# EL PASO FIELD SERVICES
# PRODUCTION PIT CLOSURE

Denied
DEPUTY OIL & GAS INSPECTOR

DEC 2 1 1998

Approved

RECEIVED
JUL 2 1998
OIL CON. DIV.

**FIELDS A #4A**
**Meter/Line ID - 90081**

## SITE DETAILS

**Legals - Twn:** 32 **Rng:** 11 **Sec:** 28 **Unit:** O
**NMOCD Hazard Ranking:** 40 **Land Type:** 2 - Federal
**Operator:** AMOCO PRODUCTION COMPANY **Pit Closure Date: 09/20/94**

## RATIONALE FOR RISK-BASED CLOSURE:

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

# FIELD PIT SITE ASSESSMENT FORM

## GENERAL

90-082 → FT
Meter: 90-081 → MV Location: Fields A No. 4A
Operator #: 0203 Operator Name: Amoco Production P/L District: Aztec
Coordinates: Letter: O Section 28 Township: 32 Range: 11
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 8/3/94 Area: 04 Run: 42

## SITE ASSESSMENT

**NMOCD Zone:** (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

**Land Type:**
BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____

**Depth to Groundwater**
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

**Wellhead Protection Area :**
Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

**Horizontal Distance to Surface Water Body**
Less Than 200 Ft (20 points) ☒ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body Kiffen Canyon
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

**TOTAL HAZARD RANKING SCORE:** 40 **POINTS**

## REMARKS

Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside
Three pits on site, location drip pit is dry. Will close one pit.

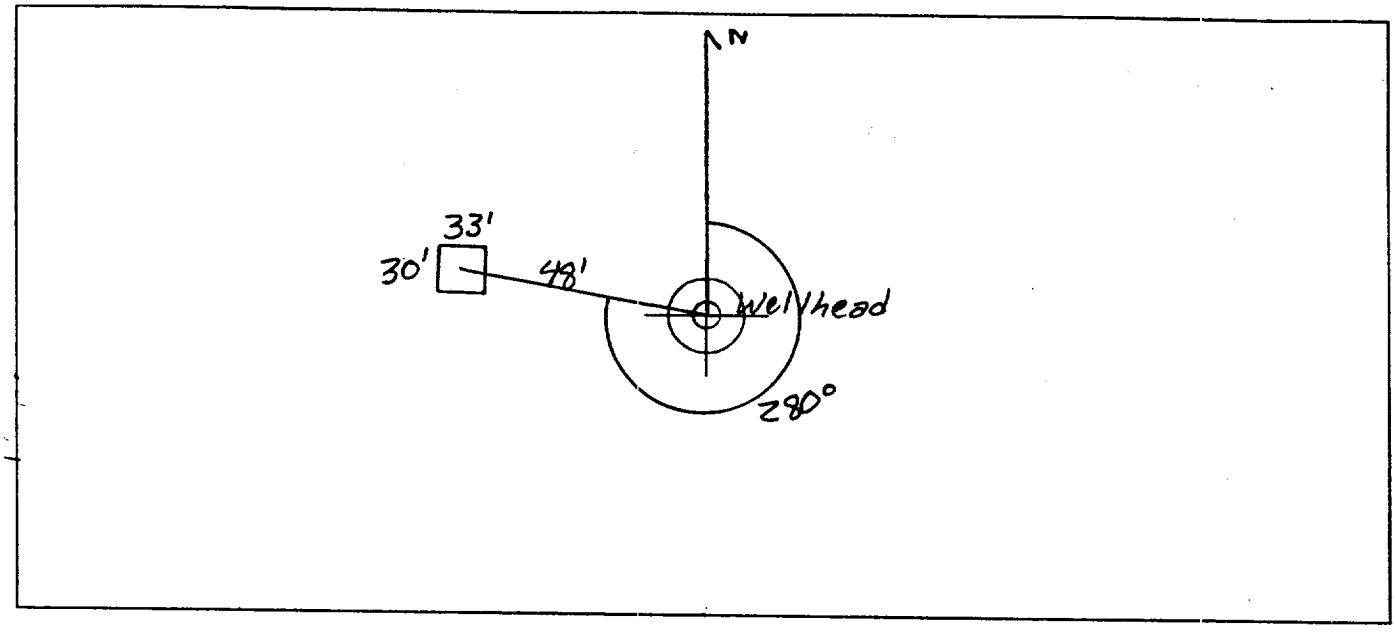
DIG & HAUL

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 280° Footage from Wellhead 48'

b) Length : 30' Width : 33' Depth : 4'




REMARKS

**Remarks :**

Pictures @ 1143 (12-15, Roll 1-8/2/94)
Dump Truck
Dual completion site.

Completed By:

Mark Kelly
Signature

6/3/94
Date

# PHASE I
# EXCAVATION

# FIELD PIT REMEDIATION/CLOSURE FORM

**GENERAL**

Meter: 90082 / 90081 Location: FIELDS A # 4A

Coordinates: Letter: O Section 28 Township: 32 Range: 11

Or Latitude _____ Longitude _____

Date Started : 9/20/94 Run: 04 42

**FIELD OBSERVATIONS**

Sample Number(s): KD 267 _____ _____ _____

Sample Depth: 8' Feet

Final PID Reading 663 ppm PID Reading Depth 8' Feet

| | Yes | No |
|---|---|---|
| Groundwater Encountered | ☐ | ☒ |

Approximate Depth _____ Feet

**CLOSURE**

Remediation Method :

| | | |
|---|---|---|
| Excavation | ☒ | Approx. Cubic Yards 70 |
| Onsite Bioremediation | ☐ | |
| Backfill Pit Without Excavation | ☐ | |

Soil Disposition:

| | | | |
|---|---|---|---|
| Envirotech | ☐ | ☒ | Tierra |
| Other Facility | ☐ | Name: | |

Pit Closure Date: 9/20/94 Pit Closed By: BEI

**REMARKS**

**Remarks :** Excavated pit to 8', Hit Sandstone, Took PID Sample, closed pit.

Signature of Specialist: Thury Dan

(SP3191) 03/16/9

El Paso Natural Gas Company

# FIELD SERVICES LABORATORY
## ANALYTICAL REPORT
## PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|---|---|---|
| SAMPLE NUMBER: | KD 247 | 946167 |
| MTR CODE \| SITE NAME: | 90082/90081 | N/A |
| SAMPLE DATE \| TIME (Hrs): | 9-20-94 | 1120 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. \| ANAL.: | 9-22-94 | 9-22-94 |
| DATE OF BTEX EXT. \| ANAL.: | 9-27-94 | 9-29-94 |
| TYPE \| DESCRIPTION: | VC | Brown fine Sand & clay |

REMARKS: _____

## RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---|---|---|---|---|---|---|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | 0.86 | MG/KG | 20 | | | |
| TOLUENE | 39.0 | MG/KG | 20 | | | |
| ETHYL BENZENE | 7.4 7.4 10/4/94 | MG/KG | 20 | | | |
| TOTAL XYLENES | 110 | MG/KG | 20 | | | |
| TOTAL BTEX | 157 | MG/KG | | | | |
| TPH (418.1) | 3290 | MG/KG | | | 2.04 | 28 |
| HEADSPACE PID | 163 | PPM | | | | |
| PERCENT SOLIDS | 88.1 | % | | | | |

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 63 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached. Surrogate Recovery was outside ATI QC limits due to Matrix interference.

DF = Dilution Factor Used

Approved By: _____ Date: 10/27/94

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**********************************************************
*                    Test Method for                     *
*      Oil and Grease and Petroleum Hydrocarbons         *
*                  in Water and Soil                     *
*                                                        *
*             Perkin-Elmer Model 1600 FT-IR              *
*                  Analysis Report                       *
**********************************************************
*
 94/09/22  13:25
*
*  Sample identification
 946167
*
*  Initial mass of sample, g
 2.040
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 3286.784
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.419
*
*
*
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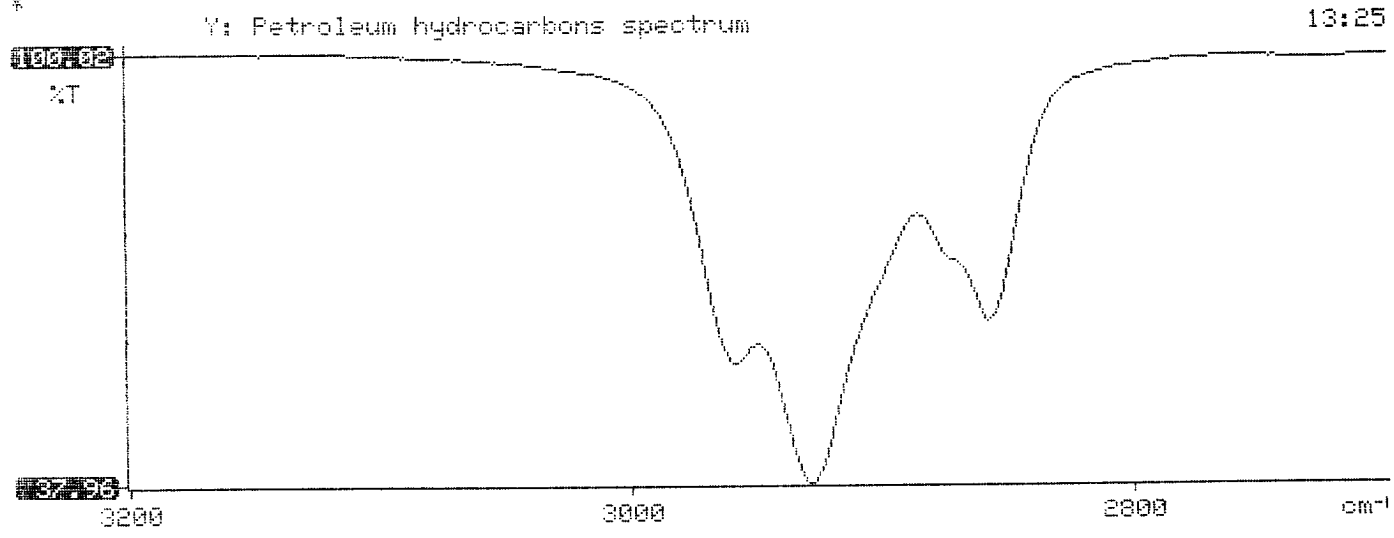


Analytical **Technologies,** Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **409408**

October 5, 1994

El Paso Natural Gas Company
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/23/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS ATI I.D.: 409408
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|---|
| 04 | 946167 | NON-AQ | 09/20/94 | 09/27/94 | 09/29/94 | 20 |
| 05 | 946177 | NON-AQ | 09/21/94 | 09/27/94 | 09/29/94 | 10 |
| 06 | 946178 | NON-AQ | 09/21/94 | 09/27/94 | 09/29/94 | 10 |

| PARAMETER | UNITS | 04 | 05 | 06 |
|---|---|---|---|---|
| BENZENE | MG/KG | 0.86 | 0.82 | 0.42 |
| TOLUENE | MG/KG | 39 | 28 | <0.25 |
| ETHYLBENZENE | MG/KG | 7.4 | 6.6 | 4.4 |
| TOTAL XYLENES | MG/KG | 110 | 83 | 55 |
| SURROGATE: | | | | |
| BROMOFLUOROBENZENE (%) | | 63* | 74 | 125* |

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

# PHASE II

## RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

**Philip Environmental Services Corp.**
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase ~~607~~ 6000
Project Location Fields A No. 4A, 9008 & 9009

Elevation
Borehole Location T32, R11, S.28, O
GWL Depth
Logged By S.Kelly
Drilled By M. Donohue
Date/Time Started 7/28/95, 0740
Date/Time Completed 7/28/95,

Well Logged By S.Kelly
Personnel On-Site M. Donohue, D. Charley, T. O'Keif
Contractors On-Site
Client Personnel On-Site

Drilling Method 4¼" ID HSA
Air Monitoring Method CGI, PID

| Depth (Feet) | Sample Number | Sample Interval | Sample Type & Recovery (inches) | Sample Description Classification System: USCS | USCS Symbol | Depth Lithology Change (feet) | Air Monitoring Units: NDU S/HS BZ | BH | S | Drilling Conditions & Blow Counts |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | Backfill to 6'. | | | | | | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | Drilling is slow, like rock. |
| 15 | | | | | | | | | | |
| 20 | 1 | 18-20 | .7' | SILT, brown, very stiff | | | | | 0/1 | 0810 |
| | | | | BOH - 20.0 | | | | | | |
| 25 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 40 | | | | | | | | | | |

Comments: 18'-20' sample (SEK43) Sent to lab (BTEX & TPH). Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature Sarah Kelly

El Paso Natural Gas Company

Phase II Drilling
Fields A No. 4A
18'-20'

# FIELD SERVICES LABORATORY
# ANALYTICAL REPORT
# PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|---|---|---|
| SAMPLE NUMBER: | SEK43 | 947104 |
| MTR CODE \| SITE NAME: | 90081 & 90082 | N/A |
| SAMPLE DATE \| TIME (Hrs): | 07-28-95 | 08:10 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. \| ANAL.: | 7-31-95 | 7-31-95 |
| DATE OF BTEX EXT. \| ANAL.: | 8-2-95 | 8-2-95 |
| TYPE \| DESCRIPTION: | VG | Brown/grey sand & clay |

REMARKS: _____

## RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---|---|---|---|---|---|---|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | <0.025 | MG/KG | 1 | | | |
| TOLUENE | <0.025 | MG/KG | 1 | | | |
| ETHYL BENZENE | <0.025 | MG/KG | 1 | | | |
| TOTAL XYLENES | <0.025 | MG/KG | 1 | | | |
| TOTAL BTEX | <0.10 | MG/KG | | | | |
| TPH (418.1) | ~~58~~ RBall/95 57.8 | MG/KG | | | 1.99 | 28 |
| HEADSPACE PID | 1 | PPM | | | | |
| PERCENT SOLIDS | 88.4 | % | | | | |

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

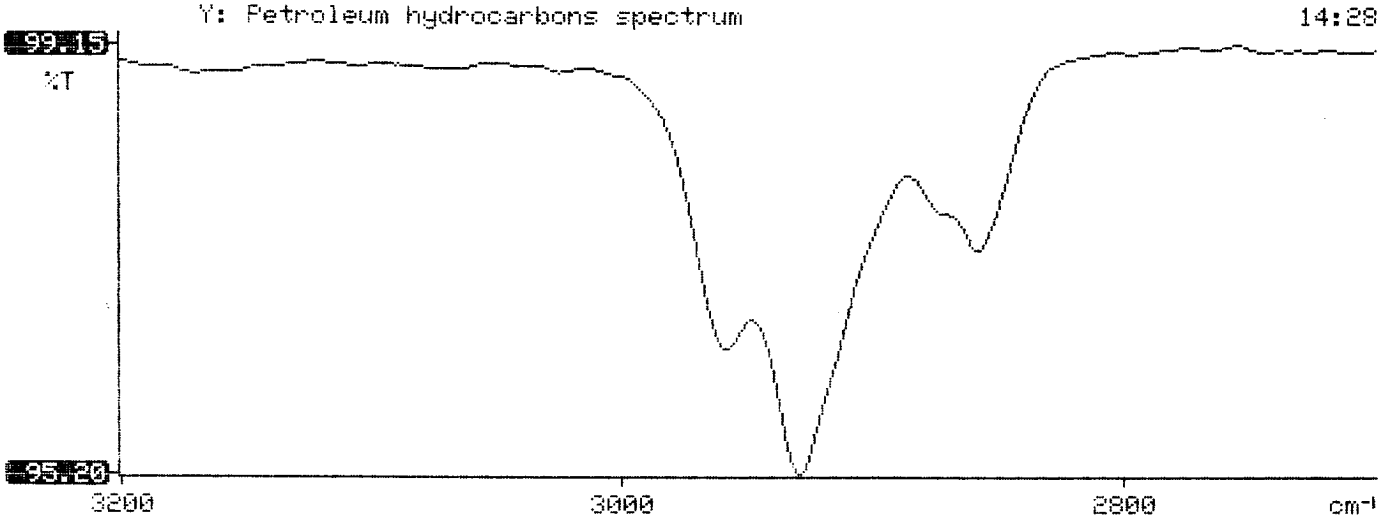
The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

Narrative: ATI Results attached

DF = Dilution Factor Used

Approved By: _____ Date: 8/22/95

**********
*
*  Test Method for
*  Oil and Grease and Petroleum Hydrocarbons
*  in Water and Soil
*
*  Perkin-Elmer Model 1600 FT-IR
*  Analysis Report
**********
*
95/07/31  14:28
*
*  Sample identification
947104
*
*  Initial mass of sample, g
1.990
*
*  Volume of sample after extraction, ml
28.000
*
*  Petroleum hydrocarbons, ppm
57.754
*  Net absorbance of hydrocarbons (2930 cm-1)
0.017
*
*
*



Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **508310**

August 7, 1995

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE/PHASE I & PHASE II DRILLING
24324

Attention: John Lambdin

On **08/02/95**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

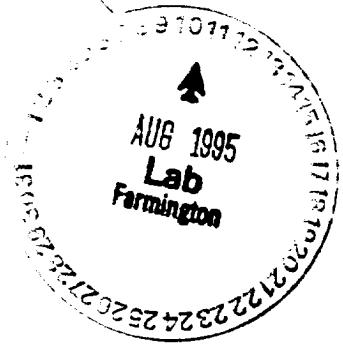
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 508310
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE I & II

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|---|
| 01 | 947101 | NON-AQ | 07/28/95 | 08/02/95 | 08/03/95 | 10 |
| 02 | 947104 | NON-AQ | 07/28/95 | 08/02/95 | 08/02/95 | 1 |
| 03 | 947105 | NON-AQ | 07/28/95 | 08/02/95 | 08/03/95 | 1 |

| PARAMETER | UNITS | 01 | 02 | 03 |
|---|---|---|---|---|
| BENZENE | MG/KG | 0.71 | <0.025 | <0.025 |
| TOLUENE | MG/KG | 13 | <0.025 | <0.025 |
| ETHYLBENZENE | MG/KG | 0.31 | <0.025 | <0.025 |
| TOTAL XYLENES | MG/KG | 63 | <0.025 | 0.13 |
| SURROGATE: | | | | |
| BROMOFLUOROBENZENE (%) | | 123* | 104 | 98 |

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE