

*Denny S. Faust*  
DEPUTY OIL & GAS INSPECTOR

JICARILLA APACHE TRIBE

JUN 23 1998

ENVIRONMENTAL PROTECTION OFFICE

P.O. BOX 507  
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: PNM Gas Services (*Conoco*) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: *Jicarilla A-18*

Location: Unit: *P* Sec. *14* T. *26* N R. *4* W County *Rio Arriba*

Pit Type: Separator *X* Dehydrator *—* Other *—*

Land Type: *Jicarilla Apache*

Pit Location: Pit dimensions: length *20'* width *18'* depth *5'*

(Attach diagram) Reference: wellhead *X* other *—*

Footage from reference: *60'*

Direction from reference: *Straight* Degrees *—* East *—* North *—*  
West *—* of South *X*

**Depth to Ground Water:**

(Vertical distance from contaminants to seasonal high water elevation of ground water)

Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet (0 points)

**Wellhead Protection Area:**

(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)

Yes (20 points)  
No (0 points)

**Distance to Surface Water:**

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)

Less than 200 feet (20 points)  
200 feet to 1,000 feet (10 points)  
Greater than 1,000 feet (0 points)

**Distance to Ephemeral Stream (dry wash):**

(Horizontal distance to all downgradient streams having a width of at least 10 feet)

Less than or equal to 100 feet (10 points)  
Greater than 100 feet (0 points)

**Distance to Nearest Lake, Playa, or Watering Pond:**

(Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)

Less than or equal to 100 feet (10 points)  
Greater than 100 feet (0 points)

**RANKING SCORE (TOTAL POINTS):**

Date Remediation Started: 8/28/97 Date Completed: 11/3/97

Remediation Method: Excavation X Approx. Cubic Yards 67

(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds): 67

Other \_\_\_\_\_

Remediation Location: Onsite X Offsite \_\_\_\_\_

(i.e., landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action:  
Removed contaminated soil from all four side walls as to get a below 100 ppm head space reading. Bottom is rock

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit Closure Sampling: Sample Location North, East, South, and West side walls.

(if multiple samples, attach sample result and diagram of sample locations and depths.) Sample depth 4'

Sample date 8/28/97 Sample time 0944

Sample Results

Soil: Benzene (ppm) ND Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) 0.007 Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 60.3 Ethylbenzene (ppb) \_\_\_\_\_

TPH 40 ppm Method 8015 Total Xylenes (ppb) \_\_\_\_\_

Ground Water Sample: Yes \_\_\_\_\_ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE 9/3/97 PRINTED NAME Ronald A. Dedrick

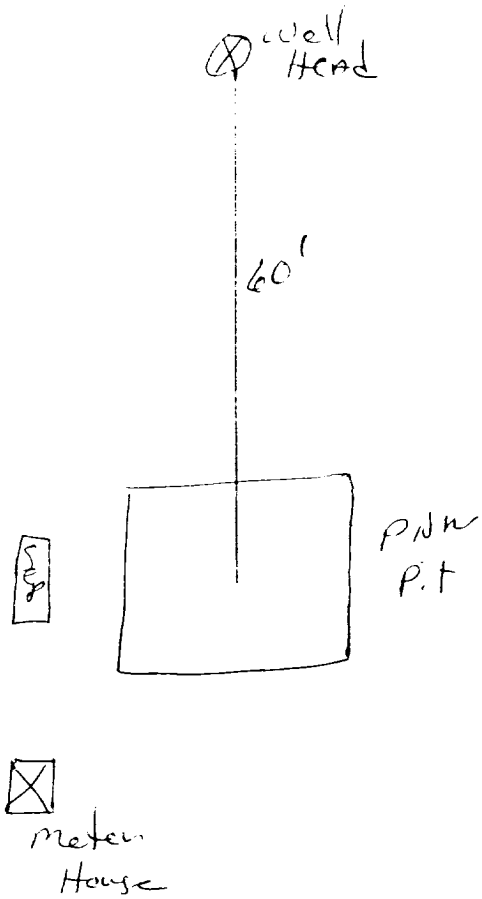
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO \_\_\_\_\_ (REASON): SPRAY + close

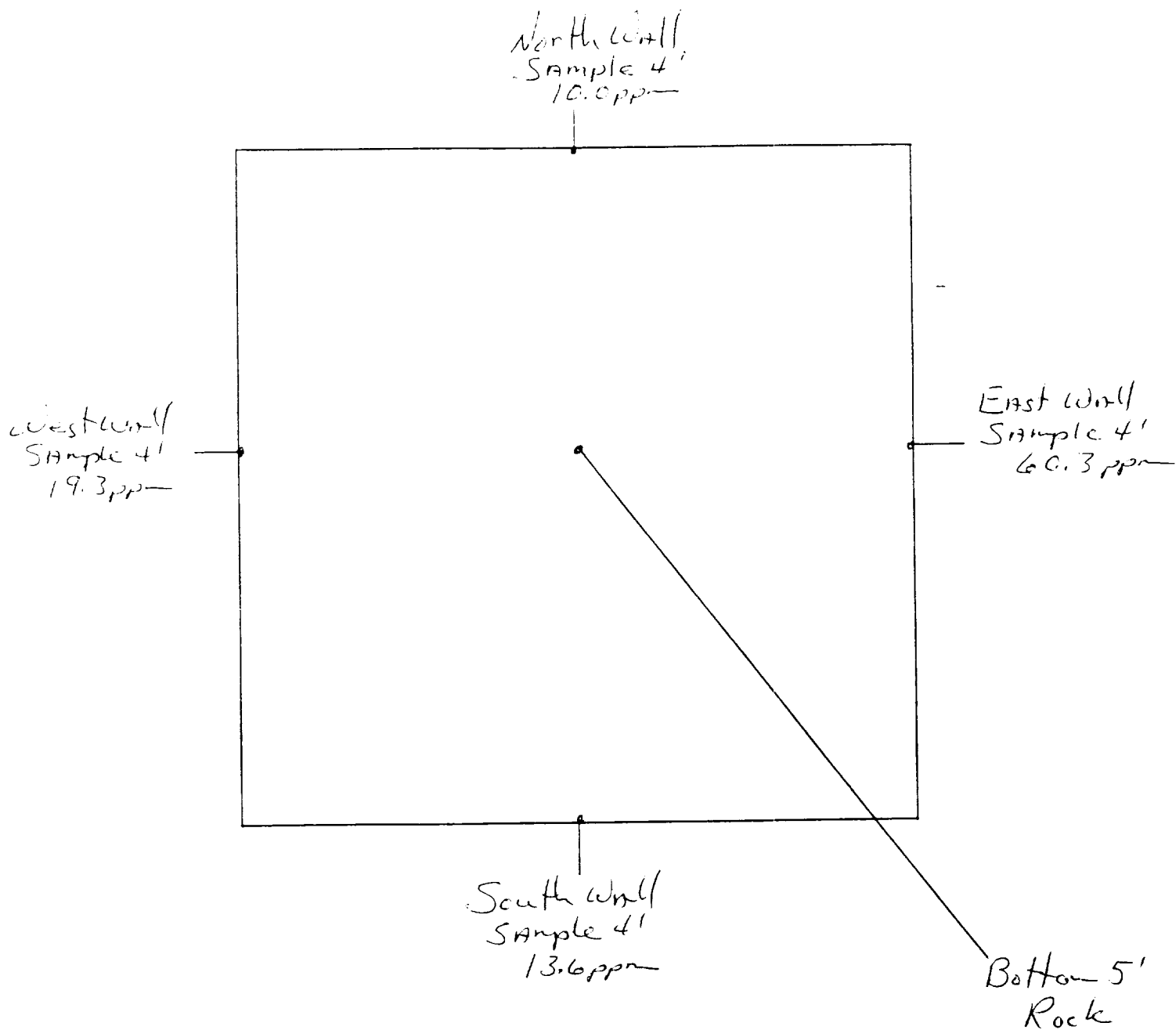
SIGNED: Kenneth Mann DATE: 9-3-97

Jicarilla A-18  
Sec. 14 T26N R4W Unit P  
Cenoco



Jicarilla A-18  
Sec. 14 T26N R4W Unit P  
Conoco

20'x18'x5'



OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *2-Sep-97*  
COC No.: *5574*  
Sample No.: *15974*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-18*  
Project Location: *9708280944; 4pt. Composite*  
Sampled by: *PA*  
Analyzed by: *DC/HR*  
Sample Matrix: *Soil*

Date: *28-Aug-97* Time: *9:44*  
Date: *2-Sep-97*

### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>40</i>	<i>mg/kg</i>	<i>5</i>	<i>mg/kg</i>

ND - Not Detected at Limit of Quantitation

### Quality Assurance Report

DRO QC No.: 0548-STD

### Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>176</i>	<i>12.8</i>	<i>15%</i>

### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>84</i>	<i>80</i>	<i>(70-130)</i>	<i>6</i>	<i>20%</i>

Method - *SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by: *DC*

Date: *9/2/97*

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*- THE ONLY WAY FORWARD INDUSTRY WITH THE ENVIRONMENT -*

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *2-Sep-97*  
COC No.: *5574*  
Sample No.: *15974*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-18*  
Project Location: *9708280944; 4pt. Composite*  
Sampled by: *PA* Date: *28-Aug-97* Time: *9:44*  
Analyzed by: *HR* Date: *1-Sep-97*  
Sample Matrix: *Soil*

### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/kg	1	ug/kg
<i>Toluene</i>	ND	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	2	ug/kg	1	ug/kg
<i>m,p-Xylene</i>	5	ug/kg	1	ug/kg
<i>o-Xylene</i>	ND	ug/kg	1	ug/kg
	<i>TOTAL</i>	7		ug/kg

ND - Not Detected at Limit of Quantitation

**Method** - SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*  
Date: *9/2/97*

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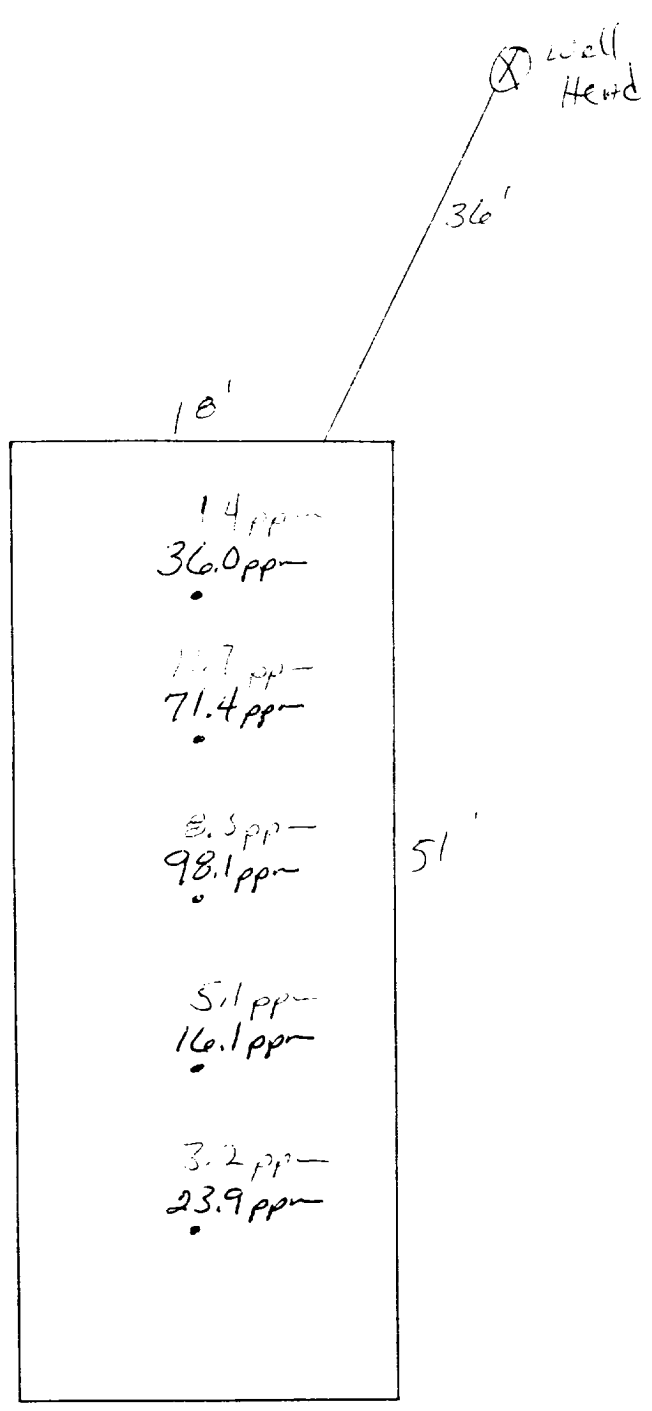
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NATURAL  
RESOURCE DEPT  
AND OIL GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

<b>Operator:</b> <u>PNM Gas Services (Conoco)</u> <b>Telephone:</b> <u>324-3764</u>	
<b>Address:</b> <u>603 W. Elm Street Farmington, NM 87401</u>	
<b>Facility or Well Name:</b> <u>Jicarilla 17-18</u>	
<b>Location:</b>	<b>Unit:</b> <u>P</u> <b>Sec.</b> <u>14</u> <b>T.</b> <u>26</u> <b>N</b> <b>R.</b> <u>4</u> <b>W</b> <b>County</b> <u>Rio Arriba</u>
<b>Land Type:</b> <u>Jicarilla Apache</u>	
<b>Date Remediation Started:</b> <u>8/28/97</u> <b>Date Completed:</b> <u>10/3/97</u>	
<b>Remediation Method:</b> Landfamed <input checked="" type="checkbox"/> <b>Approx. cubic yards</b> <u>67</u> Composted <input type="checkbox"/> Other <input type="checkbox"/>	
<b>Depth to Ground Water:</b> (pts.) <u>0</u>	<b>Final Closure Sampling:</b> <u>10/2/97</u> <u>1322</u> <b>Sampling Date:</b> <u>9/16/97</u> <b>Time</b> <u>1425</u> <b>Sampling Results:</b> <b>Field Headspace</b> (ppm) <u>98.1</u> <b>TPH</b> (ppm) <u>80</u> <b>Method</b> <u>8015</u> <b>Other</b> _____
<b>Distance to an Ephemeral Stream:</b> (pts.) <u>0</u>	
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (pts.) <u>0</u>	
<b>Wellhead Protection Area:</b> (pts.) <u>0</u>	
<b>Distance to Surface Water:</b> (pts.) <u>0</u>	
<b>Ranking Score (Total Points):</b> <u>0</u>	
<b>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF</b>	
<b>DATE</b> <u>10/14/97</u> <b>PRINTED NAME</b> <u>Ronald A. Dedrick</u>	
<b>SIGNATURE</b> <u>Ronald A. Dedrick</u> <b>AND TITLE</b> <u>Environmental Technician II</u>	
<b>AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE</b>	
<b>APPROVED:</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> <b>(REASON)</b> <u>was a Backfill</u>	
<b>SIGNED:</b> <u>Karl C. M...</u> <b>DATE:</b> <u>10-14-97</u>	

Jicknilla A-18  
Sec. 14 T26N R4W Unit P  
Conoco

Land farm





OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *8-Oct-97*  
COC No.: *5605*  
Sample No.: *16492*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-18 Landfarm*

Project Location: *9710021322; 5pt. Composite*

Sampled by: *RB* Date: *2-Oct-97* Time: *13:22*

Analyzed by: *DC/HR* Date: *3-Oct-97*

Sample Matrix: *Soil*

### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>80</i>	<i>mg/kg</i>	<i>5</i>	<i>mg/kg</i>

ND - Not Detected at Limit of Quantitation

### Quality Assurance Report

DRO QC No.: 0555-STD

### Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>212</i>	<i>6.0</i>	<i>15%</i>

### Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>85</i>	<i>99</i>	<i>(70-130)</i>	<i>14</i>	<i>20%</i>

Method - *SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by: *[Signature]*

Date: *10/8/97*

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OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Attn: *Denver Bearden*  
Company: *PNM Gas Services*  
Address: *603 W. Elm*  
City, State: *Farmington, NM 87401*

Date: *23-Sep-97*  
COC No.: *5597*  
Sample No.: *16255*  
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-18 Landfarm*  
Project Location: *9709161425; 5pt. Composite*  
Sampled by: *RB* Date: *16-Sep-97* Time: *14:25*  
Analyzed by: *HR* Date: *19-Sep-97*  
Sample Matrix: *Soil*

### Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>281</i>	<i>mg/kg</i>	<i>5</i>	<i>mg/kg</i>

ND - Not Detected at Limit of Quantitation

### Quality Assurance Report

DRO QC No.: 0555-STD

### Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>176</i>	<i>12.7</i>	<i>15%</i>

### Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>80</i>	<i>86</i>	<i>(70-130)</i>	<i>8</i>	<i>20%</i>

Method - *SW-846 EPA Method 8015A mod - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by: *[Signature]*  
Date: *9/23/97*

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