   |        |                    | ug/kg |                |                  |             |                |       |              |       |
| Xylene (p/m)   |                                   |        |                    | 11    |                |                  |             |                |       |              |       |
| Name   | •                                 |        |                    | **    |                |                  |             |                |       |              |       |
| Name      | • • •                             |        |                    | **    |                |                  |             |                |       |              |       |
| Surrogate: 4.Bromofluorotolucene   | Xylene (o)                        | 104    |                    |       |                |                  |             |                |       |              |       |
| Prepared: 10/28/04   Analyzed: 10/29/04   Prepared: 10/28/04   Prepare   | Surrogate: a,a,a-Trifluorotoluene | 97.4   |                    | и     | 100            |                  | 97.4        | 80-120         |       |              |       |
| Benzene  | Surrogate: 4-Bromofluorobenzene   | 116    |                    | н     | 100            |                  | 116         | 80-120         |       |              |       |
| Toluene  | Calibration Check (EK40101-CCV1)  |        |                    |       | Prepared: 1    | 0/28/04 A        | nalyzed: 10 | 0/29/04        |       |              |       |
| Ethylbenzene 93.3  | Benzene                           | 94.5   |                    | ug/kg | 100            |                  | 94.5        | 80-120         |       |              |       |
| Ethylenchene 93.5   100   98.7   80-120   103   80-120   120 | Toluene                           | 94.2   |                    | n     | 100            |                  | 94.2        | 80-120         |       |              |       |
| Xylene (o)   98.7   "   100   98.7   80-120  | Ethylbenzene                      | 93.3   |                    | 11    | 100            |                  | 93.3        | 80-120         |       |              |       |
| Name   100   101   100   | Xylene (p/m)                      | 206    |                    | *1    | 200            |                  | 103         | 80-120         |       |              |       |
| Surrogate: 4.8 and Phylloproblemene         101         " 100         101         80-120           Matrix Spike (EK40101-MS1)         Source: 4J26001-31         Prepared: 10/28/04         Analyzed: 10/29/04           Benzene         90.7         ug/kg         100         ND         90.7         80-120           Toluene         93.4         " 100         ND         93.4         80-120           Ethylbenzene         101         " 100         ND         101         80-120           Xylene (p/m)         229         " 200         ND         111         80-120           Xylene (p/m)         111         " 100         ND         101         80-120           Surrogate: a,a,a-Trifluorotoluene         101         " 100         ND         111         80-120           Surrogate: 4-Bromofluorobenzene         113         " 100         ND         113         80-120           Matrix Spike Dup (EK40101-MSD1)         Source: 4J26001-31         Prepared: 10/28/04         Analyzed: 10/29/04         1.42         20           Toluene         93.8         " 100         ND         92.0         80-120         1.42         20           Ethylbenzene         101         " 100         ND         93.8 <td< td=""><td>Xylene (o)</td><td>98.7</td><td></td><td>"</td><td>100</td><td></td><td>98.7</td><td>80-120</td><td></td><td></td><td></td></td<>   | Xylene (o)                        | 98.7   |                    | "     | 100            |                  | 98.7        | 80-120         |       |              |       |
| Matrix Spike (EK40101-MS1)         Source: 4J26001-31         Prepared: 10/28/04         Analyzed: 10/29/04           Benzene         90.7         ug/kg         100         ND         90.7         80-120           Toluene         93.4         "         100         ND         93.4         80-120           Ethylbenzene         101         "         100         ND         101         80-120           Xylene (p/m)         229         "         200         ND         114         80-120           Xylene (o)         111         "         100         ND         111         80-120           Surrogate: a,a,a-Trifluorotoluene         101         "         100         ND         111         80-120           Surrogate: 4-Bromofluorobenzene         113         "         100         ND         91.3         80-120           Matrix Spike Dup (EK40101-MSD1)         Source: 4J26001-31         Prepared: 10/28/04         Analyzed: 10/29/04         1.42         20           Toluene         93.8         "         100         ND         93.8         80-120         0.427         20           Ethylbenzene         101         "         100         ND         101         80-120         0   | Surrogate: a,a,a-Trifluorotoluene | 107    |                    | н     | 100            |                  | 107         | 80-120         |       |              |       |
| Benzene   90.7   ug/kg   100   ND   90.7   80-120  | Surrogate: 4-Bromofluorobenzene   | 101    |                    | n     | 100            |                  | 101         | 80-120         |       |              |       |
| Toluene 93.4 " 100 ND 93.4 80-120  Ethylbenzene 101 " 100 ND 101 80-120  Xylene (p/m) 229 " 200 ND 114 80-120  Xylene (o) 111 " 100 ND 111 80-120  Surrogate: a,a,a-Trifluorotoluene 101 " 100 ND 111 80-120  Surrogate: 4-Bromofluorobenzene 113 " 100 113 80-120  Matrix Spike Dup (EK40101-MSD1) Source: 4J26001-31 Prepared: 10/28/04 Analyzed: 10/29/04  Benzene 92.0 ug/kg 100 ND 92.0 80-120 1.42 20  Toluene 93.8 " 100 ND 93.8 80-120 0.427 20  Ethylbenzene 101 " 100 ND 101 80-120 0.00 20  Xylene (p/m) 228 " 200 ND 114 80-120 0.00 20  Xylene (o) 110 " 100 ND 114 80-120 0.00 20  Xylene (o) 110 " 100 ND 114 80-120 0.00 20  Xylene (a,a,a-Trifluorotoluene 99.9 " 100 ND 99.9 80-120  | Matrix Spike (EK40101-M\$1)       | Sou    | rce: 4J26001-3     | 1     | Prepared: 1    | 0/28/04 A        | nalyzed: 10 | 0/29/04        |       |              |       |
| Ethylbenzene 101 " 100 ND 101 80-120 Xylene (p/m) 229 " 200 ND 111 80-120 Xylene (o) 111 " 100 ND 111 80-120 Surrogate: a,a,a-Trifluorotoluene 101 " 100 ND 111 80-120 Surrogate: 4-Bromofluorobenzene 113 " 100 ND 113 80-120 Surrogate: 4-Bromofluorobenzene 113 " 100 ND 113 80-120 Surrogate: 4-Bromofluorobenzene 113 " 100 ND 92.0 80-120 1.42 20 Toluene 92.0 ug/kg 100 ND 92.0 80-120 1.42 20 Toluene 93.8 " 100 ND 93.8 80-120 0.427 20 Ethylbenzene 101 " 100 ND 93.8 80-120 0.00 20 Xylene (p/m) 228 " 200 ND 114 80-120 0.00 20 Xylene (o) 110 " 100 ND 110 80-120 0.905 20 Surrogate: a,a,a-Trifluorotoluene 99.9 " 100 ND 99.9 80-120 0.905 20 Surrogate: a,a,a-Trifluorotoluene   | Benzene                           | 90.7   |                    | ug/kg | 100            | ND               | 90.7        | 80-120         |       |              |       |
| Xylene (p/m)       229       " 200 ND 114 80-120         Xylene (o)       111       " 100 ND 111 80-120         Surrogate: a,a,a-Trifluorotoluene       101 " 100 113 80-120         Surrogate: 4-Bromofluorobenzene       113 " 100 113 80-120         Matrix Spike Dup (EK40101-MSD1)       Source: 4J26001-31 Prepared: 10/28/04 Analyzed: 10/29/04         Benzene       92.0 ug/kg 100 ND 92.0 80-120 1.42 20         Toluene       93.8 " 100 ND 93.8 80-120 0.427 20         Ethylbenzene       101 " 100 ND 101 80-120 0.00 20         Xylene (p/m)       228 " 200 ND 114 80-120 0.00 20         Xylene (o)       110 " 100 ND 110 80-120 0.905 20         Surrogate: a,a,a-Trifluorotoluene       99.9 " 100 ND 110 80-120 0.905 20  | Toluene                           | 93.4   |                    | 1)    | 100            | ND               | 93.4        | 80-120         |       |              |       |
| Xylene (o)         111         " 100         ND         111         80-120           Surrogate: a,a,a-Trifluorotoluene         101         " 100         101         80-120           Surrogate: 4-Bromofluorobenzene         113         " 100         113         80-120           Matrix Spike Dup (EK40101-MSD1)         Source: 4J26001-31         Prepared: 10/28/04 Analyzed: 10/29/04         ND         92.0         80-120         1.42         20           Toluene         92.0         ug/kg         100         ND         93.8         80-120         0.427         20           Ethylbenzene         101         " 100         ND         101         80-120         0.00         20           Xylene (p/m)         228         " 200         ND         114         80-120         0.905         20           Surrogate: a,a,a-Trifluorotoluene         99.9         " 100         ND         110         80-120         0.905         20   | Ethylbenzene                      | 101    |                    |       | 100            | ND               | 101         | 80-120         |       |              |       |
| Ayene (b)         III         100         ND         III         80-120           Surrogate: a,a,a-Trifluorotoluene         101         " 100         101         80-120           Surrogate: 4-Bromofluorobenzene         113         " 100         113         80-120           Matrix Spike Dup (EK40101-MSD1)         Source: 4J26001-31         Prepared: 10/28/04 Analyzed: 10/29/04         10/29/04           Benzene         92.0         ug/kg         100         ND         92.0         80-120         1.42         20           Toluene         93.8         " 100         ND         93.8         80-120         0.427         20           Ethylbenzene         101         " 100         ND         101         80-120         0.00         20           Xylene (p/m)         228         " 200         ND         114         80-120         0.905         20           Surrogate: a,a,a-Trifluorotoluene         99.9         " 100         ND         110         80-120         0.905         20  | Xylene (p/m)                      | 229    |                    | U     | 200            | ND               | 114         | 80-120         |       |              |       |
| Matrix Spike Dup (EK40101-MSD1)         Source: 4J26001-31         Prepared: 10/28/04         Analyzed: 10/29/04           Benzene         92.0         ug/kg         100         ND         92.0         80-120         1.42         20           Tohiene         93.8         "         100         ND         93.8         80-120         0.427         20           Ethylbenzene         101         "         100         ND         101         80-120         0.00         20           Xylene (p/m)         228         "         200         ND         114         80-120         0.00         20           Xylene (o)         110         "         100         ND         110         80-120         0.905         20           Surrogate: a,a,a-Trifluorotoluene         99.9         "         100         99.9         80-120         0.905         20  | Xylene (o)                        | 111    |                    |       | 100            | ND               | 111         | 80-120         |       |              |       |
| Matrix Spike Dup (EK40101-MSD1)         Source: 4J26001-31         Prepared: 10/28/04         Analyzed: 10/29/04           Benzene         92.0         ug/kg         100         ND         92.0         80-120         1.42         20           Tohuene         93.8         "         100         ND         93.8         80-120         0.427         20           Ethylbenzene         101         "         100         ND         101         80-120         0.00         20           Xylene (p/m)         228         "         200         ND         114         80-120         0.00         20           Xylene (o)         110         "         100         ND         110         80-120         0.905         20           Surrogate: a,a,a-Trifluorotoluene         99.9         "         100         99.9         80-120         80-120  | Surrogate: a,a,a-Trifluorotoluene | 101    |                    | "     | 100            |                  | 101         | 80-120         |       |              |       |
| Benzene         92.0         ug/kg         100         ND         92.0         80-120         1.42         20           Toluene         93.8         "         100         ND         93.8         80-120         0.427         20           Ethylbenzene         101         "         100         ND         101         80-120         0.00         20           Xylene (p/m)         228         "         200         ND         114         80-120         0.00         20           Xylene (o)         110         "         100         ND         110         80-120         0.905         20           Surrogate: a,a,a-Trifluorotoluene         99.9         "         100         99.9         80-120  | Surrogate: 4-Bromofluorobenzene   | 113    |                    | "     | 100            |                  | 113         | 80-120         |       |              |       |
| Toluene         93.8         "         100         ND         93.8         80-120         0.427         20           Ethylbenzene         101         "         100         ND         101         80-120         0.00         20           Xylene (p/m)         228         "         200         ND         114         80-120         0.00         20           Xylene (o)         110         "         100         ND         110         80-120         0.905         20           Surrogate: a,a,a-Trifluorotoluene         99.9         "         100         99.9         80-120  | Matrix Spike Dup (EK40101-MSD1)   | Sou    | rce: 4J26001-3     | 1     | Prepared: 1    | .0/28/04 A       | nalyzed: 10 | )/29/04        |       |              |       |
| Ethylbenzene         101         "         100         ND         101         80-120         0.00         20           Xylene (p/m)         228         "         200         ND         114         80-120         0.00         20           Xylene (o)         110         "         100         ND         110         80-120         0.905         20           Surrogate: a,a,a-Trifluorotoluene         99.9         "         100         99.9         80-120   | Benzene                           | 92.0   |                    | ug/kg | 100            | ND               | 92.0        | 80-120         | 1.42  | 20           |       |
| Xylene (p/m)       228       "       200       ND       114       80-120       0.00       20         Xylene (o)       110       "       100       ND       110       80-120       0.905       20         Surrogate: a,a,a-Trifluorotoluene       99.9       "       100       99.9       80-120  | Toluene                           | 93.8   |                    | "     | 100            | ND               | 93.8        | 80-120         | 0.427 | 20           |       |
| Xylene (p)m)     228     200     ND     114     80-120     0.00     20       Xylene (o)     110     "     100     ND     110     80-120     0.905     20       Surrogate: a,a,a-Trifluorotoluene     99.9     "     100     99.9     80-120  | Ethylbenzene                      | 101    |                    | 11    | 100            | ND               | 101         | 80-120         | 0.00  | 20           |       |
| Surrogate: a,a,a-Trifluorotoluene 99.9 " 100 99.9 80-120   | Xylene (p/m)                      | 228    |                    | 11    | 200            | ND               | 114         | 80-120         | 0.00  | 20           |       |
| Surroguie, 4,4,4-11/justrolionaene 99.9 100 97.9 00-120  | Xylene (o)                        | 110    |                    | n     | 100            | ND               | 110         | 80-120         | 0.905 | 20           |       |
| Surrogate: 4-Bromofluorobenzene         118         "         100         118         80-120   | Surrogate: a,a,a-Trifluorotoluene | 99.9   |                    | "     | 100            |                  | 99.9        | 80-120         |       |              |       |
|  | Surrogate: 4-Bromofluorobenzene   | 118    |                    | "     | 100            |                  | 118         | 80-120         |       |              |       |

Project: Ballard-Grayburg 5 Inch

Fax: (505) 396-1429

P.O. Box 301

Lovington TX, 88260

Project Number: EMS:2004-00206

Project Manager: Ken Dutton

Reported: 11/01/04 16:44

General Chemistry Parameters by EPA / Standard Methods - Quality Control

**Environmental Lab of Texas** 

Reporting Spike Source %REC RPD

Analyte Result Limit Units Level Result %REC Limits RPD Limit Notes

**Batch EJ42701 - General Preparation (Prep)** 

**Blank (EJ42701-BLK1)** Prepared: 10/26/04 Analyzed: 10/27/04

% Moisture 0.0

**Duplicate (EJ42701-DUP1)** Source: 4J26001-01 Prepared: 10/26/04 Analyzed: 10/27/04

% Moisture 6.0 % 6.0 0.00 20

Basin Environmental ServicesProject:Ballard-Grayburg 5 InchFax: (505) 396-1429P.O. Box 301Project Number:EMS:2004-00206Reported:Lovington TX, 88260Project Manager:Ken Dutton11/01/04 16:44

#### **Notes and Definitions**

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's. S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). DET Analyte DETECTED Analyte NOT DETECTED at or above the reporting limit ND NR Not Reported dry Sample results reported on a dry weight basis RPD Relative Percent Difference LCS Laboratory Control Spike Matrix Spike MS Duplicate Dup

|                     | Kaland KJ | and   |         |
|---------------------|-----------|-------|---------|
| Report Approved By: | (2000)    | Date: | 11/1/04 |

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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#### Items for Project Manager Review

| LabNumber  | Analysis   | Analyte                | Exception                           |
|------------|------------|------------------------|-------------------------------------|
| 4J26001-03 | 8021B BTEX | a,a,a-Trifluorotoluene | Exceeds upper control limit         |
|            | 8021B BTEX | (Soil)                 | Result calculations based on MDL    |
|            | TPH 8015   | (Soil)                 | Result calculations based on MDL    |
|            | 8021B BTEX | (Soil)                 | RPD calculations based on %Recovery |
|            | 8021B BTEX | (Soil)                 | J-Flags used                        |
|            | TPH 8015   | (Soil)                 | J-Flags used                        |
| 4J26001-03 | TPH 8015   | 1-Chlorooctadecane     | Exceeds lower control limit         |
| 4J26001-03 | TPH 8015   | 1-Chlorooctane         | Exceeds lower control limit         |
| 4J26001-05 | TPH 8015   | 1-Chlorooctadecane     | Exceeds lower control limit         |
| 4J26001-05 | TPH 8015   | 1-Chlorooctane         | Exceeds lower control limit         |
| 4J26001-06 | TPH 8015   | 1-Chlorooctadecane     | Exceeds lower control limit         |
| 4J26001-06 | TPH 8015   | 1-Chlorooctane         | Exceeds lower control limit         |
|            |            |                        | Default Report (not modified)       |
| 4J26001-07 | TPH 8015   | 1-Chlorooctadecane     | Exceeds lower control limit         |
| 4J26001-07 | TPH 8015   | 1-Chlorooctane         | S-06                                |
| 4J26001-04 | 8021B BTEX | a,a,a-Trifluorotoluene | Exceeds upper control limit         |
| 4J26001-02 | 8021B BTEX | a,a,a-Trifluorotoluene | Exceeds upper control limit         |
| 4J26001-02 | 8021B BTEX | a,a,a-Trifluorotoluene | S-04                                |
| 4J26001-03 | 8021B BTEX | a,a,a-Trifluorotoluene | S-04                                |
| 4J26001-03 | TPH 8015   | 1-Chlorooctadecane     | S-06                                |
| 4J26001-03 | TPH 8015   | 1-Chlorooctane         | S-06                                |
| 4J26001-04 | 8021B BTEX | a,a,a-Trifluorotoluene | S-04                                |
| 4J26001-05 | TPH 8015   | 1-Chlorooctadecane     | S-06                                |
| 4J26001-05 | TPH 8015   | 1-Chlorooctane         | S-06                                |
| 4J26001-06 | TPH 8015   | 1-Chlorooctadecane     | S-06                                |
| 4J26001-06 | TPH 8015   | 1-Chlorooctane         | S-06                                |
| 4J26001-07 | TPH 8015   | 1-Chlorooctadecane     | S-06                                |
| 4J26001-07 | TPH 8015   | 1-Chlorooctane         | Exceeds lower control limit         |

|  | Lab of Texas  |               | i            |            | •              |   |              | EURTOBY  |                 |                       |           |                |                  |               |
|--|---------------|---------------|--------------|------------|----------------|---|--------------|--|-----------------|-----------------------|-----------|----------------|------------------|---------------|
|  | KEN DETTON    |               |              |            |                |   | Ē            | ######################################   | BALL            | CALLERD-GRAYDER       | RAY       | 4 84           | S N              |               |
|  | P. I.         |               |              |            |                |   |              | Project &  | ** EHS: 2664-65 | 260                   | 2-73      | 425            |                  | 4             |
|  | P. B. Box 361 |               |              |            |                |   | <b>&amp;</b> | specificant  | ates Eddy       | 604/                  | FORNTY NA | KE             |                  |               |
|  | LOVENT OF NA  | A 7028        |              |            |                | ÷:  |              | 5  |                 |                       |           | Mental Control |                  | 1             |
| Towns Man (  | 100 441. 2114 |               | Per Hoc (S   | (\$ 65) 34 | 326-14         | 42.9  |              |  |                 |                       | •         |                |                  |               |
|  | Carl Bulle    |               |              |            |                | -   | د            |  |                 |                       |           |                |                  |               |
|  |               |               |              | K          |                | -   | 1            |  |                 | 7                     |           |                |                  | 1             |
|  |               | T produces of | entrending a |            |                | ((gpadg))   | ∰galetti i   | CONTRACTOR OF STREET ST | 100 / (00)      |                       | 71        |                | prompt and this  | 171           |
|  | - Mars 000 1  | PO 3          |              |            | 20°44<br>20°44 | PIGN  | 573          |  |                 |                       | V 174     |                | مه بروان المساوي | ueid a        |
|  | 2.5           |               | 111          |            |                |   |              |  |                 |                       |           |                |                  |               |
|  | 500           |               | 7.1.         |            |                |   | 3            |  |                 |                       | 4         |                |                  |               |
|  |               |               | 42.          |            |                |   |              |  |                 |                       |           |                |                  |               |
|  |               | 3             | 7            |            |                |   |              |  |                 |                       |           |                |                  |               |
|  |               |               |              |            |                |   |              |  |                 |                       |           | $\bigvee$      |                  |               |
|  | .557          |               | (40)         |            |                |   |              |  |                 |                       |           |                |                  |               |
|  |               | *             | (-4.1 kg     |            |                |   |              | - 5<br>- 7   |                 | THE SER               | -         |                |                  | 46            |
|  |               |               |              | •          |                |   |              | 23   | Table 1         | Upon Pass<br>Comments | # u       | )              |                  |               |
| STATE OF THE STATE | Secretary &   |               |              |            |                | Se de la constant de | . 3.         |  | Rec             | Ó                     | ¥         |                |                  |               |
| Jake extern  | 1725 1725     | Kalan         | dkThe        | 0          |                | 10-25-01  | -            | 521/   |                 |                       |           |                |                  | <del></del> 1 |
|  |               |               |              |            |                |   |              |  |                 |                       |           | •              |                  |               |

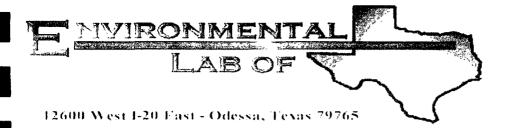
TAT brabnate. Project Name: BALLARD- GEATBURG 5" RUSH TAT (Pre-Schodule Project & MS: 2044- 40206 Project Loc: EDDY COMNIX NM CHAN OF CUSTODY RECORD AND ANALYSIS REQUEST MHOL Temperature Upon Receipt: Sample Cortainers Intact? Rec 0.0" 702 CHIEX SZ60 ş TOTAL: 8 MINUTE (CT 801' COD' HCOS) Cathorine (Ca., Mg. Ma., M.) 1725 04 WY 40 TA Mabb No5 egbuf2 Par No /505 356-1429 Other (Special) Preservative **10**5ች HOTH на ONH No. of Containers 6839 4524 1338 1717 1726 1244 1364 4629 balgma2 amiT 19 OFT 47 oct 2 & oct 88260 TOO ST 1987 19 oct A belomes sted A belomes sted 19 oct 1104 19 oct 19 oct 2Soctor 14468 Environmental Lab of Texas Phone: 432-563-1800 Fax: 432-563-1713 CHYSHAMIDE KOVING-TON NA Company Address: D. C. BOX 361 Telephone No: (505) 441-2124 DUTTON FIELD CODE BES 45 15, 35 Project Numagen. KEN138-81 MW-2 3 × 3 × MB5-2 \$3-4 1961-2 58-1 SB-A \$ 50 P Company Nerro Rev-Sampier Signature: 12800 West LZO Zeel Oducoz, Torza 78788 Special Instructions: AR 8 (tech case care) <sup>2</sup> F . <u>~</u> 7 **C** 

TAT bishnade Project Name: BALLAR) - GRAYBURG 5 aluberio Zana) TAT H2UF Project # EMS: 2004- 002 Jule Project Loc EDDY COLASTY FM CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST LÓ RM, Semperature Upon Receipt: Sample Containers Intact? Laboratory Comments: Te 0.0°C BTEX 6021B/6030 Metalls: As Ag Be Cd Cr Pb Hg Be TC.P. TOTAL PO # Ol ,elf ,bld ,eO) anoba 1440 1725 (Maroa ) N. Bra : Ha 9001 9001 Metro るなり **508** po th gjinqde Fax Ho: (5 \$ 5) 396- 1429 ORIOL ( Specify) Preservalive **OSH** HOTH ЮH CONH! No. of Containers **693** 6 6927 4425 6964 8660 4929 1346 4549 Time Sampled 24 OCT 25 oct 20 OCT 260cr 22 oct 120cT 22 ocr 26 oct 7004 26 oct 22 OCT batqma2 staQ Sacraff 1440 Environmental Lab of Texas Phone: 432-463-1200 Fax: 432-563-1713 City/Status/Zip: LOVINGTON NM Company Address: P. O. BOX 361 76 Habitions No. (582) 441-2124 LILLA Project Wanger: KEN DLITON FIELD CODE 19.5 14 S 38' 60 , <del>1</del>97 BES 53-2 Company Name 186-3 SB-2 MW-2 SB-2 K W TSE. 786-Sumpley Signature: 16-1**2800 West 1.20 East** Odesse, Toxed 70783 Special Instructions: 3 100 Jest Als 8 (tab use only) S, 2 2 Ņ

TAT brabned? Project Name BALLARD GRAY BURG- S NSH TAT (Pre-Schedule Project FMS: 2004-04206 Z CHAIN OF CLISTODY RECORD AND ANALYSIS REQUEST Project Loc. RDDY COUNTY **М**.Э.О.И Temperature Upon Receipto Sample Containers Inlact? Analyza For: Laboratory Comments: BTEX 60219/5000 STEX 6260 Rec 0.0% **versit: Ye yê ge Cq Ct b**p Hê ge 25 TOTAL 8 MARINE (CL. BOM, COS, HCOS) (% ,eM ,gM ,e3) enotes: 75/ 1100 M8106 1.614 APT 10-52-01 no9 Soul as • Болад AMPLE Per No: (5\$5) 396-1429 Other ( Specify) Pretervalive \*Ф8°н HOEN ГЭH 40NH No. of Containers 6953 1415 1469 Time Sampled 88260 22 oct 230CF 24 OCT 万种种万 Dete Sempled SOCTON 1940 Environmental Lab of Texas Phone: 432-563-1500 Fax: 432-563-1713 Project Manages: KEN LLTTON City/State/Zlp: LOYINGTON, MM Company Address: P. C. BOX 345 Telephone No: (5 465) 441-2124 10 9 90 d FIELD CODE 4 Company Name BES 38-2 142.2. 58-2 Sampler Signature: 12809 Weet 1-20 Euct Odessa, Texas 79788 Special instructions: To got the second LAB # (tab tee only) K ₩. Ħ

# Environmental Lab of Texas Variance / Corrective Action Report - Sample Log-In

| Client: Basin Environmental                               |  |           |                 |               |
|---|--|-----------|-----------------|---------------|
| Date/Time: 10-26-04@ 0815                                 |  |           |                 |               |
| Order.#: 4 326001   |  |           |                 |               |
| Initials: JMM   |  |           |                 |               |
| Sample Receipt  | Checkli                                | ist       |                 |               |
| Temperature of container/cooler?                          | (Yes)                                  | No        | 0.0             |               |
| Shipping container/cooler in good condition?              | Yes                                    | No        |                 | 1             |
| Custody Seals intact on shipping container/cooler?        | Yes                                    | No        | Not present     |               |
| Custody Seals intact on sample bottles?                   | Yes                                    | No        | (Not present)   | :<br><b>)</b> |
| Chain of custody present?                                 | (Yes)                                  | No        |                 |               |
| Sample Instructions complete on Chain of Custody?         | (res                                   | No        |                 | Ì             |
| Chain of Custody signed when relinquished and received?   | Xes                                    | No        |                 |               |
| Chain of custody agrees with sample label(s)              | Yes                                    | No        |                 | :             |
| Container labels legible and intact?                      | Ye;                                    | No        |                 | ļ             |
| Sample Matrix and properties same as on chain of custody? | Tes                                    | No        |                 |               |
| Samples in proper container/bottle?                       | (Pes)                                  | No        |                 | Į             |
| Samples properly preserved?                               | Reso                                   | No        |                 |               |
| Sample bottles intact?                                    | ( <del>Yes</del> >                     | No.       | <u> </u>        | ļ             |
| Preservations documented on Chain of Custody?             | (res)                                  | No        | <u> </u>        |               |
| Containers documented on Chain of Custody?                | (वहा                                   | No        | İ               | !             |
| Sufficient sample amount for indicated test?              | ोर्डि                                  | No        |                 |               |
| All samples received within sufficient hold time?         | (YES)                                  | <u>No</u> | <u> </u>        | i             |
| VOC samples have zero headspace?                          | (Yes)                                  | No        | Not Applicable  |               |
| Other observations:                                       |  |           |                 |               |
| Variance Docum Contact Person: Date/Time: Regarding:      |  |           | Contacted by: _ |               |
|   |  |           |                 |               |
| Corrective Action Taken:                                  |  |           |                 |               |
|   |  |           |                 |               |
|   |  |           |                 |               |
|   |  |           |                 |               |
|   |  |           |                 |               |
|   | ــــــــــــــــــــــــــــــــــــــ |           |                 |               |
|   | ·                                      |           |                 |               |
|   |  |           | -               |               |



# Analytical Report

#### **Prepared for:**

Ken Dutton

Basin Environmental Services
P.O. Box 301

Lovington, NM 88260

Project: Plain Marketing

Project Number: Ballard-Grayburg 5 inch

Location: Eddy County, NM

Lab Order Number: 4L06005

Report Date: 12/09/04

P.O. Box 301

Lovington NM, 88260

Project: Plain Marketing

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 12/09/04 17:29

#### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| MW-2      | 4L06005-01    | Water  | 12/02/04 13:05 | 12/06/04 09:30 |
| MW-3      | 4L06005-02    | Water  | 12/02/04 15:10 | 12/06/04 09:30 |

P.O. Box 301

Lovington NM, 88260

Project: Plain Marketing

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Fax: (505) 396-1429

**Reported:** 12/09/04 17:29

#### Organics by GC

#### **Environmental Lab of Texas**

| Analyte                           | Result  | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes   |
|-----------------------------------|---------|--------------------|-------|----------|---------|----------|----------|-----------|---------|
| MW-2 (4L06005-01) Water           |         |                    |       |          |         | <u> </u> |          |           | <u></u> |
| Benzene                           | 0.00111 | 0.00100            | mg/L  | 1        | EL40913 | 12/08/04 | 12/08/04 | EPA 8021B |         |
| Toluene                           | ND      | 0.00100            | 11    | **       | **      | 11       | **       | n         |         |
| Ethylbenzene                      | ND      | 0.00100            | 11    | IT       | #       | *1       | 14       | "         |         |
| Xylene (p/m)                      | ND      | 0.00100            | n     | **       | 11      | "        | n        | H         |         |
| Xylene (o)                        | ND      | 0.00100            | "     | н        | n       | 11       | u        | 12        |         |
| Surrogate: a,a,a-Trifluorotoluene |         | 99.0 %             | 80-12 | 0        | 11      | "        | "        | ii.       |         |
| Surrogate: 4-Bromofluorobenzene   |         | 96.5 %             | 80-12 | 0        | "       | "        | "        | "         |         |
| MW-3 (4L06005-02) Water           |         |                    |       |          |         |          |          |           |         |
| Benzene                           | ND      | 0.00100            | mg/L  | 1        | EL40913 | 12/08/04 | 12/08/04 | EPA 8021B |         |
| Toluene                           | ND      | 0.00100            | **    | 11       | "       | 11       | **       | н         |         |
| Ethylbenzene                      | ND      | 0.00100            | 11    | n        | 11      | **       | **       | **        |         |
| Xylene (p/m)                      | ND      | 0.00100            | n     | 11       | **      | "        | **       | n         |         |
| Xylene (o)                        | ND      | 0.00100            | п     | 11       | **      | 11       | 11       | Ħ         |         |
| Surrogate: a,a,a-Trifluorotoluene |         | 114 %              | 80-12 | 0        | "       | n        | 11       | "         |         |
| Surrogate: 4-Bromofluorobenzene   |         | 112 %              | 80-12 | 0        | "       | "        | n        | "         |         |

P.O. Box 301

Lovington NM, 88260

Project: Plain Marketing

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 12/09/04 17:29

| Analyte                       | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-2 (4L06005-01) Water       |        |                    |       |          |         |          |          |           |       |
| <b>Total Dissolved Solids</b> | 7730   | 5.00               | mg/L  | 1        | EL40702 | 12/06/04 | 12/07/04 | EPA 160.1 |       |
| MW-3 (4L06005-02) Water       |        |                    |       |          |         |          |          |           |       |
| Total Dissolved Solids        | 8530   | 5.00               | mg/L  | 1        | EL40702 | 12/06/04 | 12/07/04 | EPA 160.1 |       |

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Lovington NM, 88260

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Reported: 12/09/04 17:29

#### Organics by GC - Quality Control Environmental Lab of Texas

| Analyte                           | Result       | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC     | %REC<br>Limits | RPD                                     | RPD<br>Limit | Notes |
|-----------------------------------|--------------|--------------------|-------|----------------|------------------|----------|----------------|---|--------------|-------|
|                                   | Kesan        | Linit              | Omo   | 20701          | Lebate           | ,3100    | 2111110        |   |              | 1,000 |
| Batch EL40913 - EPA 5030C (GC)    | <del>.</del> |                    |       |                |                  |          |                |   |              |       |
| Blank (EL40913-BLK1)              |              |                    |       | Prepared &     | Analyzed:        | 12/08/04 | -              |   |              |       |
| Benzene                           | ND           | 0.00100            | mg/L  |                |                  |          |                |   |              |       |
| Foluene                           | ND           | 0.00100            | "     |                |                  |          |                |   |              |       |
| Ethylbenzene                      | ND           | 0.00100            | "     |                |                  |          |                |   |              |       |
| Kylene (p/m)                      | ND           | 0.00100            | n     |                |                  |          |                |   |              |       |
| Kylene (o)                        | ND           | 0.00100            | "     |                |                  |          |                |   | -            |       |
| Surrogate: a,a,a-Trifluorotoluene | 19.8         |                    | ug/l  | 20.0           |                  | 99.0     | 80-120         |   |              |       |
| Surrogate: 4-Bromofluorobenzene   | 17.4         |                    | "     | 20.0           |                  | 87.0     | 80-120         |   |              |       |
| LCS (EL40913-BS1)                 |              |                    |       | Prepared &     | : Analyzed:      | 12/08/04 |                |   |              |       |
| Benzene                           | 94.3         |                    | ug/i  | 100            |                  | 94.3     | 80-120         | *************************************** |              |       |
| Coluene                           | 97.6         |                    | 11    | 100            |                  | 97.6     | 80-120         |   |              |       |
| Ethylbenzene                      | 96.2         |                    | **    | 100            |                  | 96.2     | 80-120         |   |              |       |
| Kylene (p/m)                      | 194          |                    | n     | 200            |                  | 97.0     | 80-120         |   |              |       |
| Kylene (o)                        | 99.5         |                    | 11    | 100            |                  | 99.5     | 80-120         |   |              |       |
| Surrogate: a,a,a-Trifluorotoluene | 17.8         |                    | "     | 20.0           |                  | 89.0     | 80-120         |   |              |       |
| Surrogate: 4-Bromofluorobenzene   | 22.1         |                    | "     | 20.0           |                  | 110      | 80-120         |   |              |       |
| LCS Dup (EL40913-BSD1)            |              |                    |       | Prepared &     | Analyzed:        | 12/08/04 |                |   |              |       |
| Benzene                           | 97.4         |                    | ug/l  | 100            |                  | 97,4     | 80-120         | 3.23                                    | 20           |       |
| Coluene                           | 100          |                    | **    | 100            |                  | 100      | 80-120         | 2.43                                    | 20           |       |
| Ethylbenzene                      | 102          |                    | н     | 100            |                  | 102      | 80-120         | 5.85                                    | 20           |       |
| Kylene (p/m)                      | 202          |                    | "     | 200            |                  | 101      | 80-120         | 4.04                                    | 20           |       |
| Kylene (o)                        | 103          |                    | "     | 100            |                  | 103      | 80-120         | 3.46                                    | 20           |       |
| Surrogate: a,a,a-Trifluorotoluene | 18.7         |                    | "     | 20.0           |                  | 93.5     | 80-120         |   |              |       |
| Surrogate: 4-Bromofluorobenzene   | 22.2         |                    | "     | 20.0           |                  | 111      | 80-120         |   |              |       |
| Calibration Check (EL40913-CCV1)  |              |                    |       | Prepared &     | Analyzed:        | 12/08/04 |                |   |              |       |
| Benzene                           | 97.0         |                    | ug/l  | 100            | ············     | 97.0     | 80-120         |   |              |       |
| oluene                            | 99.1         |                    | P     | 100            |                  | 99.1     | 80-120         |   |              |       |
| Ethylbenzene                      | 101          |                    | **    | 100            |                  | 101      | 80-120         |   |              |       |
| Kylene (p/m)                      | 199          |                    |       | 200            |                  | 99.5     | 80-120         |   |              |       |
| Kylene (o)                        | 101          |                    | **    | 100            |                  | 101      | 80-120         |   |              |       |
| Currogate: a,a,a-Trifluorotoluene | 19.4         |                    |       | 20.0           |                  | 97.0     | 80-120         |   |              |       |

Surrogate: 4-Bromofluorobenzene

108

80-120

20.0

21.5

P.O. Box 301 Lovington NM, 88260 Project: Plain Marketing

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 12/09/04 17:29

#### **Organics by GC - Quality Control Environmental Lab of Texas**

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

Batch EL40913 - EPA 5030C (GC)

| Matrix Spike (EL40913-MS1)        | Source: 4I | <b>.06002-01</b> | Prepared & | Analyzed: | 12/08/04 |        |
|-----------------------------------|------------|------------------|------------|-----------|----------|--------|
| Benzene                           | 102        | ug/l             | 100        | ND        | 102      | 80-120 |
| Toluene                           | 102        | n                | 100        | ND        | 102      | 80-120 |
| Ethylbenzene                      | 101        | n                | 100        | ND        | 101      | 80-120 |
| Xylene (p/m)                      | 203        | "                | 200        | ND        | 102      | 80-120 |
| Xylene (o)                        | 111        | n                | 100        | ND        | 111      | 80-120 |
| Surrogate: a,a,a-Trifluorotoluene | 18.4       | n                | 20.0       |           | 92.0     | 80-120 |
| Surrogate: 4-Bromofluorobenzene   | 19.5       | "                | 20.0       |           | 97.5     | 80-120 |

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Project Number: Ballard-Grayburg 5 inch

Lovington NM, 88260 Project Manager: Ken Dutton

**Reported:** 12/09/04 17:29

General Chemistry Parameters by EPA / Standard Methods - Quality Control

**Environmental Lab of Texas** 

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

Batch EL40702 - General Preparation (WetChem)

Blank (EL40702-BLK1) Prepared: 12/06/04 Analyzed: 12/07/04

Total Dissolved Solids ND 5.00 mg/L

**Duplicate (EL40702-DUP1)** Source: 4L03001-01 Prepared: 12/06/04 Analyzed: 12/07/04

Total Dissolved Solids 4120 5.00 mg/L 4030 2.21 20

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Lovington NM, 88260

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Reported: 12/09/04 17:29

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

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K Itals

Date:

12/9/2004

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

12600 West I-20 East Odessa, Texas 79765

Phone: 432-563-1800 Fax: 432-563-1713

KEN DUTTON Project Manager:

ENV. SYSP Company Address: 36.1 Company Name

City/State/Zip: LOVZNETON

Telephone No: (5,65) 7441-22 Sampler Signature:

Fax No: (505) 396-1429

PO# FHS: 2004-00192

Project Loc: EDDY COUNTY NM

Project #: BALLARD - GRAY BURG

Project Name: PLAINS MARKETING

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

TAT Insbnst2 Alubario Beneficiale Schedule M.A.O.N. Temperature Upon Receipt. SCI Sample Containers Infact? Analyze For Laboratory Comments: STEX 80218/5030 or BTEX 8260 Netals: As Ag Ba Cd Cr Pb Hg Se TCLP TOTAL SAR / ESP / CEC Antona (Cl., SO4, CO3, HCO3) Cations (Ca. Mg, Na. K) 10%01 1000 1006 M2108 1.814: H97 Other (specify): 12-60% ខសិបករន Water Omet ( Specify) auon Preservative 'OSZH HOWN 1011 × FONH 901 No. of Containers 1384/4363 62 DEC 1500/15943 Time Sampled \$2 DEC 7807 Received by beiqme2 steQ Date FIELD CODE HW-2 -03/NW-7 Special Instructions: LAB # (leb use only) 4088% Relinquished by

# Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

| Client: Basin Evu. Susc   |                            |  |  |  |
|---|----------------------------|--|--|--|
| Olient: <u>Basin Fivo. Susc</u> Date/Time: 12/6/04 12:35  |                            |  |  |  |
| Order #: 4606005  |                            |  |  | ,  |
| Initials: JTH   |                            |  |  |  |
| Sample Receipt  | Checkl                     | ist                                      |  |  |
| Temperature of container/cooler?  | /Yes                       |  | त्र टो   |  |
| Shipping container/cooler in good condition?  | Yes                        | No                                       | 3 0  |  |
| Custody Seals intact on shipping container/cooler?  | Yes                        | No                                       | (Not present >   |  |
| Custody Seals intact on sample bottles?   | Yes                        | No                                       | Not present  |  |
| Chain of custody present?   | (Ces)                      | No                                       |  |  |
| Sample Instructions complete on Chain of Custody?   | (Yes                       | No                                       |  |  |
| Chain of Custody signed when relinquished and received?   | (Yes)                      | No                                       |  |  |
| Chain of custody agrees with sample label(s)  | 7es,                       | No                                       |  |  |
| Container labels legible and intact?  | Yes                        | No                                       |  |  |
| Sample Matrix and properties same as on chain of custody?   | (Yes>                      | No                                       |  |  |
| Samples in proper container/bottle?   | (Yes)                      | No                                       |  |  |
| Samples properly preserved?   | (Yes,                      | No                                       |  |  |
| Sample bottles intact?  | (Yes)                      | No                                       |  |  |
| Preservations documented on Chain of Custody?   | (Yes                       | No                                       |  |  |
| Containers documented on Chain of Custody?  | Yes                        | No                                       |  |  |
| Sufficient sample amount for indicated test?  | (Yes                       | No                                       | ***************************************  |  |
| All samples received within sufficient hold time?   | (CES)                      | No                                       | NIA A - III - III  |  |
| VOC samples have zero headspace?  | (Yes)                      | No                                       | Not Applicable   |  |
| Other observations:   |                            |  |  |  |
| Contact Person: Date/Time: Regarding:   |                            |  | Contacted by:  |  |
|   |                            | ***********                              |  | medicing the factor of the section o |
| Corrective Action Taken:  |                            | androning and grave supering and gravity | nturin Basanian opa de et  | a de cultiva de como form de medio natura la sustantiva de cultiva de cultiva de cultiva de cultiva de cultiva   |
|   | <del></del>                |  |  |  |
|   |                            | ******                                   |  |  |
|   | ·····                      |  |  |  |
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| CONTRACTOR OF THE PROPERTY OF | ·····                      | -  | i kanan manangan manangan matan merangan mengangan belangkan belangkan mengangkan meningkan meningkan belangka   |  |
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|   |                            |  | and the string current and of the street and the st | ganga dikinantikanta bistiri ofton <sub>mak</sub> alanga diangga daga pake gat   |
| THE RESIDENCE OF THE PROPERTY |                            |  | •  |  |

APPENDIX D
SOIL BORING LOGS

|                    |                    |  | Installed 18 Oct 04,<br>Basin Environmental                                      | Service Technologies                                     | 40 feet, 4" 020 PVC Screen  | 170 feet, 4" PVC Riser | 166 feet, Depth of Sand Pack | 166 feet to surface, Bentonite Pellet Seal | 5 3  | Groundwater depth Samples selected for                               | analysis     |              |                        |         |  |   | DATE                           | 14 Dec 04       |
|--------------------|--------------------|--|--|--|-----------------------------|------------------------|------------------------------|--|--|--|--------------|--------------|------------------------|---------|--|---|--------------------------------|-----------------|
|                    |                    | ain, Well<br>ales, Dry   | ain, Well  |  |                             |                        |                              |  |  |  |              |              |                        |         |  |   | DRAWN BY                       | Charle          |
|                    | dry                | Sand (SM) Red-Brown, Very Fine Grain, Well Sorted, Imbedded w/Limestone nodules, Dry | Sand (SM) Red-Brown, Very Fine Grain, Well<br>Sorted, Imbedded w/River Rock, Dry | Sand (SM) Dark-Red, Very Fine<br>Grain, Well Sorted, Dry | ft), Red, Dry               | wn, Very Fine          | Sorted, Dry                  | er, Dry                                    | Sand (SP) Brown, Very Fine Grain,<br>Well Sorted, Imbeeded w/Limestone<br>Nodules, Dry | Sand (SP) Tan, Very Fine Grain, Well<br>Sorted, Imbeeded w/Limestone |              | d            | i, Diy                 |         | Sand (SM) Red-Brown, Very Fine<br>Grain, Well Sorted, Imbeeded w/<br>Gravel, Moist |   | DESCRIPTION<br>Recovery Well 1 | t light figures |
| Soil               | Caliche layer, dry |  | Sand (SM) Rec<br>Sorted, Imbedo  | Sand (SM) Darl<br>Grain, Well Sor                        | Clay Layer (Soft), Red, Dry |                        | Grain, Well Sor              | Limestone Layer, Dry                       | Sand (SP) Brow<br>Well Sorted, Im<br>Nodules, Dry                                      | Sand (SP) Tan,<br>Sorted, Imbeed                                     | Nodules, Dry | limental and | Lilliestone Layer, Dry |         | Sand (SM) Red<br>Grain, Well Son<br>Gravel, Moist                                  |   | ITLE<br>Ballard Gravburg 5"    | a firmatain a   |
| Petroleum<br>Stain | Heavy              | None   | None   | None   | None                        | None                   |                              | None                                       | None   | None   | Slight       | None         | 25                     | None    |  |   | TITLE                          |                 |
| E                  | Неаму              | Heavy  | Heavy  | Heavy  | Moderate                    | Moderate               |                              | Moderate                                   | Slight   | Slight   | Heavy        | Slight       | n<br>h                 | Slight  |  |   |                                |                 |
| PID                | 724 ppm<br>675 ppm | 802 ppm<br>788 ppm   | 795 ppm  | 813 ppm  | 839 ppm                     | 245 ppm                | 771 ppm                      | 301 ppm                                    | 216 ppm  | 411 ppm  |              |              | _                      | 443 ppm | 291 ppm  |   |                                |                 |
| Soil Column        |                    |  |  | Pat I  |                             |                        |                              |  |  |  |              |              | 800                    |         | P P  |   |                                |                 |
| Depth So           | \$5                | 30   | 45   | 99   | 75                          | 06                     | -                            | 106  | 120  | 135  | 150          | 165          | 3                      | 180     | 189<br>195   | 2 |                                |                 |

T

| Soll Column Pilo Petroleum Soll Sian Description  1.3 ppm None None Sand (SM) Red-Brown, Very Fine Grain, Well Sorted, Dry  1.1 ppm None None Clay Layer (Soft), Red, Dry  1.1 ppm None None Limestone Layer, Dry  1.1 ppm None None Sand (SM) Rad-Brown, Very Fine Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Sand (SM) Rad-Brown, Very Fine Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Sand (SM) Rad-Brown, Very Fine Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Sand (SM) Rad-Brown, Very Fine Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.0 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.0 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Grain, Well Sorted, Imbedded wiSoft Red Clay, Dry  1.1 ppm None None Red Swill Red Sorted, Imbedded wiSoft Red Sorted, Imbedded wiSoft Red Sorted, Imbedded wiSoft Red Sorted, Imbedded wiSoft Red Swill Red Sw | Plains Marketing, L. P.<br>Ballard Grayburg 5" | Eddy County, New Mexico<br>Unit M, S10, T18S, R29E | Well Completion Data | Installed 19 Oct 04,<br>Basin Environmental     | Service Technologies | TD: 210 Feet bgs | 30 feet, 2" 020 PVC Screen | 180 feet, 2" PVC Riser | 175 feet, Depth of Sand Pack<br>175 feet to surface Rentonite Pellet Seel | 2 by 2 feet concrete surface pad installed | with a 4 by 60 metal locking square proctector  Groundwater depth | Samples selected for | analysis |         |         |   | DATE        | 14 Dec 04           |
|--|--|--|----------------------|---|----------------------|------------------|----------------------------|------------------------|---|--|---|----------------------|----------|---------|---------|---|-------------|---------------------|
| 1.3 ppm   None   None   None   1.1 ppm   None   None   1.1 ppm   None   None   None   1.1 ppm   None   None   None   1.1 ppm   None   None   1.0 ppm   None   None   1.0 ppm   None   None   1.0 ppm   None   None   1.0 ppm   None   None   None   1.0 ppm   None   None   1.0 ppm   None   None   None   1.0 ppm   None   No   |  | 'n,  |                      | in, Well<br>y                                   |                      |                  |                            |                        |   |  |   |                      |          |         |         |   | DRAWN BY    | KAD                 |
| 1.3 ppm   None   None   None   1.1 ppm   None   None   1.1 ppm   None   None   None   1.1 ppm   None   None   1.0 ppm   None   None   None   1.0 ppm   None   None   None   1.0 ppm   None   No   |  | d-Brown, Very Fine Gra<br>y                        |                      | -Brown, Very Fine Gra<br>ed w/Soft Red Clay, Dr |                      | 1) Red Dry       |                            | r, Dry                 |   |  |   |                      |          |         |         | Brown, Very Fine<br>ted, Imbeeded w/                | DESCRIPTION | Monitoring Well 2   |
| 1.3 ppm   None   Nore   | Soil   | Sand (SM), Rec<br>Well Sorted, Dr                  |                      | Sand (SM) Red<br>Sorted, Imbedd                 |                      | Clay Laver (Soft |                            | Limestone Laye         |   |  |   |                      |          |         |         | Sand (SM) Red-<br>Grain, Well Sort<br>Gravel, Moist |             | Ballard Grayburg 5" |
| Soil Column PID  15 13 ppm 145 145 15 17 ppm 165 190 11 ppm 11 ppm 165 190 11 ppm 11 ppm 11 ppm 11 ppm 11 ppm 11 ppm 120 120 ppm 135 12 ppm 14 ppm 15 ppm 16 ppm 16 ppm 17 ppm 18 ppm 17 ppm 18 ppm 18 ppm 18 ppm 19  | Petroleum<br>Stain                             | None   | None                 | None  | None                 | None             |                            | None                   | None  | acc.N                                      | Wood of   | 2                    | None     | None    | None    | None  | TITLE       | Balla               |
| Soil Column PID 30 1.3 ppm 45 60 0.4 ppm 75 1.1 ppm 1.1 ppm 1.2 ppm 1.2 ppm 1.2 ppm 1.2 ppm 1.3 ppm 1.1 ppm 1.1 ppm 1.1 ppm 1.2 ppm 1.2 ppm 1.1 ppm 1.2 ppm 1.2 ppm 1.2 ppm 1.2 ppm 1.3 ppm 1.1 ppm 1.2 ppm 1.2 ppm 1.2 ppm 1.3 ppm 1.3 ppm 1.4 ppm 1.5 ppm 1.5 ppm 1.5 ppm 1.6 ppm 1.6 ppm 1.7 ppm 1.7 ppm 1.8 ppm 1.9 ppm 1.9 ppm 1.9 ppm 1.9 ppm 1.9 ppm  | Petroleum<br>Odor                              | None   | None                 | None  | None                 | None             |                            | None                   | None  | o CON                                      |   | NO.                  | None     | None    | None    | None  |             |                     |
| 155 30 | PID  | 1.3 ppm  | 1.2 ppm              | 0.4 ppm   | 0.6 ppm              | 1.1 ppm          |                            | 1.1 ppm                | 1.6 ppm   | 1 4 2000                                   | mdd   | mdd c'               | 0.6 ppm  | 1.1 ppm | 1.0 ppm |   |             |                     |
| 155 30 | oil Column                                     |  |                      |   |                      |                  |                            | 110                    |   | 3160                                       | 100   | Es.                  | 1000     | 100     |         |   |             |                     |
|  | Depth So                                       | 5  | 30                   | 45  | 09                   | 75               |                            | 06                     | 105   | 120  | 200   | 3                    | 150      | 165     | 180     | 189<br>195<br>210                                   |             |                     |

| Plains Marketing, L. P.<br>Ballard Grayburg 5" | Eddy County, New Mexico<br>Unit M, S10, T18S, R29E | Well Completion Data | Installed 20 Oct 04,<br>Basin Environmental   | Service Technologies | TD: 210 Feet bgs            | 30 feet, 2 UZU FVC Screen | 175 feet Depth of Sand Pack | 175 feet to surface, Bentonite Peliet Seal | 2 by 2 feet concrete surface pad installed with a 4' by 60" metal locking square | proctector  Groundwater depth | Samples selected for | • Siskingsis |         |         |  | DATE        | 14 Dec 04         |
|--|--|----------------------|---|----------------------|-----------------------------|---------------------------|-----------------------------|--|--|-------------------------------|----------------------|--------------|---------|---------|--|-------------|-------------------|
|  | ď  |                      | , Well  |                      |                             |                           |                             |  |  |                               |                      |              |         |         |  | DRAWN BY    | KAD               |
|  | Red Brown, Very Fine Grain,<br>Dry                 |                      | Sand (SM) Red-Brown, Very Fine Grain, Well<br>Sorted, Imbedded w/Soft Red Clay, Dry |                      | Red Dry                     |                           | . Dry                       |  |  |                               |                      |              |         |         | Sand (SM) Red-Brown, Very Fine<br>Grain, Well Sorted, Imbeeded w/<br>Gravel, Moist | DESCRIPTION | Monitoring Well 3 |
| Soil   | Sand (SM), Red-<br>Well Sorted, Dry                |                      | Sand (SM) Red-I<br>Sorted, Imbedde  |                      | Clay Laver (Soff), Red. Dry |                           | Limestone Layer, Dry        |  |  |                               |                      |              |         |         | Sand (SM) Red-Brown, Very Fine<br>Grain, Well Sorted, Imbeeded w/<br>Gravel, Moist |             | rd Grayburg 5"    |
| Petroleum<br>Stain                             | Nome   | None                 | None  | None                 | None                        |                           | None                        | None                                       | None   | None                          | 2                    | None         | None    | None    | None   | TITLE       | Ball              |
| Petroleum<br>Odor                              | None   | None                 | None  | None                 | None                        |                           | None                        | None                                       | None   | 000                           | None                 | None         | None    | None    | None   |             |                   |
| PID P<br>Reading                               | 1.1 ppm  | 1.7 ppm.             | 3.8 ppm   | 4.6 ppm              | 1 S nom                     |                           |                             | 1.2 ppm<br>0.9 ppm                         | 21.1 ppm   |                               | mdd c                | 1.1 ppm      | 0.8 ppm | 0.7 ppm | 1.4 ppm  |             |                   |
| Soil Column                                    |  |                      |   |                      |                             |                           |                             |  |  | 21712                         |                      |              |         | 934     | e e  |             |                   |
| 271  | 10   | 30                   | 45  | 09                   | 75                          |                           | 90                          | 105  | 120  | 10.4                          | 25                   | 150          | 165     | 180     | 189<br>195<br>210  |             |                   |
| Depth  | 1  |                      |   | 1                    |                             |                           |                             | 1  |  |                               |                      |              |         | 1       |  | 1           | 1                 |

| Plains Marketing, L. P.<br>Ballard Grayburg 5"<br>SB-1 | Eddy County, New Mexico<br>Unit M, S10, T18S, R29E         | Well Completion Data | Installed 19 Oct 04,<br>Basin Environmental<br>Service Technologies | TD: 98 Feet bgs Samples selected for analysis                                       | Soil Boring terminated due to loss of air circulation | Sealed with 42 bags of Bentonite |         | •       |         |  |                      | 14 Dec 04                    |
|--|--|----------------------|---|---|---|----------------------------------|---------|---------|---------|--|----------------------|------------------------------|
|  | ain,   |                      |   | in, Well  |   |                                  |         |         |         |  |                      | DRAWN BY<br>KAD              |
|  | Sand (SM), Red-Brown, Very Fine Grain,<br>Well Sorted, Dry |                      | oft), White, Dry  | Sand (SM) Red-Brown, Very Fine Grain, Well<br>Sorted, Imbedded w/Soft Red Clay, Dry |   |                                  |         |         |         | Sand (SM) Tan, Very Fine Grain, Well<br>Sorted, Imbeeded w/Limestone<br>Nodules, Dry | yer, Dry             | DESCRIPTION<br>Soil Boring 1 |
| Soil   | Sand (SM), Re<br>Well Sorted, D                            |                      | Clay Layer (Soft), White, Dry                                       | Sand (SM) Re<br>Sorted, Imbed   |   |                                  |         |         |         | Sand (SM) Ta<br>Sorted, Imbee<br>Nodules, Dry  | Limestone Layer, Dry | ITLE<br>Ballard Grayburg 5"  |
| Petroleum<br>Stain                                     | None   | None                 | None  | None  | None  | None                             | None    | None    | None    | None   | None                 | TITLE                        |
| Petroleum<br>Odor                                      | None   | None                 | None  | None  | None  | None                             | None    | None    | None    | None   | None                 |                              |
| PID<br>Reading   | 4.4 ppm  | 4.5 ppm              | 8.6 ppm   | 3.8 ppm   | 5.7 ppm   | 2.5 ppm                          | 1.5 ppm | 2.8 ppm | 3.1 ppm | 3.0 ppm  | 2.6 ppm              |                              |
| Soil Column  |  |                      |   | 6   |   |                                  |         |         |         |  |                      | TD 0                         |
| Depth  | 9  |                      | 8   | 8   | 8   | 20                               | 8       | 02 —    | 1-1     | 8  | 8                    | 100                          |

| Plains Marketing, L. P. Ballard Grayburg 5" SB-2 | Eddy County, New Mexico<br>Unit M, S10, T18S, R29E         | Well Completion Data | Installed 20 Oct 04, | Service Technologies | 105 Feet bgs | Samples selected for | analysis                    | Soil Boring terminated due to |   | Sealed with 17 bags of Bentonite |  | •       |         |  |                      | DATE<br>14 Dec 04            |
|--|--|----------------------|----------------------|----------------------|--------------|----------------------|-----------------------------|-------------------------------|---|----------------------------------|--|---------|---------|--|----------------------|------------------------------|
|  |  | Well Co              | Installe<br>Basin F  | Service              | TD: 105      | Sa                   | ]                           | Soil Bori                     |   | Sealed                           |  |         |         |  |                      | DRAWN BY<br>KAD              |
|  | Grain,   |                      |                      |                      |              |                      |                             |                               |   |                                  | Srain, Well  |         |         | /ell   |                      | DESCRIPTION<br>Soil Boring 2 |
|  | Sand (SM), Red-Brown, Very Fine Grain,<br>Well Sorted, Dry |                      |                      |                      |              |                      | Clay Layer (Soff), Red, Dry |                               |   |                                  | Sand (SM) Red-Brown, Very Fine Grain, Well<br>Sorted Imbedded w/Soft Red Clay, Dry |         |         | Sand (SM) Tan, Very Fine Grain, Well<br>Sorted, Imbeeded w/Limestone<br>Nodules, Dry | Limestone Layer, Dry | TITLE<br>Ballard Grayburg 5" |
| Soil   | Sand (SM), F<br>Well Sorted,                               |                      |                      |                      |              |                      | Clay Layer                  |                               |   |                                  | Sand (SM)  |         |         | Sand (SM)<br>Sorted, Im<br>Nodules, E  | Limestone            |                              |
| Petroleum<br>Stain                               | None   | None                 | None                 |                      | None         | None                 | None                        |                               |   | None                             | None   | None    | None    | None   | None                 | None                         |
| Petroleum<br>Odor                                | None   | None                 | None                 |                      | None         | None                 | None                        |                               |   | None                             | None   | None    | None    | None   | None                 | None                         |
| PID<br>Reading                                   | 0.5 ppm  | 0.7 ppm              | 0.8 ppm              |                      | 0.4 ppm      | 0.4 ppm              | 1.1 ppm                     |                               |   | O.Z. ppm                         | 0.6 ppm  | 0.6 ppm | 0.8 ppm | 0.7 ppm  | 0.6 ppm              | 0.3 ppm                      |
| Soi Column                                       |  |                      |                      |                      |              |                      |                             | Į.                            |   | , i i                            | SIL  |         |         |  |                      | <u>e</u>                     |
| Depth  | 9  |                      | 20                   |                      | 30           |                      | 04                          | 1                             | 1 | 8                                | 8  | 02      |         | 8  | 8                    | T 100 T                      |

APPENDIX E

NMOCD C-141

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grund Avenue, Artesia. NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410

Date: 9-7-04

\* Attach Additional Sheets If Necessary

#### 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

#### District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Release Notification and Corrective Action **OPERATOR** x Initial Report Final Report Contact Camille Reynolds Name of Company Plains Marketing, LP Address 5805 East Hwy. 80, Midland, TX 79706 Telephone No. 505-441-0965 Facility Name Ballard Greyburg 5" #2 Facility Type 5"Steel Pipeline Surface Owner BLM Mineral Owner Lease No. LOCATION OF RELEASE East/West Line Unit Letter Township North/South Line | Feet from the County Section Range 10 185 295 Eddy Latitude 32° 45'27.1" Longitude 104°04'12.0" NATURE OF RELEASE Type of Release Crude Oil Volume Recovered 0 barrels Date and Hour of Discovery 9-2-04 @ 08:45 Volume of Release 80 barrels Date and Hour of Occurrence 9-2-04 @ 05:00 Source of Release 5" Steel Pipeline Was Immediate Notice Given? If YES, To Whom? ☑ Yes ☐ No ☐ Not Required Van Barton By Whom? Ken Dutton Date and Hour 9-2-04 @ 14:32 Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* External corrosion of the 5" steel pipeline. A line clamp was installed to mitigate the release. The line is a 5-inch steel gathering line that produces approximately 95 barrels of crude per day. The pressure on the line varies from 50 to 70 psi and the gravity of the sour crude oil is 39. The sour crude has an H2S content of 20 ppm Describe Area Affected and Cleanup Action Taken.\* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was 10 x 6 feet, subsequent excavation of impacted soil resulted in an area of approximately 22 x 23 x 13 feet. 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 market or "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. OIL CONSERVATION DIVISION amille Keynolds Signature: Approved by District Supervisor: Printed Name: Cumille Reynolds Title: Remediation Coordinator Approvai Date: Expiration Date: E-mail Address; cjrcynolds@pzaip.com Conditions of Approval: Attached [

Phone:505-441-0965



March 11, 2005

Mr. Ed Martin
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

2R-053

Re:

Plains All American - Annual Monitoring Report

1 Site in Eddy County, New Mexico

Dear Mr. Martin:

Plains Pipeline is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains Pipeline actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains Pipeline hereby submits our Annual Monitoring report for the following site:

Ballard Greyburg 5 Inch

Section 10, Township 18 South, Range 29 East, Eddy County

Basin Environmental prepared this document and has vouched for their accuracy and completeness, and on behalf of Plains Pipeline, I have personally reviewed the document and interviewed Basin in order to verify the accuracy and completeness of this document. It is based upon these inquiries and reviews that Plains Pipeline submits the enclosed Annual Monitoring Report for the above 1 facility.

If you have any questions or require further information, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds

Remediation Coordinator

Plains Pipeline

CC:

Van Barton, NMOCD, Artesia, NM

**Enclosures** 

#### 2004 ANNUAL MONITORING REPORT

**BALLARD-GRAYBURG 5" GATHERING** SW ¼ SW ¼ SECTION 10, TOWNSHIP 18 SOUTH, RANGE 29 EAST LATITUDE, LONGITUDE: 32°, 45′, 27.1″ NORTH, 104°, 04′, 12.0″ WEST **EDDY COUNTY, NEW MEXICO** PLAINS EMS NUMBER: 2004-00192

#### PREPARED FOR:

PLAINS MARKETING, L.P. 333 CLAY STEET, SUITE 1600 **HOUSTON, TEXAS 77002** 

#### PREPARED BY:

BASIN ENVIRONMENTAL SERVICE TECHNOLGIES, LLC P. O. Box 301 Lovington, New Mexico 88260

April 2005

en Dutton

Project Manager

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#### INTRODUCTION

Basin Environmental Service Technologies, LLC, (Basin) on behalf of Plains Marketing, L.P., (Plains), prepared this annual report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an annual report by April 1 of each year. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the initial quarterly groundwater monitoring event conducted in calendar year 2004 only. Additional site activities and remedial work is summarized in several letters and reports previously submitted to the NMOCD. For reference, the Site Location Map is provided as Figure 1.

Initial groundwater monitoring was conducted during the fourth (4<sup>th</sup>) quarter in 2004 to assess the levels and extent of dissolved phase and phase-separated hydrocarbons (PSH) constituents. The groundwater monitoring event consisted of measuring static water levels in the monitoring wells, checking for the presence of PSH atop the water column, and purging and sampling of each well exhibiting sufficient recharge. Monitoring or recovery wells containing a thickness of PSH greater than 0.01 foot were not sampled.

#### SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SW ¼ SW ¼ Section 10, Township 18 South, Range 29 East. The latitude is 32°, 45′, 27.1" North and the longitude is 104°, 04′, 12.0" West. On 02 September 2004, Allstate Environmental Services, LLC (Allstate) responded to the pipeline release on behalf of Plains to repair the pipeline and excavate the impacted soil. Beginning on 18 October 2004, Basin assumed project responsibilities for the Ballard Grayburg 5" site. The site is characterized by a right-of-way for the pipeline in a pasture utilized for cattle grazing. The visible surface stained area includes the release point covering an area approximately 22 feet long by 23 feet wide. Excavation activities during the emergency response covered an area approximately 22 feet long by 23 feet wide and 12 feet below ground surface (bgs). All excavated soil was placed on a poly-liner for future remedial action. Approximately 80 barrels of crude oil were released from the Plains Pipeline and 0 barrels were recovered.

Currently, there are two (2) monitoring wells (MW-2 and MW-3) and one (1) recovery well (RW-1) on site. Two (2) attempts to install an up gradient monitoring well proved futile due to drilling into limestone caverns. A hydrocarbon absorbent sock was installed in the recovery well to absorb the limited amount of crude oil on the groundwater and is replaced on a monthly basis.

#### FIELD ACTIVITIES

The site monitoring wells were gauged and sampled on 04 December 2004. During the initial sampling event, the monitoring wells, designated to be sampled, were purged of approximately 3 well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were stored in clean, glass containers provided by the laboratory and

placed on ice in the field. Purge water was collected in polystyrene fifty-five gallon drums which remain on-site.

Locations of the monitoring wells, recovery well and the inferred groundwater elevations, which were constructed from the measurements collected during the initial 4<sup>th</sup> quarter monitoring event, are depicted on Figure 2, Inferred Groundwater Elevation Map. The groundwater elevation data are provided as Table 1. Research of the New Mexico State Engineers Office reflected a general south to southwest groundwater gradient in this area of Eddy County, New Mexico. The depth to groundwater, as measured from the top of the well casing, was 186.58 feet.

A measurable thickness of PSH was detected in RW-1 during the reporting period, refer to Figure 3, Groundwater Concentration and Inferred PSH Extent Map. A maximum thickness of 0.04 in RW-1 was measured and is shown on Table 1. A hydrocarbon absorbent sock was installed in the recovery well and is replaced on a monthly basis.

#### LABORATORY RESULTS

Groundwater samples were collected from the monitor wells MW-2 and MW-3 during the initial fourth quarter monitoring event and were delivered to Environmental Laboratory of Texas, Odessa, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) constituent concentrations by EPA Method SW846-8021b. A listing of BTEX constituent concentrations for 2004 is summarized in Table 2 and the laboratory reports are provided as Appendix A. Recovery well, RW-1, was not sampled due to the presence of PSH.

Laboratory results for the two (2) site groundwater samples, obtained during the 2004 annual period, indicate that benzene and total BTEX concentrations were below laboratory detection limits for monitor wells MW-2 and MW-3.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code.

#### **SUMMARY**

This report presents the results of monitoring activities for the 2004 annual monitoring period. Currently, there are two (2) groundwater monitoring wells (MW-1 and MW-2) and one (1) recovery well (RW-1) on-site. During 2004, hydrocarbon absorbent socks were installed in RW-1 for passive product recovery. A measurable thickness of PSH was detected in RW-1 during the quarterly sampling event. A maximum thickness of 0.04 in RW-1 was measured and is shown on Table 1.

Laboratory results for the two (2) site groundwater samples, obtained during the 2004 annual period, indicated that benzene and BTEX constituent concentrations were below laboratory detection limits for monitor wells MW-2 and MW-3.

Based on the limited data, groundwater elevations at the site are relatively similar and groundwater gradient appears to be to the south. Research of the New Mexico State Engineers Office reflected a general south to southwest groundwater gradient.

As previously mentioned, several unsuccessful attempts were made to install an up gradient monitoring well. Based on the location of the recovery well RW-1 adjacent to the source area, the limited amount of PSH on the groundwater, the fact that the two (2) attempted up gradient monitor wells did not encounter impacted soils, and the two (2) down gradient monitor wells are not impacted, it appears the groundwater impacted area is very limited in extent and an up gradient monitor well is not warranted at this site.

#### ANTICIPATED ACTIONS

Groundwater monitoring and annual reporting will continue in 2005. A Remediation Work Plan has been submitted and remediation of the site will commence once approval is received from the regulatory agencies.

#### **LIMITATIONS**

Basin has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin and/or Plains.

#### **DISTRIBUTION**

Copy 1:

**Ed Martin** 

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Copy 2:

Van Barton

New Mexico Oil Conservation Division

1301 W. Grand Avenue Artesia, New Mexico 88210

Copy 3:

Camille Reynolds

Plains Marketing, L.P.

3112 Highway 82

Lovington, New Mexico 88260

cjreynolds@paalp.com

Copy 4:

Jeff Dann

Plains Marketing, L.P.

333 Clay Street Suite 1600

Houston, Texas 77002 jpdann@paalp.com

Copy 5:

Basin Environmental Service Technologies, LLC

P. O. Box 301

Lovington, New Mexico 88260

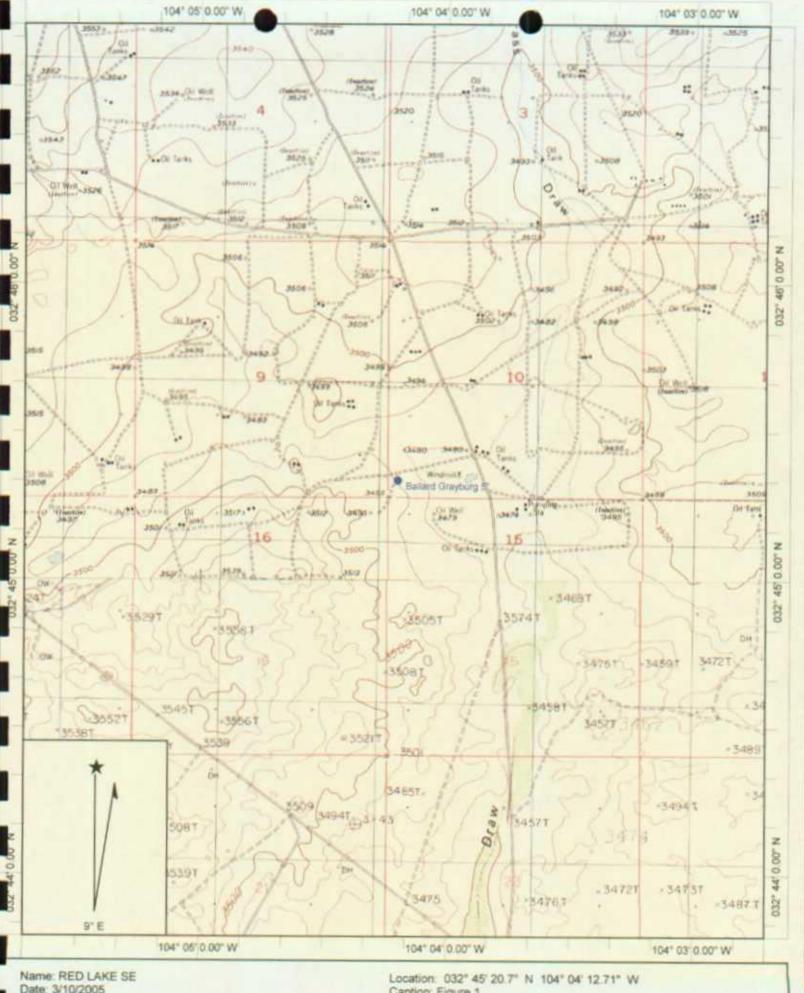
kdutton@basinenv.com

Copy Number: 1

**FIGURES** 

# FIGURE 1

SITE LOCATION MAP



Date: 3/10/2005 Scale: 1 inch equals 2000 feet Caption: Figure 1

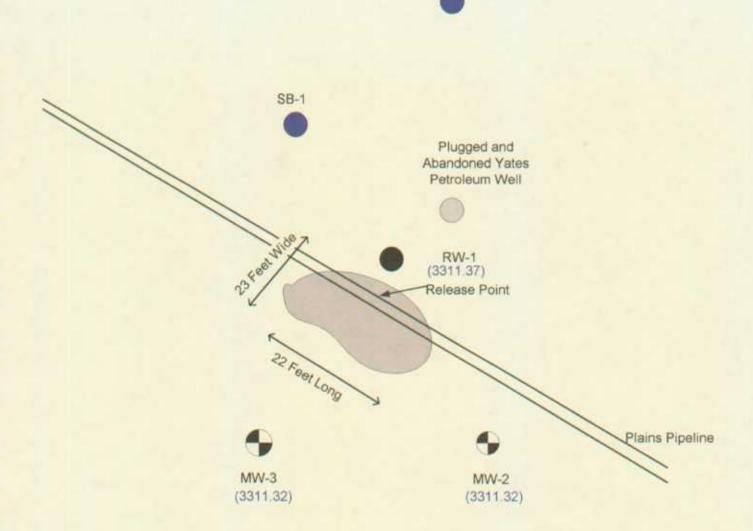
SITE LOCATION MAP BALLARD-GRAYBURG 5" CIAUCIAI CAN TARC DANE

# FIGURE 2

INFERRED GROUNDWATER ELEVATION MAP

Plains Marketing, L.P.
Ballard Grayburg 5"
Unit M, S10, T18S, R29E
Eddy County, New Mexico





SB-2



Monitor Well Location

(3497.20) El

Groundwater Elevation in Feet TITLE

Plains Marketing, L.P. Ballard Grayburg 5" Eddy County, NM DESCRIPTION

Figure 2
Inferred Groundwater Elevation
Map
04 Dec 04

DRAWN BY

Basin Environmental Service Technologies kad

# FIGURE 3

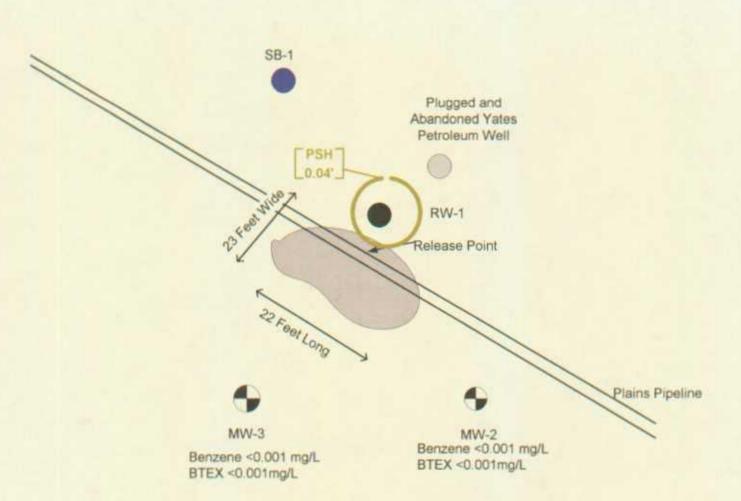
GROUNDWATER CONCENTRATION AND INFERRED PSH EXTENT MAP

Plains Marketing, L.P.
Ballard Grayburg 5"
Unit M, S10, T18S, R29E
Eddy County, New Mexico



SB-2







Monitor Well Location

Inferred PSH Extent

TITLE

Plains Marketing, L.P. Ballard Grayburg 5" Eddy County, NM DESCRIPTION

Figure 3
Groundwater Concentration and
Inferred PSH Extent Map
04 Dec 04

DRAWN BY

Basin Environmental Service Technologies kad **TABLES** 

# TABLE 1

**GROUNDWATER ELEVATION DATA (2004)** 

TABLE 1

#### **GROUNDWATER ELEVATION DATA (2004)**

#### PLAINS MARKETING, L.P. BALLARD-GRAYBURG 5" EDDY COUNTY, NEW MEXICO PLAINS EMS NO. 2004-00192

| WELL<br>NUMBER | DATE MEASURED | CASING WELL<br>ELEVATION | DEPTH TO PRODUCT | DEPTH TO<br>WATER | PSH<br>THICKNESS | CORRECTED<br>GROUNDWATER<br>ELEVATION |
|----------------|---------------|--------------------------|------------------|-------------------|------------------|---------------------------------------|
| MW - 2         | 11/10/04      | 3,497.90                 | -                | 186.58            | 0.00             | 3,311.32                              |
|                | 12/04/04      | 3,497.90                 | -                | 186.58            | 0.00             | 3,311.32                              |
| MW - 2         | 01/17/05      | 3,497.90                 | -                | 186.57            | 0.00             | 3,311.33                              |
|                | 02/22/05      | 3,497.90                 | -                | 186.58            | 0.00             | 3,311.32                              |
|                |               |                          |                  |                   |                  |                                       |
| MW - 3         | 11/10/04      | 3,497.91                 | -                | 186.59            | 0.00             | 3,311.32                              |
|                | 12/04/04      | 3,497.91                 | -                | 186.59            | 0.00             | 3,311.32                              |
| MW - 3         | 01/17/05      | 3,497.91                 | -                | 186.58            | 0.00             | 3,311.33                              |
|                | 02/22/05      | 3,497.91                 | -                | 186.59            | 0.00             | 3,311.32                              |
|                |               |                          |                  |                   |                  |                                       |
| RW-1           | 11/10/04      | 3,497.94                 | 186.56           | 186.60            | 0.04             | 3,311.37                              |
| :              | 12/04/04      | 3,497.94                 | 186.56           | 186.60            | 0.04             | 3,311.37                              |
| RW-1           | 01/17/05      | 3,497.94                 | 186.57           | 186.60            | 0.03             | 3,311.37                              |
|                | 02/22/05      | 3,497.94                 | 186.56           | 186.58            | 0.02             | 3,311.38                              |
|                |               |                          |                  |                   |                  |                                       |

# TABLE 2

CONCENTRATIONS OF BENZENE AND BTEX IN GROUNDWATER (2004)

TABLE 2

#### **CONCENTRATIONS OF BENZENE AND BTEX IN GROUNDWATER (2004)**

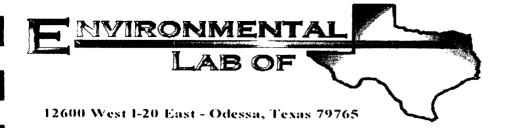
PLAINS MARKETING, L.P. BALLARD-GRAYBURG 5" EDDY COUNTY, NEW MEXICO PLAINS EMS NO: 2004-00192

| SAMPLE LOCATION    | SAMPLE   |         | MET     | HODS: EPA S       | SW 846-8021B    |              |
|--------------------|----------|---------|---------|-------------------|-----------------|--------------|
|                    | DATE     | BENZENE | TOLUENE | ETHYL-<br>BENZENE | M,P-<br>XYLENES | O-XYLENES    |
|                    |          | (mg/L)  | (mg/L)  | (mg/L)            | (mg/L)          | (mg/L)       |
| NMOCD REGULATORY S | TANDARD  | 0.01    | 0.75    | 0.75              | TOTAL XYLE      | NES 0.62     |
| MW-2               | 12/04/04 | <0.001  | <0.001  | <0.001            | <0.001          | <0.001       |
| MW-3               | 12/04/04 | <0.001  | <0.001  | <0.001            | <0.001          | <0.001       |
|                    |          |         |         |                   |                 | <del> </del> |

**APPENDICES** 

# APPENDIX A

LABORATORY REPORTS



# **Analytical Report**

#### **Prepared for:**

Ken Dutton

Basin Environmental Services
P.O. Box 301

Lovington, NM 88260

Project: Plain Marketing

Project Number: Ballard-Grayburg 5 inch

Location: Eddy County, NM

Lab Order Number: 4L06005

Report Date: 12/09/04

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Project Number: Ballard-Grayburg 5 inch

Reported: 12/09/04 17:29

Lovington NM, 88260

Project Manager: Ken Dutton

#### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| MW-2      | 4L06005-01    | Water  | 12/02/04 13:05 | 12/06/04 09:30 |
| MW-3      | 4L06005-02    | Water  | 12/02/04 15:10 | 12/06/04 09:30 |

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Project Number: Ballard-Grayburg 5 inch

Reported: 12/09/04 17:29

Lovington NM, 88260

Project Manager: Ken Dutton

#### Organics by GC **Environmental Lab of Texas**

| Analyte                           | Result   | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|--|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-2 (4L06005-01) Water           |  |                    |       |          |         |          |          |           |       |
| Benzene                           | 0.00111  | 0.00100            | mg/L  | 1        | EL40913 | 12/08/04 | 12/08/04 | EPA 8021B |       |
| Toluene                           | ND   | 0.00100            | **    | **       | #       | •        | **       | 11        |       |
| Ethylbenzene                      | ND   | 0.00100            | "     | **       | Ħ       | **       | Ħ        | 11        |       |
| Xylene (p/m)                      | ND   | 0.00100            | **    | u        | n       | 11       | H        | **        |       |
| Xylene (o)                        | ND   | 0.00100            | п     | 11       | *       | 11       | If       | 11        |       |
| Surrogate: a,a,a-Trifluorotoluene | The second of th | 99.0 %             | 80-1. | 20       | n       | "        | "        | · ·       |       |
| Surrogate: 4-Bromofluorobenzene   |  | 96.5 %             | 80-12 | 20       | "       | "        | **       | "         |       |
| MW-3 (4L06005-02) Water           |  |                    |       |          |         |          |          |           |       |
| Benzene                           | ND   | 0.00100            | mg/L  | 1        | EL40913 | 12/08/04 | 12/08/04 | EPA 8021B |       |
| Toluene                           | ND   | 0.00100            | et    | **       | n       | u        | 11       | n         |       |
| Ethylbenzene                      | ND   | 0.00100            | н     | н        | "       | u        | **       |           |       |
| Xylene (p/m)                      | ND   | 0.00100            | tt    | n        | H       | *1       | n        | и -       |       |
| Xylene (o)                        | ND   | 0.00100            | 11    | 11       | **      | 11       | II.      | и         |       |
| Surrogate: a,a,a-Trifluorotoluene |  | 114 %              | 80-1  | 20       | "       | ,,       | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |  | 112 %              | 80-1. | 20       | "       | "        | ,        | 12        |       |

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Project Number: Ballard-Grayburg 5 inch

Reported: 12/09/04 17:29

Lovington NM, 88260

#### Project Manager: Ken Dutton

#### General Chemistry Parameters by EPA / Standard Methods **Environmental Lab of Texas**

| Analyte                       | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-2 (4L06005-01) Water       |        |                    |       |          |         |          |          |           |       |
| Total Dissolved Solids        | 7730   | 5.00               | mg/L  | 1        | EL40702 | 12/06/04 | 12/07/04 | EPA 160.1 |       |
| MW-3 (4L06005-02) Water       |        |                    |       |          |         |          |          |           |       |
| <b>Total Dissolved Solids</b> | 8530   | 5.00               | mg/L  | 1        | EL40702 | 12/06/04 | 12/07/04 | EPA 160.1 |       |

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Project Number: Ballard-Grayburg 5 inch

Reported: 12/09/04 17:29

0/DEC

Lovington NM, 88260

Project Manager: Ken Dutton

#### Organics by GC - Quality Control **Environmental Lab of Texas**

|                                   |        | Reporting |       | Spike      | Source      |          | %REC   |  | RPD   |            |
|-----------------------------------|--------|-----------|-------|------------|-------------|----------|--------|--|-------|------------|
| Analyte                           | Result | Limit     | Units | Level      | Result      | %REC     | Limits | RPD                                    | Limit | Notes      |
| Batch EL40913 - EPA 5030C (GC)    |        | <u>-</u>  |       |            |             |          |        |  |       | . <u> </u> |
| Blank (EL40913-BLK1)              |        |           |       | Prepared & | : Analyzed: | 12/08/04 |        |  |       |            |
| Benzene                           | . ND   | 0.00100   | mg/L  |            |             |          |        |  | -     |            |
| l'oluene                          | ND     | 0.00100   | 11    |            |             |          |        |  |       |            |
| Ethylbenzene                      | ND     | 0.00100   | 11    |            |             |          |        |  |       |            |
| Kylene (p/m)                      | ND     | 0.00100   | n     |            |             |          |        |  |       |            |
| Kylene (o)                        | ND     | 0.00100   | n     |            |             |          |        |  |       |            |
| Surrogate: a,a,a-Trifluorotoluene | 19.8   |           | ug/!  | 20.0       |             | 99.0     | 80-120 |  |       |            |
| Surrogate: 4-Bromofluorobenzene   | 17.4   |           | м     | 20.0       |             | 87.0     | 80-120 |  |       |            |
| LCS (EL40913-BS1)                 |        |           |       | Prepared & | . Analyzed: | 12/08/04 |        |  |       |            |
| Benzene                           | 94.3   |           | ug/l  | 100        |             | 94.3     | 80-120 | /************************************* |       |            |
| Toluene                           | 97.6   |           | п     | 100        |             | 97.6     | 80-120 |  |       |            |
| Ethylbenzene                      | 96.2   |           | #     | 100        |             | 96.2     | 80-120 |  |       |            |
| Xylene (p/m)                      | 194    |           | **    | 200        |             | 97.0     | 80-120 |  |       |            |
| Xylene (o)                        | 99.5   |           | "     | 100        |             | 99.5     | 80-120 |  |       |            |
| Surrogate: a,a,a-Trifluorotoluene | 17.8   |           | "     | 20.0       |             | 89.0     | 80-120 | -                                      |       |            |
| Surrogate: 4-Bromofluorobenzene   | 22.1   |           | "     | 20.0       |             | 110      | 80-120 |  |       |            |
| LCS Dup (EL40913-BSD1)            |        |           |       | Prepared & | Analyzed:   | 12/08/04 |        |  |       |            |
| Benzene                           | 97.4   |           | ug/l  | 100        |             | 97.4     | 80-120 | 3.23                                   | 20    |            |
| Гошее                             | 100    |           | н     | 100        |             | 100      | 80-120 | 2.43                                   | 20    |            |
| Ethylbenzene                      | 102    |           | 11    | 100        |             | 102      | 80-120 | 5.85                                   | 20    |            |
| Xylene (p/m)                      | 202    |           | ti .  | 200        |             | 101      | 80-120 | 4.04                                   | 20    |            |
| Xylene (o)                        | 103    |           | **    | 100        |             | 103      | 80-120 | 3.46                                   | 20    |            |
| Surrogate: a,a,a-Trifluorotoluene | 18.7   |           | n     | 20.0       | .,,,        | 93.5     | 80-120 |  |       |            |
| Surrogate: 4-Bromofluorobenzene   | 22.2   |           | "     | 20.0       |             | 111      | 80-120 |  |       |            |
| Calibration Check (EL40913-CCV1)  |        |           |       | Prepared & | : Analyzed: | 12/08/04 |        |  |       |            |
| Benzene                           | 97.0   |           | ug/l  | 100        |             | 97.0     | 80-120 |  |       |            |
| Toluene                           | 99.1   |           | n     | 100        |             | 99.1     | 80-120 |  |       |            |
| Ethylbenzene                      | 101    |           | Ħ     | 100        |             | 101      | 80-120 |  |       |            |
| Xylene (p/m)                      | 199    |           | 11    | 200        |             | 99.5     | 80-120 |  |       |            |
| Xylene (o)                        | 101    |           | 19    | 100        |             | 101      | 80-120 |  |       |            |
| Surrogate: a,a,a-Trifluorotoluene | 19.4   | ~~··      | "     | 20.0       |             | 97.0     | 80-120 | · · · · · ·                            |       |            |
| Surrogate: 4-Bromofluorobenzene   | 21.5   |           | n     | 20.0       |             | 108      | 80-120 |  |       |            |

P.O. Box 301

Lovington NM, 88260

Project: Plain Marketing

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported: 12/09/04 17:29

#### Organics by GC - Quality Control Environmental Lab of Texas

| 1       |        |           |       |       |        |      |        |     |       |       |
|---------|--------|-----------|-------|-------|--------|------|--------|-----|-------|-------|
|         |        | Reporting |       | Spike | Source |      | %REC   |     | RPD   |       |
| Analyte | Result | Limit     | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

| Matrix Spike (EL40913-MS1)        | Source: 41 | <b>_06002-01</b> | Prepared & | Analyzed: | 12/08/04 |        |
|-----------------------------------|------------|------------------|------------|-----------|----------|--------|
| Benzene                           | 102        | ug/l             | 100        | ND        | 102      | 80-120 |
| Toluene                           | 102        | "                | 100        | ND        | 102      | 80-120 |
| Ethylbenzene                      | 101        | n                | 100        | ND        | 101      | 80-120 |
| Xylene (p/m)                      | 203        | n                | 200        | ND        | 102      | 80-120 |
| Xylene (o)                        | 111        | 4                | 100        | ND        | 111      | 80-120 |
| Surrogate: a,a,a-Trifluorotoluene | 18.4       | "                | 20.0       |           | 92.0     | 80-120 |
| Surrogate: 4-Bromofluorobenzene   | 19.5       | "                | 20.0       |           | 97.5     | 80-120 |

Lovington NM, 88260

Duplicate (EL40702-DUP1)

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Project Number: Ballard-Grayburg 5 inch

Project Manager: Ken Dutton

Reported: 12/09/04 17:29

General Chemistry Parameters by EPA / Standard Methods - Quality Control

**Environmental Lab of Texas** 

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

mg/L

Batch EL40702 - General Preparation (WetChem)

Blank (EL40702-BLK1) Prepared: 12/06/04 Analyzed: 12/07/04

ND

Total Dissolved Solids

Source: 4L03001-01 Prepared: 12/06/04 Analyzed: 12/07/04

4120 Total Dissolved Solids mg/L 4030 5.00 2.21 20

5.00

Project: Plain Marketing

Fax: (505) 396-1429

P.O. Box 301

Project Number: Ballard-Grayburg 5 inch

Reported:

Lovington NM, 88260

Project Manager: Ken Dutton

12/09/04 17:29

#### **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

LCS

Laboratory Control Spike

MS

Matrix Spike

Dup

Duplicate

Report Approved By:

Raland KJulis

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

# Environmental Lab or Texas

12600 West I-20 East Odessa, Texas 79765

Phone: 432-563-1800 Fax: 432-563-1713

EMV. SYSP KEN DUTTON BASIN Project Manager:

XI Company Address: 361 Company Name

Telephone No: (585) 441-2124 City/State/Zip: LOVZNETON

Sampler Signature:

Fax No: (565) 396-1429

PO# EHS: 2004-00192

Project Loc: EDDY COUNTY NM

Project Name: PLAINS MARKETING

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project #: BALLARD - GRAY BURG

TOTAL

|        |              | TAT brebnat                    | ×                   | X  |              |                | Γ            |              |              |              |  |  |                           | ******               | **********   | ******  |                  | ٦      |
|--------|--------------|--------------------------------|---------------------|--|--------------|----------------|--------------|--------------|--------------|--------------|--|--|---------------------------|----------------------|--------------|---------|------------------|--------|
| _      |              | elubario2-en9) TAT H2U9        |                     |  |              |                |              |              |              |              |  |  |                           |                      |              |         |                  | l      |
|        |              |                                |                     |  |              |                |              |              |              |              |  |  | z                         |                      |              |         |                  |        |
|        |              |                                |                     |  |              |                |              |              |              |              |  |  |                           |                      |              |         |                  | 1      |
|        |              |                                |                     |  |              |                |              |              |              |              |  |  | >                         |                      |              |         |                  |        |
|        |              | SU1                            | ×                   | ×  |              |                |              |              |              |              |  |  |                           |                      |              |         |                  |        |
|        |              | ,M,A.O.N                       |                     |  |              |                |              |              |              |              |  |  | ,                         |                      |              |         |                  |        |
|        |              | SC!                            |                     |  |              |                |              |              |              |              |  |  | Sample Containers Infact? | ī.                   |              |         |                  |        |
|        | 0            | 8S8 X3T8 100000481508 X3TB     | X                   | X  |              |                |              |              |              |              |  |  | Sample Containers Infact? | Laboratory Comments: | •            |         | Š                |        |
|        |              | seltialovime?                  |                     |  |              |                |              |              |              |              |  |  | 12 2                      | Ē                    | J            | Ţ       |                  |        |
|        |              | eelitelov                      |                     |  |              | Π              |              |              |              |              | T  |  | tair                      | ្តីខ្ល               | Re3°C        | 1       | 3=               | 1      |
|        | 9;           | Metals: As Ag Ba Cd Cr Pb Hg 5 | 1                   |  |              |                |              | Π            |              |              |  | 1  | ပိ                        |                      | ¥            | 1       | 35               |        |
| N.     |              | SAR / ESP / CEC                | T                   |  |              | T              |              |              |              |              | Π  |  | g g                       |                      | Ž            |         |                  |        |
| TOTAL: |              | Milens (Cl., SOA, CO3, HCO3)   | 1                   |  |              | T              | 1            |              |              |              | T  |  | San                       |                      | •            |         |                  |        |
|        |              | Cations (Ca. Mg, Na. K)        |                     |  | Г            | Τ              | 1            | 1            |              |              | 1  | 1  |                           |                      | Γ            | ्ञ      |                  |        |
|        | 9(           | 001 8001 M8108 1.814:HFT       | 1                   | 1  |              | T              | T            | T            | T            |              | T  | Π  | 1                         | de of                |              | 8       | Time             | 1020   |
| *****  |              | Other (specity):               | T                   |  |              |                | 1            | 1            | -            |              | 1  | 1  |                           | •                    | 图            |         |                  | 2      |
| 1      | ĕ            | POS                            | T                   | T  |              | T              | T            |              | 1            |              | 1  | T  |                           |                      |              | 12-6-64 |                  | Į.     |
| 1      | Matrix       | градве                         | 1                   | <u> </u>   | 1            | 1              | 1            | 1            | 1            |              | <b> </b>   | <b>†</b>   |                           |                      |              | -1      | 9                | 0      |
|        |              | Water                          | T <sub>×</sub>      | K  | <del> </del> | 1              | 1            | 1            | 1            | 1            | 1  | 1-   | 1                         |                      | Oate         |         | Ö                | 12-BOK |
|        | -            | Oliter ( Specify)              | -                   |  | 1            | CHIPPE         | <del> </del> |              | -            | <b></b>      | *********  | -  | 1                         |                      |              | 1       |                  | 7      |
|        |              | arion                          | 1                   | 1  | <del>1</del> | 1              | †            | 1            | T            | $\vdash$     | T  | <b> </b>   | 1                         |                      | <u> </u>     |         |                  |        |
|        | 2            | *0S*H                          | 1                   | 1  | 1            | 1              | 1            | 1            | 1            | <u> </u>     | 1  | 1  | 1                         |                      | İ            |         |                  |        |
| 1      | Preservative | нови                           | †                   | <del>                                     </del> | 1            | T              | 1            | t            | 1-           | †            | <del>                                     </del> | <del>                                     </del> | 1                         |                      |              |         |                  |        |
|        | 8            | HCI                            | ·                   | <del>d</del> ⋝                                   | <del></del>  | 1              | †            | 1            | †            | 1            | T  | 1  | 1                         |                      |              |         |                  |        |
|        | D.           | FONH                           | 1                   | <b>†</b>   | f            | 1              | †            | <del>†</del> | 1            | <del> </del> | †  |  | 1 ·                       |                      |              | /       |                  |        |
|        |              | 921                            | ·                   | 17   | <del> </del> | †              | +-           | †            | +            | †            | 1  | <del> </del>                                     | 1                         |                      |              | 5       |                  |        |
|        | L,,,         | No. of Containers              | <del></del>         | 4  | <del></del>  | +              | +            | +            | +-           | +            | ┿  | 1  | 1                         |                      |              |         |                  |        |
|        |              | mentation to old               | N                   |  |              | <del> </del> - | 1            | <del> </del> | <del> </del> | ļ            | ↓_   | <u> </u>   | 1                         |                      |              | 2       | (                | À      |
|        |              | 1                              | 15                  | 150  | Ī            |                |              |              |              |              |  |  |                           |                      | -            | 2       |                  | 3      |
|        |              | balqms2 amiT                   | 13                  |  | 1            |                | İ            |              |              |              |  |  |                           |                      | Comme.       | K       | . `              |        |
|        |              | 2                              | 1864                | 25   |              |                |              |              |              |              | 1  |  |                           |                      | `            | 1       |                  | dk/    |
|        |              |                                | 13                  | 13   | 4            | +              | _            | <del> </del> | -            | <del> </del> |  | ـــ  |                           |                      |              | d       | <u>β</u> ,       | C      |
|        |              | 3                              | ٩                   | 15   | \$           |                |              |              |              |              |  |  |                           |                      | 1            |         | 2 C              | ند     |
|        |              | Date Sampled &                 | 75                  | 7  |              |                |              |              |              | 1            |  |  |                           |                      | ed by:       | 2       | Pag.             | 9      |
|        |              | & belome? etc.                 | 80                  | 3 5  | 4            |                |              |              |              |              |  |  |                           |                      | Receiv       |         |                  |        |
|        |              |                                | +8                  | 1 5  | 4-           | -              | ┿            | ┼            | -            | ┼            | -  | -  | -                         |                      | 8            |         | <del>_</del>     |        |
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|        |              |                                |                     |  |              |                |              |              |              |              |  |  |                           |                      | *            | 7       |                  |        |
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|        |              | y                              | 4                   |  | 1            |                |              |              |              |              |  |  |                           |                      | Oate         | ğ       | Date             |        |
|        |              | }                              | 3                   |  |              |                |              |              |              |              |  |  |                           |                      | C            | A       | ٥                |        |
|        |              |                                | 3                   |  |              |                |              |              |              |              |  |  |                           |                      | -            | 70      |                  |        |
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|        |              |                                | 1.                  | 1  |              |                |              |              | 1            |              |  |  |                           |                      |              | M       |                  |        |
|        |              |                                | MILL 9              | 62 118-8   |              |                |              |              |              |              |  |  |                           |                      | 1            | W.      |                  |        |
|        |              |                                | Ł                   | 12   | +            | +              | +            | +            | -            | +            | 4-   | +-   | ١                         |                      | 1            | 1       | Λ                |        |
|        |              |                                | 9                   | 18   | 1            |                |              |              |              |              |  | Į  | Pug<br>Sug                | Į                    |              | /       | D                |        |
|        |              | × ×                            |                     | 1'   |              |                |              |              |              |              |  |  | Tect.                     | `                    | 1/2          |         | *                |        |
|        |              | දි.                            | 2                   |  |              |                |              |              |              |              |  | 1  | ust                       |                      | 13/          | / Q     | 8                |        |
|        |              | े व                            | *                   |  |              |                |              |              | 1            |              |  |  | =                         | 1                    | T            | 1       | F.               |        |
|        |              | 5901071                        | (Ann sen can) # ava |  |              |                |              | ì            |              |              |  |  | Special Instructions:     | 1                    | Relinquighed | 1)      | Relinguished by: |        |
|        |              |                                | 41                  |  |              |                |              |              |              | 1            |  | <u> </u>   | 100                       |                      | ΛŒ.          |         | MX.              |        |
|        |              |                                |                     |  |              |                |              |              |              |              |  |  |                           |                      |              |         |                  |        |

# Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

| Client: Basin Evu. Succ  |  |      |   |  |
|--|--|------|---|--|
| Olient: <u>Basin Evu. Susc</u> Date/Time: <u>12/6/04</u> 12:35 |  |      |   |  |
| Order #: 4606005   |  |      |   | ·                                      |
| Initials: TVH  |  |      |   |  |
| Sample Receipt   | Checkli                                | st   |   |  |
| Temperature of container/cooler?                               | (Yes)                                  | No   | उ टो  |  |
| Shipping container/cooler in good condition?                   | Yes                                    | No   |   |  |
| Custody Seals intact on shipping container/cooler?             | Yes                                    | No   | (Not present)   |  |
| Custody Seals intact on sample bottles?                        | Yes                                    | No   | Not present   |  |
| Chain of custody present?                                      | (res                                   | No   |   |  |
| Sample Instructions complete on Chain of Custody?              | (res                                   | No   |   |  |
| Chain of Custody signed when relinquished and received?        | (Yes)                                  | No   |   |  |
| Chain of custody agrees with sample label(s)                   | Yes.                                   | No   |   |  |
| Container labels legible and intact?                           | (Yes)                                  | No   |   |  |
| Sample Matrix and properties same as on chain of custody?      | (Yes)                                  | No   |   |  |
| Samples in proper container/bottle?                            | (Yes)                                  | No   |   |  |
| Samples properly preserved?                                    | (Yes                                   | No   |   |  |
| Sample bottles intact?   | (Yes)                                  | No   |   |  |
| Preservations documented on Chain of Custody?                  | Yes                                    | No   |   |  |
| Containers documented on Chain of Custody?                     | (Yes                                   | No   |   |  |
| Sufficient sample amount for indicated test?                   | (Yes                                   | No   |   |  |
| All samples received within sufficient hold time?              | (CES)                                  | No   |   |  |
| VOC samples have zero headspace?                               | (Yes,                                  | No   | Not Applicable  |  |
| Other observations:  |  |      |   |  |
| Contact Person: Date/Time:Regarding:                           | ,                                      |      | Contacted by:   |  |
|  |  |      |   |  |
| Corrective Action Taken:                                       |  |      |   |  |
|  |  |      |   |  |
|  | ······································ |      | ·····   | -                                      |
|  |  | ···· | annadagus a territorio de la Maria de La Maria de La Maria de La Maria de La Maria de La Maria de La Maria de L |  |
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|  |  |      |   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |

### **APPENDIX B**

RELEASE NOTIFICATION AND CORRECTIVE ACTION (FORM C-141)

District.1
1625 N. French Dr., Hobbs, NM 88240
<u>District.11</u>
1301 W. Grand Avenue, Artesia, NM 88210
<u>District.11</u>
1000 Rio Brazos Road, Aztee, NM 87410
<u>District.17</u>
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-14 Revised October 10, 200

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

| 1220 S. St. Flair            | us or, sam    | a re, 1414 67303 |              | Sa                                    | anta F   | e, NM 875                        | 05                        |             |                  |                            |                | SIGE OF TOTAL |  |  |  |
|------------------------------|---------------|------------------|--------------|---------------------------------------|----------|----------------------------------|---------------------------|-------------|------------------|----------------------------|----------------|---------------|--|--|--|
|                              |               |                  | Rele         | ase Notific                           | atio     | n and Co                         | orrective A               | ction       |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          | OPER.                            | ALUDES.                   |             | v Initi          | al Report                  |                | Final Repor   |  |  |  |
| Name of Co                   | mpany Pl      | ains Marketii    | ng. LP       | · · · · · · · · · · · · · · · · · · · |          |                                  | nille Reynolds            |             | × 1111111        | и пероп                    |                | I mai Kepoi   |  |  |  |
|                              |               | vy. 80, Midla    |              | 79706                                 |          | Telephone No. 505-441-0965       |                           |             |                  |                            |                |               |  |  |  |
|                              |               | Greyburg 5       |              |                                       |          | Facility Type 5"Steel Pipeline   |                           |             |                  |                            |                |               |  |  |  |
| Surface Ow                   | ner BLM       |                  |              | Mineral C                             | lwner    |                                  |                           |             | Lease N          | lo                         |                |               |  |  |  |
| Sando On                     | iici Dijivi   |                  | ·            | <del></del> -                         |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  | -            |                                       |          | N OF RE                          |                           |             |                  |                            |                |               |  |  |  |
| Unit Letter<br>M             | Section<br>10 | Township<br>18S  | Range<br>29E | Feet from the                         | Nort     | h/South Line                     | Feet from the             | East/We     | st Line          | County<br>Eddy             |                |               |  |  |  |
|                              |               |                  |              |                                       | l        |                                  | l                         |             |                  | .,,,,                      | _              |               |  |  |  |
|                              |               | Latitu           | de 32°4      | 5'27.1"                               |          | Longitude                        | 104°04'12.0"              |             |                  |                            |                |               |  |  |  |
|                              |               |                  | 0            |                                       |          |                                  |                           |             |                  | •                          |                |               |  |  |  |
|                              |               |                  |              | NAT                                   | URI      | OFREL                            | EASE<br>Release 80 barrel |             |                  |                            |                |               |  |  |  |
| Type of Rele<br>Source of Re |               |                  |              |                                       |          |                                  | lour of Occurrence        |             |                  | Recovered 0<br>Hour of Dis |                |               |  |  |  |
| Source of Re                 | icase 3 Su    | oci ripenne      |              |                                       |          | 9-2-04@                          |                           |             | )-2 <b>-04</b> @ |                            | way            |               |  |  |  |
| Was Immedi                   | ate Notice (  |                  |              |                                       |          | If YES, To                       |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  | Yes _        | No Not R                              | equirec  |                                  |                           |             |                  |                            |                |               |  |  |  |
| By Whom? k                   | en Dutton     |                  |              |                                       |          |                                  | lour 9-2-04 @ 14          |             |                  |                            |                |               |  |  |  |
| Was a Water                  | course Read   |                  | Yes ⊠        | 1 No                                  |          | If YES, Vo                       | olume Impacting t         | he Waterc   | ourse.           |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
| If a watercot                | use was im    | pacted, Descri   | ive runy.    | •                                     |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
| D 7. 6                       |               | 1 D              | 25.1 1       | Tales & Pass                          |          |                                  |                           |             |                  |                            | 3              |               |  |  |  |
|                              |               |                  |              | n Taken.* Extern<br>luces approximate |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              | de has an H <sub>2</sub> S con        |          |                                  | - per cus;e p. e          |             |                  | w.103 1. 0111 2            |                | por and are   |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              | cen.* The impacte                     |          |                                  |                           | plastic.    | Aerial ex        | tent of surfa              | ce imp         | act was 10 x  |  |  |  |
| 6 feet, subsec               | uent excav    | ation of impac   | eted soil n  | esulted in an area                    | of app   | oximately 22                     | x 23 x 13 teet.           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
| I hereby cart                | fu that the   | information of   | ven above    | is true and comp                      | lete to  | the best of my                   | knowledge and u           | nderstand   | that pure        | ment to NM                 | OCD.           | ules and      |  |  |  |
| regulations a                | ll operators  | are required to  | o report a   | nd/or file certain                    | release  | notifications a                  | nd perform correc         | tive action | as for rela      | eases which                | may e          | ndanger       |  |  |  |
| public health                | or the envi   | ronment. The     | acceptan     | ce of a C-141 repo                    | ort by t | he NMOCD m                       | arked as "Final R         | eport" doe  | s not reli       | eve the ope                | ator o         | f liability   |  |  |  |
|                              |               |                  |              | investigate and retained of a C-141   |          |                                  |                           |             |                  |                            |                |               |  |  |  |
|                              |               | ws and/or regu   |              | nance of a C-141                      | report   | does not renev                   | e the operator of         | responsion  | nty for c        | omprance v                 | nui an         | y outer       |  |  |  |
| /                            | `             |                  |              |                                       |          |                                  | OIL CON                   | SERVA       | TION             | DIVISIO                    | N              |               |  |  |  |
| /                            | ·             | ule K            |              | Alde                                  |          |                                  |                           |             |                  |                            |                |               |  |  |  |
| Signature:                   | um            | ule of           | up           | LWXW                                  |          |                                  | <b>n</b> :                |             |                  |                            |                |               |  |  |  |
| Printed Name                 | : Camille I   | Reynolds         |              |                                       |          | Approved by District Supervisor: |                           |             |                  |                            |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |
| Title: Remed                 | tation Coor   | dinator          |              |                                       |          | Approval Da                      | ie:                       | Expiration  |                  |                            | piration Date: |               |  |  |  |
| E-mail Addre                 | ss: cjreyno   | ids@paalp.co     | m            |                                       |          | Conditions of                    | f Approval:               |             |                  | Attached                   |                |               |  |  |  |
|                              |               |                  |              |                                       |          |                                  | •                         |             |                  | Auacheo                    | u              |               |  |  |  |
| Date: 9-7-04<br>Attach Addi  | ional CL-     | eta IE Non       |              | Phone:505-441-0                       | 700      |                                  |                           |             |                  | <u> </u>                   |                |               |  |  |  |
| MINUT AUGU                   | COLL PRINT    | C+4 14 146CEGG   | ar v         |                                       |          |                                  |                           |             |                  |                            |                |               |  |  |  |