

NM2 - 10

**MONITORING
REPORTS
YEAR(S):**

2006 - 1998



Lodestar Services, Incorporated

PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

2007 APR 26 PM 1:37

April 25, 2007

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

NM 2 - 0010

CERTIFIED MAIL:7005 1820 0001 6170 6879

**RE: 4th Quarter Sampling at Giant's Centralized Surface Waste Management
Landfarm Facility NM -02-0010 ✓**

Dear Mr. Price,

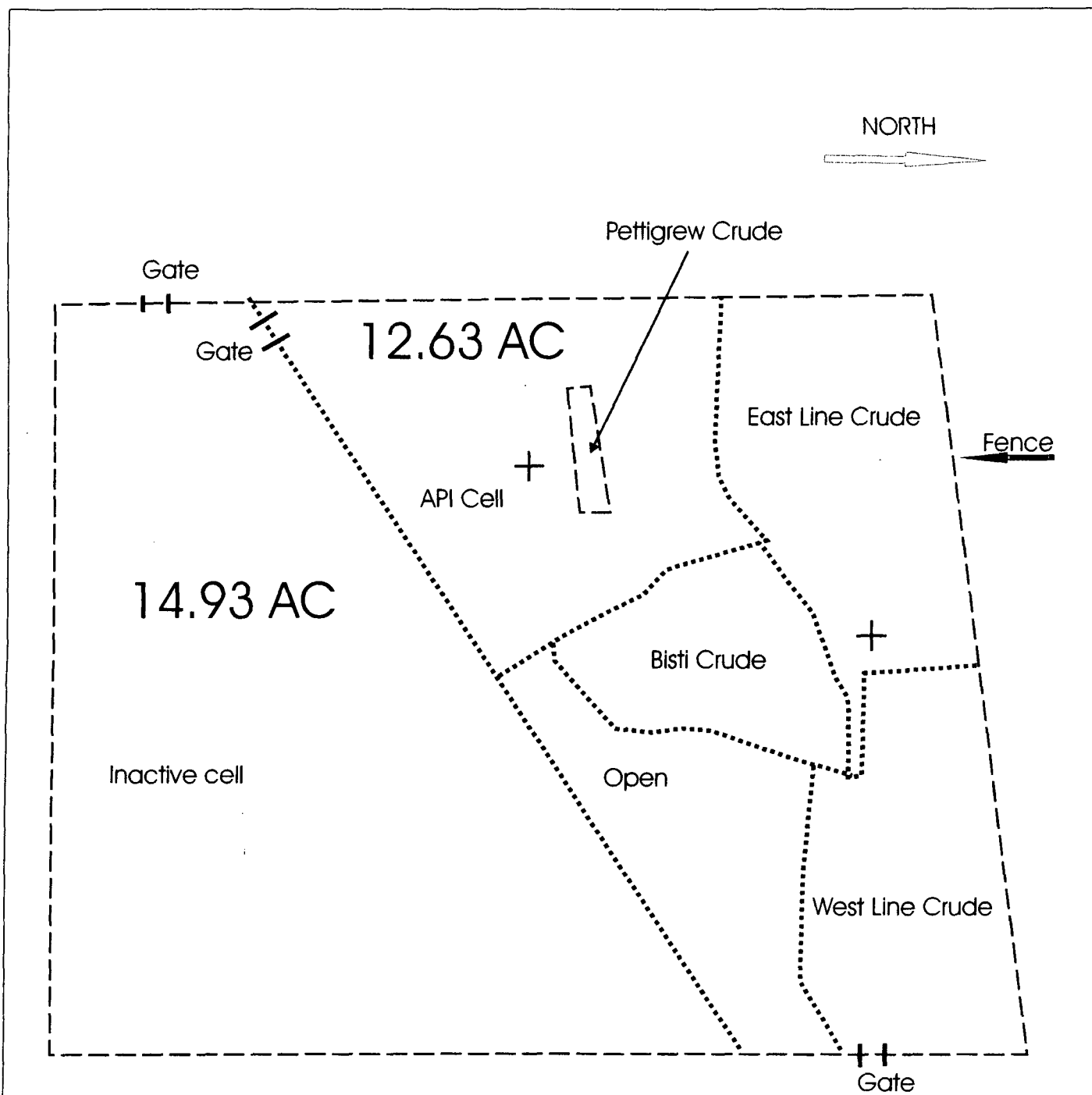
On December 21, 2006, Lodestar Services, Inc. collected 4th Quarter 2006 samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes and total petroleum hydrocarbons. Laboratory reports are included for your review.

Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson of Giant at (505) 632-4077.

Sincerely,
Lodestar Services, Inc.

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. David Kirby, Giant Industries Arizona, Inc.
File



+ December 21, 2006
 4th Quarter Sampling
 Sample Location
 Scale: 1 inch equals 200 feet

Lodestar Services, Inc
 PO Box 3861
 Farmington, NM 87499

Landfarm Cell Diagram

Figure 1
 Drawn By MJN 4/25/07
 Cell dimensions are based on
 GPS Survey Completed 3/31/06



Pinnacle Lab ID number **612222**
January 11, 2007

LODESTAR
26 CR 3500
FLORA VISTA, NM 87415

Project Name GIANT LANDFARM
Project Number (NONE)

Attention: MARTIN NEE/BILL ROBERTSON

On 12/22/2006 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), 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.

A handwritten signature in black ink, appearing to read "H. Mitchell Rubenstein".

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



CLIENT	: LODESTAR	PINNACLE ID	: 612222
PROJECT #	: (NONE)	DATE RECEIVED	: 12/22/2006
PROJECT NAME	: GIANT LANDFARM	REPORT DATE	: 01/11/2007
PINNACLE		DATE	
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
612222 - 01	API CELL	NON-AQ	12/21/2006
612222 - 02	WEST LINE CELL	NON-AQ	12/21/2006

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
 CLIENT : LODESTAR
 PROJECT # : (NONE)
 PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 612222
 ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	12/21/2006	12/27/2006	01/03/2007	1
02	WEST LINE CELL	NON-AQ	12/21/2006	12/27/2006	01/03/2007	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WEST LINE CELL
FUEL HYDROCARBONS	10	MG/KG	< 10	< 10
HYDROCARBON RANGE			C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE
BENZENE	0.025	MG/KG	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
TOTAL XYLENES	0.10	MG/KG	< 0.10	< 0.10

SURROGATE:
 BROMOFLUOROBENZENE (%) 102 98
 SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
 N/A

GAS CHROMATOGRAPHY RESULTS EXTRACTION BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 612222
BLANK I.D.	: 122706	DATE EXTRACTED	: 12/27/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 01/03/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/KG	<10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.10
SURROGATE:		
BROMOFLUOROBENZENE (%)		117
SURROGATE LIMITS	(80 - 120)	

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 612222
BATCH ID	: 122706	DATE EXTRACTED	: 12/27/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 01/03/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.04	104	1.05	105	1	(68 - 120)	20
TOLUENE	<0.025	1.00	1.02	102	1.02	102	0	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.02	102	1.03	103	1	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	3.06	102	3.08	103	1	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 612222
BATCH ID	: 122706	DATE EXTRACTED	: 12/27/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 01/03/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	BLANK RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	52.5	105	53.4	107	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 612222
SAMPLE ID	: 612222-01	DATE EXTRACTED	: 12/27/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 01/03/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.04	104	1.08	108	4	(68 - 120)	20
TOLUENE	<0.025	1.00	1.01	101	1.05	105	4	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.03	103	1.06	106	3	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	3.08	103	3.16	105	3	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 612222
SAMPLE ID	: 612222-01	DATE EXTRACTED	: 12/27/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 01/03/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	51.2	102	52.5	105	3	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
 CLIENT : LODESTAR
 PROJECT # : (NONE)
 PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 612222
 ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	API CELL	NON-AQ	12/21/2006	01/03/2007	01/04/2007	1
02	WEST LINE CELL	NON-AQ	12/21/2006	01/03/2007	01/04/2007	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WEST LINE CELL
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10

CALCULATED SUM:

SURROGATE:

O-TERPHENYL (%)

SURROGATE LIMITS

(70-130)

108

107

CHEMIST NOTES:

N/A

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 612222
BLANK I.D.	: 010307	DATE EXTRACTED	: 01/03/2007
CLIENT	: LODESTAR	DATE ANALYZED	: 01/04/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:

O-TERPHENYL (%)		107
SURROGATE LIMITS	(70-130)	

CHEMIST NOTES:

N/A



GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 612222
BATCH ID	: 010307	DATE EXTRACTED	: 01/03/2007
CLIENT	: LODESTAR	DATE ANALYZED	: 01/04/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	BLANK RESULT	CONC SPIKE	SPIKED BLANK	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	237	119	198	99	18	(75-125)	20
HYDROCARBON RANGE		C10-C32							
HYDROCARBONS QUANTITATED USING DIESEL FUEL									

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 612222
SAMPLE ID	: 612222-01	DATE EXTRACTED	: 01/03/2007
CLIENT	: LODESTAR	DATE ANALYZED	: 01/04/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	236	118	240	120	2	(70-130)	20
HYDROCARBON RANGE		C10-C32							
HYDROCARBONS QUANTITATED USING DIESEL FUEL									

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

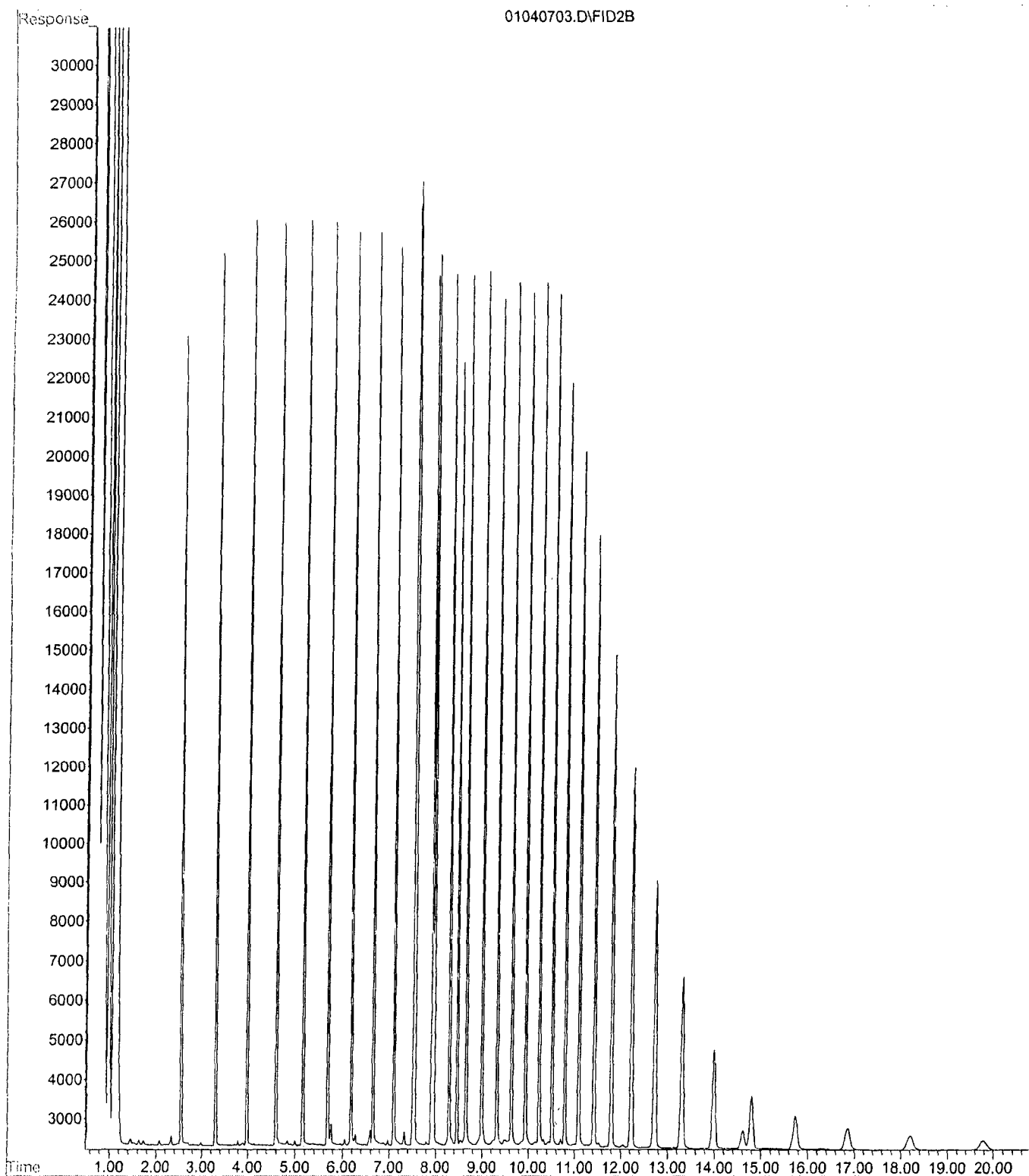
PROJECT MANAGER: M. Nell				ANALYSIS REQUEST											
COMPANY: Lodestar Services				Petroleum Hydrocarbons (418.1) TRPH											
ADDRESS: 26 Road 3500				(MOD.8015) Diesel/Direct Inject											
PHONE: 505 334 2791				TPH, GRO, DEO 8015M											
FAX:				8021 (BTEX)/8015 (Gasoline) MTBE											
BILL TO: Bill Robertson				8021 (BTEX) □ MTBE □ TMB □ PCE											
COMPANY: 111 CR 4990				8021 (TCL)											
ADDRESS: Bloomfield, NM 87413				8021 (EDX)											
				8021 (HALO)											
				8021 (CUST)											
				504.1 EDB □ / DBCP □											
				8260 (TCL) Volatile Organics											
				8260 (Full) Volatile Organics											
				8260 (CUST) Volatile Organics											
				8260 (Landfill) Volatile Organics											
				Pesticides/PCB (608/8081/8082)											
				Herbicides (615/8151)											
				Base/Neutral/Acid Compounds GC/MS (625/8270)											
				Polynuclear Aromatics (610/8310/8270-SIMS)											
				General Chemistry:											
				Priority Pollutant Metals (13)											
				Target Analyte List Metals (23)											
				RCRA Metals (8)											
				RCRA Metals by TCLP (Method 1311)											
				Metals:											
				NUMBER OF CONTAINERS											

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS				RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.:		(RUSH) □ 24hr □ 48hr □ 72hr □ 1 WEEK	(NORMAL) ☒			Signature:	Time:	Signature:	Time:
PROJ. NAME:	Giant Landfarm	CERTIFICATION REQUIRED □ NM □ SDWA □ OTHER				Printed Name:	Date:	Printed Name:	Date:
P.O. NO.:		METHANOL PRESERVATION □				Company:		Company:	
SHIPPED VIA:	UPS	COMMENTS: FIXED FEE □				RECEIVED BY: (LAB)			
SAMPLE RECEIPT		NO CONTAINERS		2		Signature: M. Nell			
CUSTODY SEALS		ON/NA				Time: 12/21/06			
RECEIVED/INTACT		YES				Date: 12/22/06			
BLUE/CE		40				Printed Name: M. Nell			
						Company: Pinnacle Laboratories Inc.			

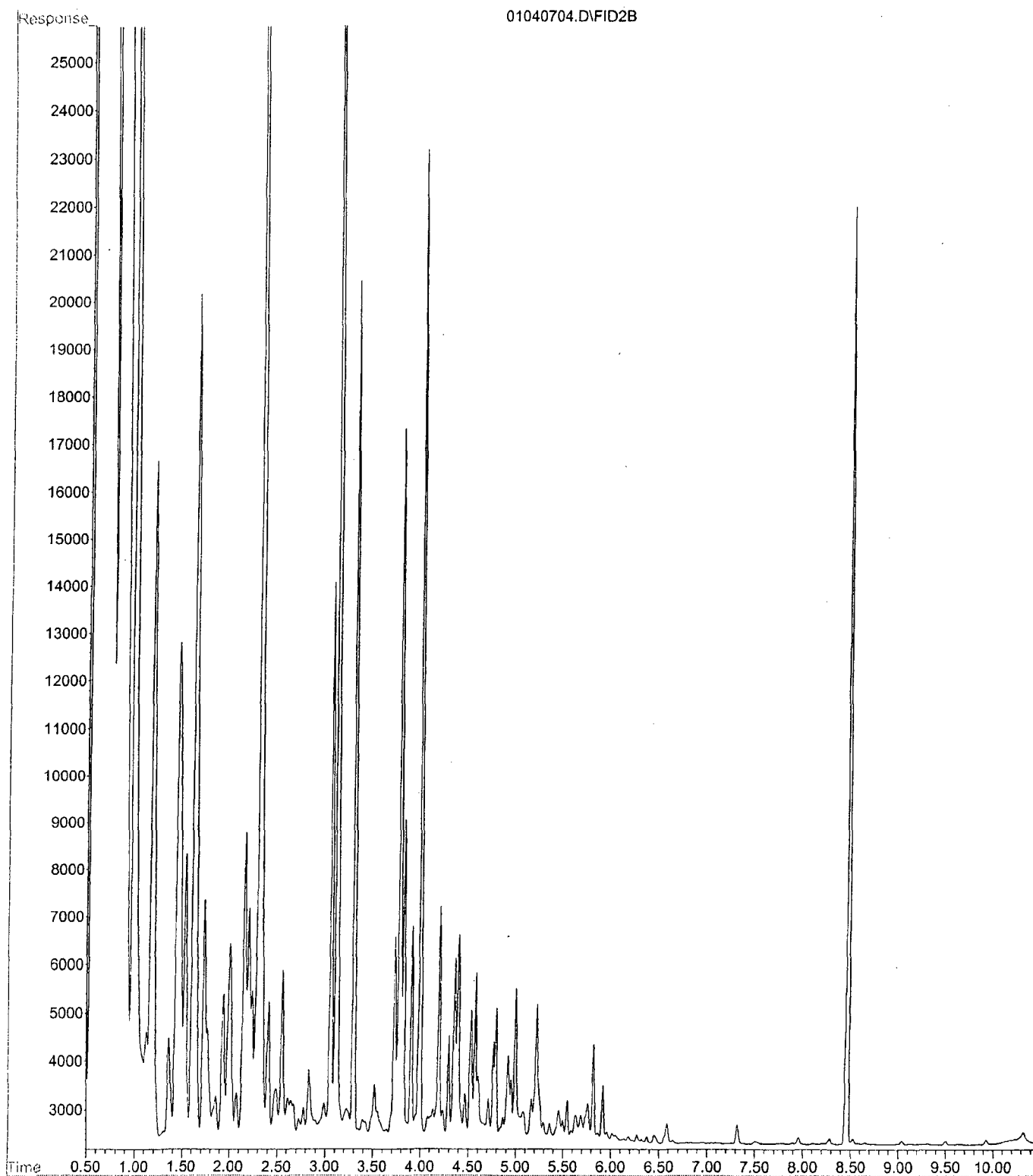
SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

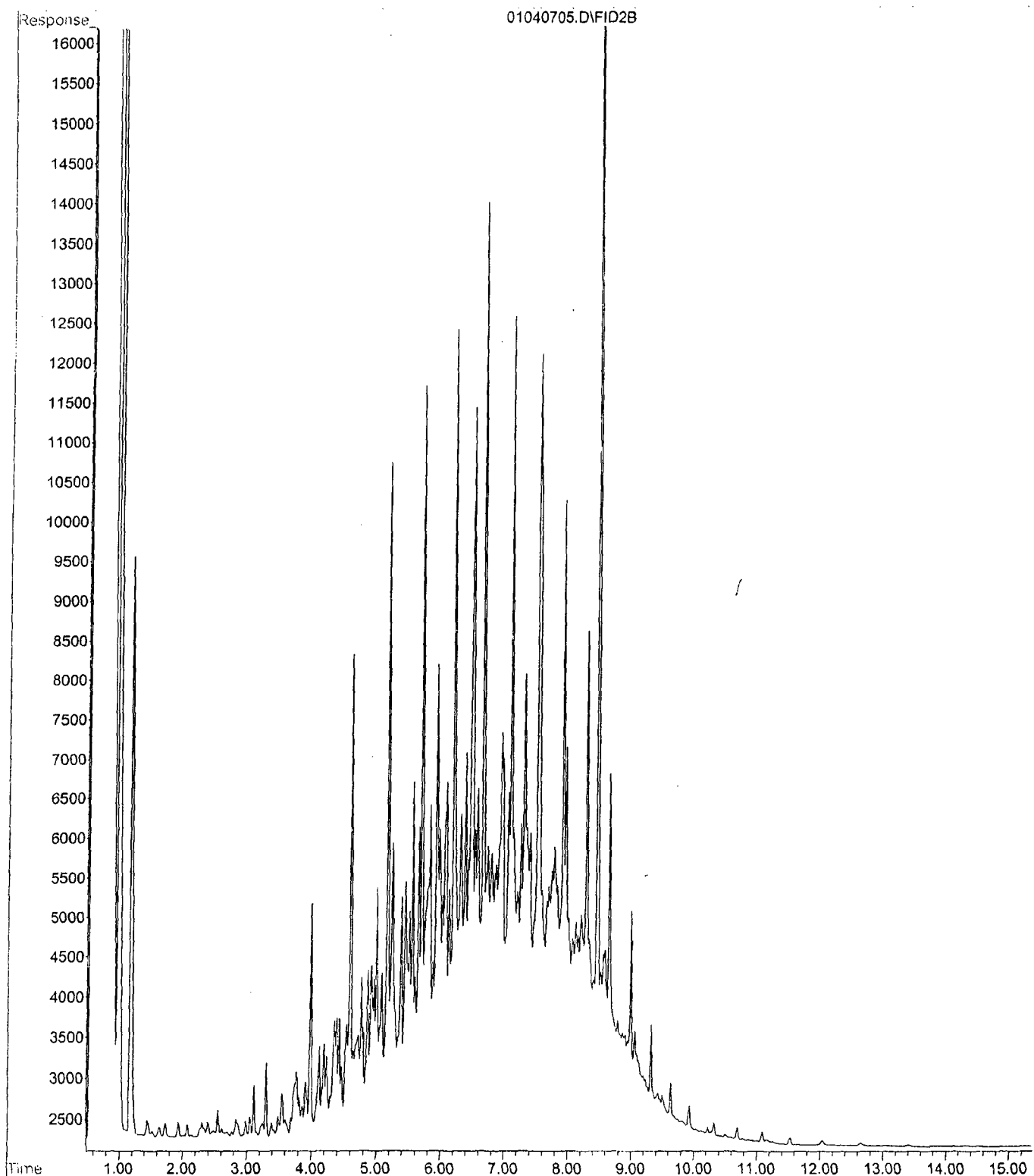
File : C:\HPCHEM\2\DATA\010407F\01040703.D
Operator : BP
Acquired : 4 Jan 2007 8:22 am using AcqMethod NM122806.M
Instrument : FID-1
Sample Name: RT STD
Misc Info : GC5-56-15
Vial Number: 3



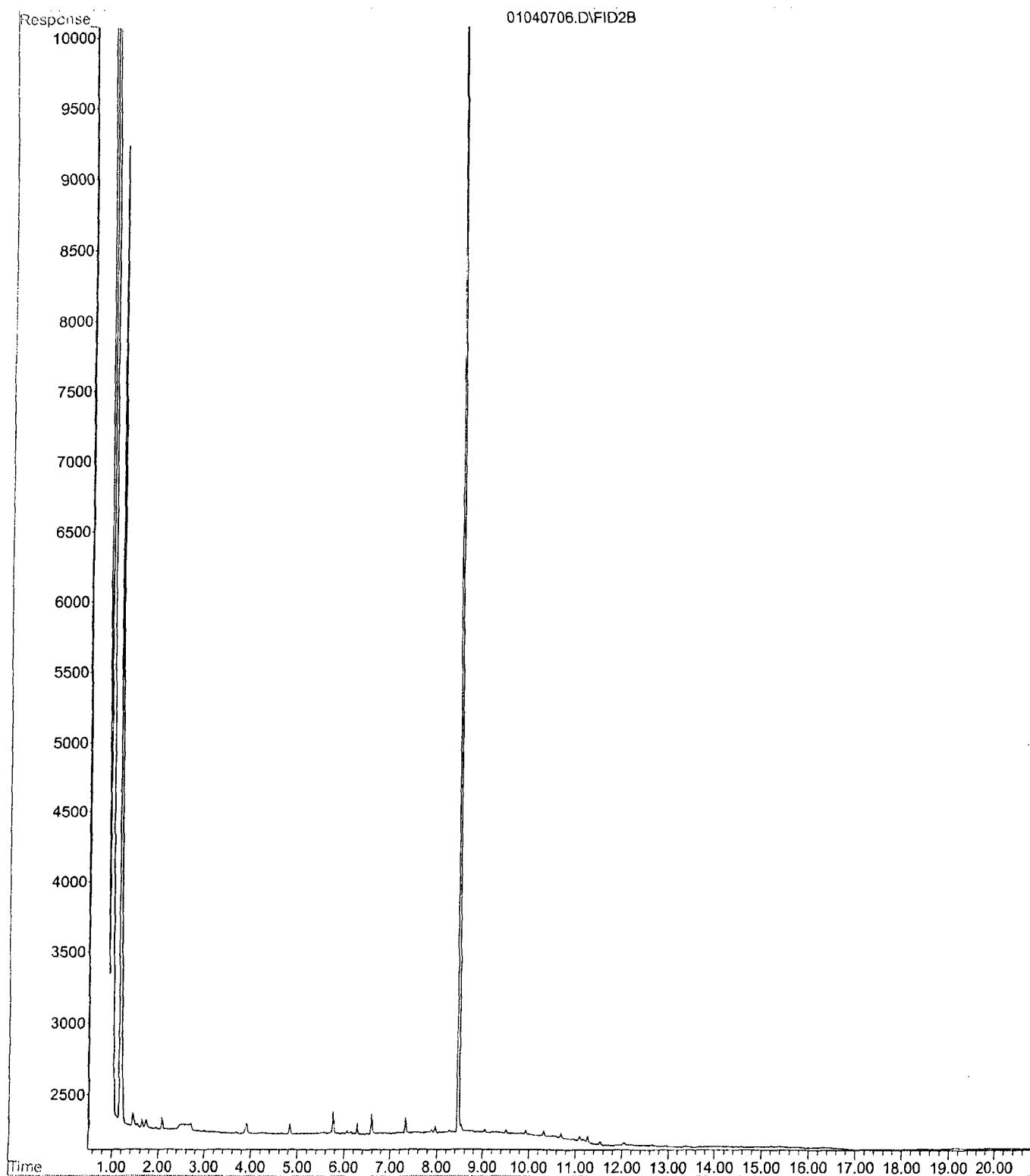
File : C:\HPCHEM\2\DATA\010407F\01040704.D
Operator : BP
Acquired : 4 Jan 2007 8:54 am using AcqMethod NM122806.M
Instrument : FID-1
Sample Name: GRO CCV
Misc Info : GC5-56-18
Vial Number: 4



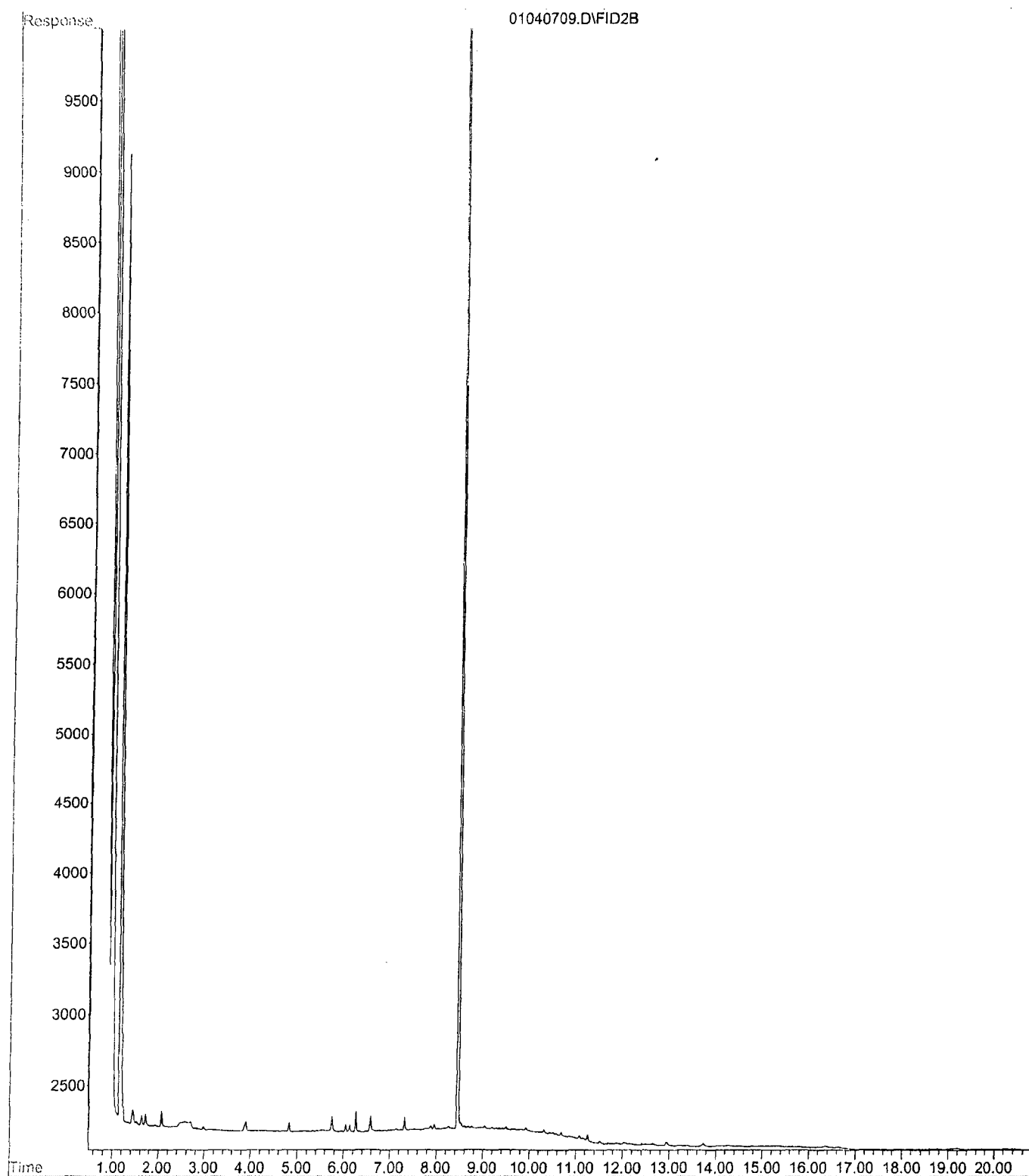
File : C:\HPCHEM\2\DATA\010407F\01040705.D
Operator : BP
Acquired : 4 Jan 2007 9:27 am using AcqMethod NM122806.M
Instrument : FID-1
Sample Name: DRO CCV
Misc Info : GC5-56-13
Vial Number: 5



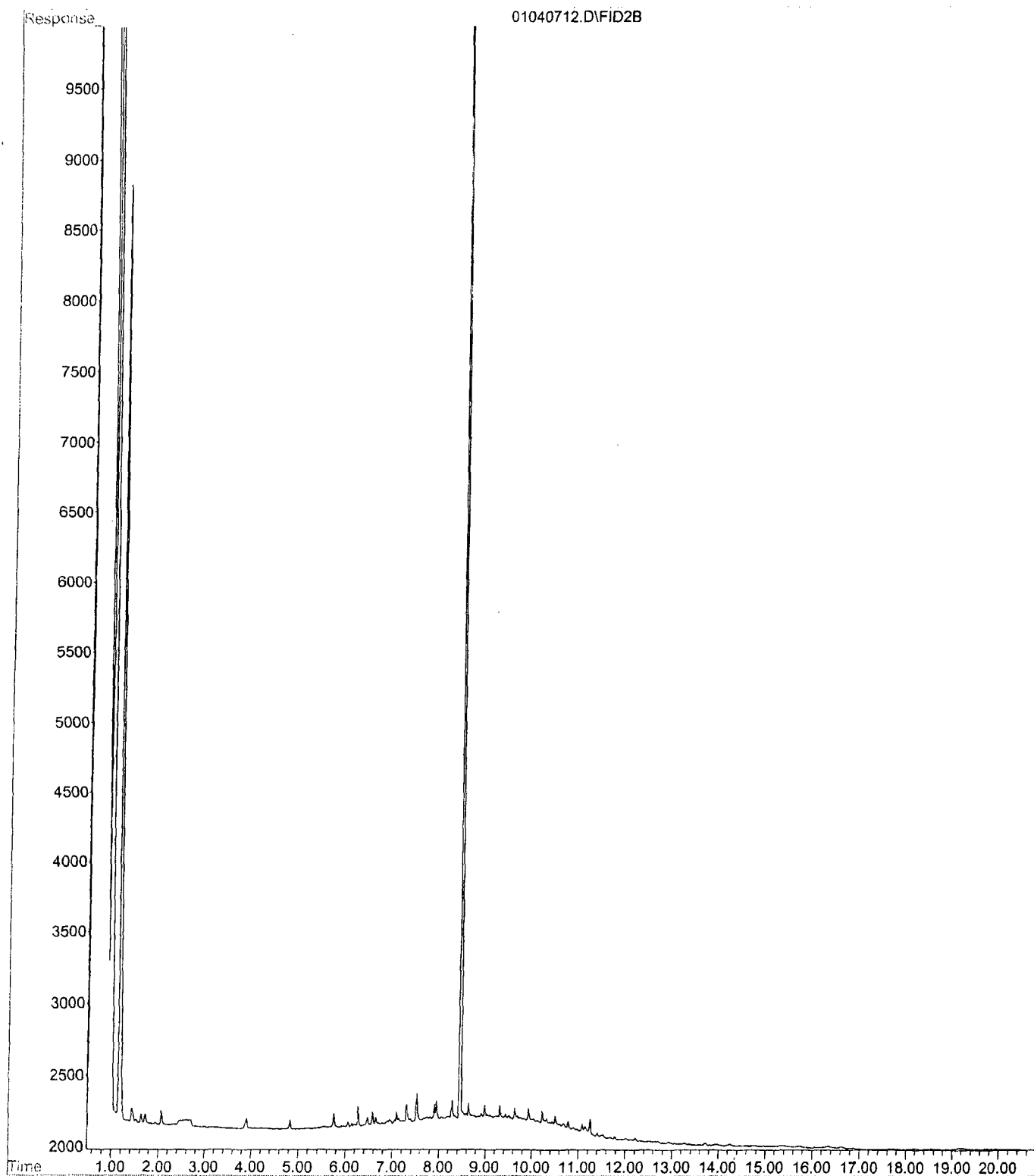
File : C:\HPCHEM\2\DATA\010407F\01040706.D
Operator : BP
Acquired : 4 Jan 2007 9:58 am using AcqMethod NM122806.M
Instrument : FID-1
Sample Name: SRB-010307
Misc Info : 10g/10mL
Vial Number: 6



File : C:\HPCHEM\2\DATA\010407F\01040709.D
Operator : BP
Acquired : 4 Jan 2007 11:33 am using AcqMethod NM122806.M
Instrument : FID-1
Sample Name: 612222-01 1X
Misc Info : 10g/10mL
Vial Number: 9

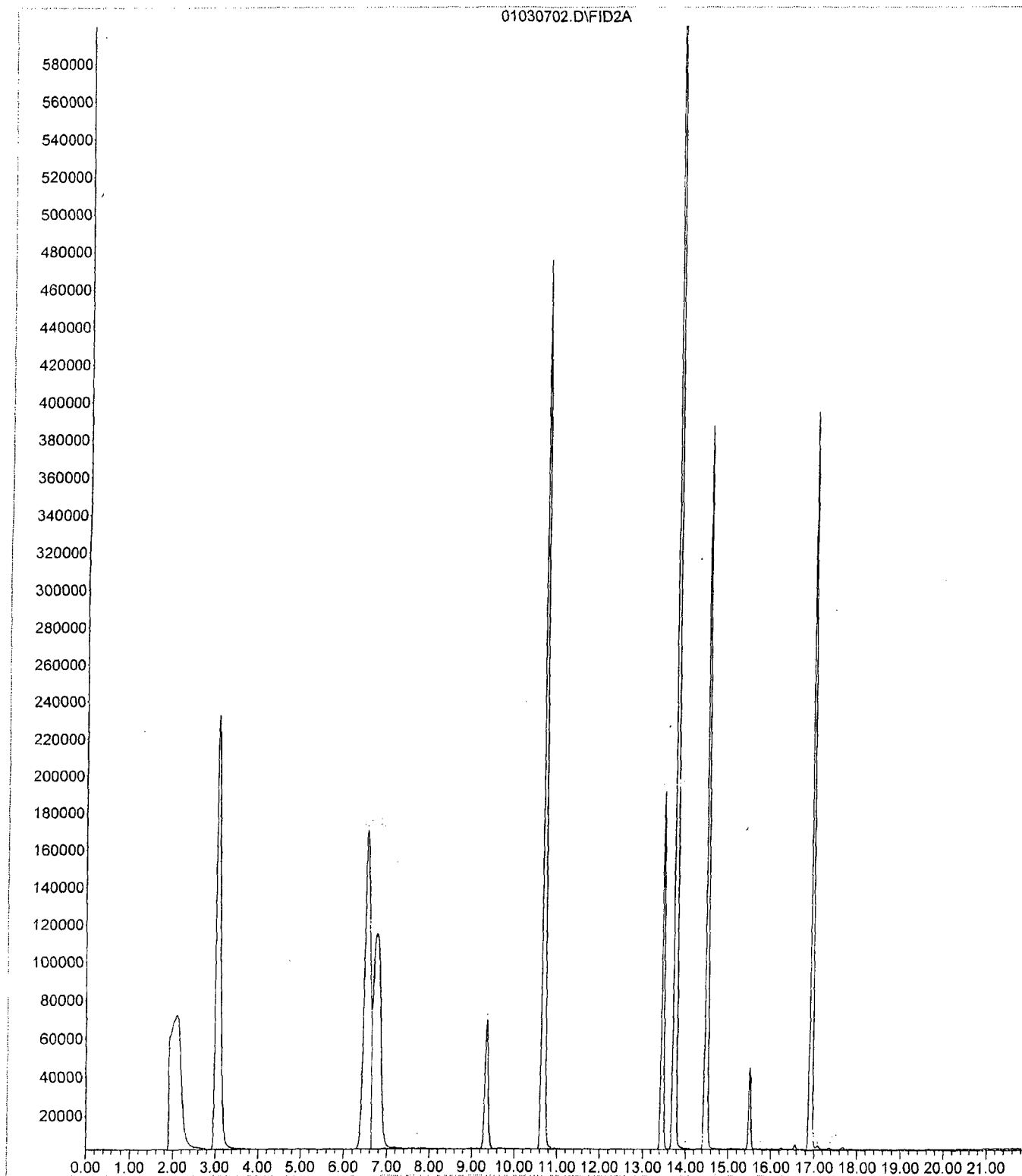


File : C:\HPCHEM\2\DATA\010407F\01040712.D
Operator : BP
Acquired : 4 Jan 2007 1:11 pm using AcqMethod NM122806.M
Instrument : FID-1
Sample Name: 612222-02 1X
Misc Info : 10g/10mL
Vial Number: 12

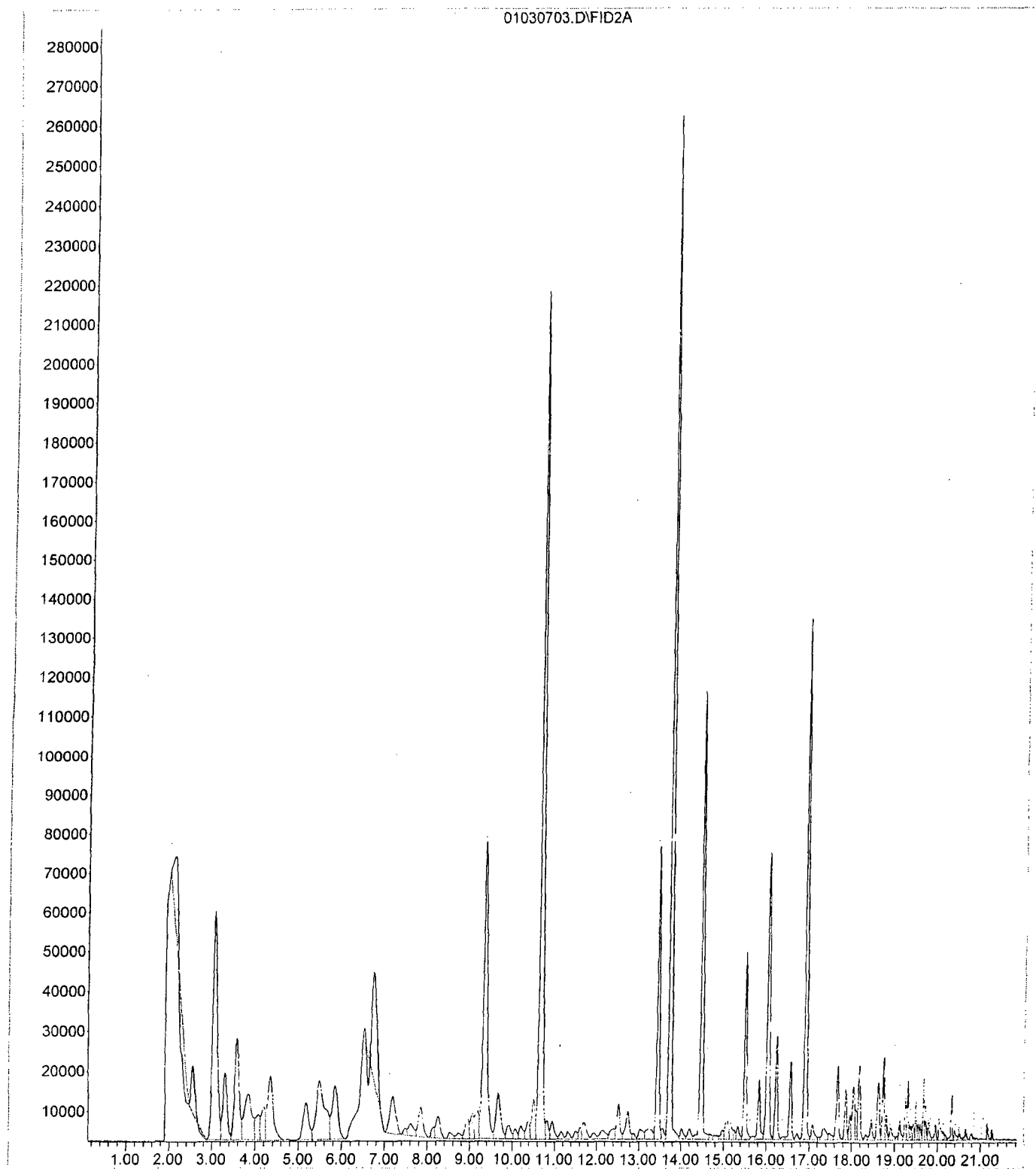


b12222

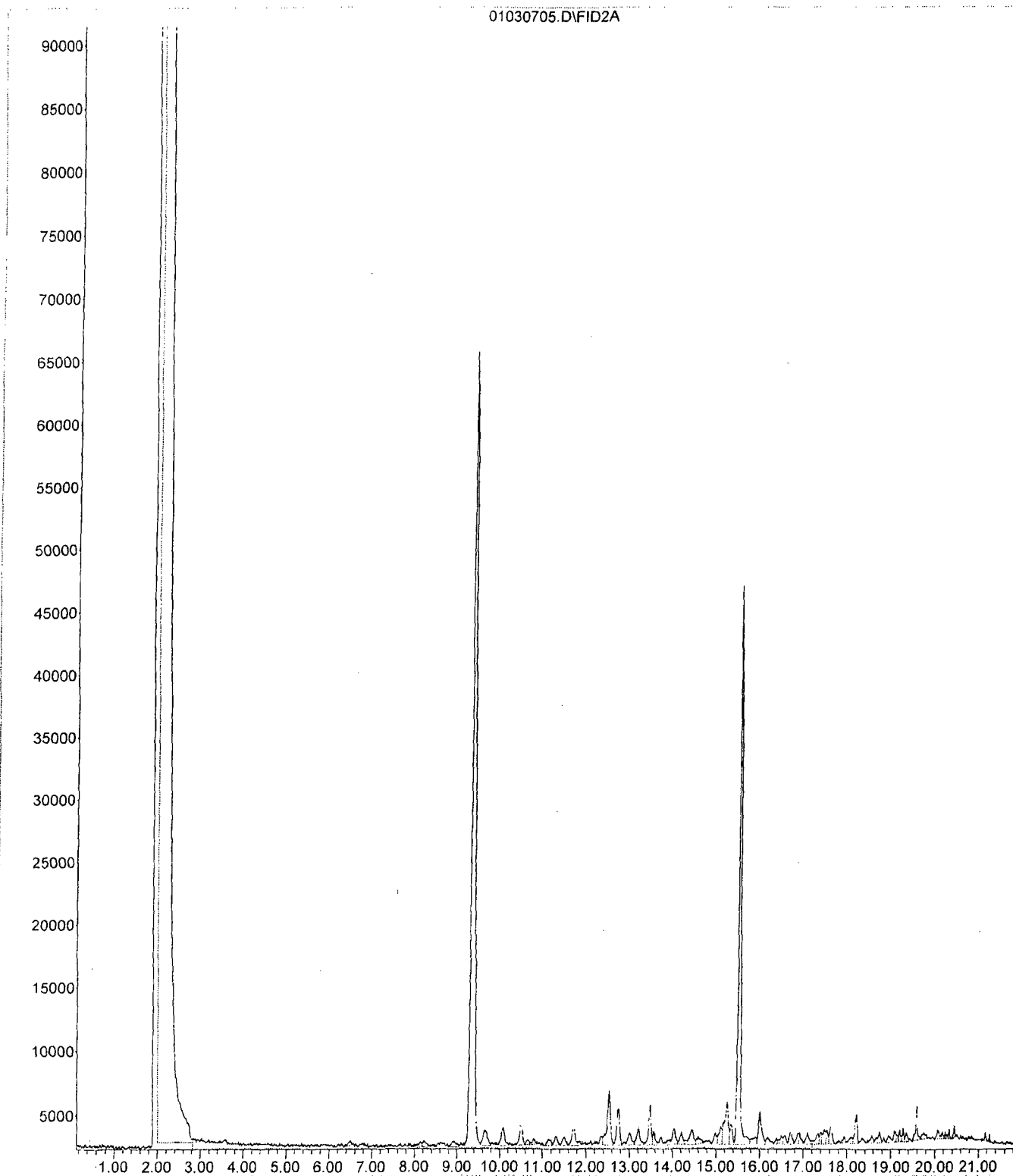
File : C:\HPCHEM\1\DATA\010307\01030702.D
Operator : BP
Acquired : 3 Jan 2007 8:25 using AcqMethod BG122806.M
Instrument : GC-2
Sample Name: GRO RT STD
Misc Info : 10uL MS5-23-01
Vial Number: 1



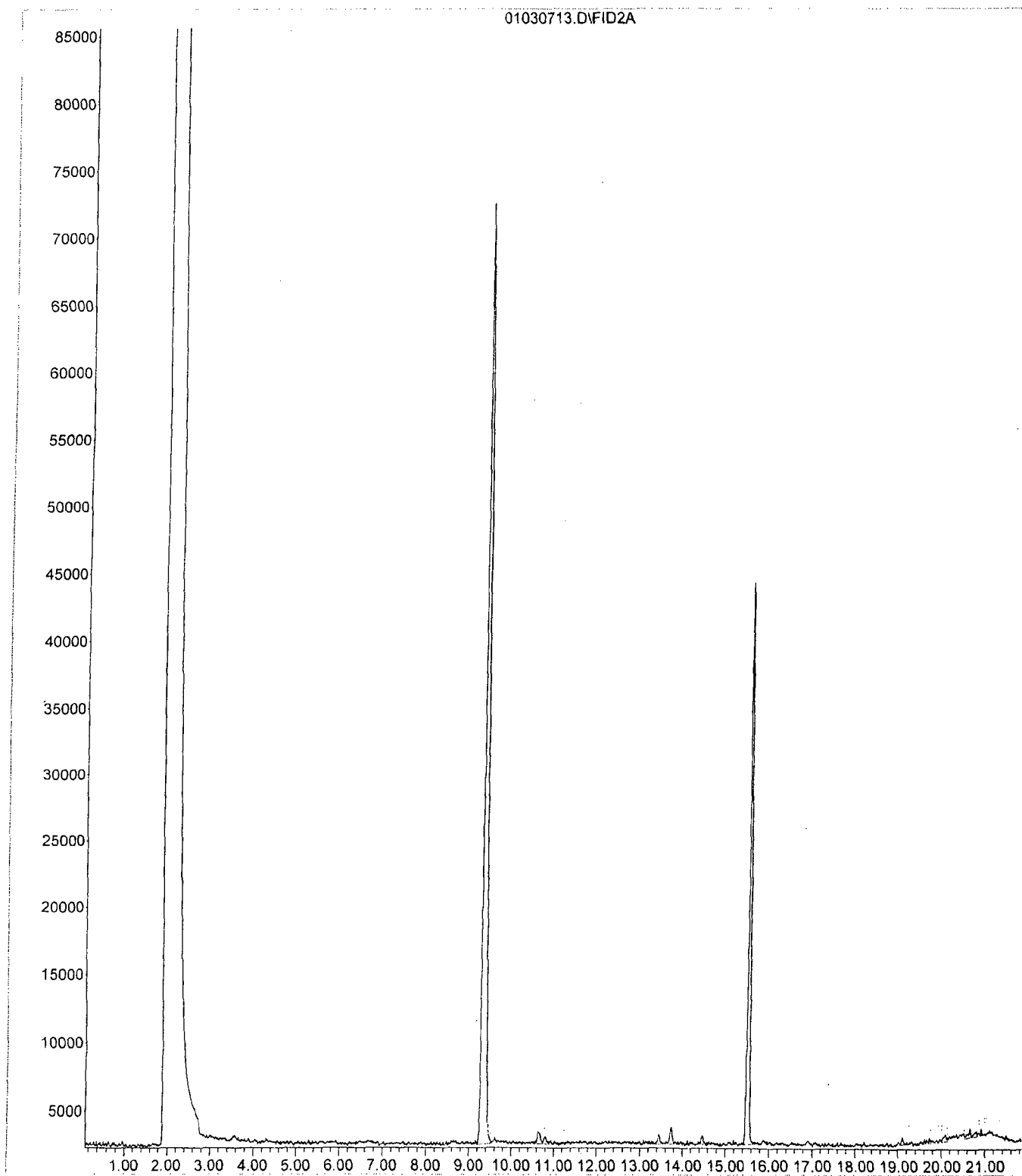
File : C:\HPCHEM\1\DATA\010307\01030703.D
Operator : BP
Acquired : 3 Jan 2007 8:56 using AcqMethod BG122806.M
Instrument : GC-2
Sample Name: GRO CCV 1000ppb
Misc Info : 10uL MS5-21-14
Vial Number: 2



File : C:\HPCHEM\1\DATA\010307\01030705.D
Operator : BP
Acquired : 3 Jan 2007 9:58 using AcqMethod BG122806.M
Instrument : GC-2
Sample Name: SRB-122706
Misc Info : 100uL BTEX/GRO SOIL
Vial Number: 4



File : C:\HPCHEM\1\DATA\010307\01030713.D
Operator : BP
Acquired : 3 Jan 2007 14:26 using AcqMethod BG122806.M
Instrument : GC-2
Sample Name: 612222-02 1X
Misc Info : 100uL BTEX/GRO SOIL
Vial Number: 12





PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

2006 MAY 30 PM 12 42

May 22, 2006

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

**RE: Annual Sampling at Giant's Centralized Surface Waste Management Landfarm
Facility NM -02-0010**

Dear Mr. Martin,

On March 31, 2006, Lodestar Services, Inc. collected annual samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Two Crude Cell samples and one API Cell sample was collected as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for the following constituents:

Total Petroleum Hydrocarbons
Benzene, Toluene, Ethyl benzene, and Xylenes
Major Ions (Na, Ca, Mg, K, Cl-,SO₄, CO₃, and HCO₃)
RCRA Metals (As, Ba, Cd, Cr, Pb, Se, Ag, and Hg)

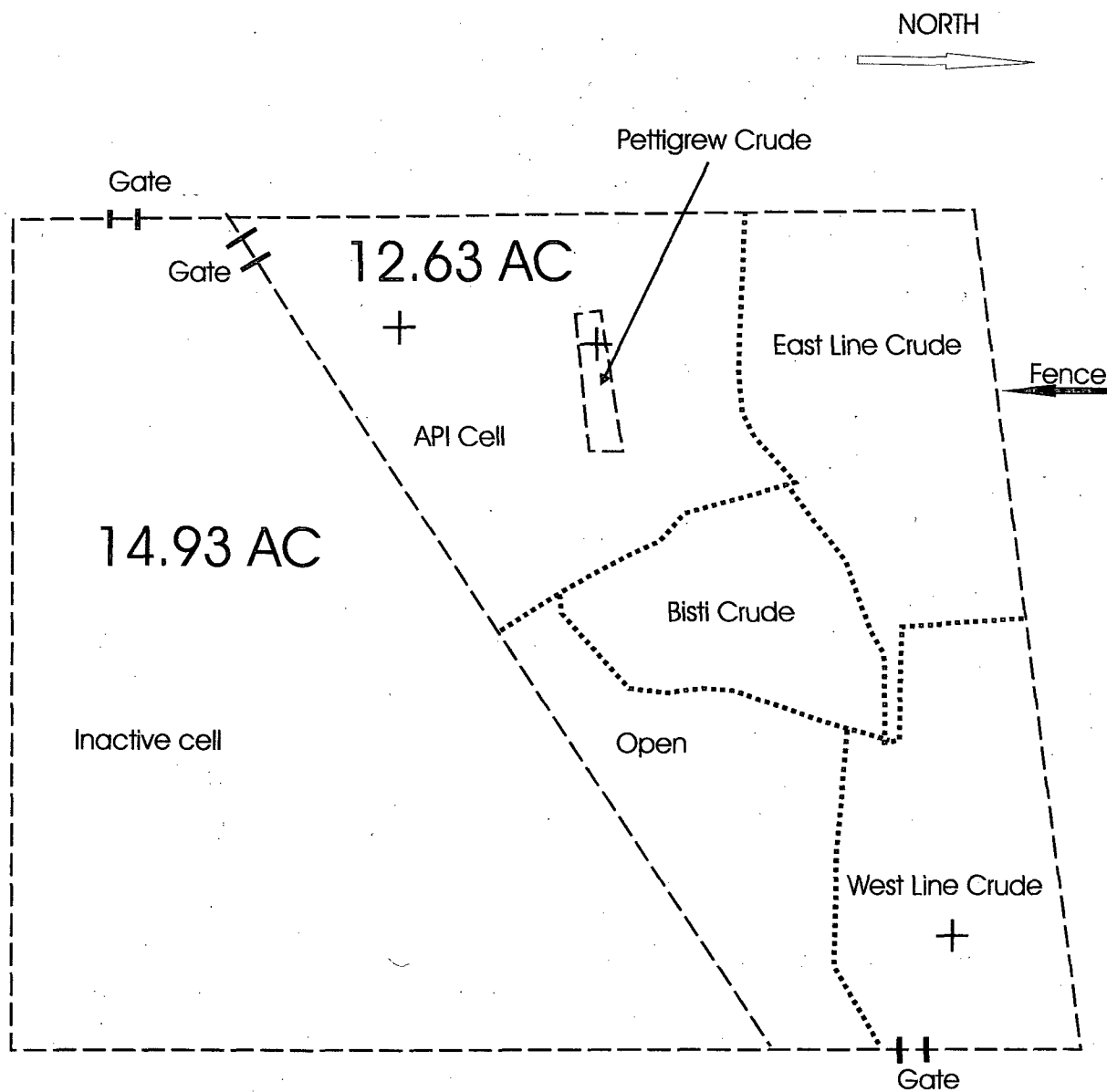
The attached analytical results are consistent with the original baseline data collected on March 27, 1998.

Should you have any questions or require additional information please do not hesitate to call Bill Robertson of Giant at (505) 632-4077 or Martin Nee at (505) 334-2791.

Sincerely,
Lodestar Services Incorporated

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. David Kirby, Giant Industries Arizona, Inc.
File



+ March 31, 2006
Annual Sampling
Sample Location
Scale: 1 inch equals 200 feet


 Lodestar Services, Inc
 PO Box 3861
 Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 5/10/06
 Cell dimensions are based on
 GPS Survey Completed 3/31/06



Pinnacle Lab ID number 604008
April 21, 2006

GIANT INDUSTRIES
111 COUNTY RD. 4990
BLOOMFIELD, NM 87413

Project Name GIANT LANDFARM
Project Number (NONE)

Attention: MARTIN NEE/BILL ROBERTSON

On 04/04/06 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze non-aq 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.

EPA Methods 8015 DRO/GRO and 8021 were analyzed by Pinnacle Laboratories, Inc., Albuquerque, NM.

All other samples were analyzed by Flowers Chemical Laboratories, Inc., Altamonte Springs, FL.

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

A handwritten signature in black ink, appearing to read "H. Rubenstein".

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

CLIENT	: GIANT INDUSTRIES	PINNACLE ID	: 604008
PROJECT #	: (NONE)	DATE RECEIVED	: 04/04/06
PROJECT NAME	: GIANT LANDFARM	REPORT DATE	: 04/21/06

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
604008 - 01	API	NON-AQ	03/31/06
604008 - 02	WEST LINE CRUDE	NON-AQ	03/31/06
604008 - 03	PETTIGREW CRUDE	NON-AQ	03/31/06

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
 CLIENT : GIANT INDUSTRIES
 PROJECT # : (NONE)
 PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 604008
 ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API	NON-AQ	03/31/06	04/06/06	04/14/06	1
02	WEST LINE CRUDE	NON-AQ	03/31/06	04/06/06	04/14/06	1
03	PETTIGREE CRUDE	NON-AQ	03/31/06	04/06/06	04/14/06	1

PARAMETER	DET. LIMIT	UNITS	API	WEST LINE CRUDE	PETTIGREE CRUDE
BENZENE	0.025	MG/KG	< 0.025	< 0.025	< 0.025
TOLUENE	0.050	MG/KG	< 0.050	0.10	< 0.050
ETHYLBENZENE	0.025	MG/KG	< 0.025	0.062	< 0.025
TOTAL XYLENES	0.10	MG/KG	< 0.10	0.35	< 0.10
METHYL-t-BUTYL ETHER	0.13	MG/KG	< 0.13	< 0.13	< 0.13

SURROGATE:
 BROMOFLUOROBENZENE (%) 102 103 91
 SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
 N/A

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 604008
BLANK I. D.	: 040606	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/14/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.050
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.10
METHYL-t-BUTYL ETHER	MG/KG	<0.13

SURROGATE:

BROMOFLUOROBENZENE (%)

97

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 604008
BATCH ID	: 040606	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/14/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.999	100	1.09	109	9	(68 - 120)	20
TOLUENE	<0.050	1.00	0.991	99	1.09	109	10	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.962	96	1.07	107	11	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	2.86	95	3.17	106	10	(58 - 120)	20
METHYL-t-BUTYL ETHER	<0.13	1.00	1.06	106	1.19	119	12	(66 - 120)	20

CHEMIST NOTES:

N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 604008
SAMPLE ID	: 604008-01	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/14/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.960	96	0.981	98	2	(68 - 120)	20
TOLUENE	<0.050	1.00	0.963	96	0.981	98	2	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.939	94	0.953	95	1	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	2.79	93	2.83	94	1	(58 - 120)	20
METHYL-t-BUTYL ETHER	<0.13	1.00	1.02	102	1.01	101	1	(66 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015B GRO
CLIENT : GIANT INDUSTRIES
PROJECT # : (NONE)
PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 604008
ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API	NON-AQ	03/31/06	04/06/06	04/12/06	1
02	WEST LINE CRUDE	NON-AQ	03/31/06	04/06/06	04/12/06	1
03	PETTIGREE CRUDE	NON-AQ	03/31/06	04/06/06	04/12/06	1
PARAMETER	DET. LIMIT	UNITS	API	WEST LINE CRUDE	PETTIGREE CRUDE	
FUEL HYDROCARBONS	10	MG/KG	< 10	< 10	< 10	
HYDROCARBON RANGE			C6-C10	C6-C10	C6-C10	
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	GASOLINE	

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 604008
BLANK I.D.	: 040606	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/12/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: BP

PARAMETER	UNITS
FUEL HYDROCARBONS	MG/KG
HYDROCARBON RANGE	<10
HYDROCARBONS QUANTITATED USING	C6-C10 GASOLINE

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 604008
BATCH ID	: 040606	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/12/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	BLANK RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	48.7	97	49.7	99	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 604008
SAMPLE ID	: 604008-01	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/12/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	45.5	91	45.4	91	0	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY RESULTS

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	
CLIENT	: GIANT INDUSTRIES	PINNACLE I.D. : 604008
PROJECT #	: (NONE)	ANALYST : DSR
PROJECT NAME	: GIANT LANDFARM	

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API	NON-AQ	03/31/06	04/06/06	04/07/06	1
02	WEST LINE CRUDE	NON-AQ	03/31/06	04/06/06	04/07/06	1
03	PETTIGREE CRUDE	NON-AQ	03/31/06	04/06/06	04/07/06	1

PARAMETER	DET. LIMIT	UNITS	API	WEST LINE CRUDE	PETTIGREE CRUDE
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10	< 10
CALCULATED SUM:					

SURROGATE:			
O-TERPHENYL (%)		83	76
SURROGATE LIMITS	(70-130)		74

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST : EPA 8015 MODIFIED (DIRECT INJECT) PINNACLE I.D. : 604008
BLANK I.D. : 040606A DATE EXTRACTED : 04/06/06
CLIENT : GIANT INDUSTRIES DATE ANALYZED : 04/06/06
PROJECT # : (NONE) SAMPLE MATRIX : NON-AQ
PROJECT NAME : GIANT LANDFARM ANALYST : DSR

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:
O-TERPHENYL (%) 77
SURROGATE LIMITS (70-130)

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 604008
BATCH ID	: 040606A	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/06/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	BLANK RESULT	CONC SPIKE	SPIKED BLANK	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	175	88	206	103	16	(75-125)	20
HYDROCARBON RANGE		C10-C32							
HYDROCARBONS QUANTITATED USING		DIESEL FUEL							

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 604008
SAMPLE ID	: 604008-01	DATE EXTRACTED	: 04/06/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/07/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	190	95	197	99	4	(70-130)	20
HYDROCARBON RANGE		C10-C32							
HYDROCARBONS QUANTITATED USING		DIESEL FUEL							

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407-339-5984 Fax 407-260-6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2860 Phone 772-343-8006 Fax 772-343-8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Report Summary

Date Received: Apr 5, 2006

FCL Project Manager: June S. Flowers

Laboratory #	Sample Description	Analysis	Chemist	Location	SampleMatrix
13601SO1	API/604008-01	EPA310.1	LCC	Main Lab	Soil
		EPA325.2	JGK	Main Lab	
		EPA375.4	JGK	Main Lab	
		EPA6010	EVB	Main Lab	
		EPA6020	EVB	Main Lab	
13601SO2	W.Line Crude/604008-02	EPA7471	EVB	Main Lab	Soil
		EPA310.1	LCC	Main Lab	
		EPA325.2	JGK	Main Lab	
		EPA375.4	JGK	Main Lab	
		EPA6010	EVB	Main Lab	
13601SO3	Pettigrew Crude/604008-03	EPA6020	EVB	Main Lab	Soil
		EPA7471	EVB	Main Lab	
		EPA310.1	LCC	Main Lab	
		EPA325.2	JGK	Main Lab	
		EPA375.4	JGK	Main Lab	
		EPA6010	EVB	Main Lab	
		EPA6020	EVB	Main Lab	
		EPA7471	EVB	Main Lab	

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
President/Technical Director



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407 - 339 - 5984 Fax 407 - 260 - 6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2860 Phone 772 - 343 - 8006 Fax 772 - 343 - 8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Analysis Report

Lab #: 13601501 Sampled: 03/31/06 10:17 AM Desc: API/604008-01

Parameter	Result	Units	DF	MDL	POL	QC Batch	Method	CAS #	Analyzed
Calcium	731	mg/Kg	1.00	10.0	20.0	10058902	EPA6010	7440-70-2	04/05/06
Magnesium	734	mg/Kg	1.00	1.00	2.00	10058902	EPA6010	7439-95-4	04/05/06
Potassium	460	mg/Kg	1.00	10.0	20.0	10058902	EPA6010	7440-09-7	04/05/06
Sodium	207	mg/Kg	1.00	50.0	100	10058902	EPA6010	7440-23-5	04/05/06
Arsenic	0.956	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-38-2	04/06/06
Barium	63.9	mg/Kg	1.00	0.200	0.400	10058995	EPA6020	7440-39-3	04/06/06
Cadmium	0.100 U	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-43-9	04/06/06
Chromium	1.98	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-47-3	04/06/06
Lead	3.51	mg/Kg	1.00	0.100	0.200	10058995	EPA6020	7439-92-1	04/06/06
Selenium	0.200 U	mg/Kg	1.00	0.200	0.400	10058995	EPA6020	7782-49-2	04/06/06
Silver	0.0500 U	mg/Kg	1.00	0.0500	0.100	10058995	EPA6020	7440-22-4	04/06/06
Mercury	0.0391	mg/Kg	1.00	0.0100	0.0200	10059433	EPA7471	7439-97-6	04/13/06
Chloride	143	mg/kg	10.1	50.5	101	10059873	EPA325.2	16887-00-6	04/06/06
Sulfate	20.81	mg/kg	1.00	20.0	40.0	10059875	EPA375.4	14808-79-8	03/31/06
Bicarbonate Alkalinity	441	mg/Kg	50.0	50.0	100	10059877	EPA310.1	3812-32-6	04/14/06
Carbonate Alkalinity	299	mg/Kg	50.0	50.0	100	10059877	EPA310.1	T-005	04/14/06
Total Alkalinity CaCO3	451	mg/Kg	50.0	50.0	100	10059877	EPA310.1		04/14/06

Lab #: 13601502 Sampled: 03/31/06 10:40 AM Desc: W Line Grade/604008-02

Parameter	Result	Units	DF	MDL	POL	QC Batch	Method	CAS #	Analyzed
Calcium	2330	mg/Kg	1.00	10.0	20.0	10058902	EPA6010	7440-70-2	04/05/06
Magnesium	721	mg/Kg	1.00	1.00	2.00	10058902	EPA6010	7439-95-4	04/05/06
Potassium	348	mg/Kg	1.00	10.0	20.0	10058902	EPA6010	7440-09-7	04/05/06
Sodium	50.0 U	mg/Kg	1.00	50.0	100	10058902	EPA6010	7440-23-5	04/05/06
Arsenic	1.71	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-38-2	04/06/06
Barium	78.1	mg/Kg	1.00	0.200	0.400	10058995	EPA6020	7440-39-3	04/06/06
Cadmium	0.100 U	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-43-9	04/06/06

FLDOH: E83018 (Main Lab) FLDOH: E86562 (South Lab) FLDOH: E82405 (North Lab) NJDEP: FL015

KYUSTP: 0007



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407 - 339 - 5984 Fax 407 - 260 - 6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2860 Phone 772 - 343 - 8006 Fax 772 - 343 - 8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Lab #: 13601502 Sampled: 03/31/06 10:40 AM Desc: W Line Crude/604008-02

Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Chromium	2.12	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-47-3	04/06/06
Lead	3.05	mg/Kg	1.00	0.100	0.200	10058995	EPA6020	7439-92-1	04/06/06
Selenium	0.200 U	mg/Kg	1.00	0.200	0.400	10058995	EPA6020	7782-49-2	04/06/06
Silver	0.0500 U	mg/Kg	1.00	0.0500	0.100	10058995	EPA6020	7440-22-4	04/06/06
Mercury	0.0528	mg/Kg	1.00	0.0100	0.0200	10059433	EPA7471	7439-97-6	04/13/06
Chloride	43.4 I	mg/kg	5.00	25.0	50.0	10059873	EPA325.2	16887-00-6	04/06/06
Sulfate	20.0 U	mg/kg	1.00	20.0	40.0	10059875	EPA375.4	14808-79-8	03/31/06
Bicarbonate Alkalinity	771	mg/Kg	50.0	50.0	100	10059877	EPA310.1	3812-32-6	04/14/06
Carbonate Alkalinity	1860	mg/Kg	50.0	50.0	100	10059877	EPA310.1	T-005	04/14/06
Total Alkalinity CaCO3	821	mg/Kg	50.0	50.0	100	10059877	EPA310.1		04/14/06

Lab #: 13601503 Sampled: 03/31/06 10:26 AM Desc: Pettigrew Crude/604008-03

Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Calcium	3240	mg/Kg	1.00	10.0	20.0	10058902	EPA6010	7440-70-2	04/05/06
Magnesium	762	mg/Kg	1.00	1.00	2.00	10058902	EPA6010	7439-95-4	04/05/06
Potassium	480	mg/Kg	1.00	10.0	20.0	10058902	EPA6010	7440-09-7	04/05/06
Sodium	430	mg/Kg	1.00	50.0	100	10058902	EPA6010	7440-23-5	04/05/06
Arsenic	1.57	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-38-2	04/06/06
Barium	105	mg/Kg	1.00	0.200	0.400	10058995	EPA6020	7440-39-3	04/06/06
Cadmium	0.100 U	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-43-9	04/06/06
Chromium	1.75	mg/Kg	1.00	0.100	0.100	10058995	EPA6020	7440-47-3	04/06/06
Lead	3.37	mg/Kg	1.00	0.100	0.200	10058995	EPA6020	7439-92-1	04/06/06
Selenium	0.200 U	mg/Kg	1.00	0.200	0.400	10058995	EPA6020	7782-49-2	04/06/06
Silver	0.0500 U	mg/Kg	1.00	0.0500	0.100	10058995	EPA6020	7440-22-4	04/06/06
Mercury	0.0388	mg/Kg	1.00	0.0100	0.0200	10059433	EPA7471	7439-97-6	04/13/06
Chloride	2700	mg/kg	60.0	300	600	10059874	EPA325.2	16887-00-6	04/10/06
Sulfate	163	mg/kg	1.00	20.0	40.0	10059875	EPA375.4	14808-79-8	03/31/06
Bicarbonate Alkalinity	1430	mg/Kg	50.0	50.0	100	10059877	EPA310.1		04/14/06
Carbonate Alkalinity	2920	mg/Kg	50.0	50.0	100	10059877	EPA310.1	3812-32-6	04/14/06



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407 - 339 - 5984 Fax 407 - 260 - 6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2860 Phone 772 - 343 - 8006 Fax 772 - 343 - 8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Lab #:	13601S03	Sampled:	03/31/06 10:26 AM	Desc:	Petigrew Crude/604008-Q3	PQL	QC Batch	Method	CAS #	Analyzed
Parameter		Result	1500	Units	mg/Kg	DF	MDL			
Total Alkalinity CaCO3						50.0	50.0	100	10059877 EPA310.1	T-005 04/14/06



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407 - 339 - 5984 Fax 407 - 260 - 6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2860 Phone 772 - 343 - 8006 Fax 772 - 343 - 8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Quality Report

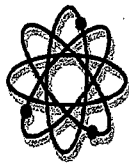
Quality Control Batch: 1005895		Analyst: EVB
Blank	Result	Units
Arsenic	0.100U	mg/Kg
Barium	0.200U	mg/Kg
Cadmium	0.100U	mg/Kg
Chromium	0.100U	mg/Kg
Lead	0.100U	mg/Kg
Selenium	0.200U	mg/Kg
Silver	0.0500U	mg/Kg

Laboratory Control Sample

	Result	Units	Spike	%REC	%REC Lim
Arsenic	0.205	mg/Kg	0.200	102.30	80.00-120.00
Barium	0.209	mg/Kg	0.200	104.50	80.00-120.00
Cadmium	0.204	mg/Kg	0.200	102.05	80.00-120.00
Chromium	0.210	mg/Kg	0.200	104.95	80.00-120.00
Lead	0.200	mg/Kg	0.200	100.05	80.00-120.00
Selenium	0.191	mg/Kg	0.200	95.30	80.00-120.00
Silver	0.198	mg/Kg	0.200	98.85	80.00-120.00

Matrix Spike

	Result	Units	Spike	%REC	%REC Lim	Sample
Arsenic	0.204	mg/Kg	0.200	97.30	80.00-120.00	0.00960
Barium	0.800	mg/Kg	0.200	79.15	80.00-120.00	0.642
Cadmium	0.215	mg/Kg	0.200	107.55	80.00-120.00	0.100U
Chromium	0.228	mg/Kg	0.200	103.90	80.00-120.00	0.0199
Lead	0.244	mg/Kg	0.200	104.20	80.00-120.00	0.0352
Selenium	0.193	mg/Kg	0.200	96.45	80.00-120.00	0.200U
Silver	0.196	mg/Kg	0.200	98.15	80.00-120.00	0.0500U



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407 - 339 - 5984 Fax 407 - 260 - 6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2660 Phone 772 - 343 - 8006 Fax 772 - 343 - 8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Arsenic	0.239	mg/Kg	0.200	114.60	80.00-120.00	0.00960	15.62	20.00
Barium	0.981	mg/Kg	0.200	169.75	80.00-120.00	0.642	20.35	20.00
Cadmium	0.230	mg/Kg	0.200	114.95	80.00-120.00	0.1000	6.65	20.00
Chromium	0.256	mg/Kg	0.200	118.10	80.00-120.00	0.0199	11.74	20.00
Lead	0.272	mg/Kg	0.200	118.60	80.00-120.00	0.0352	11.16	20.00
Selenium	0.203	mg/Kg	0.200	101.65	80.00-120.00	0.2000	5.25	20.00
Silver	0.223	mg/Kg	0.200	111.55	80.00-120.00	0.05000	12.78	20.00

Quality Control Batch: 10059433		Analyst: EVB
Blank	Result	Units
Mercury	0.000200U	mg/Kg

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Mercury	1.01	mg/Kg	1.00	100.78	95.99-109.43

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
Mercury	0.524	mg/Kg	0.500	104.76	83.51-121.43	0.000200U

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Mercury	0.524	mg/Kg	0.500	104.76	83.51-121.43	0.000200U	0.00	7.58

Quality Control Batch: 10059873		Analyst: JGK
Blank	Result	Units
Chloride	0.500U	mg/Kg

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Chloride	52.3	mg/kg	50.0	104.66	86.18-113.66

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
Chloride	58.1	mg/kg	50.0	102.21	84.16-117.04	7.04



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407 - 339 - 5984 Fax 407 - 260 - 6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2860 Phone 772 - 343 - 8006 Fax 772 - 343 - 8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

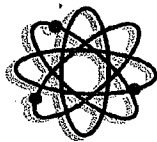
Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Quality Control Batch: 10059873	Analyst: JGK	Result	56.8	Units	mg/kg	Spike	50.0	%REC	99.61	%REC Lim	84.16-117.04	Sample	7.04	RPD	2.26	RPD Lim	5.42
Matrix Spike Duplicate																	
Chloride																	

Quality Control Batch: 10059875	Analyst: JGK	Result	20.0U	Units	mg/kg	Spike	20.0	%REC	106.50	%REC Lim	80.00-120.00	Sample	51.7	RPD	1.92	RPD Lim	20.00
Blank Sulfate																	
Laboratory Control Sample Sulfate		Result	21.3	Units	mg/kg	Spike	66.7	%REC	92.80	%REC Lim	80.00-120.00	Sample	51.7	RPD	1.92	RPD Lim	20.00
Matrix Spike Sulfate		Result	114	Units	mg/kg	Spike	66.7	%REC	96.10	%REC Lim	80.00-120.00	Sample	51.7	RPD	1.92	RPD Lim	20.00
Matrix Spike Duplicate Sulfate		Result	116	Units	mg/kg	Spike	66.7	%REC	96.10	%REC Lim	80.00-120.00	Sample	51.7	RPD	1.92	RPD Lim	20.00

Quality Control Batch: 10059877	Analyst: LCC	Result	1.00U	Units	mg/L	Spike	100	%REC	95.44	%REC Lim	88.84-105.82	Sample	7.04	RPD	2.26	RPD Lim	5.42
Blank Total Alkalinity CaCO3																	
Laboratory Control Sample Total Alkalinity CaCO3		Result	95.4	Units	mg/L	Spike	100	%REC	95.44	%REC Lim	88.84-105.82	Sample	7.04	RPD	2.26	RPD Lim	5.42



FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs FL 32715-0597 Phone 407-339-5984 Fax 407-260-6110 www.flowerslabs.com
8253 South U.S. Highway 1, Port St. Lucie FL 34952-2860 Phone 772-343-8006 Fax 772-343-8089
P.O. Box 1200, Madison FL 32341 Phone 407-973-6878 Fax 407-973-6878

Pinnacle Laboratories
2709 D Pan American Freeway NE
Albuquerque, NM 87107

PO #: 604008
Client Project #: GI
Date Sampled: Mar 31, 2006
Apr 19, 2006; Invoice: 13601

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted. Sample results reported as dissolved were field filtered.

Quality Control

Enclosed analyses met method or FCL criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	One or more QC samples associated with this data value exceeded QC limits.
J1	Surrogate recovery limits have been exceeded.
J2	No known quality control criteria exist for the component.
J3	Reported value failed to meet established quality control criteria for either precision or accuracy.
J4	Sample matrix interfered with the ability to make an accurate determination on the spiked sample.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
ZTNTC	Too numerous to count. Numeric value represents filtration volume.
A	Absent
P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

Pinnacle Laboratories, Inc.

Interlab Chain of Custody

Date: 4-18-07 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	TCRP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	TOC	Gen Chemistry: SO ₄ , NO ₃ , Cl, K, Mg, Ca, Na, HCO ₃	Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE	Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TC-14	NUMBER OF CONTAINERS
API 1604008-01	3-31-07	1017	NRQ13601501	X																				
West Line Cond/1604008-02	↓	1040	13601502	X																				
Eligrow Cond/1604008-03	↓	1026	13601503	X																				

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY:		2.	
PROJECT #:	6041008	Total Number of Containers		PENSACOLA - STL-FL		Signature:	Signature:	Signature:	Signature:
PROJ. NAME:	GI	Chain of Custody Seals		ESL - OR		Time:	Time:	Time:	Time:
QC LEVEL:	(STD) IV	Received Intact?		ATEL - AZ		Date:	Date:	Date:	Date:
QC REQUIRED:	MS MSD BLANK	Received Good Cond/Cold		ATEL - MARION		Printed Name:	Printed Name:	Printed Name:	Printed Name:
IAT:	STANDARD RUSHII	LAB NUMBER:		ATEL - MELMORE		Company	Company	Company	Company
DUE DATE: 4-18-07		COMMENTS:		FCL		RECEIVED BY:		2.	
RUSH SURCHARGE:				EHL		Signature:		Signature:	
CLIENT DISCOUNT:				GEL		Time:		Time:	
SPECIAL CERTIFICATION				WCAS		Printed Name:		Printed Name:	
REQUIRED: YES (NO)				WOHL		Date:		Date:	

350C

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

Pinnacle Laboratories, Inc. 2709-D Pan American Freeway, NE Albuquerque, NM 87107 (505) 344-3777 Fax (505) 344-4413																									
SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	TOC	Gen Chemistry: $SO_4, NO_3, Cl, K, Mg, Ca, Na, HCO_3$	Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE	Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS	
API / 604008-01	3/31/06	1017	NAQ		X						X														
West Line Crude / 604008-02	↓	1040	↓		X						X														
Pattigrew Crude / 604008-03	↓	1026	↓		X						X														
1360150																									

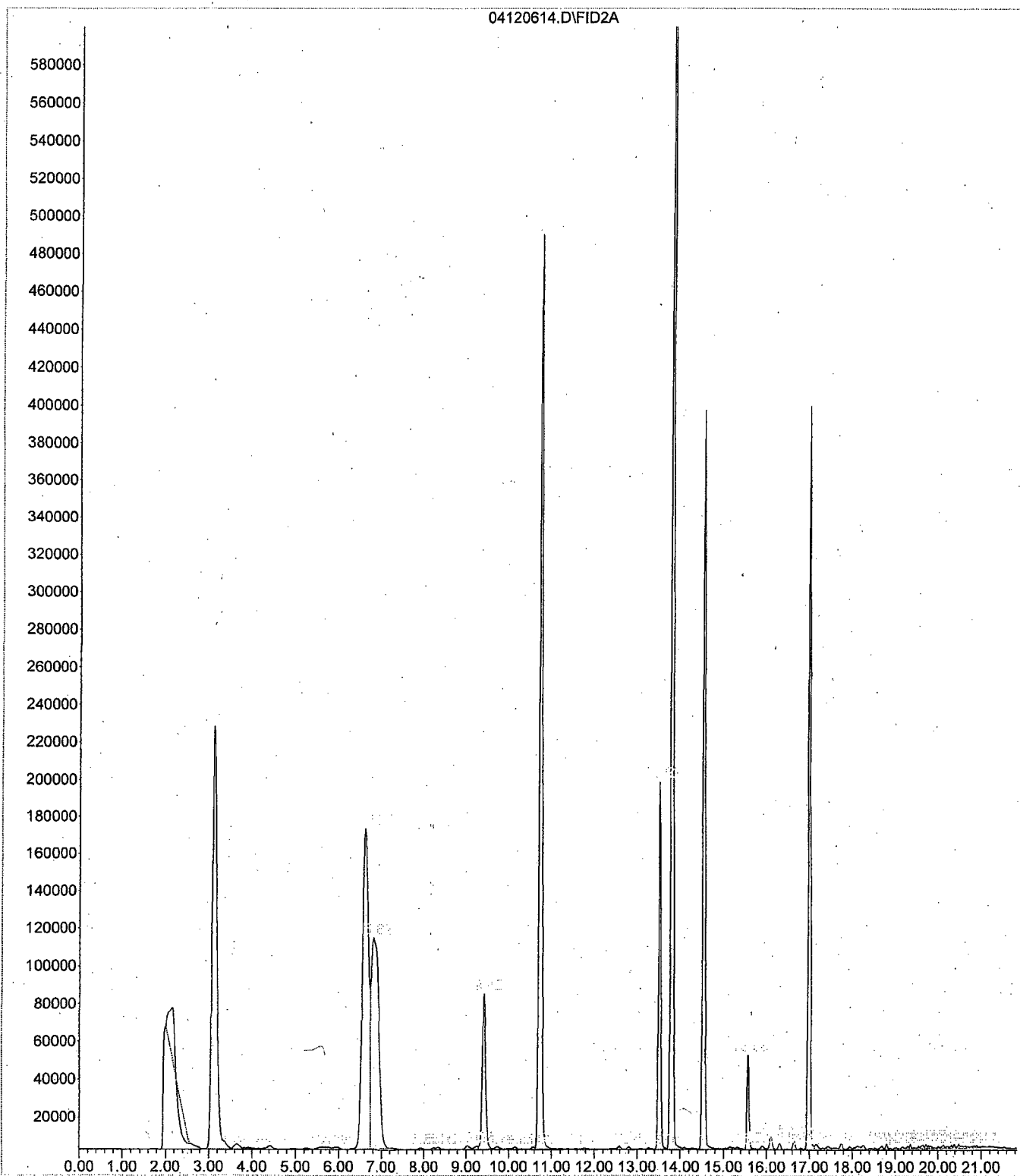
PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY:		1. RELINQUISHED BY:		2.				
PROJECT #:	604008	Total Number of Containers		PENSACOLA - STL-FL		Signature:		Signature:		Time:				
PROJ. NAME:	GI	Chain of Custody Seals		ESL - OR		Printed Name:		Printed Name:		Date:				
QC LEVEL:	STD IV	Received Intact?		ATEL - AZ		Signature:		Signature:		Date:				
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - MARION		Printed Name:		Printed Name:		Date:				
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MELMORE		Company		Company						
DUE DATE: 4-18-07			COMMENTS:			RECEIVED BY:			1. RECEIVED BY:			2.		
RUSH SURCHARGE:						Signature:			Signature:			Time:		
CLIENT DISCOUNT:						Printed Name:			Printed Name:			Date:		
SPECIAL CERTIFICATION REQUIRED: YES (NO)						Company			Company					

SHADED AREAS ARE FOR LAB USE ONLY.

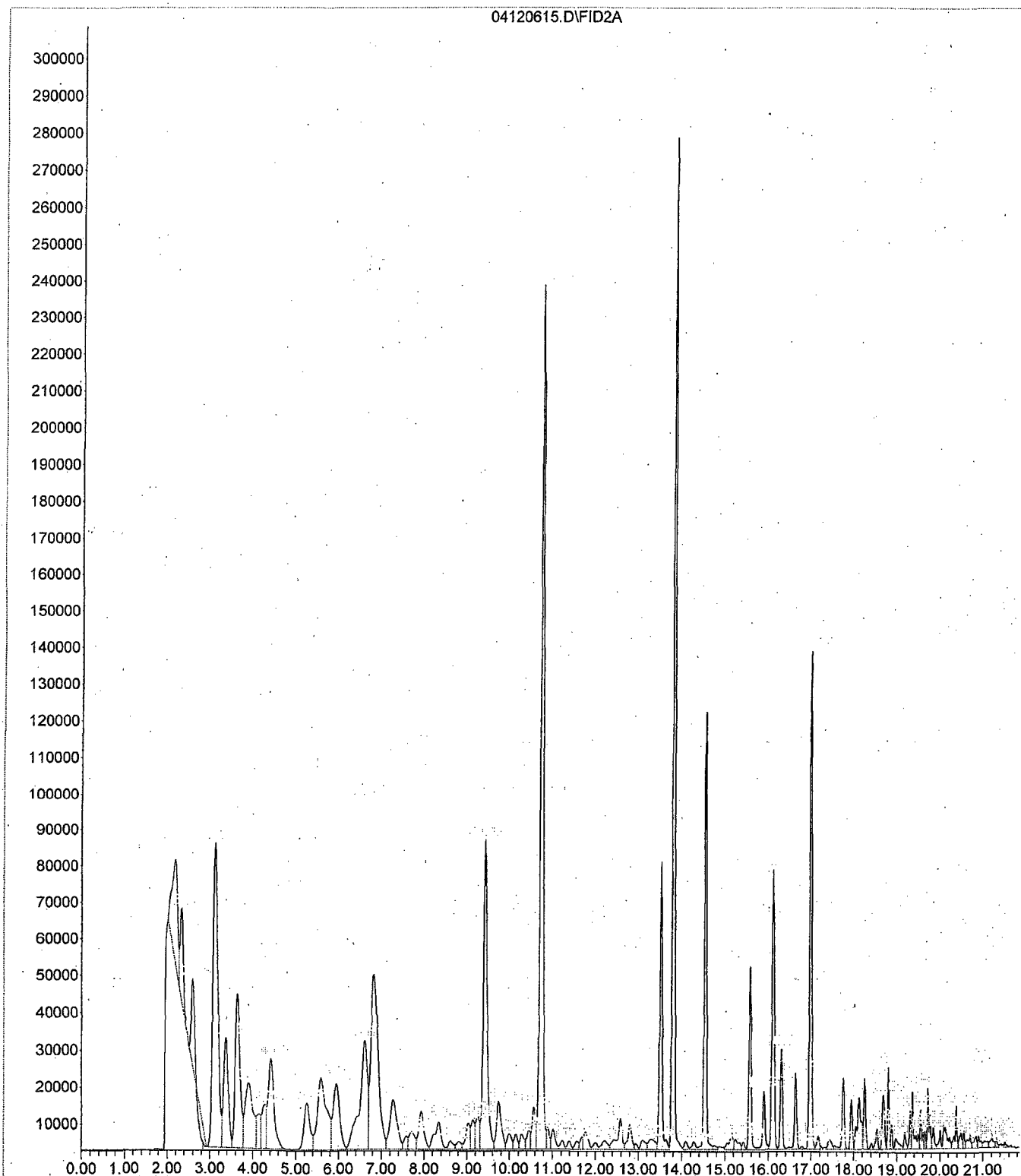
PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: <u>M. Nec</u>		ANALYSIS REQUEST	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY: <u>Grand Industries</u> ADDRESS: <u>111 CR 4990</u> <u>Bloomfield NM 87413</u>		SAMPLE ID DATE TIME MATRIX LAB ID <u>APL</u> <u>3/31/06</u> <u>1017</u> <u>Soil</u> <u>01</u> <u>West Line crude</u> <u>3/31/06</u> <u>1040</u> <u>Soil</u> <u>02</u> <u>Pettigrew Crude</u> <u>3/31/06</u> <u>1026</u> <u>Soil</u> <u>03</u>	
COMPANY: <u>Lodestar Services</u> ADDRESS: <u>26 CR 3500</u> <u>Flora Vista NM 87445</u> PHONE: <u>505 334 2791</u> FAX: BILL TO: <u>Bill Robertson</u> COMPANY			

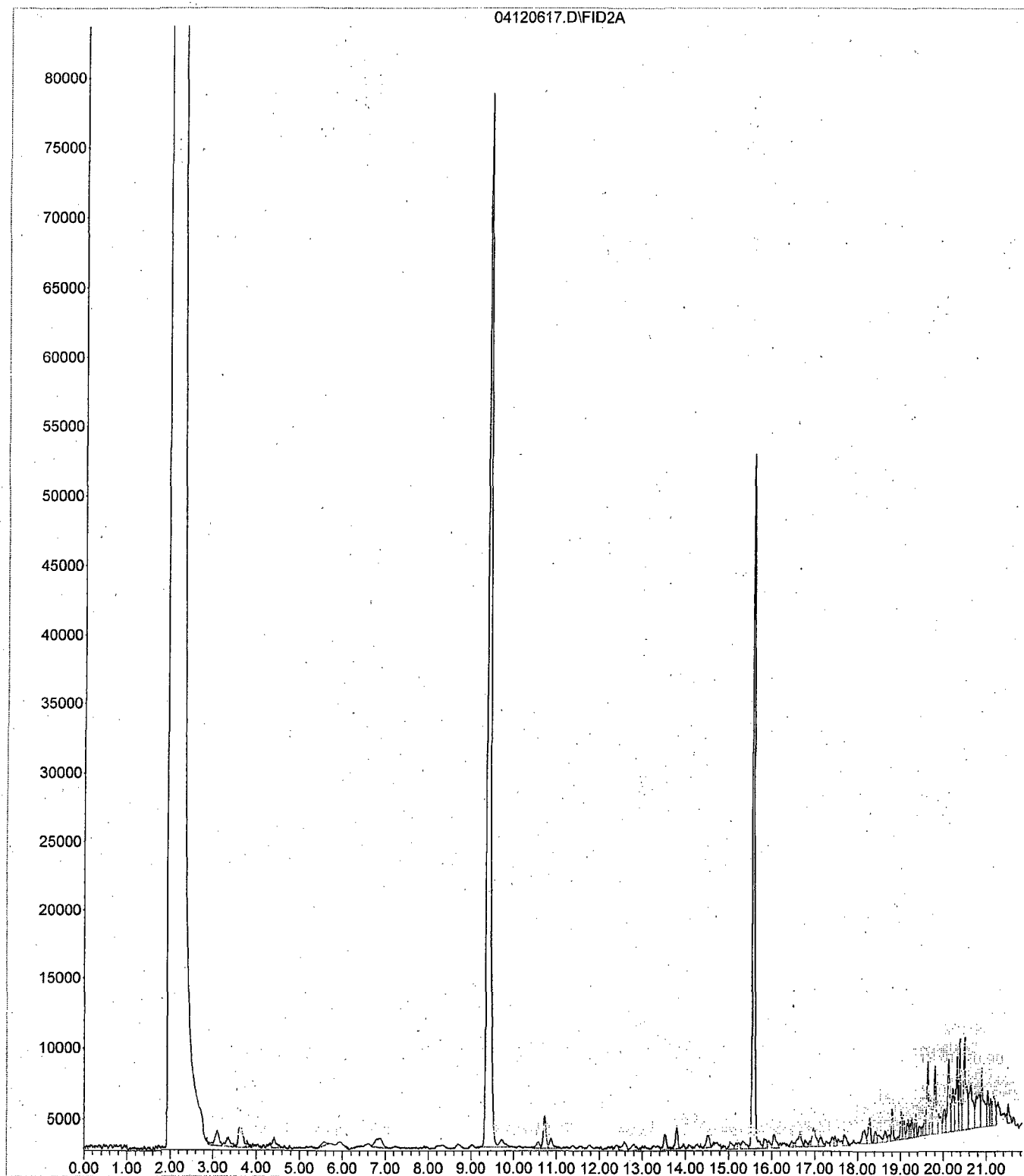
File : C:\HPCHEM\1\DATA\041206\04120614.D
Operator : BP
Acquired : 12 Apr 2006 15:18 using AcqMethod BG040506.M
Instrument : GC-2
Sample Name: GRO RT STD
Misc Info : 10uL MS4-81-15
Vial Number: 3



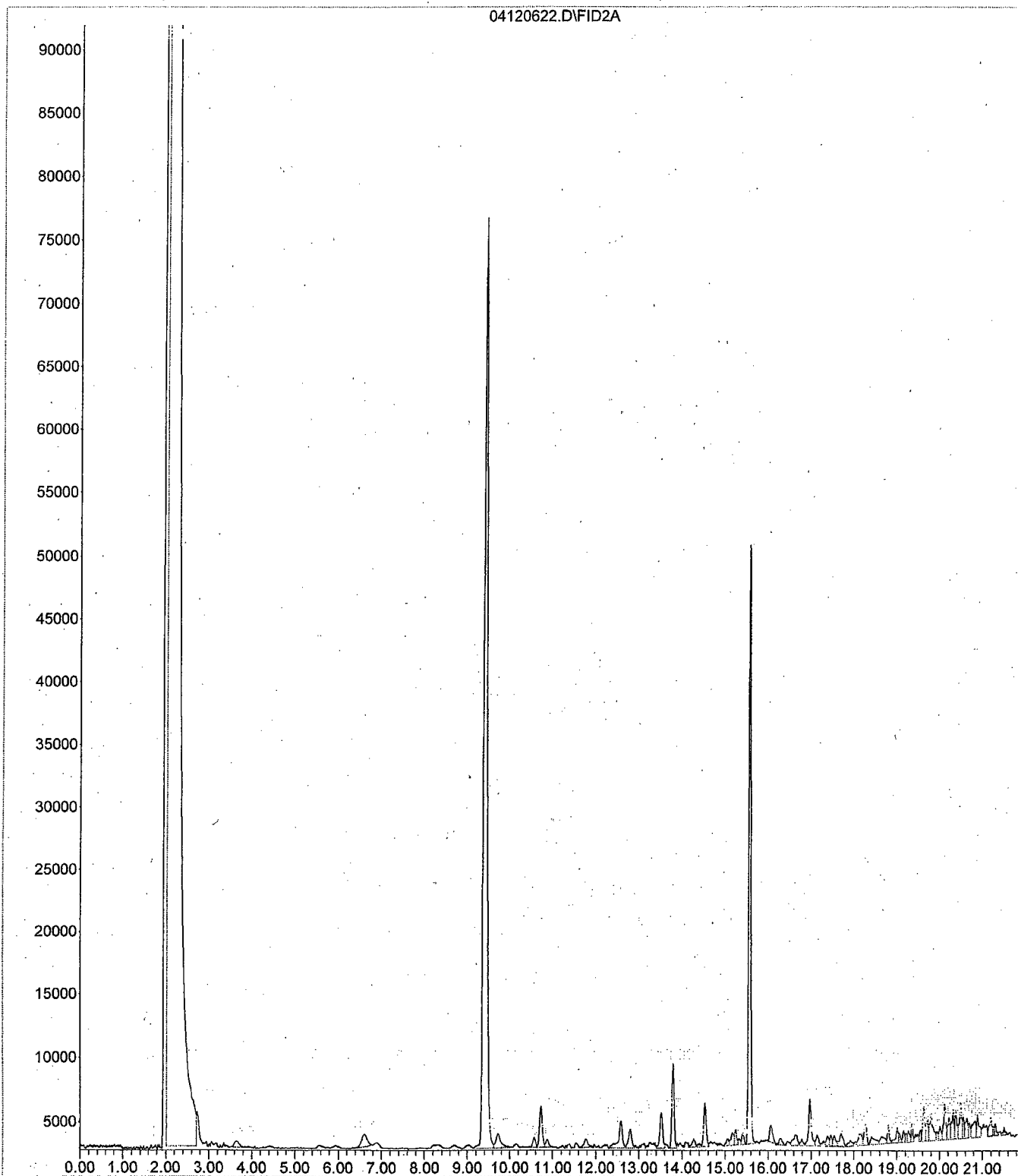
File : C:\HPCHEM\1\DATA\041206\04120615.D
Operator : BP
Acquired : 12 Apr 2006 15:49 using AcqMethod BG040506.M
Instrument : GC-2
Sample Name: GRO CCV 1000ppb
Misc Info : 10uL MS4-80-01
Vial Number: 4



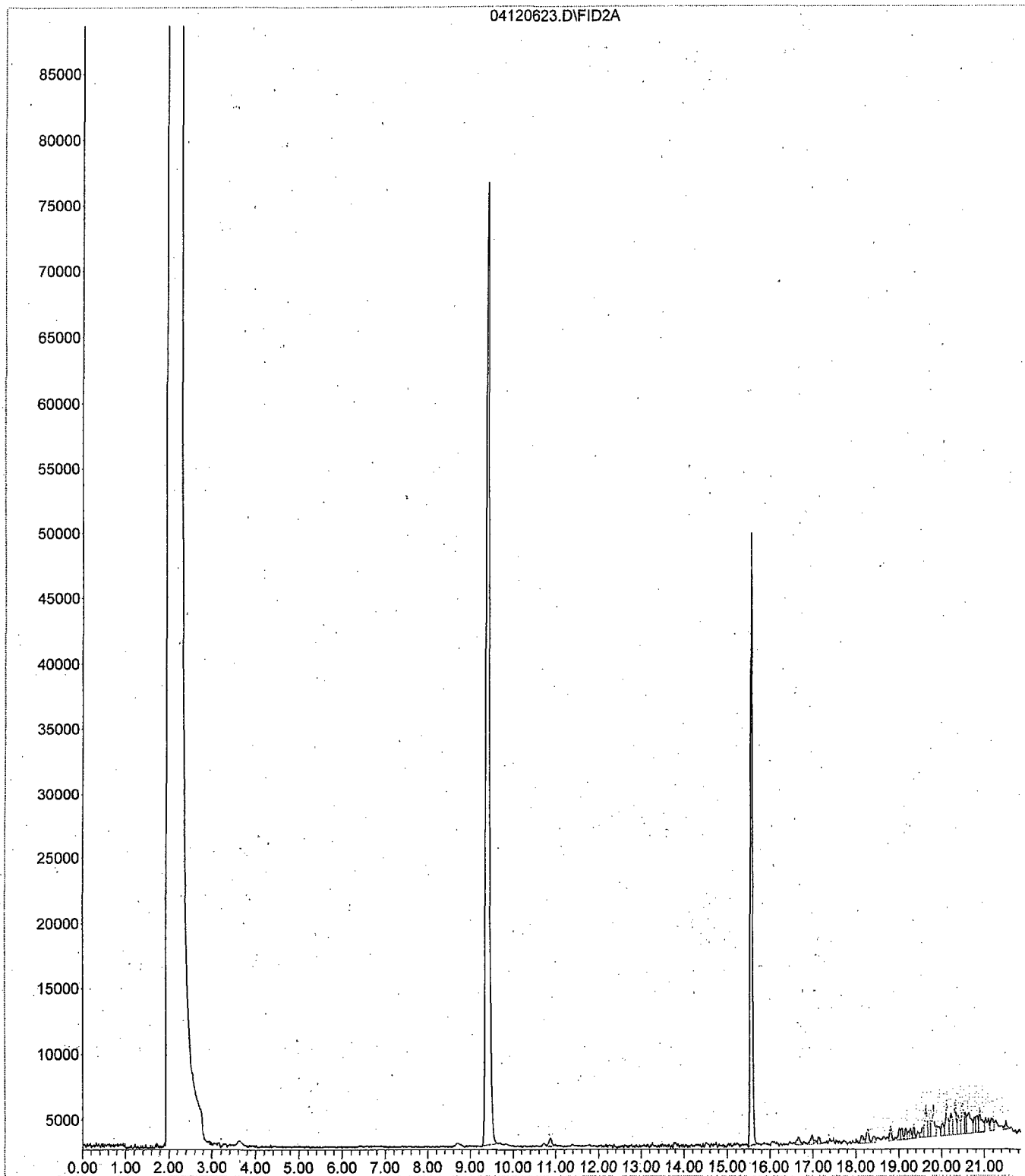
File : C:\HPCHEM\1\DATA\041206\04120617.D
Operator : BP
Acquired : 12 Apr 2006 16:51 using AcqMethod BG040506.M
Instrument : GC-2
Sample Name: SRB-040606
Misc Info : 100uL SOIL
Vial Number: 6



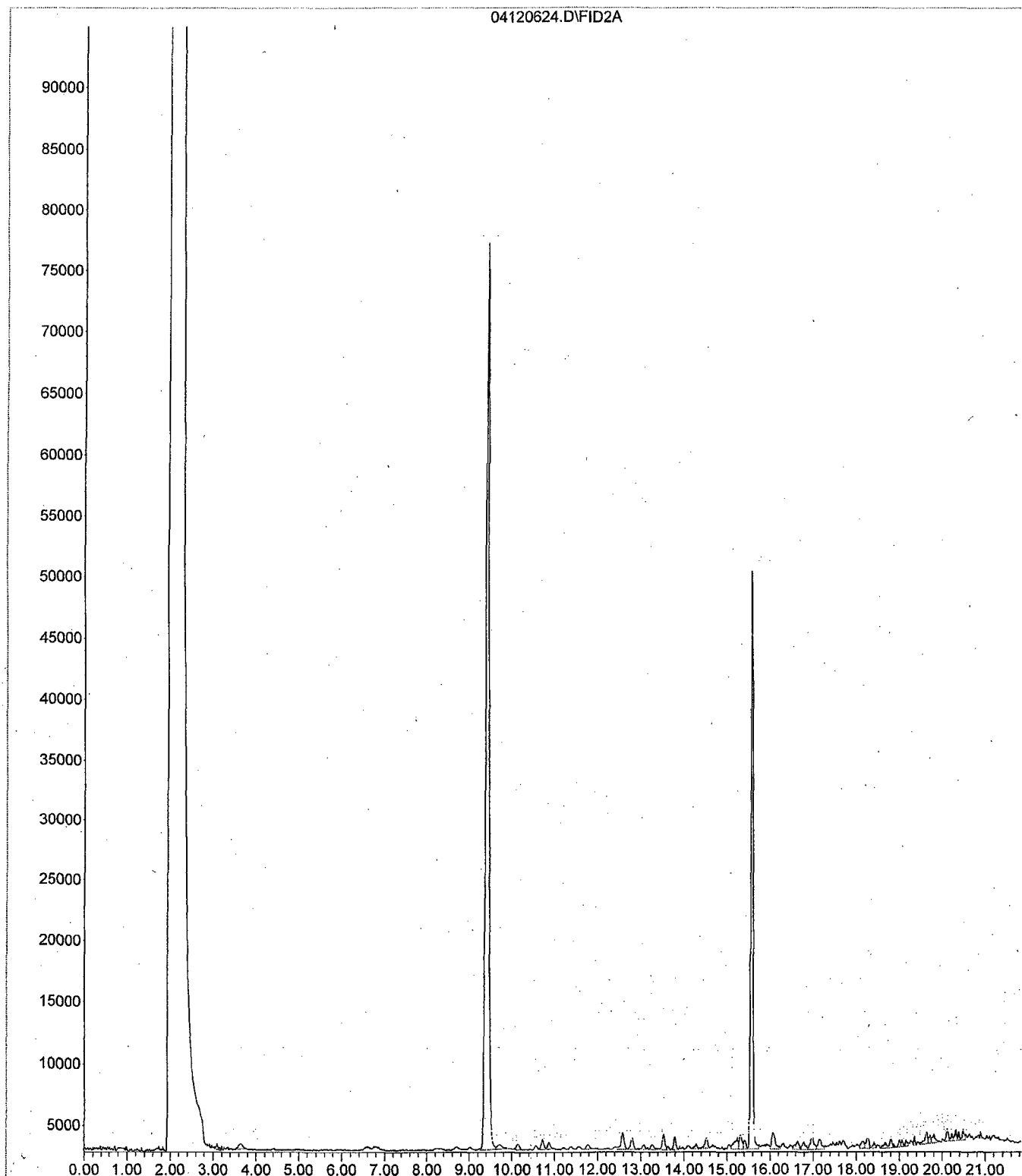
File : C:\HPCHEM\1\DATA\041206\04120622.D
Operator : BP
Acquired : 12 Apr 2006 19:27 using AcqMethod BG040506.M
Instrument : GC-2
Sample Name: 604008-01 1X
Misc Info : 100uL BTEX/GRO SOIL
Vial Number: 11



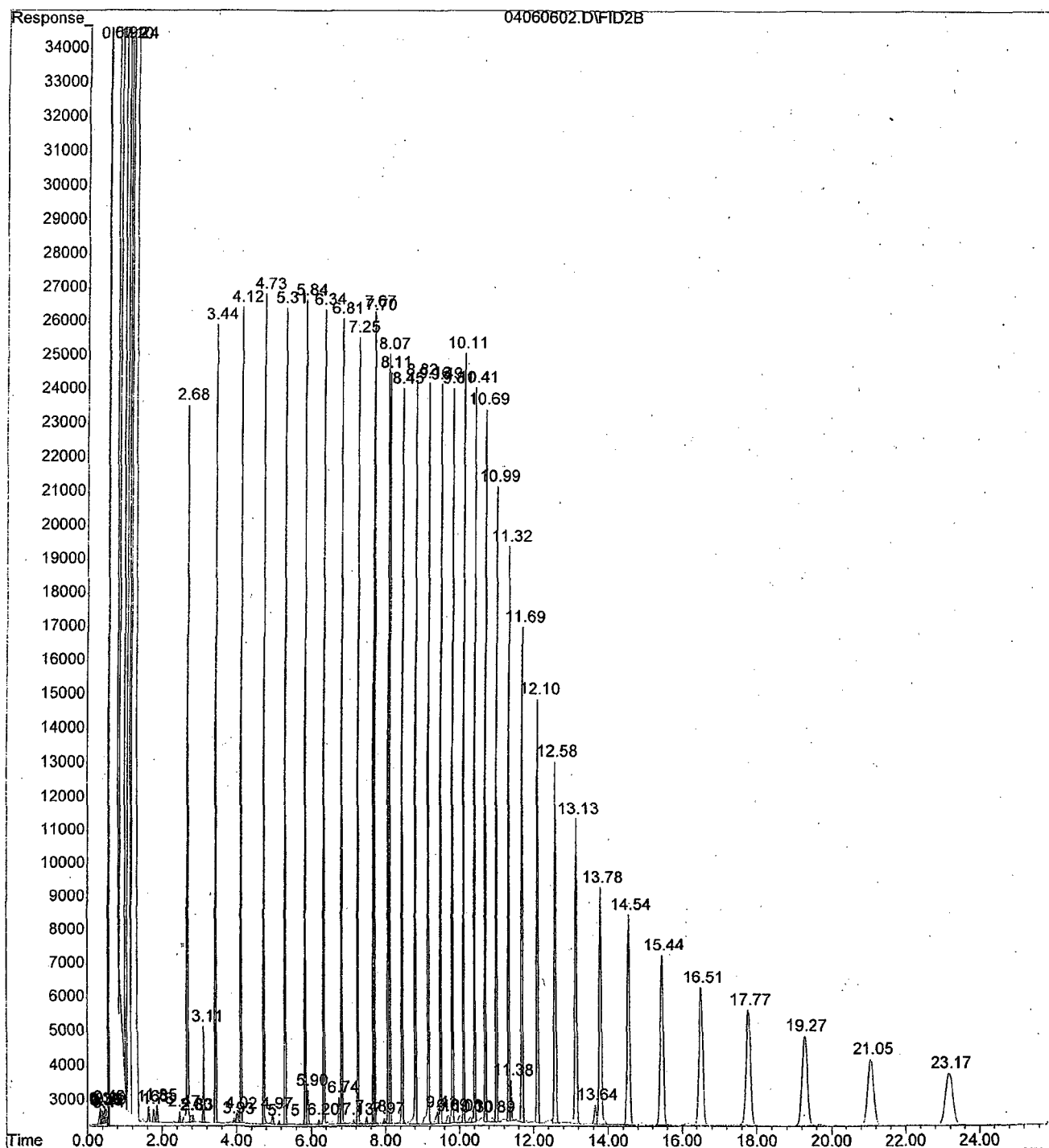
File : C:\HPCHEM\1\DATA\041206\04120623.D
Operator : BP
Acquired : 12 Apr 2006 19:58 using AcqMethod BG040506.M
Instrument : GC-2
Sample Name: 604008-02 1X
Misc Info : 100uL BTEX/GRO SOIL
Vial Number: 12



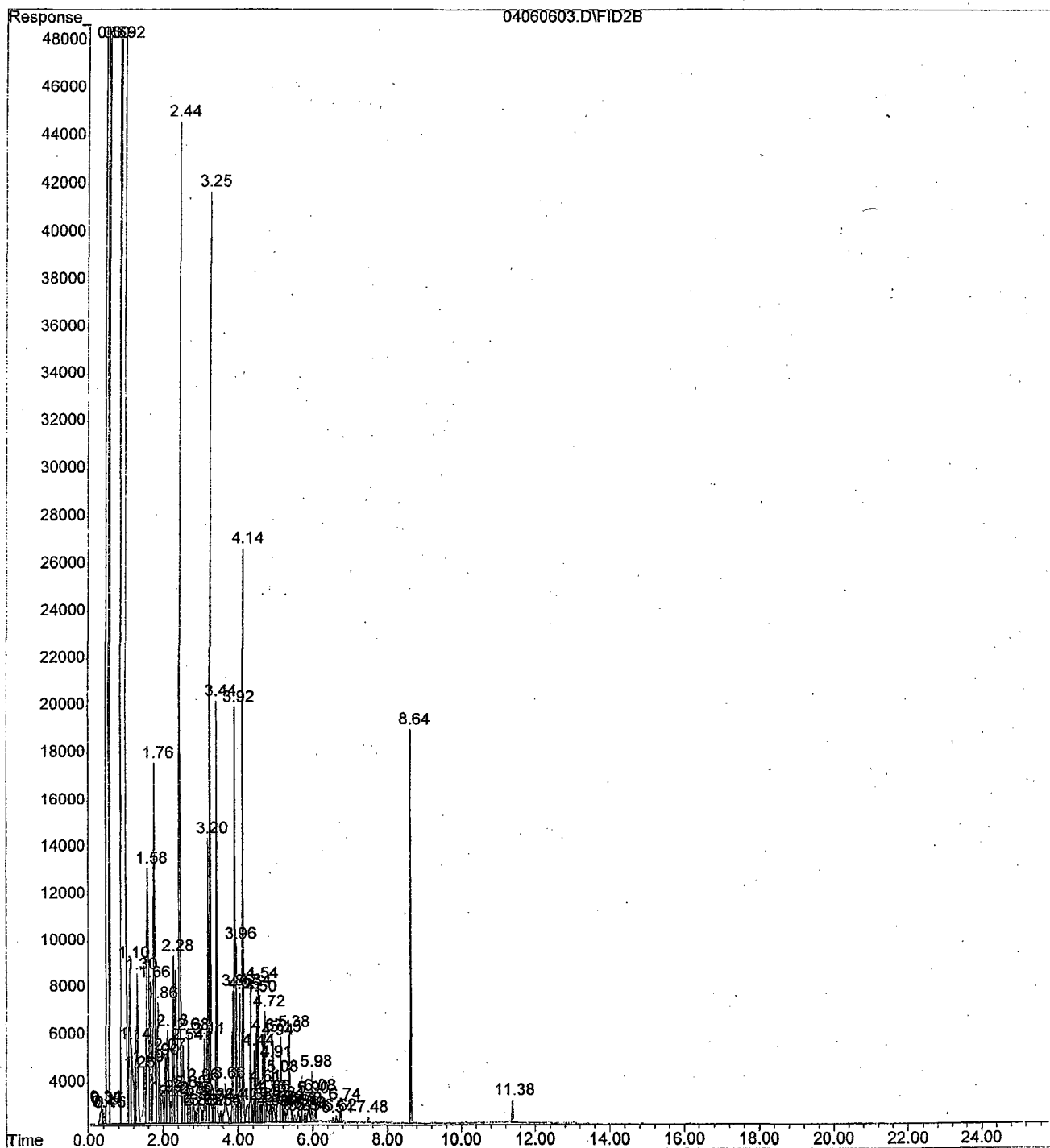
File : C:\HPCHEM\1\DATA\041206\04120624.D
Operator : BP
Acquired : 12 Apr 2006 20:29 using AcqMethod BG040506.M
Instrument : GC-2
Sample Name: 604008-03 1X
Misc Info : 100uL BTEX/GRO SOIL
Vial Number: 13



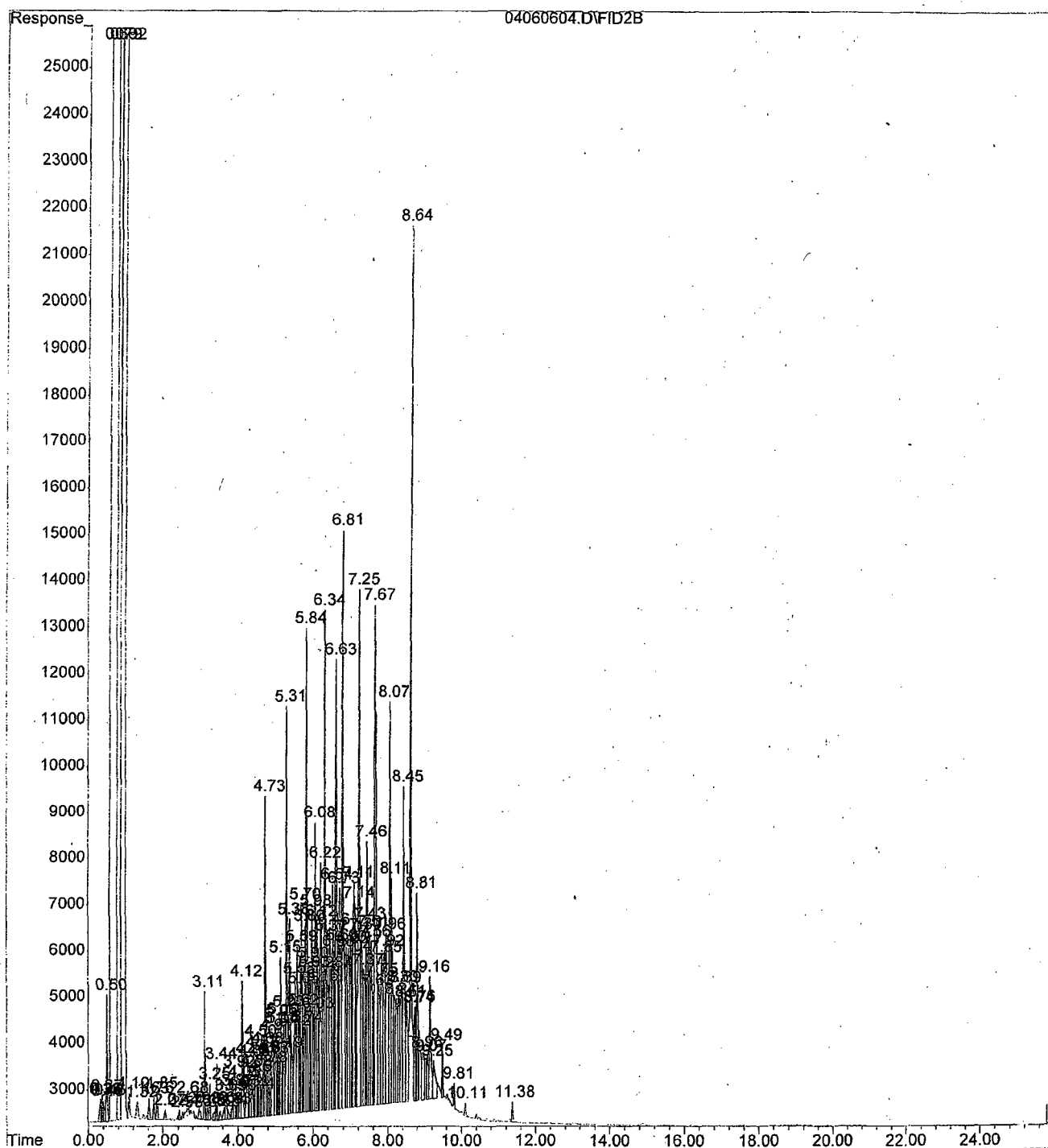
File : C:\HPCHEM\2\DATA\040606F\04060602.D
Operator : DSR/AE
Acquired : 6 Apr 2006 14:24 using AcqMethod NM040506.M
Instrument : FID-1
Sample Name: RT STD
Misc Info : GC5-41-16
Vial Number: 2



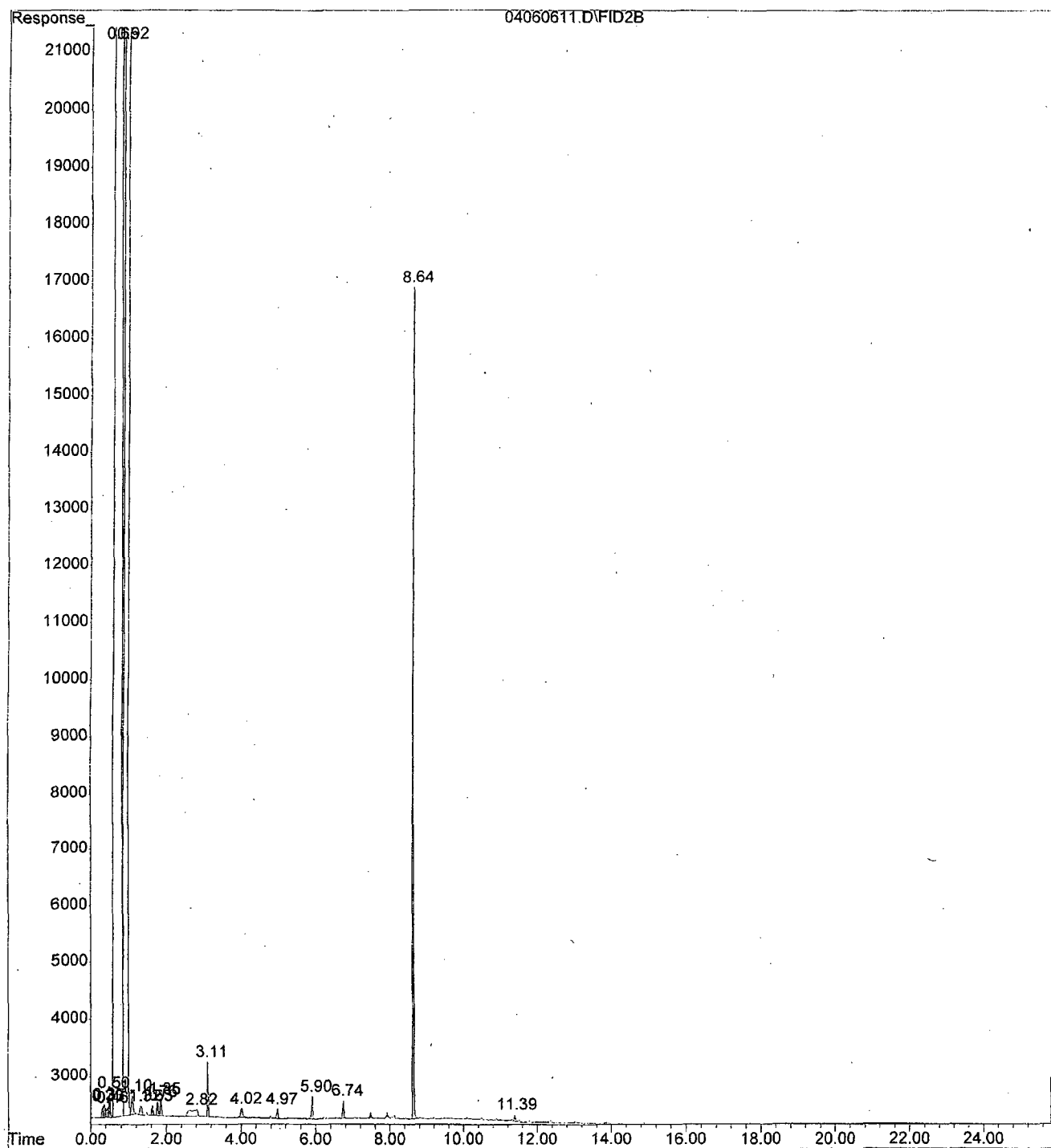
File : C:\HPCHEM\2\DATA\040606F\04060603.D
Operator : DSR/AE
Acquired : 6 Apr 2006 15:00 using AcqMethod NM040506.M
Instrument : FID-1
Sample Name: GRO CCV 200PPM
Misc Info : GC5-39-08
Vial Number: 3



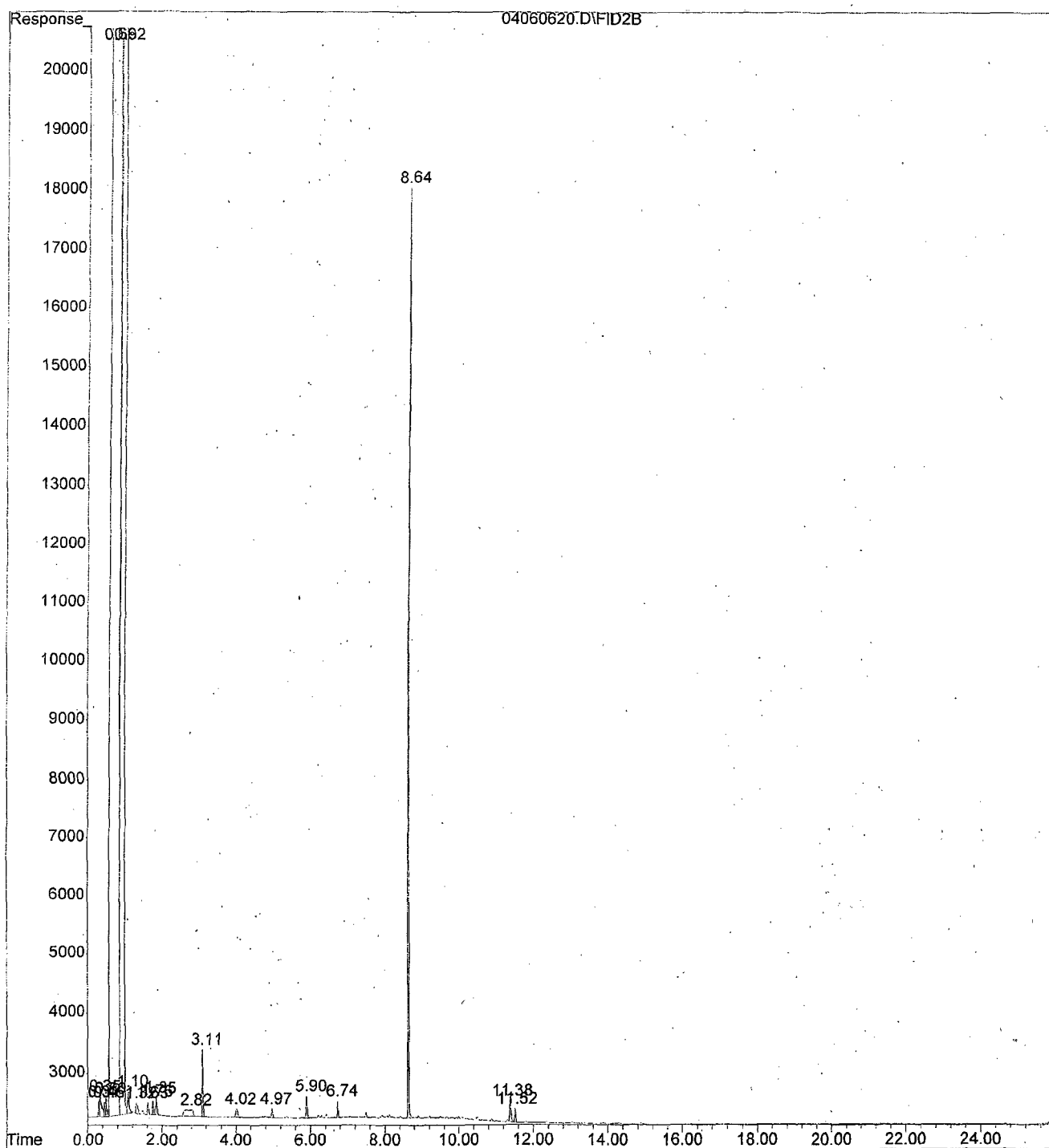
File : C:\HPCHEM\2\DATA\040606F\04060604.D
Operator : DSR/AE
Acquired : 6 Apr 2006 15:35 using AcqMethod NM040506.M
Instrument : FID-1
Sample Name: DRO CCV 200PPM
Misc Info : GC5-39-11
Vial Number: 4



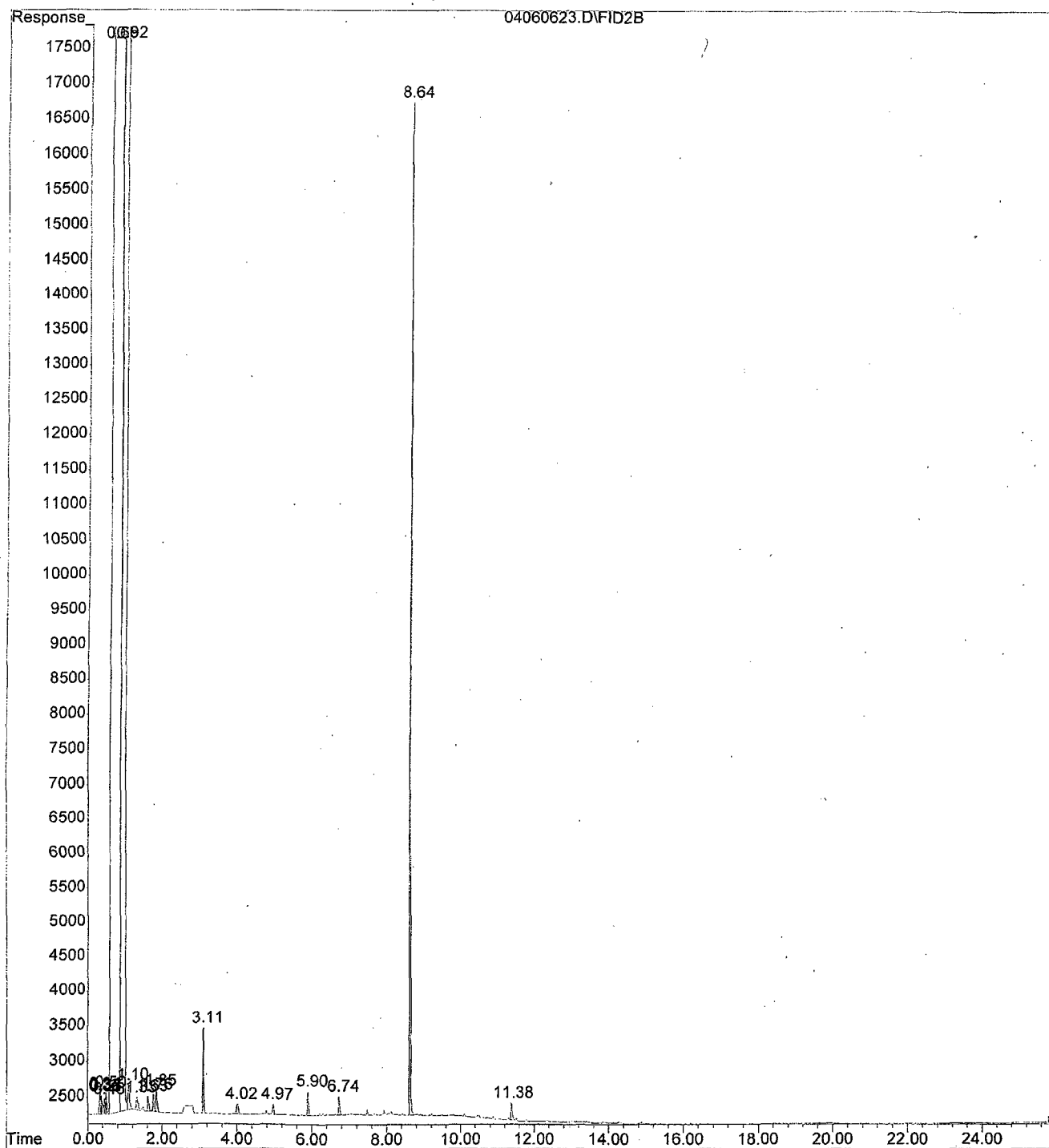
File : C:\HPCHEM\2\DATA\040606F\04060611.D
Operator : DSR/AE
Acquired : 6 Apr 2006 20:21 using AcqMethod NM040506.M
Instrument : FID-1
Sample Name: SRB 040606A
Misc Info : 10G/10ML 040606A
Vial Number: 11



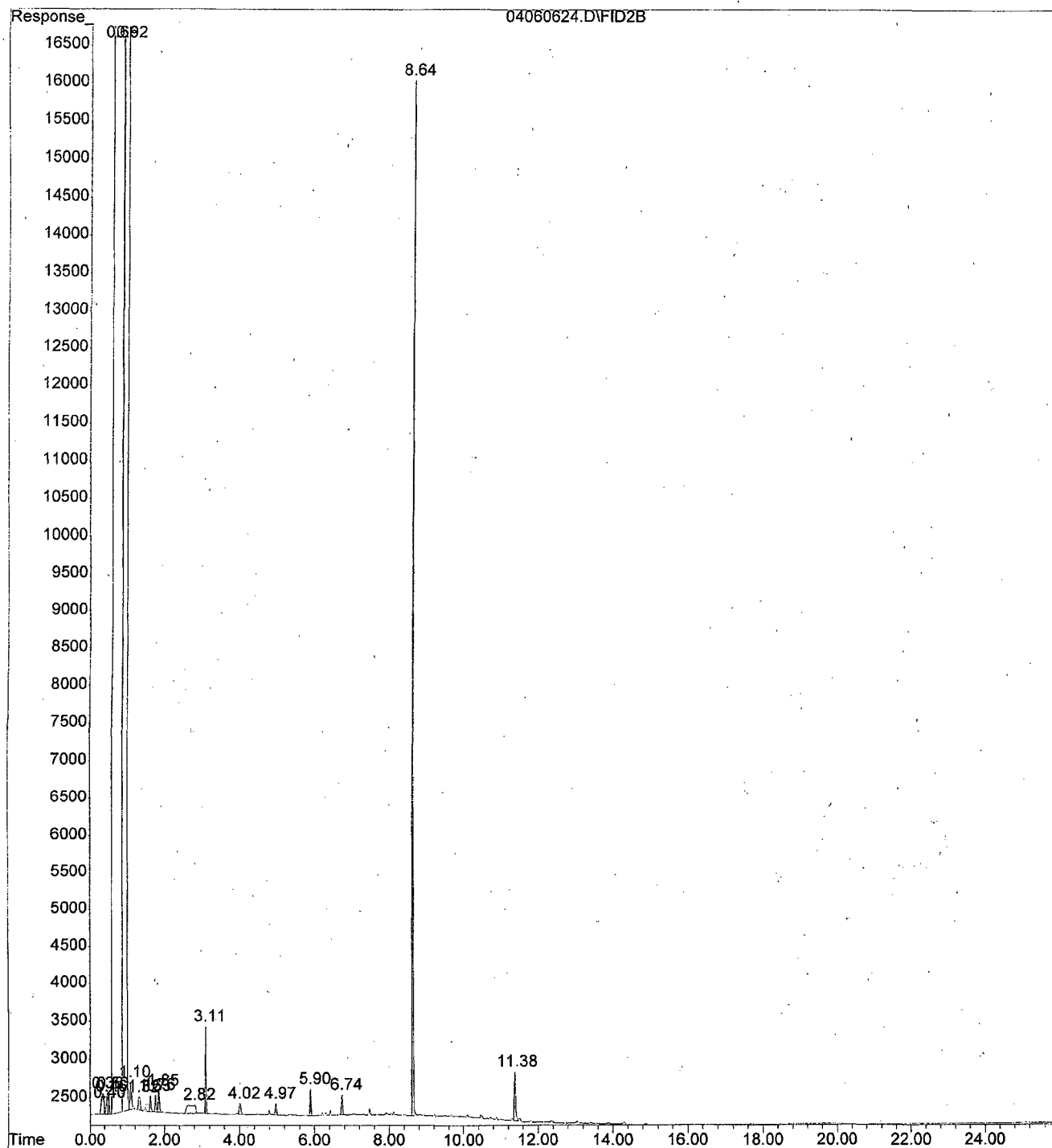
File : C:\HPCHEM\2\DATA\040606F\04060620.D
Operator : DSR/AE
Acquired : 7 Apr 2006 1:42 using AcqMethod NM040506.M
Instrument : FID-1
Sample Name: 604008-01
Misc Info : 10G/10ML 040606A
Vial Number: 20



File : C:\HPCHEM\2\DATA\040606F\04060623.D
Operator : DSR/AE
Acquired : 7 Apr 2006 3:30 using AcqMethod NM040506.M
Instrument : FID-1
Sample Name: 604008-02
Misc Info : 10G/10ML 040606A
Vial Number: 23



File : C:\HPCHEM\2\DATA\040606F\04060624.D
Operator : DSR/AE
Acquired : 7 Apr 2006 4:06 using AcqMethod NM040506.M
Instrument : FID-1
Sample Name: 604008-03
Misc Info : 10G/10ML 040606A
Vial Number: 24





Lodestar Services, Incorporated

PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

RECEIVED

JAN 18 2007

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

January 16, 2007

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

CERTIFIED MAIL:7004 1820 0001 6170 6923

RE: 3rd Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Mr. Price,

On September 29, 2006, Lodestar Services, Inc. collected 3rd Quarter 2006 samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes and total petroleum hydrocarbons. Laboratory reports are included for your review.

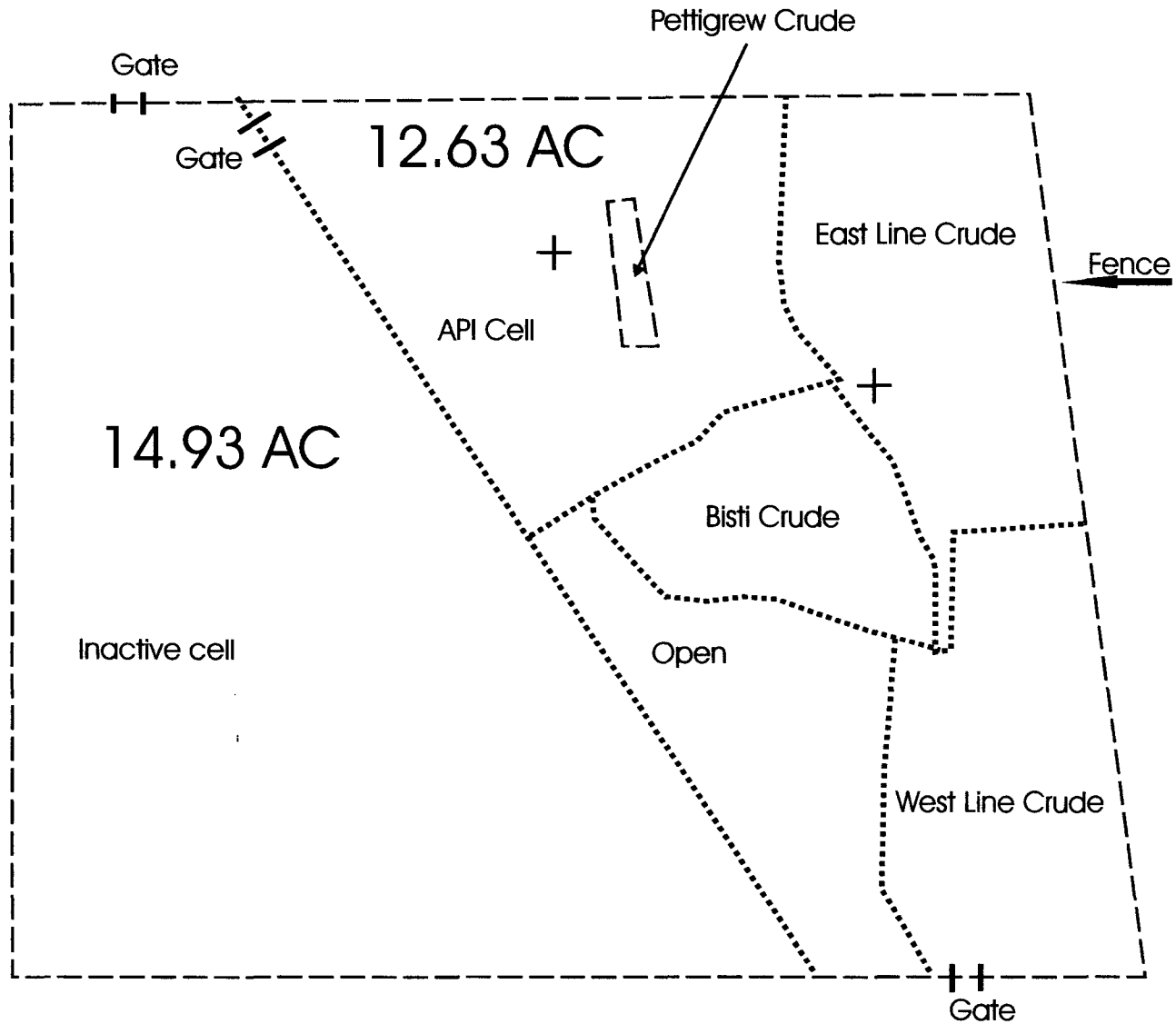
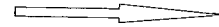
Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson of Giant at (505) 632-4077.

Sincerely,
Lodestar Services, Inc.

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. David Kirby, Giant Industries Arizona, Inc.
File

NORTH



+ September 29, 2006
Sample Location

Scale: 1 inch equals 200 feet

 Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 1/16/07
Cell dimensions are based on
GPS Survey Completed 3/31/06



Pinnacle Lab ID number **609259**
October 09, 2006

GIANT INDUSTRIES
111 COUNTY RD. 4990
BLOOMFIELD, NM 87413

Project Name Landfarm
Project Number (NONE)

Attention: Bill Robertson

On 09/29/06 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.

A handwritten signature in cursive script, appearing to read "H. Rubenstein for".

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABS

Environmental Testing

CLIENT	: GIANT INDUSTRIES	PINNACLE ID	: 609259
PROJECT #	: (NONE)	DATE RECEIVED	: 09/29/06
PROJECT NAME	: Landfarm	REPORT DATE	: 10/09/06
PINNACLE		DATE	
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
609259 - 01	API Cell	NON-AQ	09/29/06
609259 - 02	Crude Cell	NON-AQ	09/29/06

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
CLIENT : GIANT INDUSTRIES
PROJECT # : (NONE)
PROJECT NAME : Landfarm

PINNACLE I.D. : 609259
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	API Cell	NON-AQ	09/29/06	10/03/06	10/04/06	1
02	Crude Cell	NON-AQ	09/29/06	10/03/06	10/04/06	1
PARAMETER	DET. LIMIT	UNITS	API Cell	Crude Cell		
BENZENE	0.025	MG/KG	< 0.025	< 0.025		
TOLUENE	0.025	MG/KG	< 0.025	< 0.025		
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025		
TOTAL XYLENES	0.10	MG/KG	< 0.10	< 0.10		

SURROGATE:
BROMOFLUOROBENZENE (%) 109 113
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 609259
BLANK I. D.	: 100306	DATE EXTRACTED	: 10/03/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 10/04/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Landfarm	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.10

SURROGATE:

BROMOFLUOROBENZENE (%)

112

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 609259
BATCH ID	: 100306	DATE EXTRACTED	: 10/03/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 10/03/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Landfarm	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.05	105	1.09	109	4	(68 - 120)	20
TOLUENE	<0.025	1.00	1.06	106	1.10	110	4	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.08	108	1.13	113	5	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	3.27	109	3.40	113	4	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 609259
SAMPLE ID	: 609259-02	DATE EXTRACTED	: 10/03/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 10/04/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Landfarm	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.08	108	1.14	114	5	(68 - 120)	20
TOLUENE	<0.025	1.00	1.09	109	1.15	115	5	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.10	110	1.16	116	5	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	3.33	111	3.50	117	5	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
 CLIENT : GIANT INDUSTRIES
 PROJECT # : (NONE)
 PROJECT NAME : Landfarm

PINNACLE I.D. : 609259
 ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API Cell	NON-AQ	09/29/06	10/03/06	10/05/06	1
02	Crude Cell	NON-AQ	09/29/06	10/03/06	10/05/06	1
PARAMETER		DET. LIMIT	UNITS	API Cell	Crude Cell	
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	< 10	
FUEL HYDROCARBONS, C10-C22		10	MG/KG	13	< 10	
FUEL HYDROCARBONS, C22-C36		20	MG/KG	< 20	< 20	R4
CALCULATED SUM:				13		
SURROGATE:						
O-TERPHENYL (%)				71	92	
SURROGATE LIMITS		(70-130)				

CHEMIST NOTES:

R4 = Reporting limit raised due to background interference.

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 609259
BLANK I.D.	: 100306	DATE EXTRACTED	: 10/03/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 10/04/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Landfarm	ANALYST	: BP

PARAMETER	UNITS		
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10	
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10	
FUEL HYDROCARBONS, C22-C36	MG/KG	< 20	R4

SURROGATE:

O-TERPHENYL (%)		94
-----------------	--	----

SURROGATE LIMITS (70-130)

CHEMIST NOTES:

R4 = Reporting limit raised due to background interference.

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 609259
BATCH ID	: 100306	DATE EXTRACTED	: 10/03/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 10/04/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Landfarm	UNITS	: MG/KG

PARAMETER	BLANK RESULT	CONC SPIKE	SPIKED BLANK	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	186	93	175	88	6	(75-125)	20
HYDROCARBON RANGE		C10-C32							
HYDROCARBONS QUANTITATED USING DIESEL FUEL									

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 609259
SAMPLE ID	: 609259-01	DATE EXTRACTED	: 10/03/06
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 10/05/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Landfarm	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	13	200	202	95	190	89	6	(70-130)	20
HYDROCARBON RANGE	C10-C32								
HYDROCARBONS QUANTITATED USING	DIESEL FUEL								

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

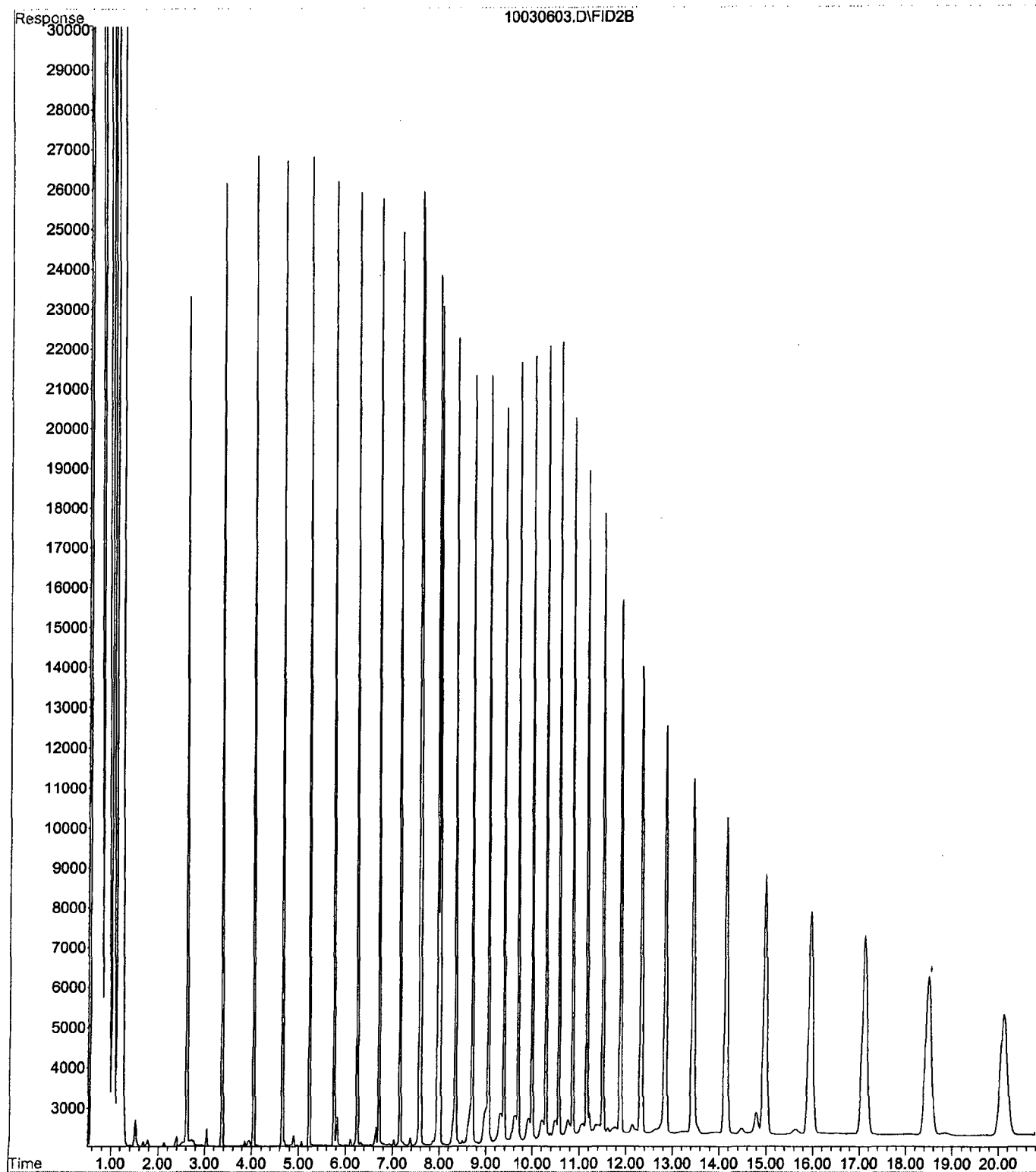
SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

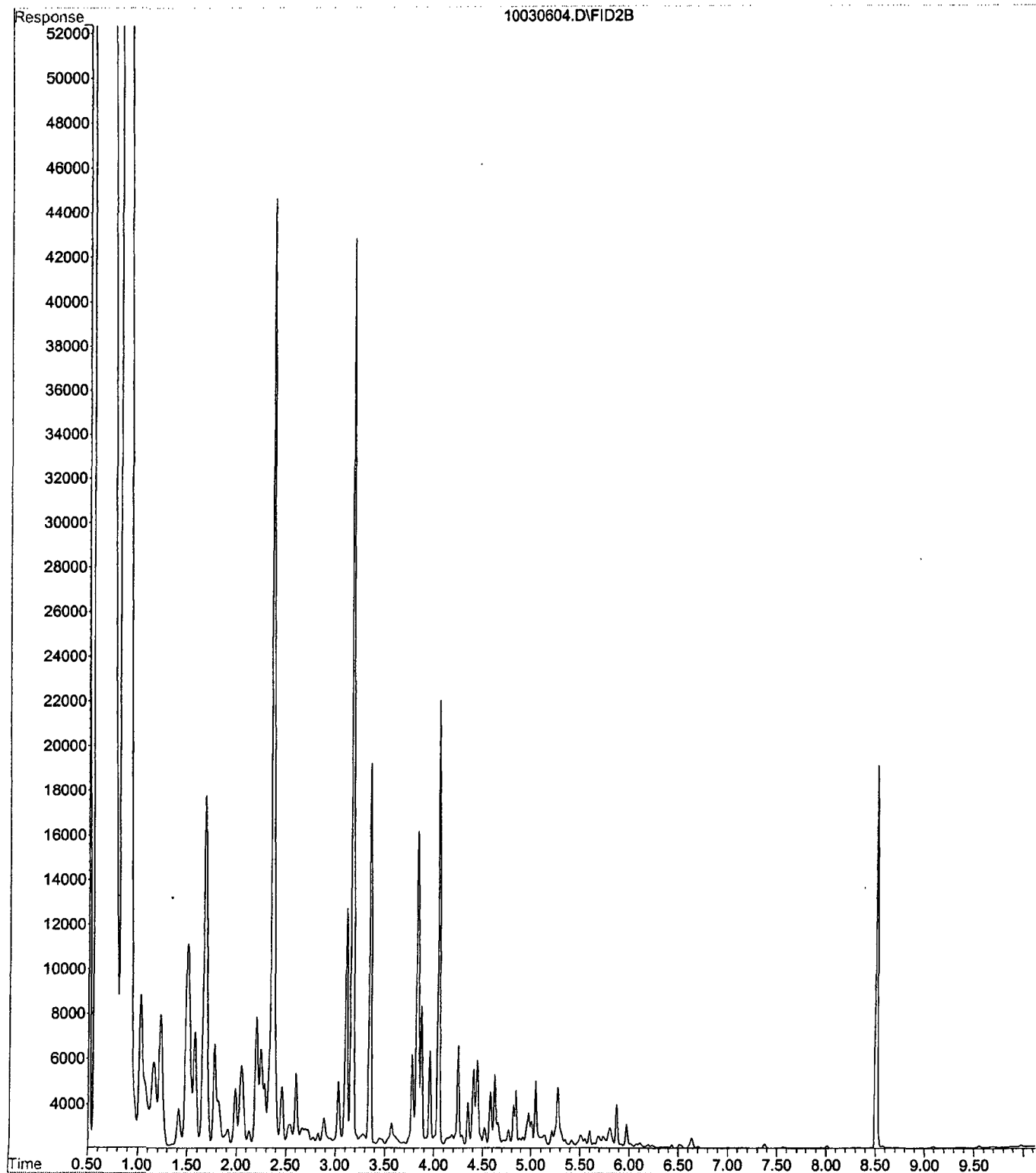
[illegible]

259

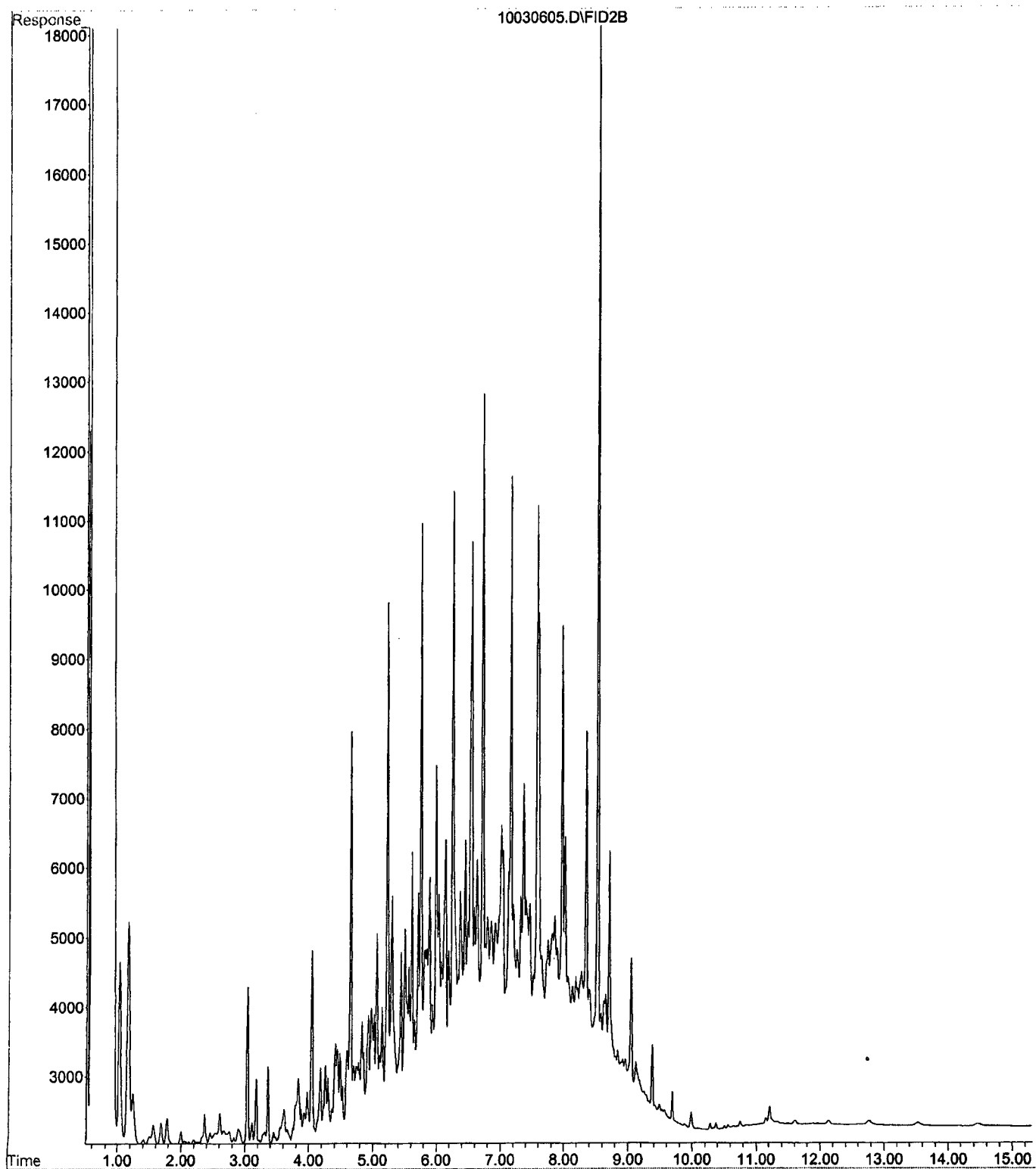
File : C:\HPCHEM\2\DATA\100406F\10030603.D
Operator : BP
Acquired : 4 Oct 2006 9:41 pm using AcqMethod AZ090706.M
Instrument : FID-1
Sample Name: RT STD
Misc Info : GC5-47-06
Vial Number: 2



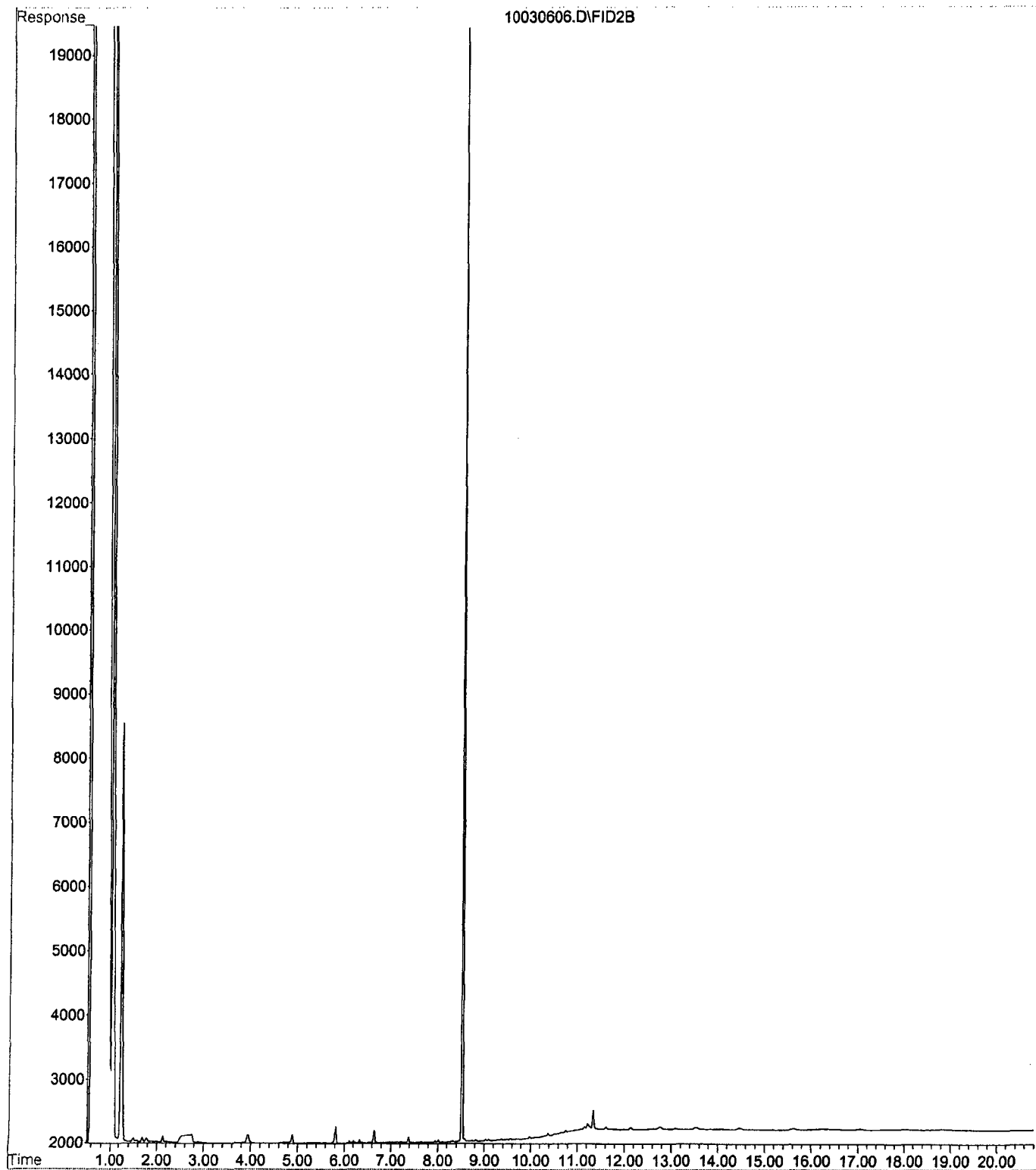
File : C:\HPCHEM\2\DATA\100406F\10030604.D
Operator : BP
Acquired : 4 Oct 2006 10:15 pm using AcqMethod AZ090706.M
Instrument : FID-1
Sample Name: GRO CCV
Misc Info : GC5-46-05
Vial Number: 3



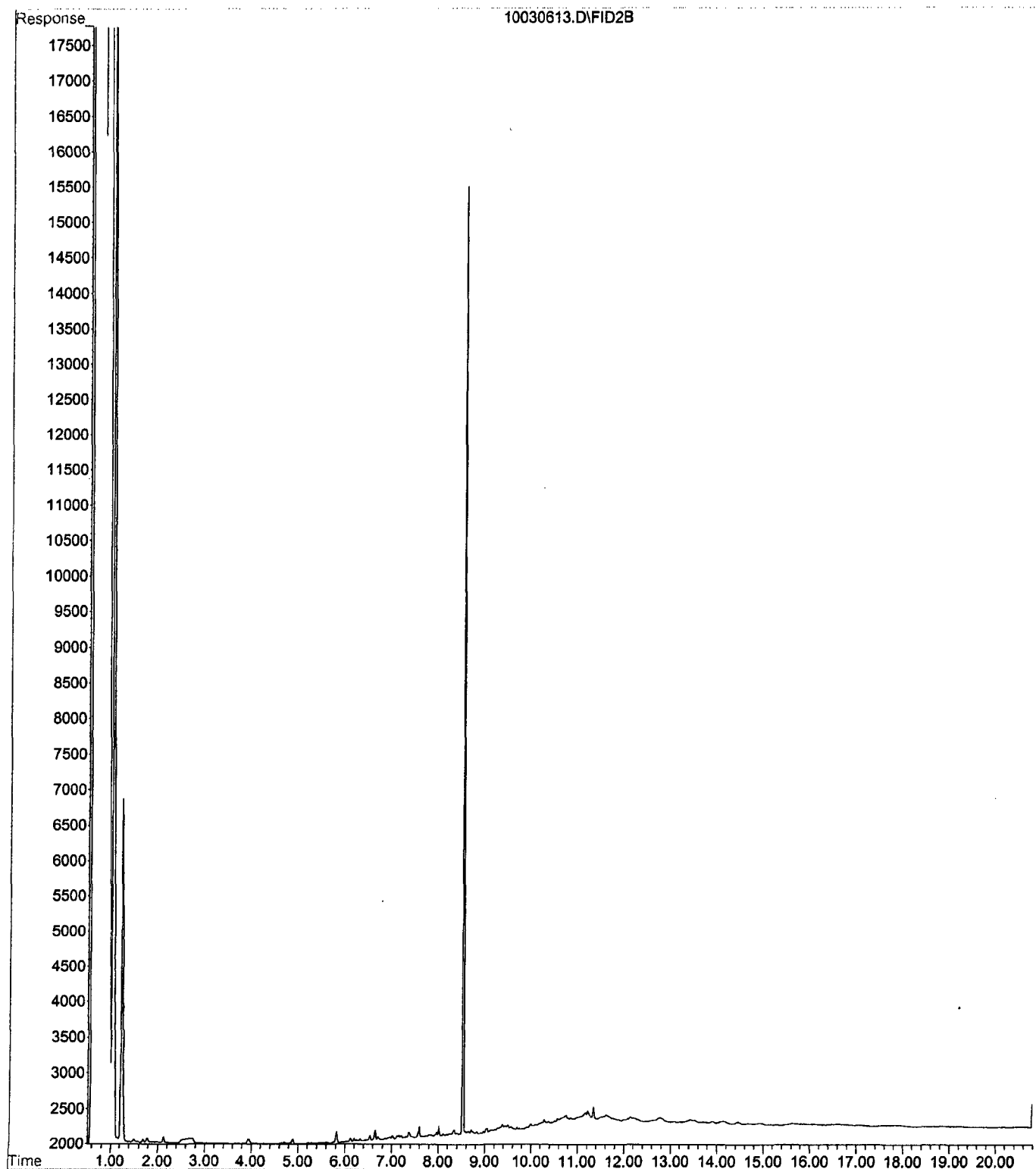
File : C:\HPCHEM\2\DATA\100406F\10030605.D
Operator : BP
Acquired : 4 Oct 2006 10:48 pm using AcqMethod AZ090706.M
Instrument : FID-1
Sample Name: DRO CCV
Misc Info : GC5-46-08
Vial Number: 4



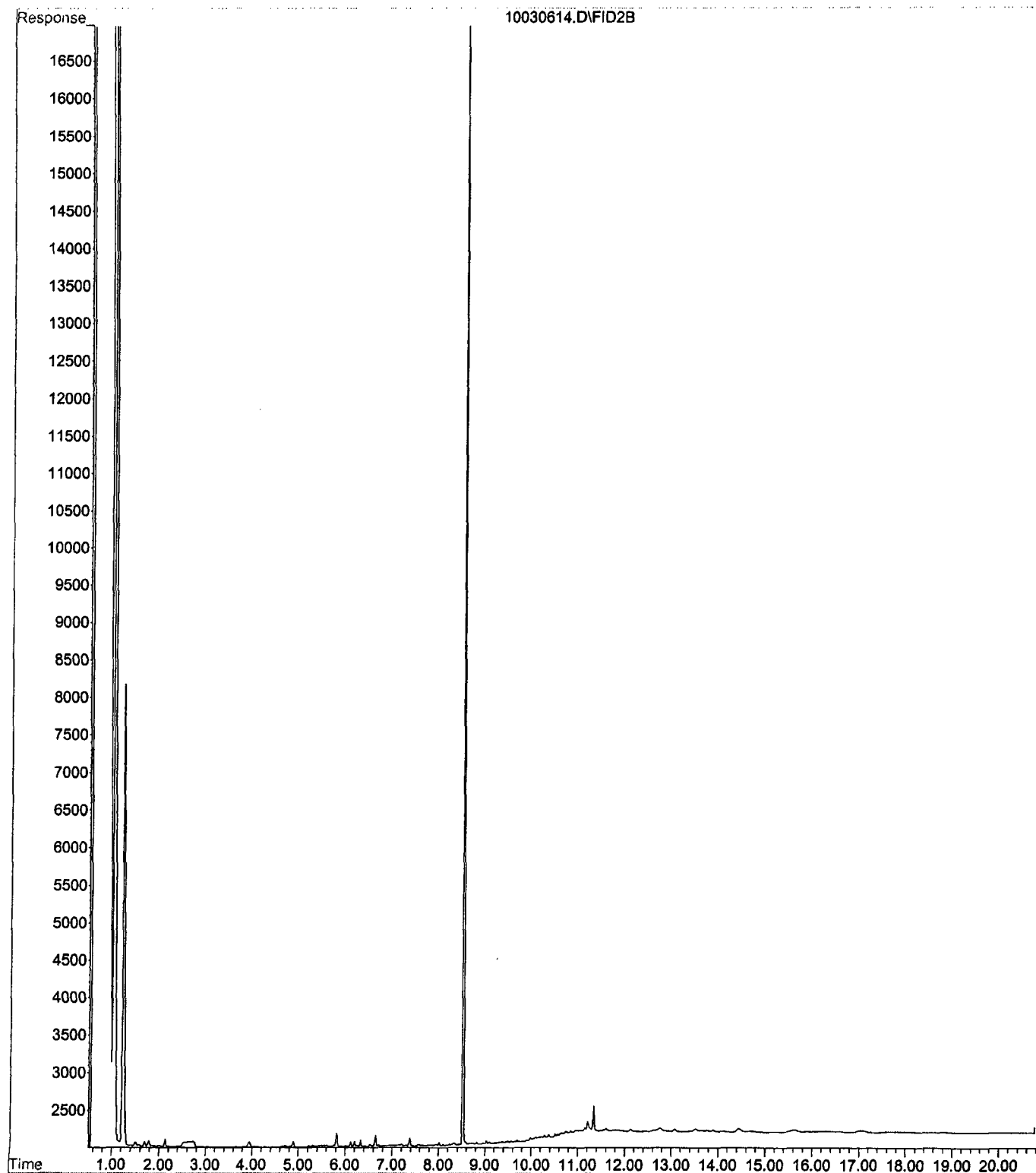
File : C:\HPCHEM\2\DATA\100406F\10030606.D
Operator : BP
Acquired : 4 Oct 2006 11:21 pm using AcqMethod AZ090706.M
Instrument : FID-1
Sample Name: SRB-100306
Misc Info : 10g/10mL
Vial Number: 5



File : C:\HPCHEM\2\DATA\100406F\10030613.D
Operator : BP
Acquired : 5 Oct 2006 3:14 am using AcqMethod AZ090706.M
Instrument : FID-1
Sample Name: 609259-01 1x
Misc Info : 10g/10mL
Vial Number: 12



File : C:\HPCHEM\2\DATA\100406F\10030614.D
Operator : BP
Acquired : 5 Oct 2006 3:47 am using AcqMethod AZ090706.M
Instrument : FID-1
Sample Name: 609259-02 1X
Misc Info : 10g/10mL
Vial Number: 13





Lodestar Services, Incorporated

PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

2006 SEP 21 PM 12 36

September 19, 2006

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

CERTIFIED MAIL:7004 1820 0001 6170 6923

RE: 2nd Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Mr. Price,

On July 18, 2006, Lodestar Services, Inc. collected 2nd Quarter 2006 samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes (BTEX). No target analytes were detected in the samples. Laboratory reports are included for your review.

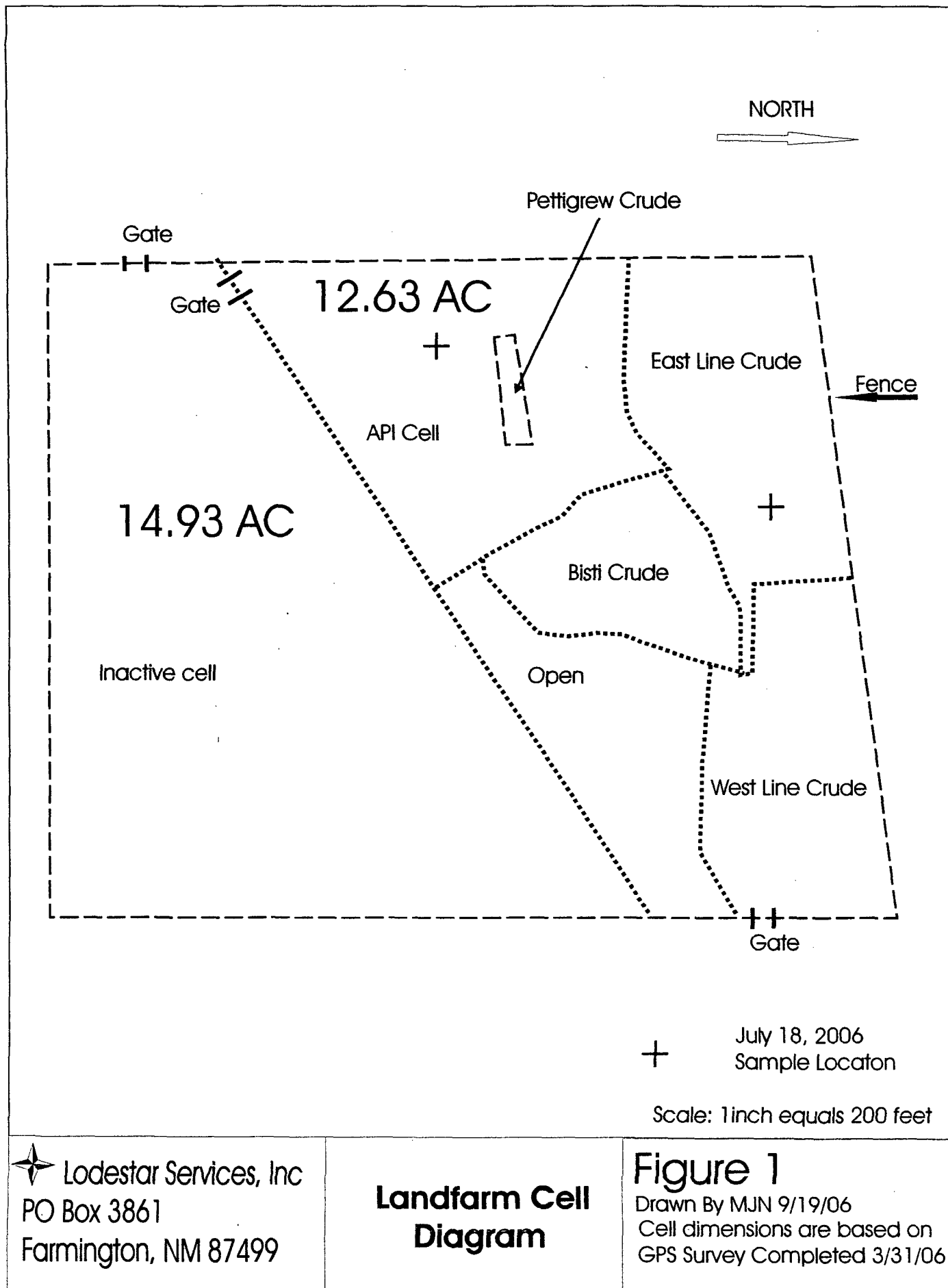
Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson of Giant at (505) 632-4077.

Sincerely,

Lodestar Services, Inc.

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. David Kirby, Giant Industries Arizona, Inc.
File



PINNACLE LABS

Environmental Testing

Pinnacle Lab ID number **607180**
August 08, 2006

LODESTAR
26 CR 3500
FLORA VISTA, NM 87415

Project Name LANDFARM
Project Number 30002

Attention: MARTIN NEE/BILL ROBERTSON

On 07/20/2006 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

CLIENT	: LODESTAR	PINNACLE ID	: 607180
PROJECT #	: 30002	DATE RECEIVED	: 07/20/2006
PROJECT NAME	: LANDFARM	REPORT DATE	: 08/07/2006
PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
607180 - 01	LANDFARM API CELL	NON-AQ	07/18/2006
607180 - 02	LANDFARM WESTLINE CELL	NON-AQ	07/18/2006

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
CLIENT : LODESTAR
PROJECT # : 30002
PROJECT NAME : LANDFARM

PINNACLE I.D. : 607180
ANALYST : BP

SAMPLE		DATE	DATE	DATE	DIL.	
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	LANDFARM API CELL	NON-AQ	07/18/2006	07/28/2006	07/28/2006	1
02	LANDFARM WESTLINE CELL	NON-AQ	07/18/2006	07/28/2006	07/28/2006	1

PARAMETER	DET. LIMIT	UNITS	LANDFARM API CELL	LANDFARM WESTLINE CELL
BENZENE	0.025	MG/KG	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
TOTAL XYLENES	0.10	MG/KG	< 0.10	< 0.10

SURROGATE:
BROMOFLUOROBENZENE (%) 116 110
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 607180
BLANK I. D.	: 072806	DATE EXTRACTED	: 07/28/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 07/28/2006
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.10

SURROGATE:
BROMOFLUOROBENZENE (%) 111
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 607180
BATCH ID	: 072806	DATE EXTRACTED	: 07/28/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 07/28/2006
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.15 C1	115	1.08 C1	108	6	(68 - 120)	20
TOLUENE	<0.025	1.00	1.13	113	1.08	108	5	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.09	109	1.08	108	1	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	3.13 C1	104	3.23 C1	108	3	(58 - 120)	20

CHEMIST NOTES:

C1 = CCV was greater than established limits. Results may be biased high.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 607180
SAMPLE ID	: 607232-08	DATE EXTRACTED	: 07/28/2006
CLIENT	: LODESTAR	DATE ANALYZED	: 07/28/2006
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.17	C1 117	1.15	C1 115	2	(68 - 120)	20
TOLUENE	<0.025	1.00	1.18	118	1.16	116	2	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.19	119	1.17	117	2	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	3.56	C1 119	3.53	C1 118	1	(58 - 120)	20

CHEMIST NOTES:

C1 = CCV was greater than established limits. Results may be biased high.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

PLI Accession #

607180

DATE: _____ OF _____ PAGE: _____

SHADED AREAS ARE FOR LAB USE ONLY

PROJECT MANAGER: Martin Alex		ANALYSIS REQUEST	
COMPANY:	ADDRESS:	PHONE:	FAX:
Lodesta Services	26 CR 3500	Flora Vista NM 87445	505 3342791 5053209675
Bill Robertson	Island Industries	111 CR 4990 Bluffton	87413

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
Landrum API Cell	7/18/06	0751	Soil	01
Landrum Westline Cell	7/18/06	0824	Soil	02

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) DMTBE DTM B DPCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB DBCP	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS	

PLEASE FILL THIS FORM IN COMPLETELY

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY:		RECEIVED BY:	
PROJ. NO.:	30002	(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr	☐ 1 WEEK	Signature:	Time:	Signature:	Time:
PROJ. NAME:	Landrum	CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER		Printed Name:	Date:	Printed Name:	Date:
P.O. NO.:		METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED		Company:		Company:	
SHIPPED VIA: UPS Ground							
SAMPLE RECEIPT							
NO CONTAINERS		2		Signature:		Signature:	
CUSTODY SEALS		Y/N (NA)		Time:		Time:	
RECEIVED/INTACT		YES		Printed Name:		Printed Name:	
BLUE ICE/ICE		4.32		Company:		Company:	

COMMENTS:



PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

February 22, 2006

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

CERTIFIED MAIL 7005 1820 0001 6170 6787

RE: 4th Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Mr. Martin,

On December 20, 2005, Lodestar Services, Inc. collected 4th Quarter samples from Giant Industries Arizona, Inc.'s (Giant) land farm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active land farm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes (BTEX).

Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson (505) 632-4077.

Sincerely,

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
File

2006 FEB 23 PM 1 39



Pinnacle Lab ID number **512187**
January 11, 2006

LODESTAR
26 CR 3500
FLORA VISTA, NM 87415

GIANT INDUSTRIES, INC.
111 COUNTY RD 4990
BLOOMFIELD, NM 87413

Project Name BISTI LANDFARM
Project Number (NONE)

Attention: MARTIN NEE/TIM KINNEY

On 12/20/05 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.

A handwritten signature in black ink, appearing to read "H. Mitchell Rubenstein".

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

CLIENT	: LODESTAR	PINNACLE ID	: 512187
PROJECT #	: (NONE)	DATE RECEIVED	: 12/20/05
PROJECT NAME	: BISTI LANDFARM	REPORT DATE	: 01/11/06
PINNACLE			
ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
512187 - 01	WESTLINE	NON-AQ	12/20/05
512187 - 02	API CELL	NON-AQ	12/20/05

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
 CLIENT : LODESTAR
 PROJECT # : (NONE)
 PROJECT NAME : BISTI LANDFARM

PINNACLE I.D. : 512187
 ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	WESTLINE	NON-AQ	12/20/05	12/22/05	12/22/05	1
02	API CELL	NON-AQ	12/20/05	12/22/05	12/22/05	1
PARAMETER		DET. LIMIT	UNITS	WESTLINE	API CELL	
BENZENE		0.025	MG/KG	< 0.025	< 0.025	
TOLUENE		0.025	MG/KG	< 0.025	< 0.025	
ETHYLBENZENE		0.025	MG/KG	< 0.025	< 0.025	
TOTAL XYLENES		0.050	MG/KG	< 0.050	< 0.050	

SURROGATE:

BROMOFLUOROBENZENE (%)

107

94

SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:

N/A

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 512187
BLANK I. D.	: 122205	DATE EXTRACTED	: 12/22/05
CLIENT	: LODESTAR	DATE ANALYZED	: 12/22/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: BISTI LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050

SURROGATE:
BROMOFLUOROBENZENE (%) 96
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 512187
MSMSD #	: 512187-02	DATE EXTRACTED	: 12/22/05
CLIENT	: LODESTAR	DATE ANALYZED	: 12/22/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: BISTI LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.09	109	1.01	101	8	(68 - 120)	20
TOLUENE	<0.025	1.00	1.07	107	1.02	102	5	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.08	108	0.983	98	9	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.26	109	2.99	100	9	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 512187
BATCH #	: 122205	DATE EXTRACTED	: 12/22/05
CLIENT	: LODESTAR	DATE ANALYZED	: 12/27/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: BISTI LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.04	104	1.15	115	10	(68 - 120)	20
TOLUENE	<0.025	1.00	1.03	103	1.13	113	9	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.03	103	1.13	113	9	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.10	103	3.39	113	9	(58 - 120)	20

CHEMIST NOTES:
N/A

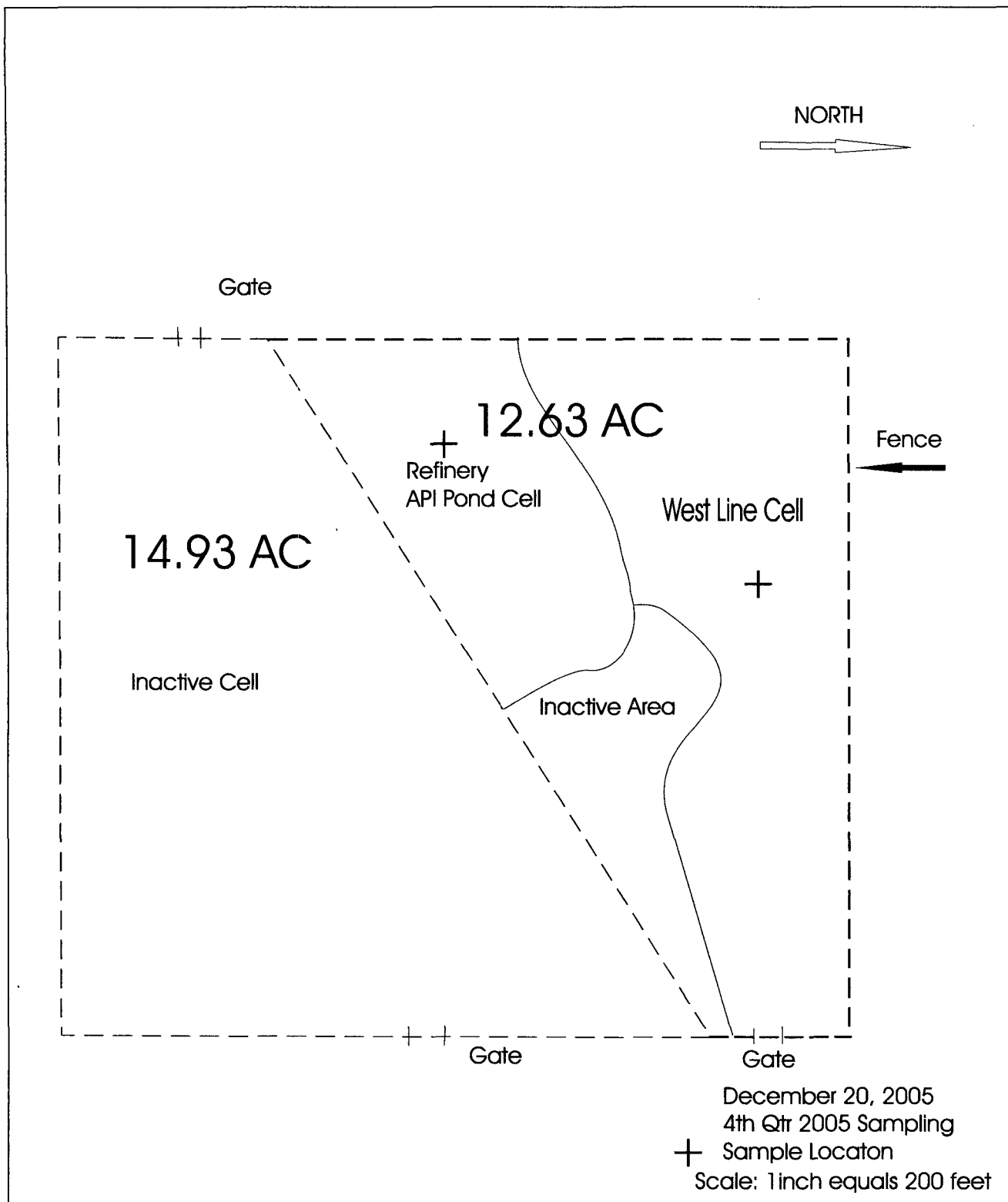
$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SHADOW AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]



 Lodestar Services, Inc
 PO Box 3861
 Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 2/22/06
 Land farm dimensions are
 based on Philip Services
 Figure 1A dated 9/30/97.



PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

RECEIVED

NOV 18 2005

**OIL CONSERVATION
DIVISION**

November 16, 2005

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

CERTIFIED MAIL 7005 1820 0001 6170 6725

**RE: 3rd Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm
Facility NM -02-0010**

Dear Mr. Martin,

On September 30, 2005, Lodestar Services, Inc. collected 3rd Quarter samples from Giant Industries Arizona, Inc.'s (Giant) land farm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active land farm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes (BTEX).

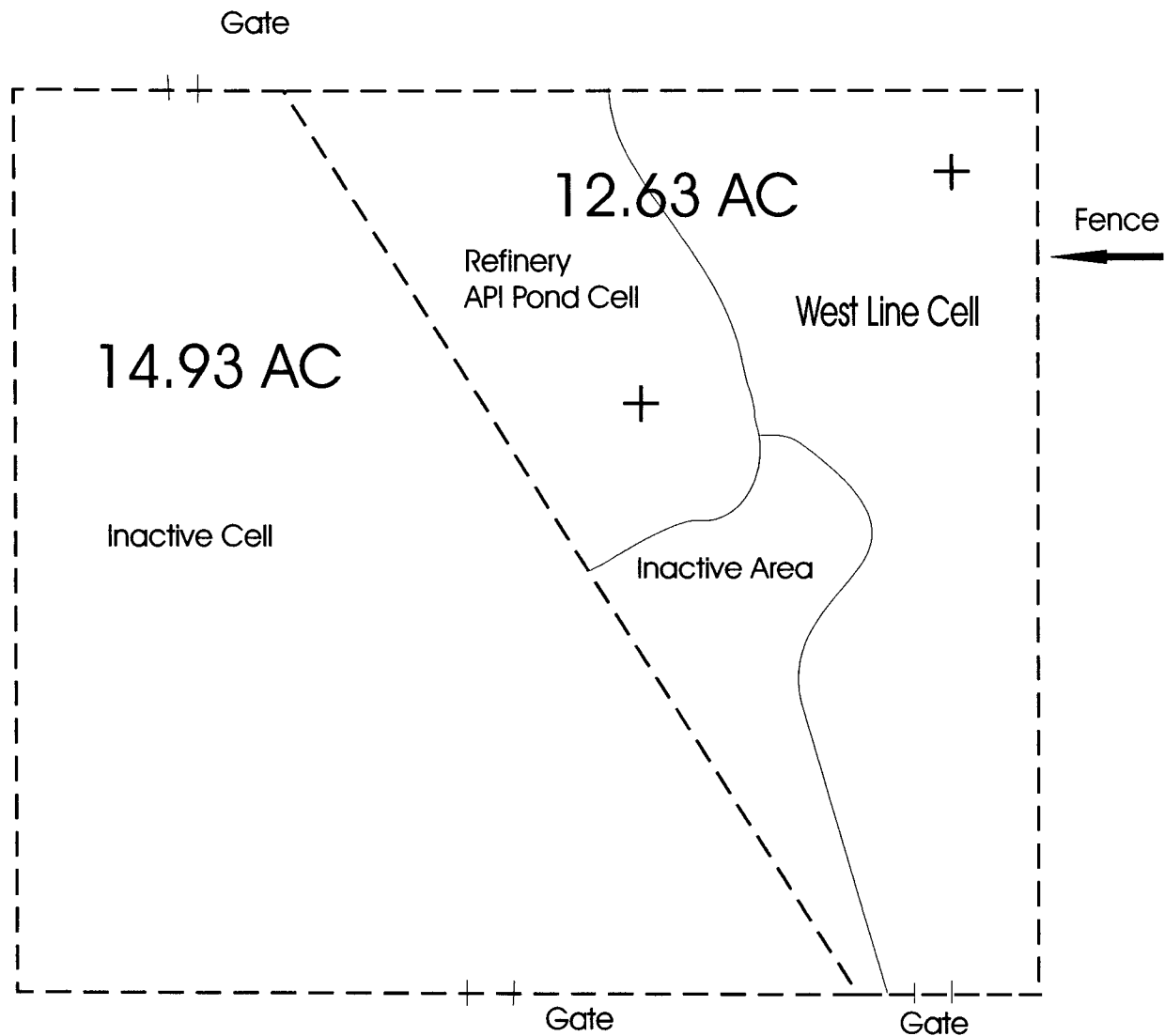
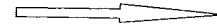
Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson (505) 632-4077.

Sincerely,

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
File

NORTH



September 30, 2005

3rd Qtr 2005 Sampling

+ Sample Location

Scale: 1 inch equals 200 feet



Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 11/16/05
Land farm dimensions are
based on Phillip Services
Figure 1A dated 9/30/97

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **509409**
October 24, 2005

LODESTAR
26 CR 3500
FLORA VISTA, NM 87415

GIANT INDUSTRIES
111 COUNTY ROAD 4990
BLOOMFIELD, NM 87413

Project Name GIANT LANDFARM
Project Number (NONE)

Attention: MARTIN NEE/BILL ROBERTSON

On 09/30/05 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: LODESTAR	PINNACLE ID	: 509409
PROJECT #	: (NONE)	DATE RECEIVED	: 09/30/05
PROJECT NAME	: GIANT LANDFARM	REPORT DATE	: 10/24/05
PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
509409 - 01	API	NON-AQ	09/30/05
509409 - 02	WEST LINE	NON-AQ	09/30/05

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
CLIENT : LODESTAR
PROJECT # : (NONE)
PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 509409
ANALYST : BP

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API	NON-AQ	09/30/05	10/06/05	10/07/05	1
02	WEST LINE	NON-AQ	09/30/05	10/06/05	10/07/05	1
PARAMETER		DET. LIMIT	UNITS	API	WEST LINE	
BENZENE		0.025	MG/KG	< 0.025	< 0.025	
TOLUENE		0.025	MG/KG	< 0.025	< 0.025	
ETHYLBENZENE		0.025	MG/KG	< 0.025	< 0.025	
TOTAL XYLENES		0.050	MG/KG	< 0.050	< 0.050	

SURROGATE:

BROMOFLUOROBENZENE (%)

102

98

SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:

N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 509409
BLANK I. D.	: 100605	DATE EXTRACTED	: 10/06/05
CLIENT	: LODESTAR	DATE ANALYZED	: 10/07/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050

SURROGATE:

BROMOFLUOROBENZENE (%)

106

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 509409
BLANK I. D.	: 100605	DATE EXTRACTED	: 10/06/05
CLIENT	: LODESTAR	DATE ANALYZED	: 10/15/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050

SURROGATE:

BROMOFLUOROBENZENE (%)

97

SURROGATE LIMITS:

(80 - 120)

CHEMIST NOTES:

N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	:	509409
BATCH #	: 100605	DATE EXTRACTED	:	10/06/05
CLIENT	: LODESTAR	DATE ANALYZED	:	10/15/05
PROJECT #	: (NONE)	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.05	105	1.01	101	4	(68 - 120)	20
TOLUENE	<0.025	1.00	1.03	103	1.04	104	1	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.04	104	1.07	107	3	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.10	103	3.23	108	4	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	:	509409
MSMSD #	: 509409-02	DATE EXTRACTED	:	10/06/05
CLIENT	: LODESTAR	DATE ANALYZED	:	10/07/05
PROJECT #	: (NONE)	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.989	99	1.03	103	4	(68 - 120)	20
TOLUENE	<0.025	1.00	1.09	109	1.14	114	4	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.05	105	1.10	110	5	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.23	108	3.39	113	5	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : LODESTAR
PROJECT # : (NONE)
PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 509409
ANALYST : DSR

SAMPLE	DATE	DATE	DATE	DIL.		
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API	NON-AQ	09/30/05	10/06/05	10/06/05	1
02	WEST LINE	NON-AQ	09/30/05	10/06/05	10/06/05	1

PARAMETER	DET. LIMIT	UNITS	API	WEST LINE
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10
CALCULATED SUM:				

SURROGATE:
O-TERPHENYL (%) 81 83
SURROGATE LIMITS (70-130)

CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 509409
BLANK I.D.	: 100605	DATE EXTRACTED	: 10/06/05
CLIENT	: LODESTAR	DATE ANALYZED	: 10/06/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: DSR

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:

O-TERPHENYL (%)

93

SURROGATE LIMITS (70-130)

CHEMIST NOTES:

N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 509409
LCS/LCSD #	: 100605	DATE EXTRACTED	: 10/06/05
CLIENT	: LODESTAR	DATE ANALYZED	: 10/06/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	205	103	190	95	8	(70-130)	20

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 509409
MSMSD #	: 509409-01	DATE EXTRACTED	: 10/06/05
CLIENT	: LODESTAR	DATE ANALYZED	: 10/06/05
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	194	97	193	97	1	(70-130)	20

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

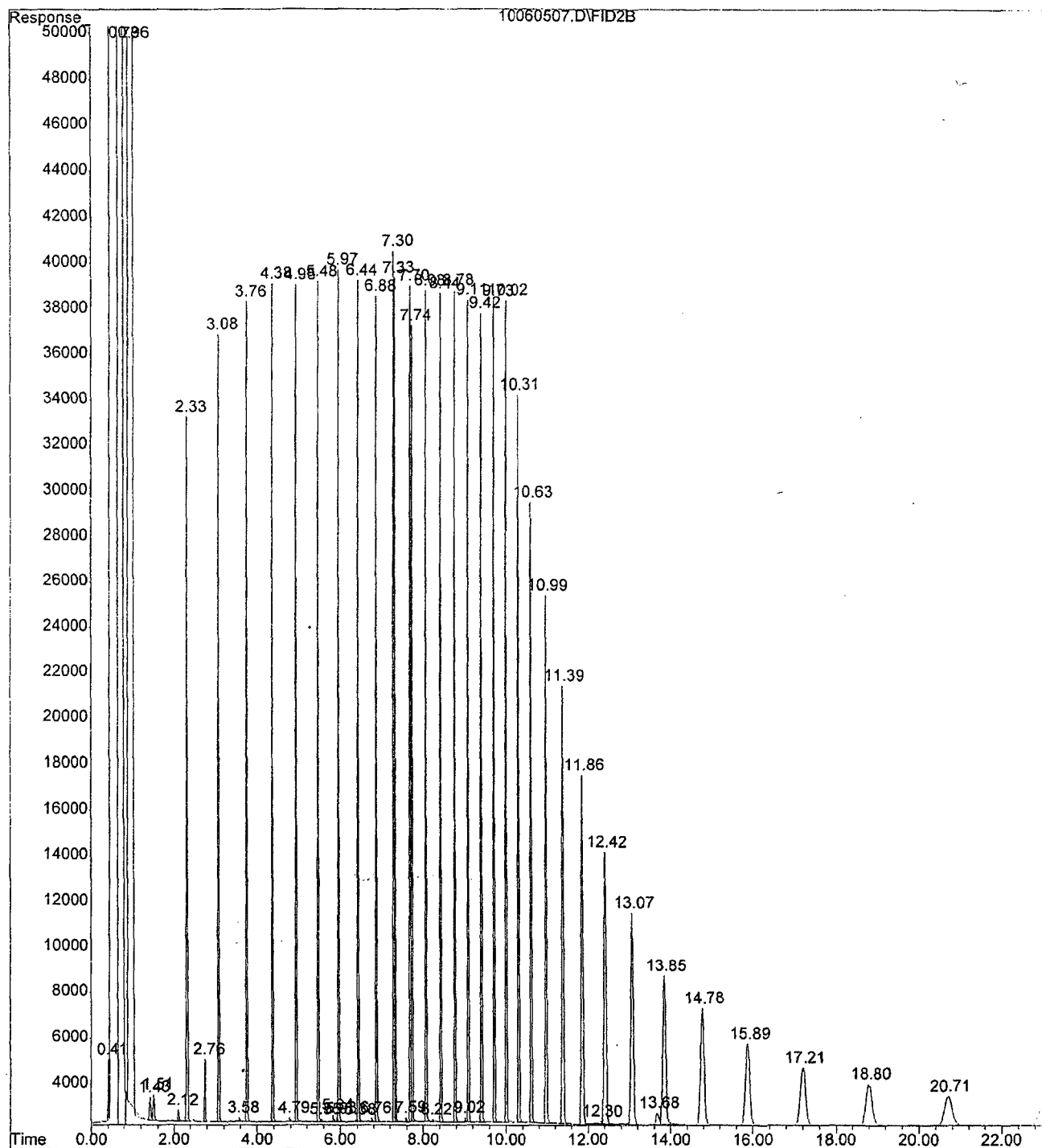
RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

[illegible]

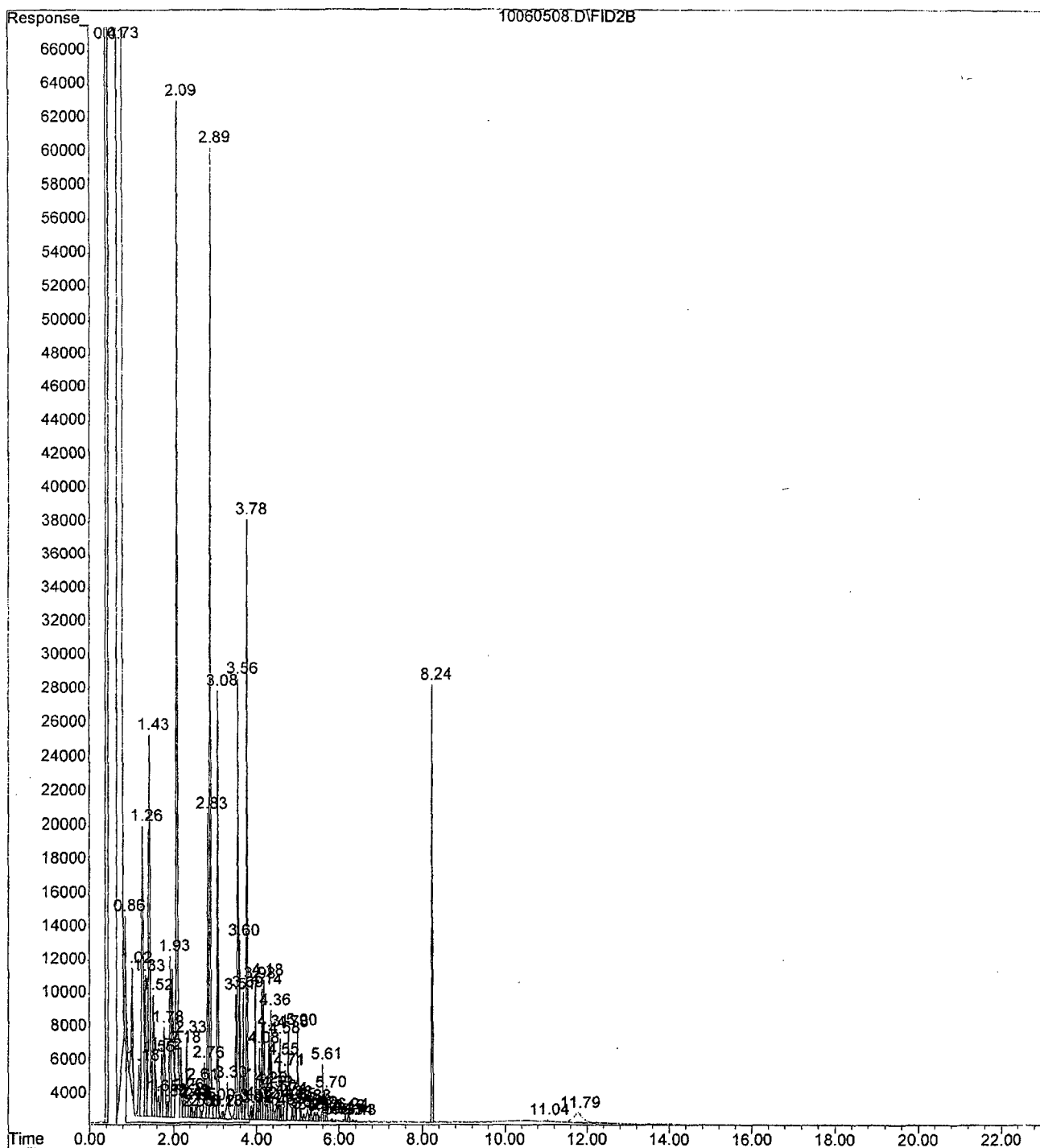
SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

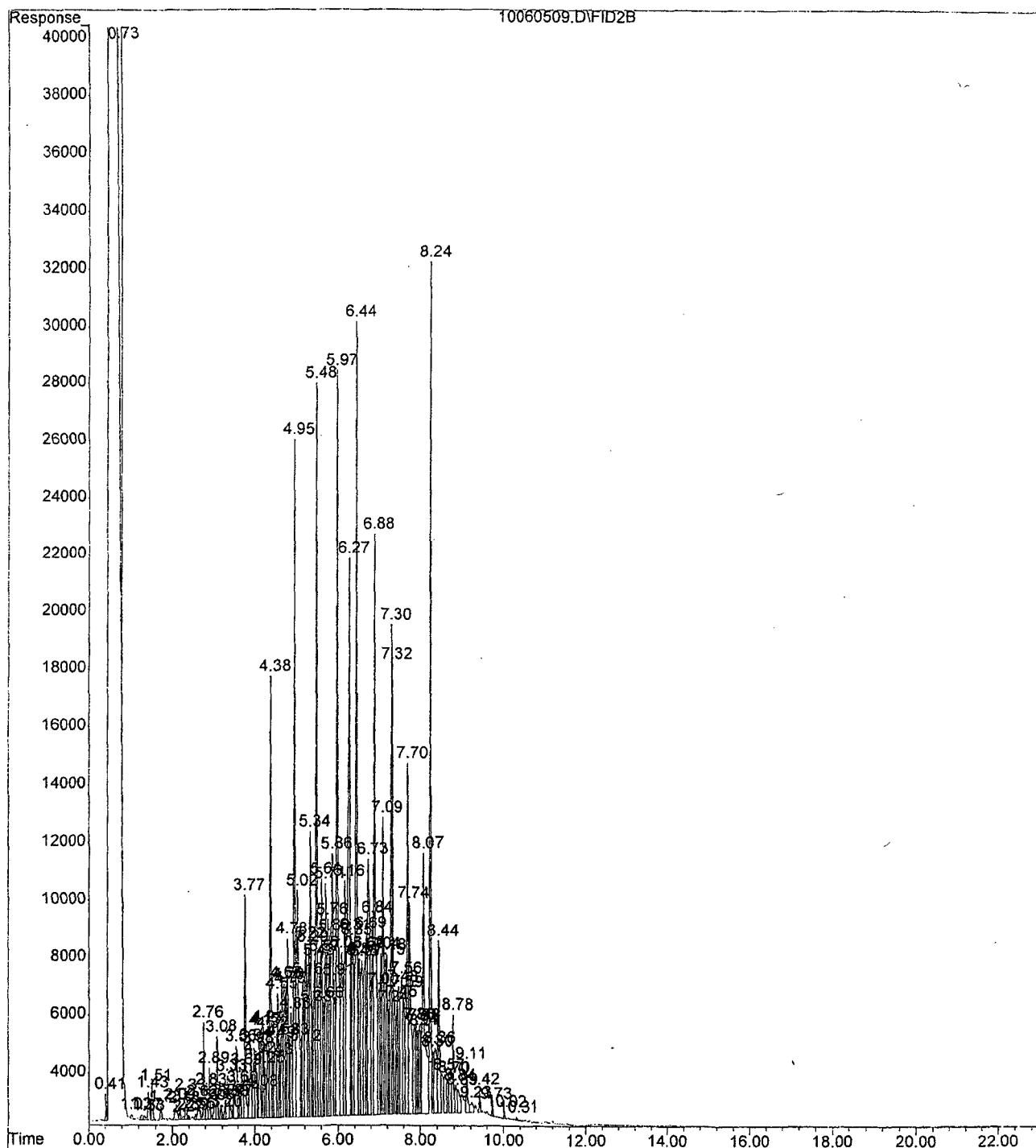
File : C:\HPCHEM\2\DATA\100605F\10060507.D
Operator : DSR
Acquired : 6 Oct 2005 15:06 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: RT
Misc Info : GC5-28-17
Vial Number: 2



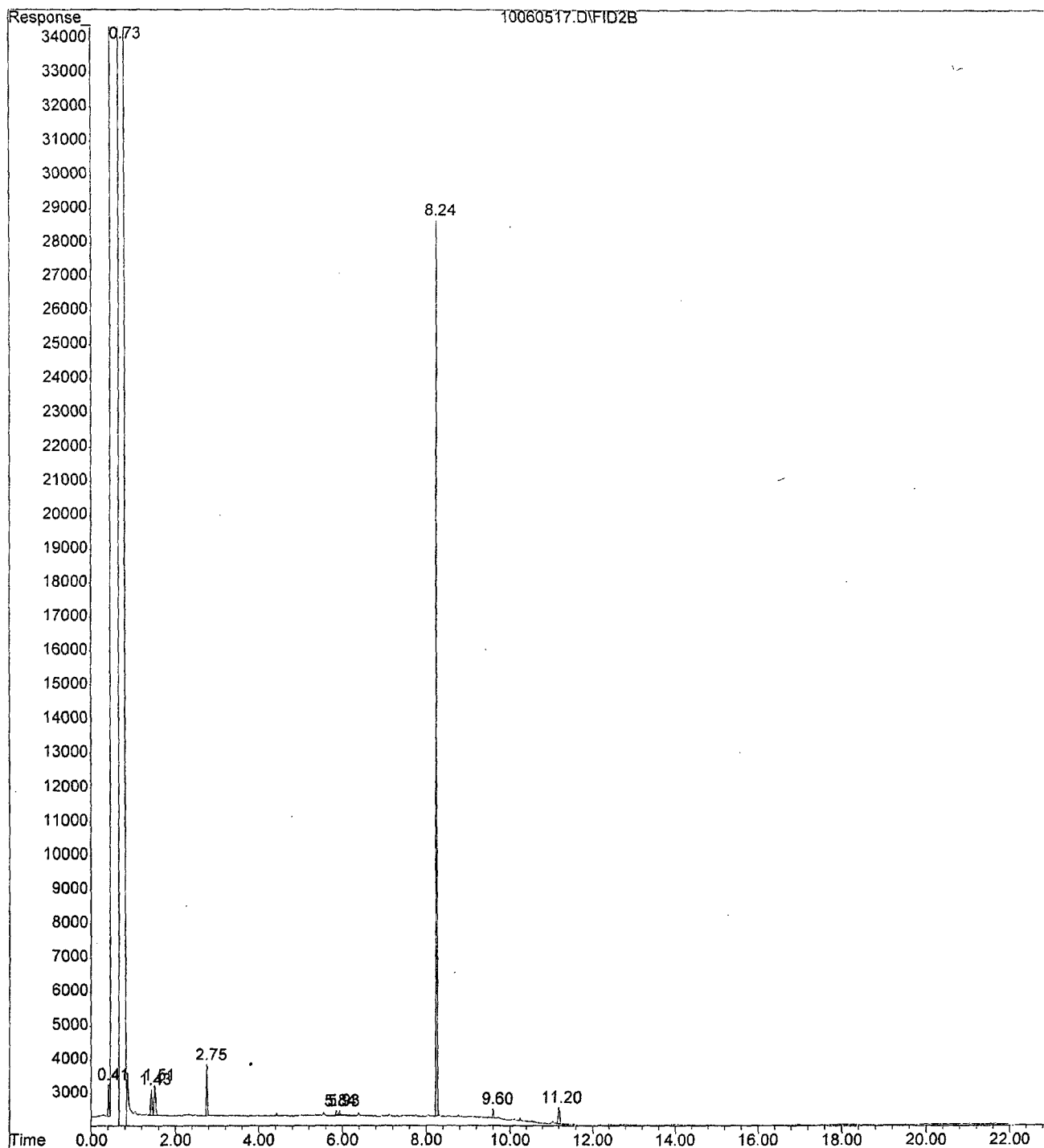
File : C:\HPCHEM\2\DATA\100605F\10060508.D
Operator : DSR
Acquired : 6 Oct 2005 15:37 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: GRO CCV 200PPM
Misc Info : GC5-29-03
Vial Number: 3



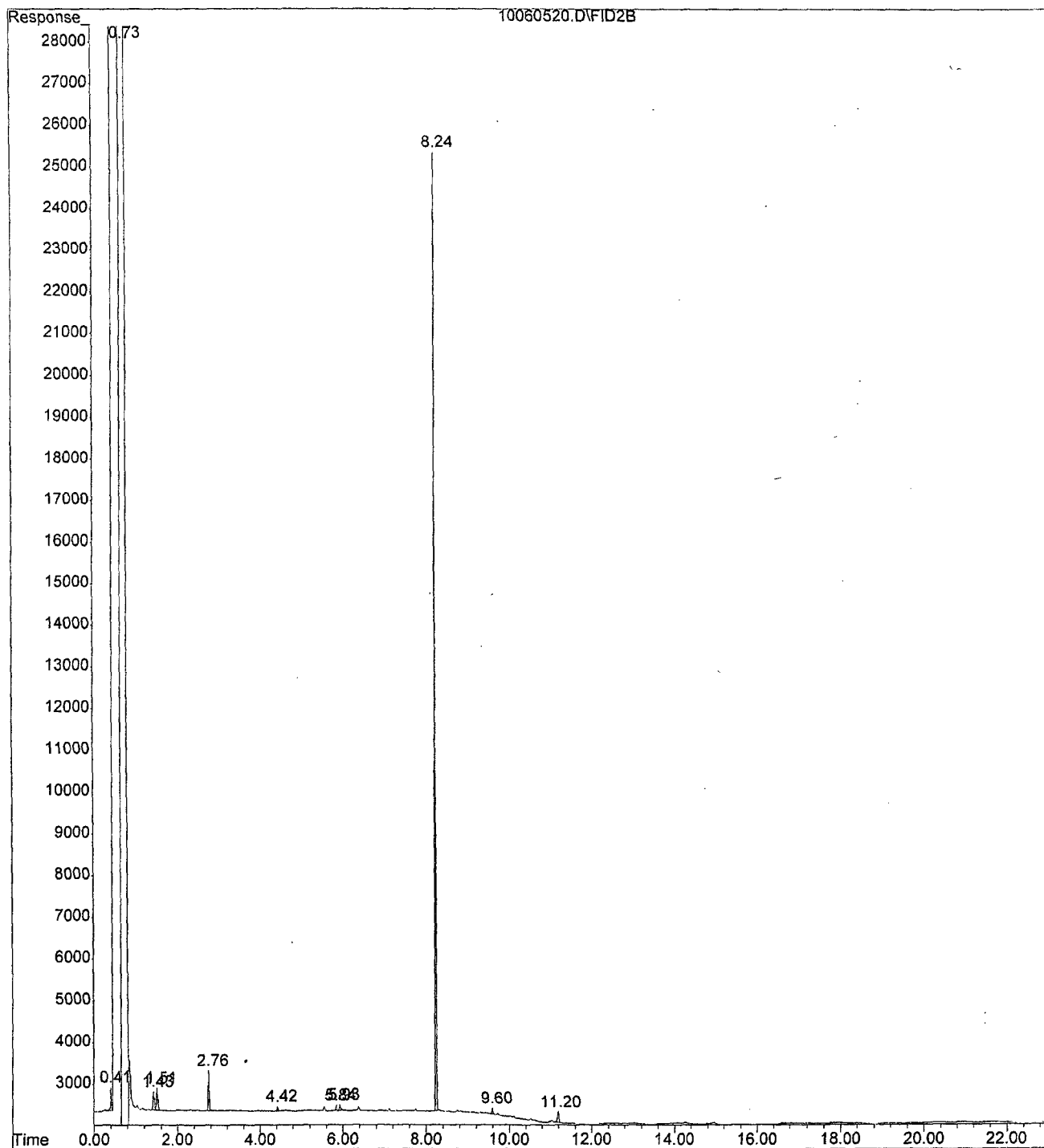
File : C:\HPCHEM\2\DATA\100605F\10060509.D
Operator : DSR
Acquired : 6 Oct 2005 16:08 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: DRO CCV 200PPM
Misc Info : GC5-29-08
Vial Number: 4



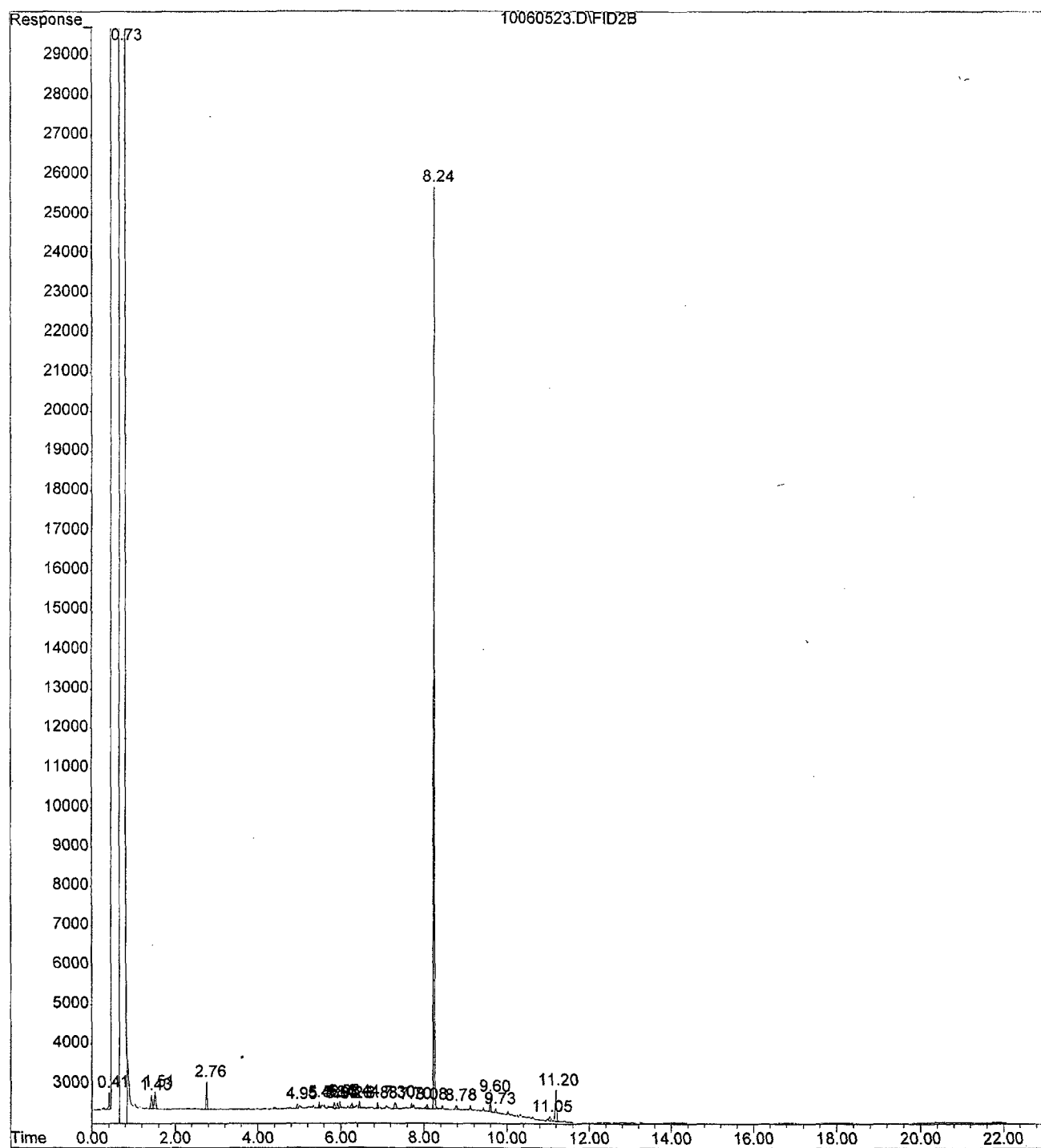
File : C:\HPCHEM\2\DATA\100605F\10060517.D
Operator : DSR
Acquired : 6 Oct 2005 20:18 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: SRB 100605
Misc Info : 10G/10ML 10/06
Vial Number: 12



File : C:\HPCHEM\2\DATA\100605F\10060520.D
Operator : DSR
Acquired : 6 Oct 2005 21:52 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: 509409-01
Misc Info : 10G/10ML 10/06
Vial Number: 15



File : C:\HPCHEM\2\DATA\100605F\10060523.D
Operator : DSR
Acquired : 6 Oct 2005 23:26 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: 509409-02
Misc Info : 10G/10ML 10/06
Vial Number: 18





Lodestar Services, Incorporated

PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

August 22, 2005

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

CERTIFIED MAIL:7004 1160 0007 4952 1562

RE: 2nd Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Mr. Martin,

On June 27, 2005, Lodestar Services, Inc. collected 2nd Quarter 2005 samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes (BTEX). No target analytes were detected in the samples. Laboratory reports are included for your review.

Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson of Giant at (505) 632-4077.

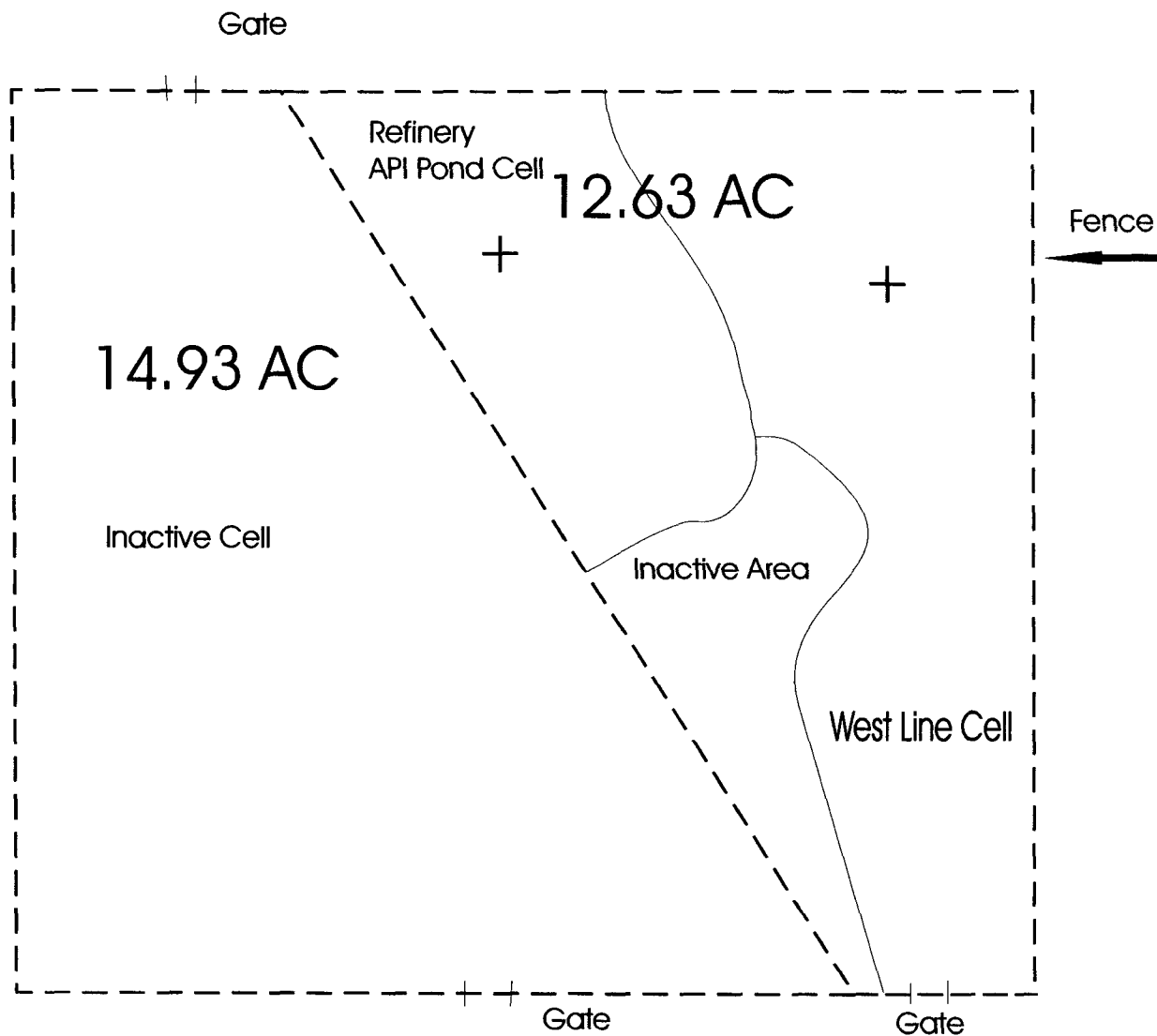
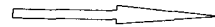
Sincerely,

Lodestar Services, Inc.

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
Mr. David Kirby, Giant Industries Arizona, Inc.
File

NORTH



June 27, 2005

2nd Qtr 2005 Sampling

+ Sample Location

Scale: 1 inch equals 200 feet



Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 8/22/05

Cell dimensions are based on
Philip Services Figure 1A dated
9/30/97

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **506246**
July 12, 2005

GIANT INDUSTRIES
111 COUNTY RD. 4990
BLOOMFIELD, NM 87413

LODESTAR
26 CR 3500
FLORA VISTA, NM 87415

Project Name LANDFARM
Project Number (NONE)

Attention: MARTIN NEE/BILL ROBERTSON

On 06/27/2005 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: GIANT INDUSTRIES	PINNACLE ID	: 506246
PROJECT #	: (NONE)	DATE RECEIVED	: 06/27/2005
PROJECT NAME	: LANDFARM	REPORT DATE	: 07/12/2005
PINNACLE			
ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
506246 - 01	API CELL	NON-AQ	06/27/2005
506246 - 02	WESTLINE CELL	NON-AQ	06/27/2005

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : GIANT INDUSTRIES
PROJECT # : (NONE)
PROJECT NAME : LANDFARM

PINNACLE I.D. : 506246
ANALYST : BP

SAMPLE	DATE	DATE	DATE	DIL.
ID. #	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	06/27/2005	06/29/2005	06/30/2005	1
02	06/27/2005	06/29/2005	06/30/2005	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WESTLINE CELL
FUEL HYDROCARBONS	10	MG/KG	< 10	< 10
HYDROCARBON RANGE			C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE

BENZENE	0.025	MG/KG	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
TOTAL XYLENES	0.050	MG/KG	< 0.050	< 0.050
METHYL-t-BUTYL ETHER	0.13	MG/KG	< 0.13	< 0.13

SURROGATE:
BROMOFLUOROBENZENE (%) 103 96
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 506246
BLANK I.D.	: 062905	DATE EXTRACTED	: 06/29/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/30/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/KG	<10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050
METHYL-t-BUTYL ETHER	MG/KG	<0.13
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 506246
BLANK I.D.	: 070505	DATE EXTRACTED	: N/A
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 07/05/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/KG	<10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050
METHYL-t-BUTYL ETHER	MG/KG	<0.13
SURROGATE:		
BROMOFLUOROBENZENE (%)		99
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	:	506246
BATCH #	: 062905	DATE EXTRACTED	:	06/29/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	:	06/30/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: LANDFARM	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	51.4	103	54.3	109	5	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 506246
MSMSD #	: 506246-02	DATE EXTRACTED	: 06/29/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/30/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	50.7	101	49.9	100	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:

N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST : EPA 8021B
BATCH # : 062905
CLIENT : GIANT INDUSTRIES
PROJECT # : (NONE)
PROJECT NAME : LANDFARM

PINNACLE I.D. : 506246
DATE EXTRACTED : 06/29/2005
DATE ANALYZED : 07/05/2005
SAMPLE MATRIX : NON-AQ
UNITS : MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.08	108	0.974	97	10	(68 - 120)	20
TOLUENE	<0.025	1.00	1.10	110	1.08	108	2	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.11	111	1.13	113	2	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.32	111	3.40	113	2	(58 - 120)	20
METHYL-t-BUTYL ETHER	<0.13	1.00	1.13	113	1.00	100	12	(66 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 506246
MSMSD #	: 506246-02	DATE EXTRACTED	: 06/29/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/30/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.10	110	1.14	114	4	(68 - 120)	20
TOLUENE	<0.025	1.00	1.12	112	1.16	116	4	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.13	113	1.17	117	3	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.43	114	3.53	118	3	(58 - 120)	20
METHYL-t-BUTYL ETHER	<0.13	1.00	1.08	108	1.15	115	6	(66 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : GIANT INDUSTRIES
PROJECT # : (NONE)
PROJECT NAME : LANDFARM

PINNACLE I.D. : 506246
ANALYST : DSR

SAMPLE	DATE	DATE	DATE	DIL.
ID. #	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	06/27/2005	07/05/2005	07/05/2005	1
02	06/27/2005	07/05/2005	07/05/2005	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WESTLINE CELL
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10
CALCULATED SUM:				

SURROGATE:
O-TERPHENYL (%) 80 96
SURROGATE LIMITS (70-130)

CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 506246
BLANK I.D.	: 070505	DATE EXTRACTED	: 07/05/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 07/05/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: DSR

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:

O-TERPHENYL (%) 101

SURROGATE LIMITS (70-130)

CHEMIST NOTES:

N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 506246
LCS/LCSD #	: 070505	DATE EXTRACTED	: 07/05/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 07/05/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	197	99	198	99	1	(70-130)	20

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	:	506246
MSMSD #	: 506246-01	DATE EXTRACTED	:	07/05/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	:	07/05/2005
PROJECT #	: (NONE)	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: LANDFARM	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	199	100	196	98	2	(70-130)	20

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$

CHAIN OF CUSTODY

DATE: 6/27/25 PAGE: 1 OF 1

PLI Accession #:

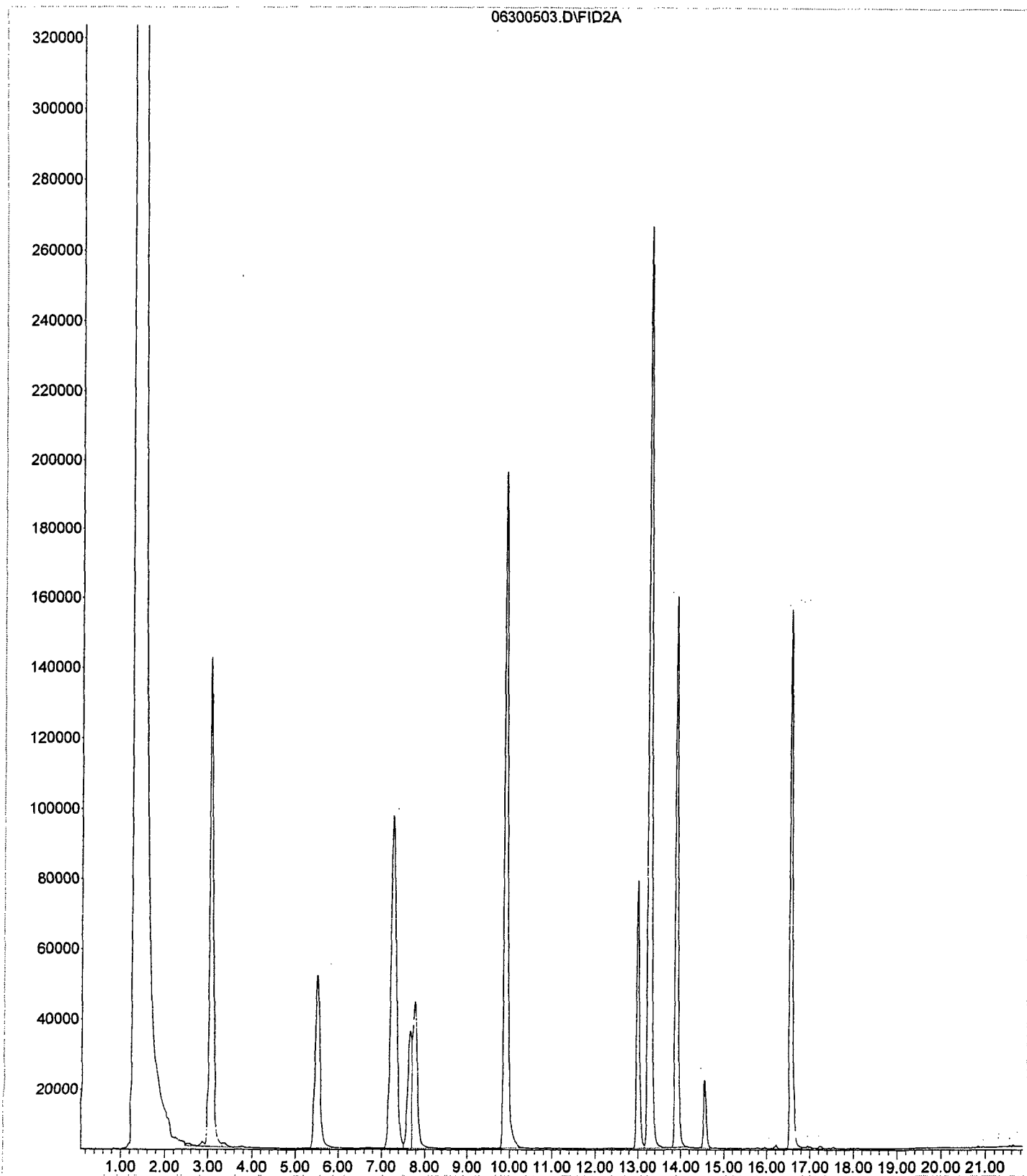
506246

[illegible]

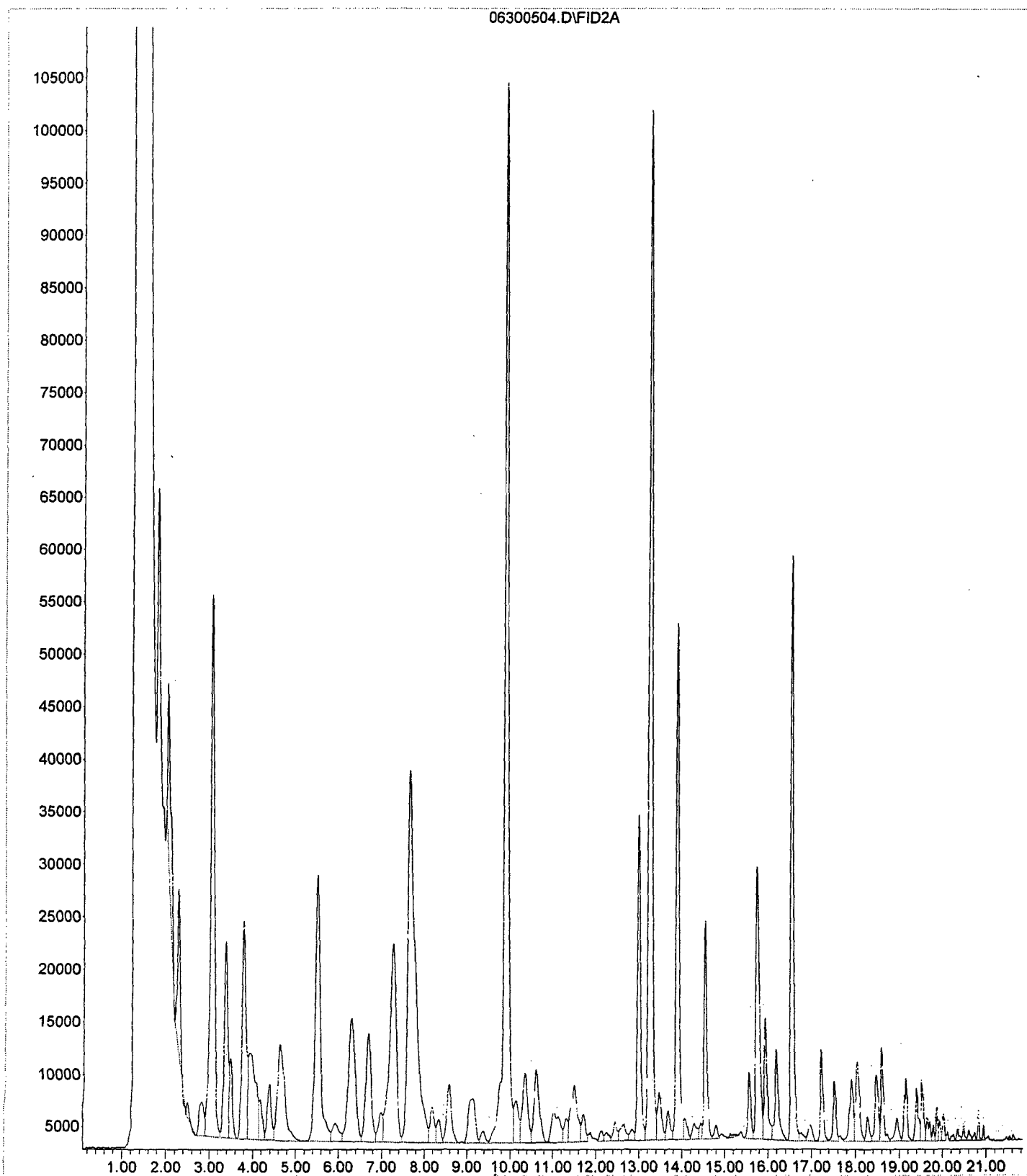
SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

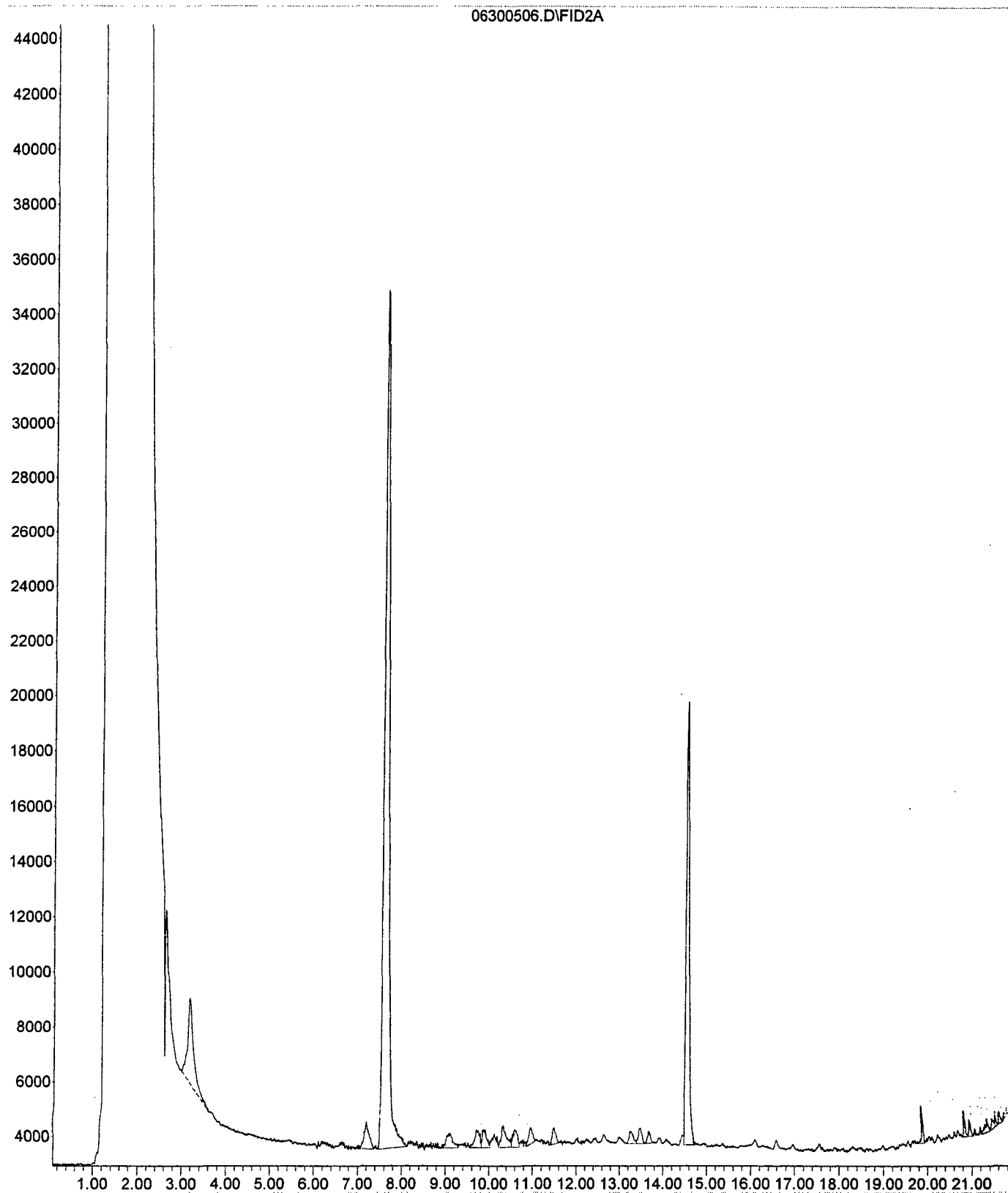
File : C:\HPCHEM\1\DATA\063005\06300503.D
Operator : BP
Acquired : 30 Jun 2005 9:40 using AcqMethod BG051005.M
Instrument : GC-2
Sample Name: GRO RT STD
Misc Info : 10uL GC4-37-14
Vial Number: 1



File : C:\HPCHEM\1\DATA\063005\06300504.D
Operator : BP
Acquired : 30 Jun 2005 10:11 using AcqMethod BG051005.M
Instrument : GC-2
Sample Name: GRO CCV 1000ppb
Misc Info : 10uL GC4-37-13
Vial Number: 2

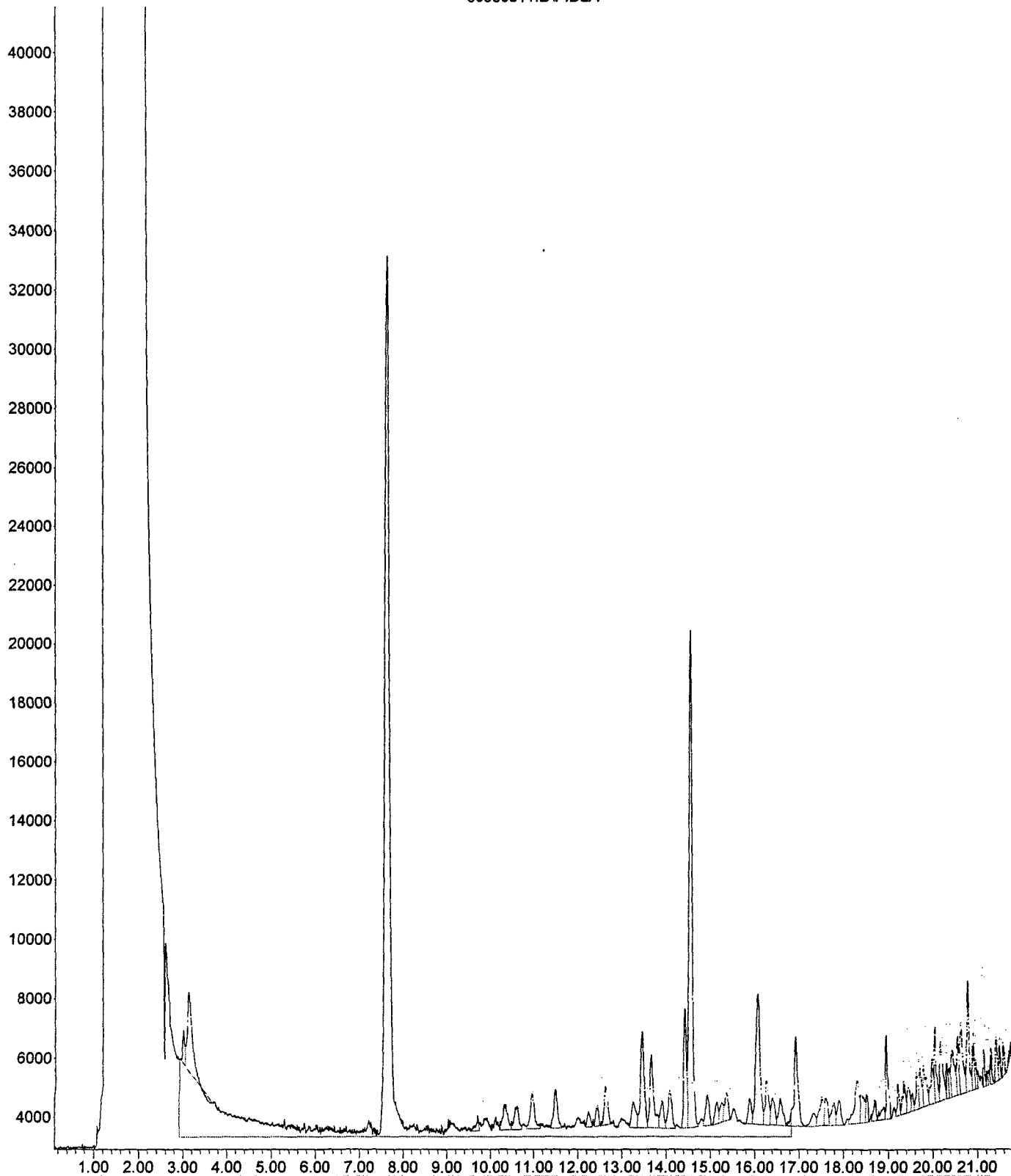


File : C:\HPCHEM\1\DATA\063005\06300506.D
Operator : BP
Acquired : 30 Jun 2005 11:16 using AcqMethod BG051005.M
Instrument : GC-2
Sample Name: SRB-063005
Misc Info : 100uL SOIL
Vial Number: 4



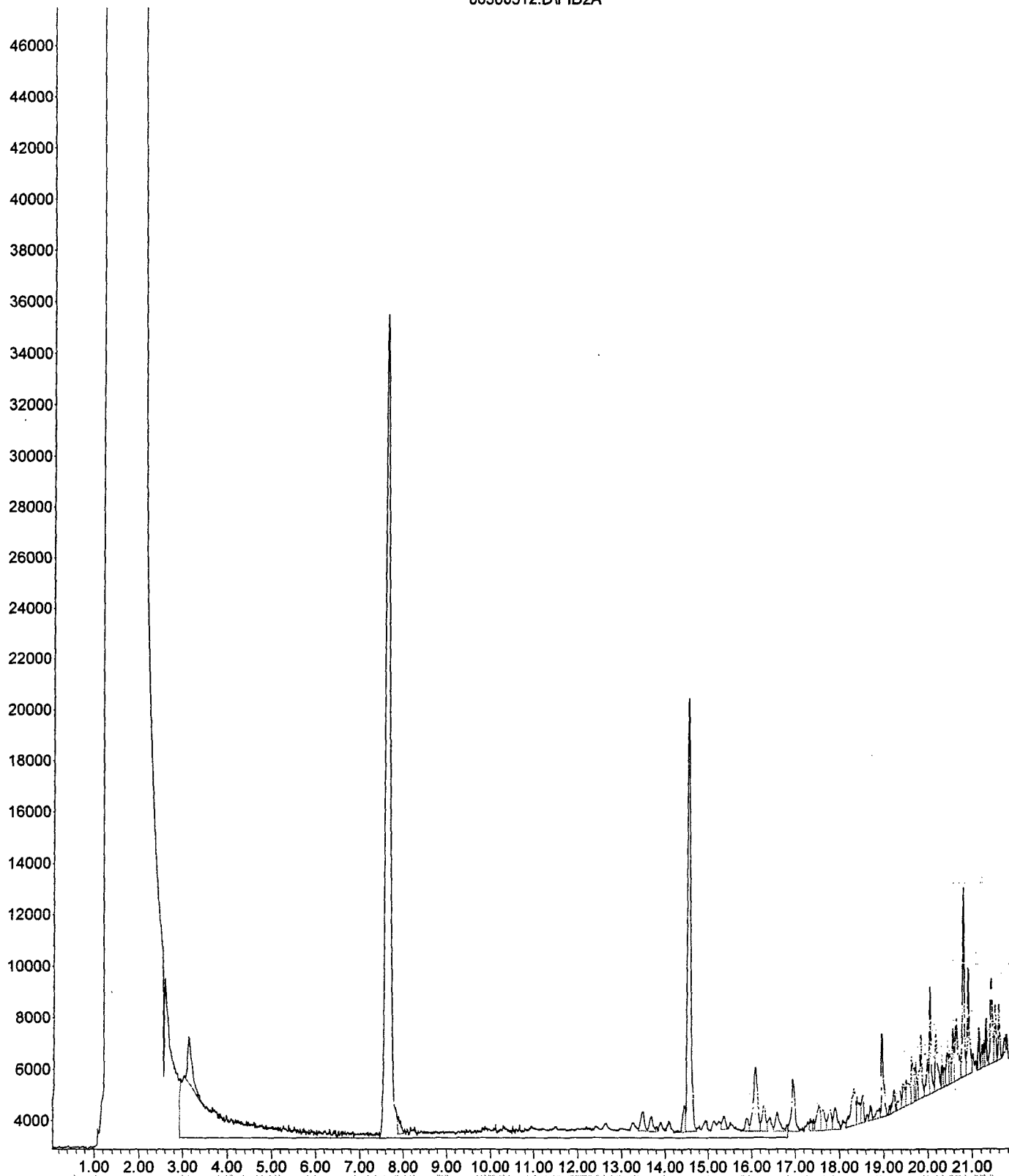
File : C:\HPCHEM\1\DATA\063005\06300511.D
Operator : BP
Acquired : 30 Jun 2005 13:54 using AcqMethod BG051005.M
Instrument : GC-2
Sample Name: 506246-01 1X
Misc Info : 100uL BTEX/GRO SOIL
Vial Number: 9

06300511.D\FID2A

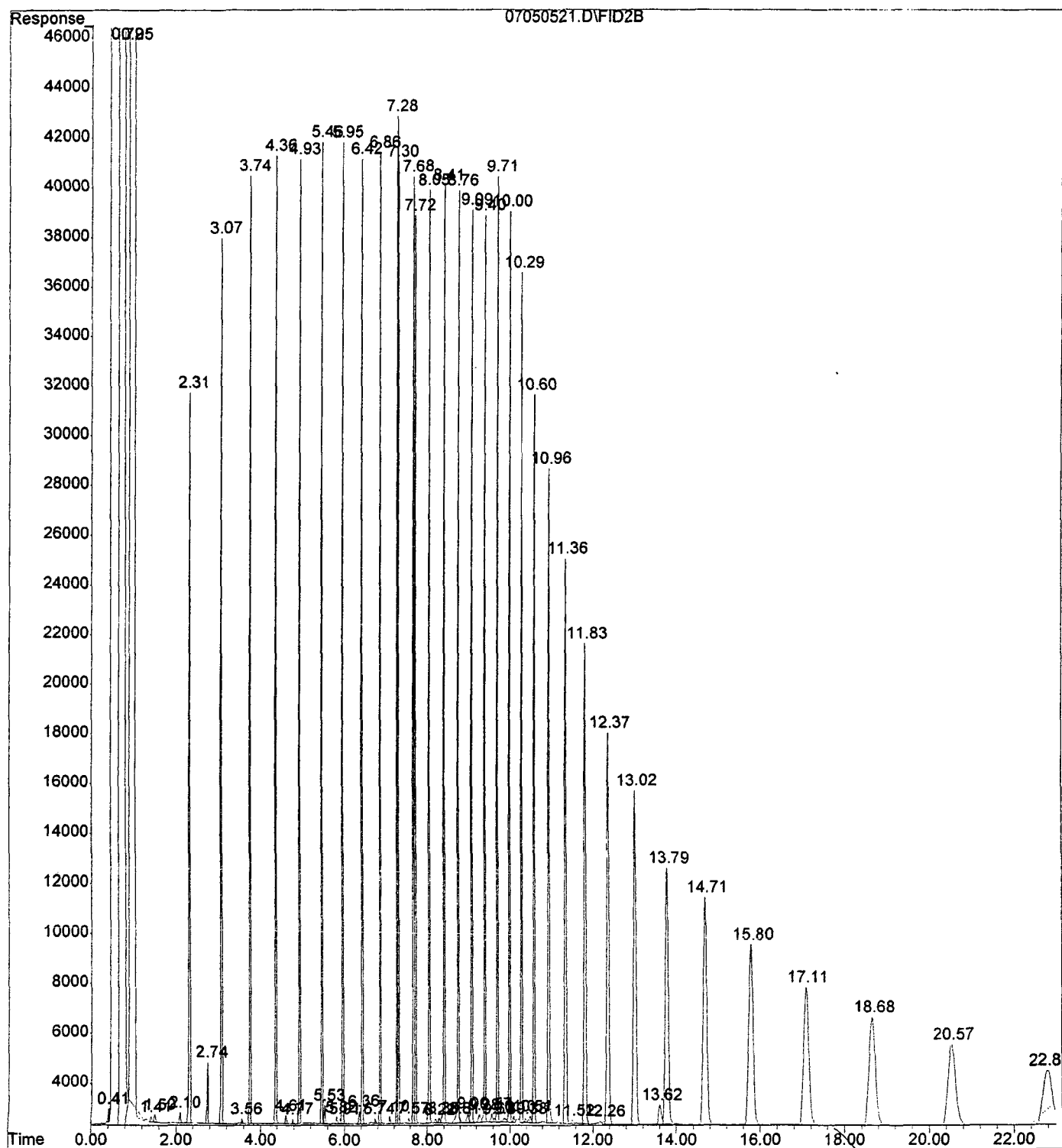


File : C:\HPCHEM\1\DATA\063005\06300512.D
Operator : BP
Acquired : 30 Jun 2005 14:26 using AcqMethod BG051005.M
Instrument : GC-2
Sample Name: 506246-02 1X
Misc Info : 100uL BTEX/GRO SOIL
Vial Number: 10

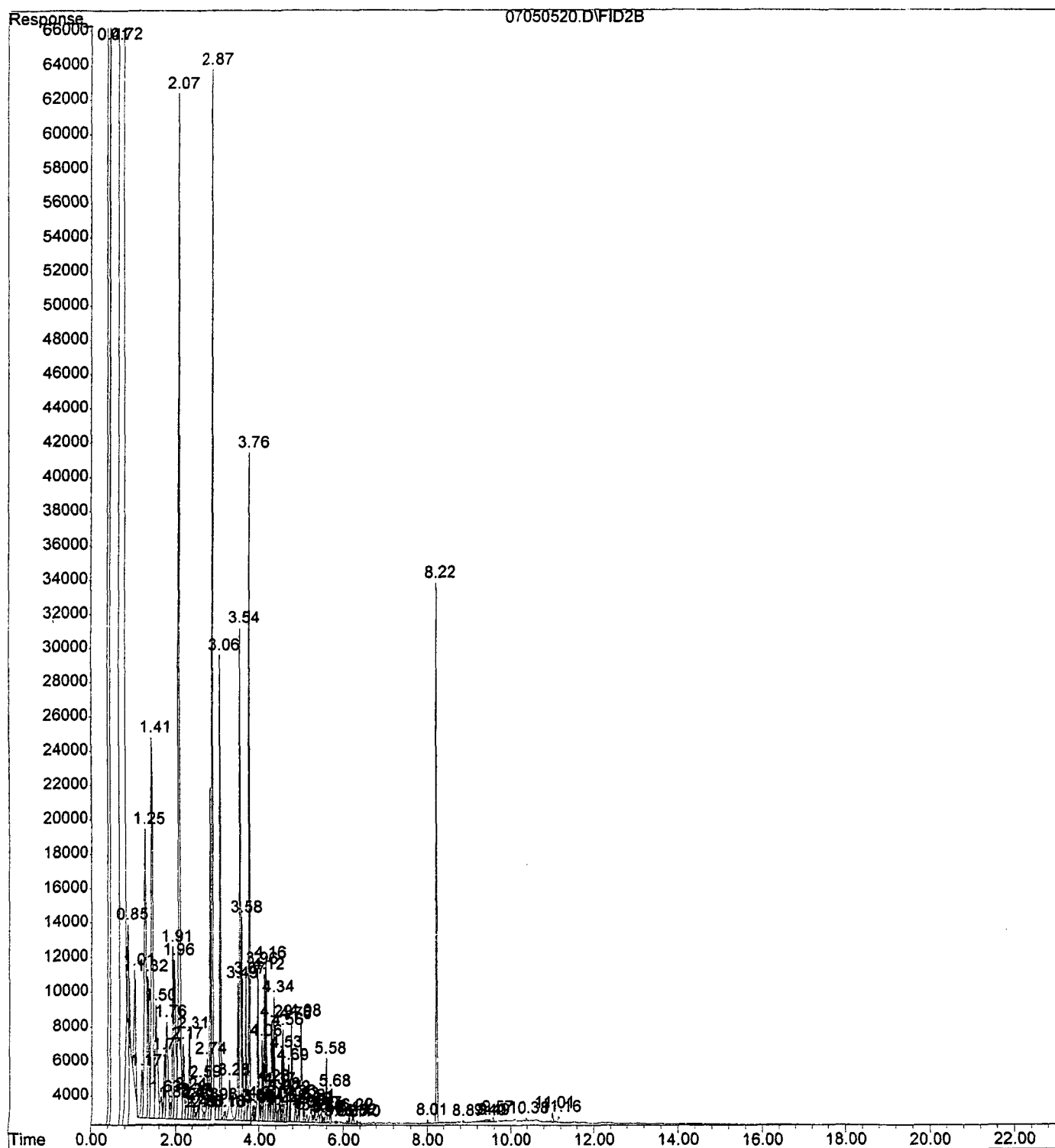
06300512.D\FID2A



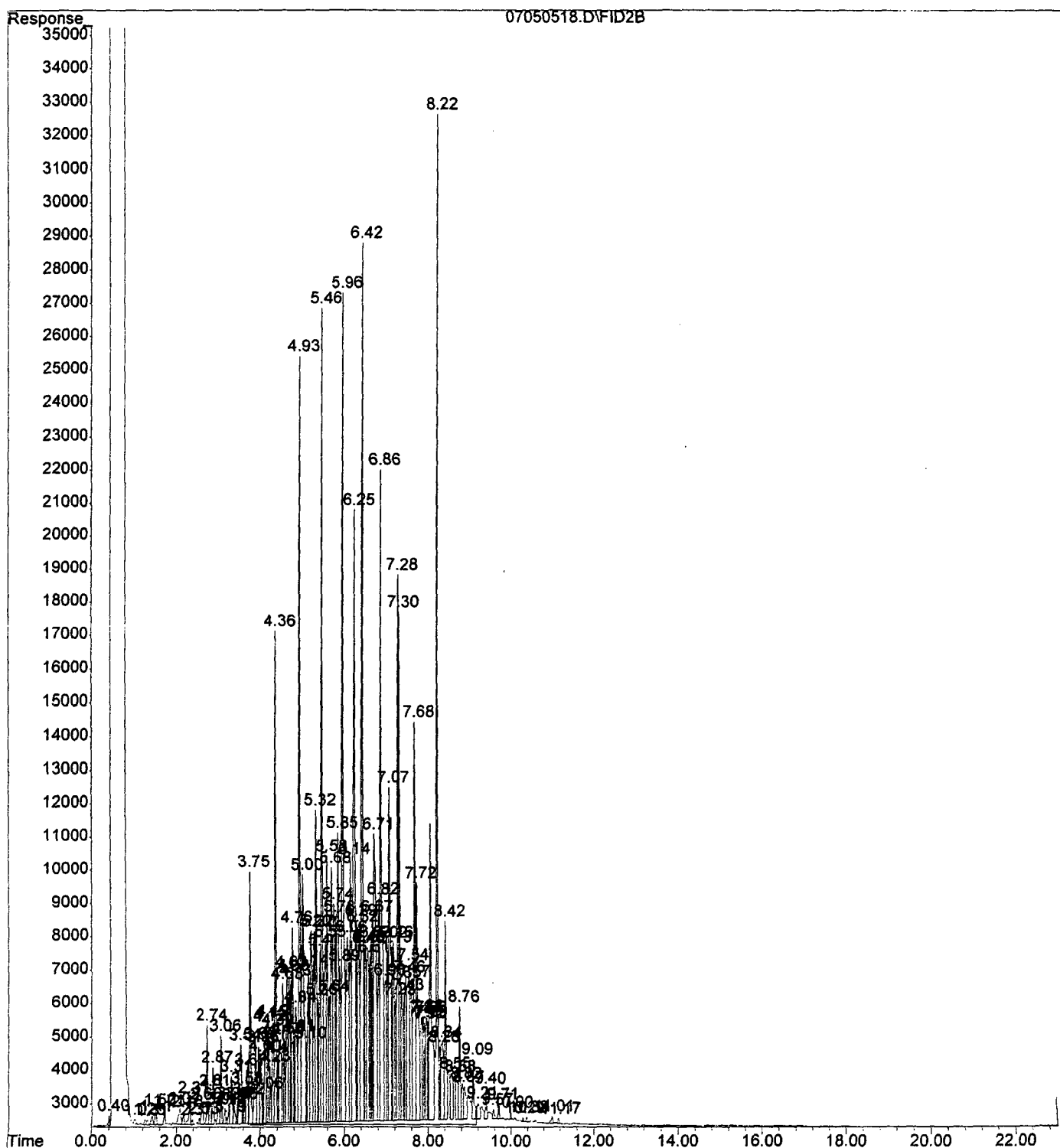
File : C:\HPCHEM\2\DATA\070505F\07050521.D
Operator : DSR
Acquired : 5 Jul 2005 21:03 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: RT
Misc Info : GC5-19-01
Vial Number: 1



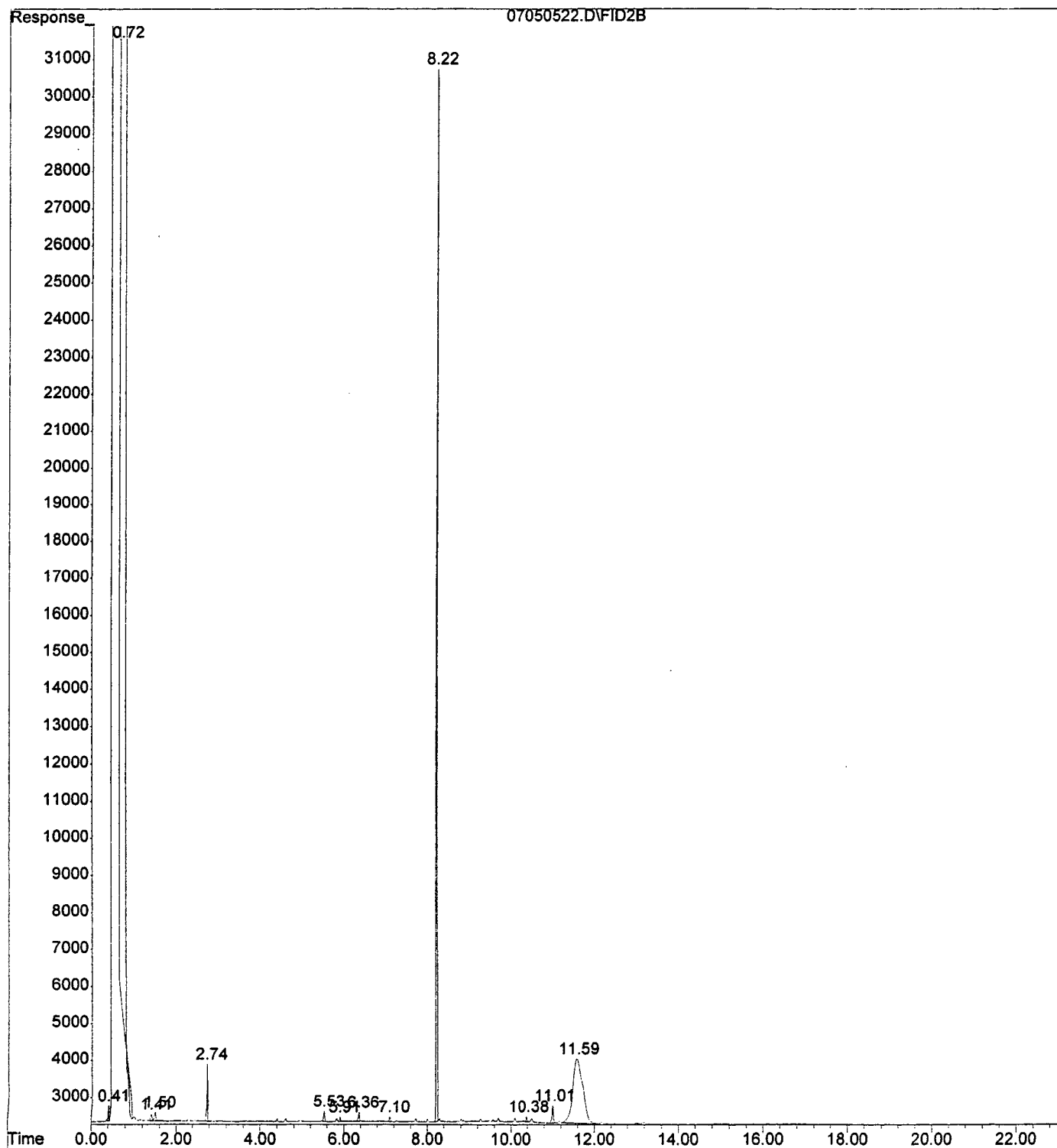
File : C:\HPCHEM\2\DATA\070505F\07050520.D
Operator : DSR
Acquired : 5 Jul 2005 20:32 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: GRO CCV 200PPM
Misc Info : GC5-22-01
Vial Number: 17



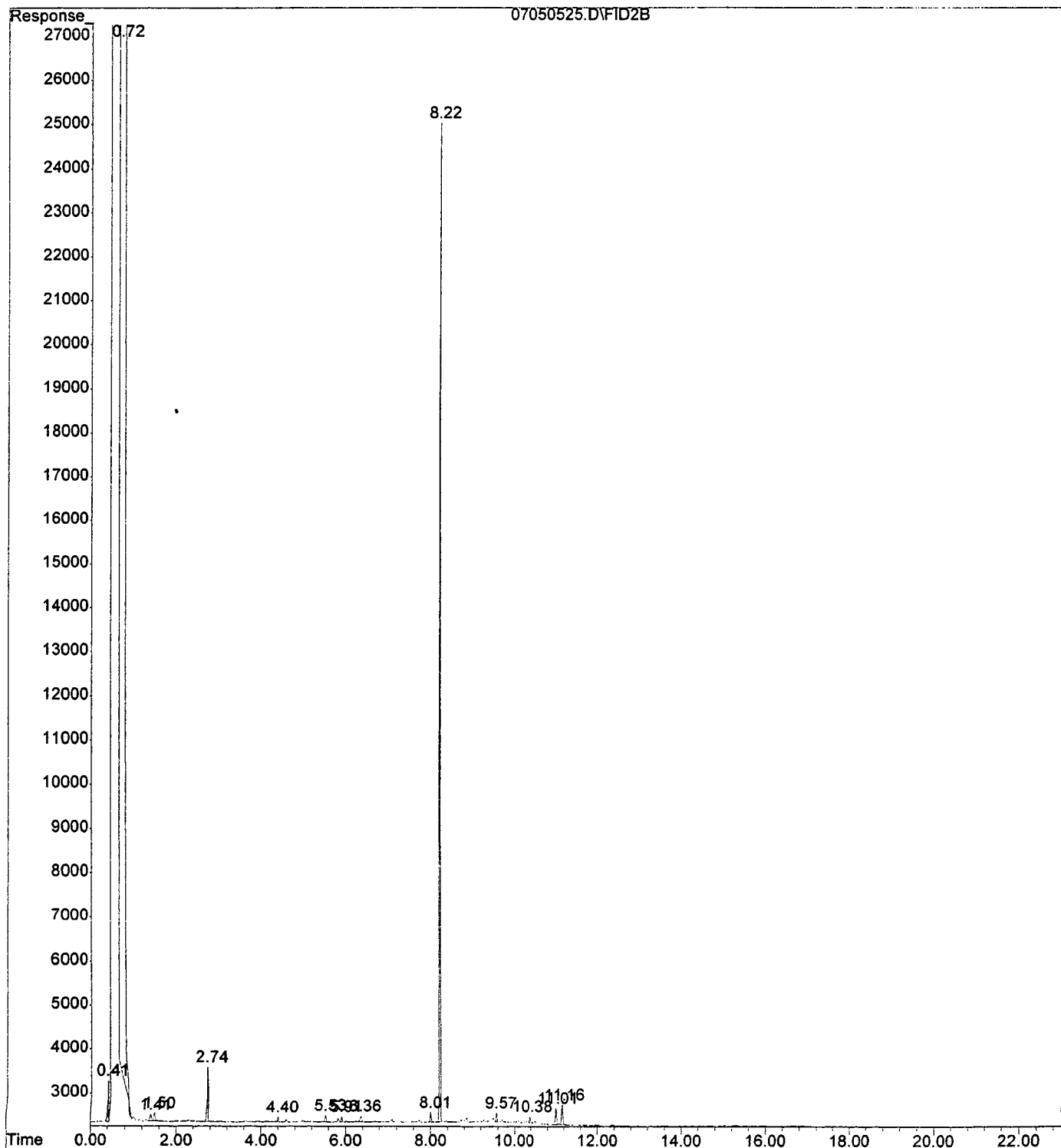
File : C:\HPCHEM\2\DATA\070505F\07050518.D
Operator : DSR
Acquired : 5 Jul 2005 19:29 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: DRO CCV 200PPM
Misc Info : GC5-22-04
Vial Number: 15



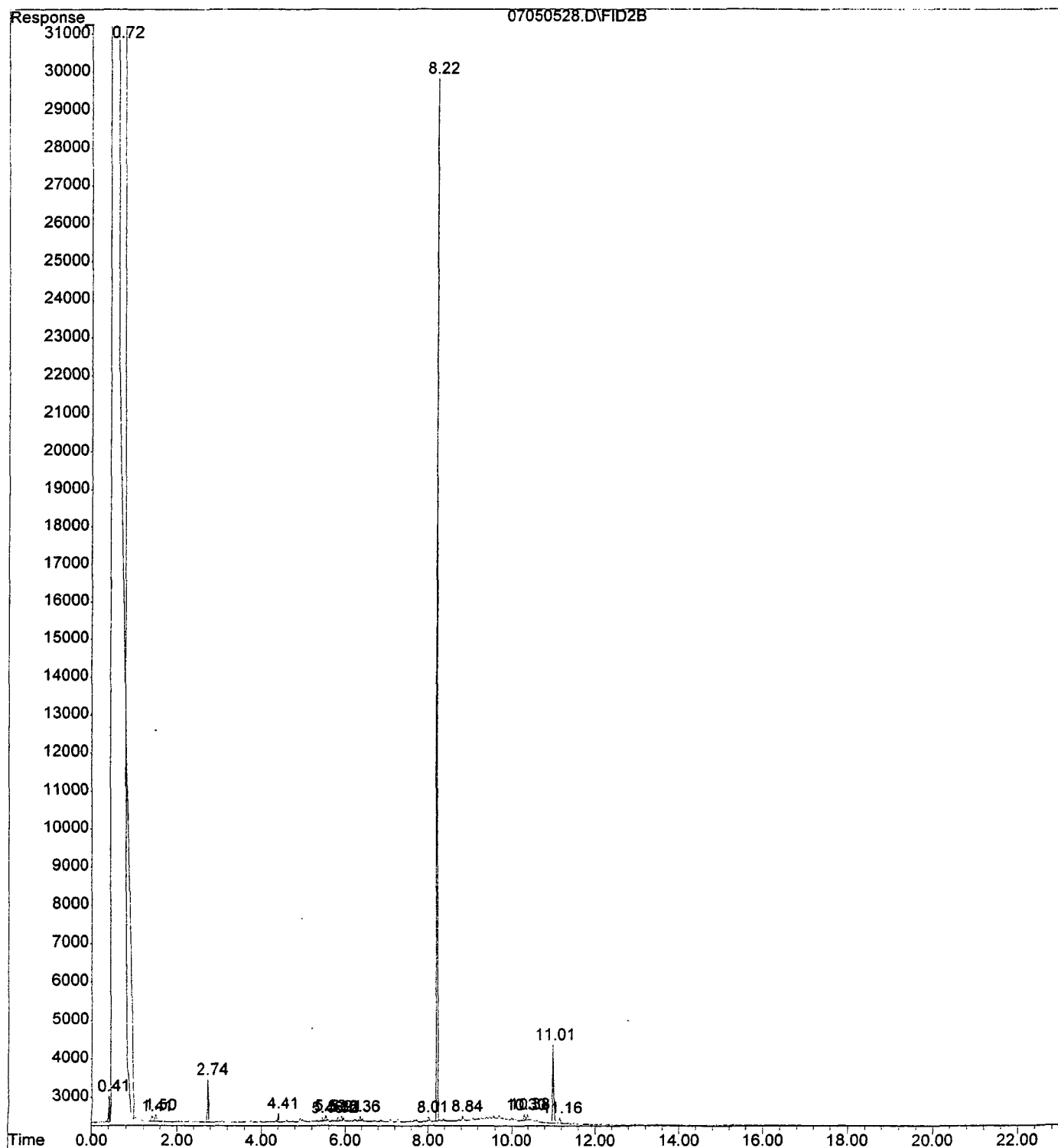
File : C:\HPCHEM\2\DATA\070505F\07050522.D
Operator : DSR
Acquired : 5 Jul 2005 21:35 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: SRB 070505
Misc Info : 10G/10ML 07/05
Vial Number: 18



File : C:\HPCHEM\2\DATA\070505F\07050525.D
Operator : DSR
Acquired : 5 Jul 2005 23:09 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: 506246-01
Misc Info : 10G/10ML 07/05
Vial Number: 21



File : C:\HPCHEM\2\DATA\070505F\07050528.D
Operator : DSR
Acquired : 6 Jul 2005 00:43 using AcqMethod TPH0705.M
Instrument : FID-1
Sample Name: 506246-02
Misc Info : 10G/10ML 07/05
Vial Number: 24





PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

June 3, 2005

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

**RE: Annual Sampling at Giant's Centralized Surface Waste Management Landfarm
Facility NM -02-0010**

Dear Mr. Martin,

On March 29, 2005, Lodestar Services, Inc. collected annual samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for the following constituents:

Total Petroleum Hydrocarbons
Benzene, Toluene, Ethyl benzene, and Xylenes
Major Ions (Na, Ca, Mg, K, Cl-,SO₄, CO₃, and HCO₃)
RCRA Metals (As, Ba, Cd, Cr, Pb, Se, Ag, and Hg)

The attached analytical results are consistent with the original baseline data collected on March 27, 1998.

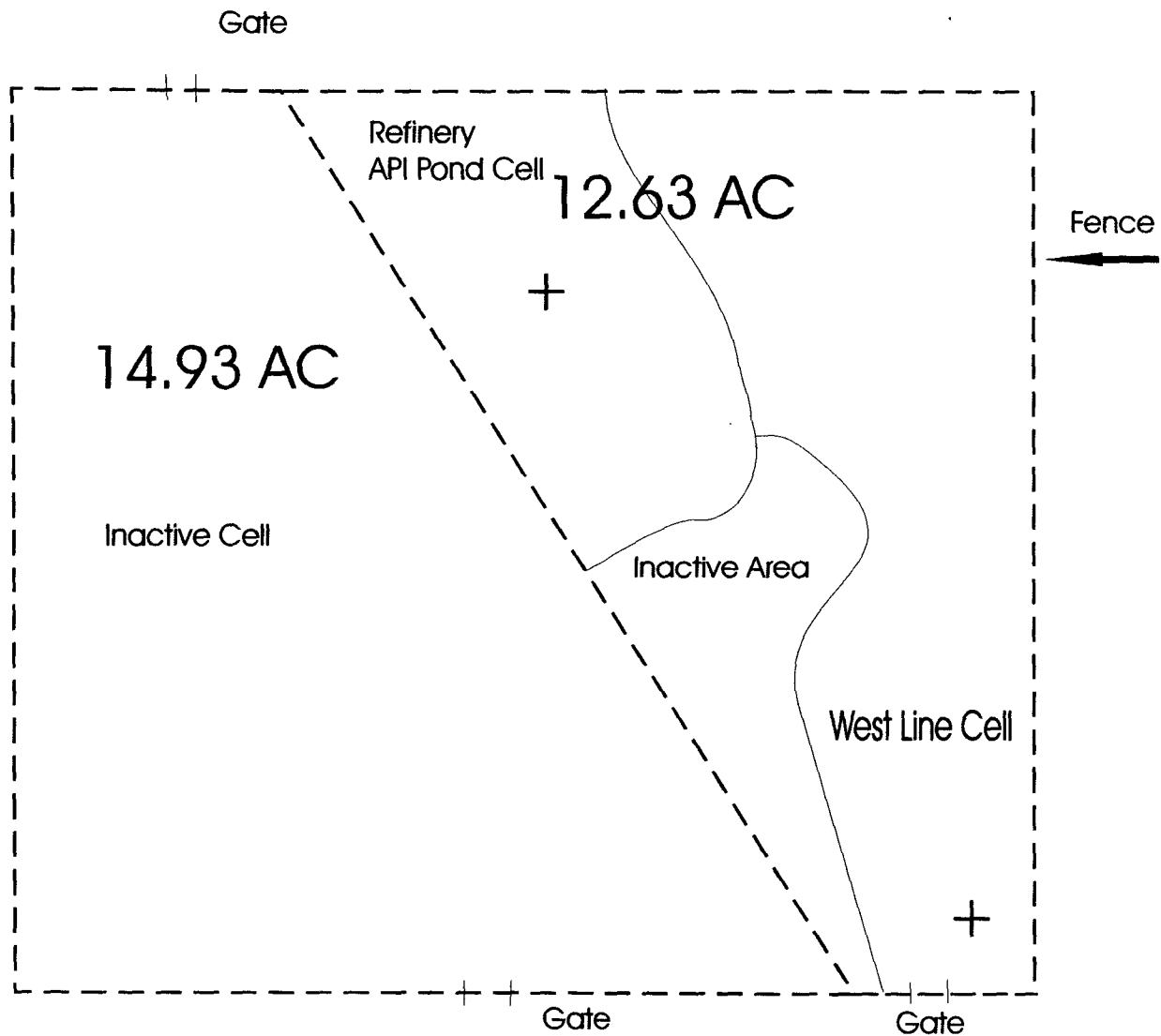
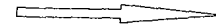
Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson of Giant at (505) 632-4077.

Sincerely,

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
File

NORTH



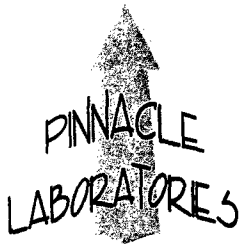
+ March 29, 2005
Annual Sampling
Sample Location
Scale: 1 inch equals 200 feet

 Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 5/12/04
Cell dimensions are based on
Philip Services Figure 1A dated
9/30/97



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **503228**
~~November 09, 2001~~
June 1, 2005

GIANT INDUSTRIES
111 COUNTY RD. 4990
BLOOMFIELD, NM 87413

LODESTAR SERVICES
26 CR 3500
FLORA VISTA, NM 87415

Project Name GIANT LANDFARM
Project Number 30002

Attention: MARTIN NEE/BILL ROBERTSON

On 03/29/2005 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.

Due to a lab log-in error, Mercury was not run within hold-time. The Mercury was run at no charge. We apologize for any inconvenience this may have caused.

EPA method 8015/8021 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

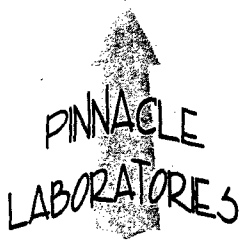
All remaining analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

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

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: GIANT INDUSTRIES	PINNACLE ID	: 503228
PROJECT #	: 30002	DATE RECEIVED	: 03/29/2005
PROJECT NAME	: GIANT LANDFARM	REPORT DATE	: 05/27/2005
PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
503228 - 01	API CELL	NON-AQ	03/29/2005
503228 - 02	WESTLINE CELL	NON-AQ	03/29/2005



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002
PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 503228
ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	03/29/2005	04/04/2005	04/06/2005	1
02	WESTLINE CELL	NON-AQ	03/29/2005	04/04/2005	04/06/2005	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WESTLINE CELL
BENZENE	0.025	MG/KG	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
TOTAL XYLENES	0.050	MG/KG	< 0.050	< 0.050

SURROGATE:

BROMOFLUOROBENZENE (%)

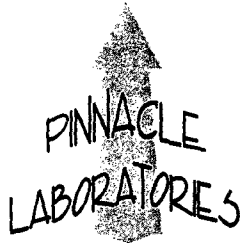
88

94

SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 503228
BLANK I. D.	: 040405	DATE EXTRACTED	: 04/04/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/06/2005
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050

SURROGATE:

BROMOFLUOROBENZENE (%)

97

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST : EPA 8021B
BATCH # : 040405
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002
PROJECT NAME : GIANT LANDFARM

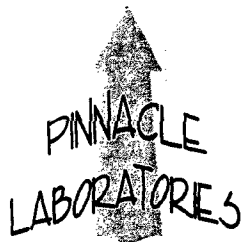
PINNACLE I.D. : 503228
DATE EXTRACTED : 04/04/2005
DATE ANALYZED : 04/06/2005
SAMPLE MATRIX : NON-AQ
UNITS : MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.06	106	1.08	108	2	(68 - 120)	20
TOLUENE	<0.025	1.00	1.04	104	1.07	107	3	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.03	103	1.06	106	3	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.10	103	3.18	106	3	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST : EPA 8021B
MSMSD # : 503228-02
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002
PROJECT NAME : GIANT LANDFARM

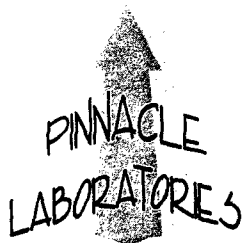
PINNACLE I.D. : 503228
DATE EXTRACTED : 04/04/2005
DATE ANALYZED : 04/06/2005
SAMPLE MATRIX : NON-AQ
UNITS : MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.979	98	1.01	101	3	(68 - 120)	20
TOLUENE	<0.025	1.00	0.975	98	1.01	101	4	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.959	96	0.994	99	4	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	2.88	96	2.98	99	3	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002
PROJECT NAME : GIANT LANDFARM

PINNACLE I.D. : 503228
ANALYST : DSR

SAMPLE		DATE		DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	03/29/2005	04/05/2005	04/05/2005	1
02	WESTLINE CELL	NON-AQ	03/29/2005	04/05/2005	04/05/2005	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WESTLINE CELL
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10

CALCULATED SUM:

SURROGATE:

O-TERPHENYL (%)

SURROGATE LIMITS

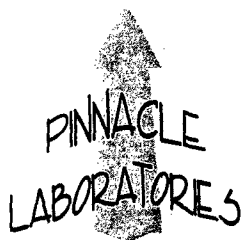
(70-130)

82

90

CHEMIST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 503228
BLANK I.D.	: 040505	DATE EXTRACTED	: 04/05/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/05/2005
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	ANALYST	: DSR

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:

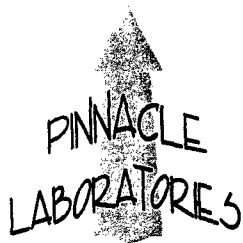
O-TERPHENYL (%)

88

SURROGATE LIMITS (70-130)

CHEMIST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

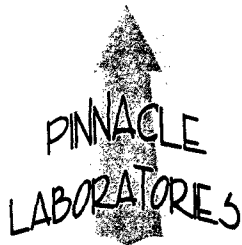
TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	:	503228
LCS/LCSD #	: 040505	DATE EXTRACTED	:	04/05/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	:	04/05/2005
PROJECT #	: 30002	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	184	92	203	102	10	(70-130)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 503228
MSMSD #	: 503228-01	DATE EXTRACTED	: 04/05/2005
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/05/2005
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: GIANT LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	189	95	188	94	1	(70-130)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

ANALYTICAL REPORT

Job Number: 400-1274.2

Job Description: 503228: LODE-Giant Landfarm

For:

Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Attention: Jacinta Tenorio



Marty Edwards
Project Manager I
medwards@stl-inc.com
05/22/2005

cc: Mitch Rubenstein

The test results in this report meet all NELAP requirements for accredited parameters. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced except in full with written approval from the laboratory.

CASE NARRATIVE

7471- Mercury:

Mercury for Job 400-1272.2 was digested 14 days outside of established holding time. Per our client's request, STL Pensacola has analyzed and reported the results for mercury.

Marty Edwards
Project Manager
STL Pensacola

METHOD SUMMARY

Client: Pinnacle Laboratories

Job Number: 400-1274.2

Description	Method	Preparation Method
Matrix: Solid		
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846 7471A	
Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/		SW846 7471A
Percent Moisture	EPA 160.3	

REFERENCES

EPA - US Environmental Protection Agency

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986
And Its Updates.

SAMPLE SUMMARY

Client: Pinnacle Laboratories

Job Number: 400-1274.2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
400-1274-1	AP1 CELL/503228-01	Solid	03/29/2005 0829	03/30/2005 0940
400-1274-2	WEST LINE CELL/503228-02	Solid	03/29/2005 0849	03/30/2005 0940

SAMPLE RESULTS

Analytical Data

Client: Pinnacle Laboratories

Job Number: 400-1274.2

Client Sample ID: AP1 CELL/503228-01

Lab Sample ID: 400-1274-1

Date Sampled: 03/29/2005 0829

Client Matrix: Solid % Moisture: 0.0

Date Received: 03/30/2005 0940

7471A Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Method: 7471A

Analysis Batch: 400-5721

Instrument ID: PE FLOW

Preparation: 7471A

Prep Batch: 400-5531

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: .6284 g

Date Analyzed: 05/12/2005 1242

Final Weight/Volume: 25 mL

Date Prepared: 05/10/2005 0923

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier
Hg		<0.0084	RL 0.0084

Analytical Data

Client: Pinnacle Laboratories

Job Number: 400-1274.2

Client Sample ID: WEST LINE CELL/503228-02

Lab Sample ID: 400-1274-2

Date Sampled: 03/29/2005 0849

Client Matrix: Solid % Moisture: 0.0

Date Received: 03/30/2005 0940

7471A Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Method: 7471A

Analysis Batch: 400-5721

Instrument ID: PE FLOW

Preparation: 7471A

Prep Batch: 400-5531

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: .6368 g

Date Analyzed: 05/12/2005 1249

Final Weight/Volume: 25 mL

Date Prepared: 05/10/2005 0923

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier
Hg		<0.0080	RL

Analytical Data

Client: Pinnacle Laboratories

Job Number: 400-1274.2

General Chemistry

Client Sample ID: AP1 CELL/503228-01

Lab Sample ID: 400-1274-1

Date Sampled: 03/29/2005 0829

Client Matrix: Solid

Date Received: 03/30/2005 0940

Analyte	Result	Qual	Units	RL	Dil	Method	Any Batch	Date Analyzed
Percent Solids	94		%	0.10	1.0	160.3	400-5250	05/05/2005 0000

Client Sample ID: WEST LINE CELL/503228-02

Lab Sample ID: 400-1274-2

Date Sampled: 03/29/2005 0849

Client Matrix: Solid

Date Received: 03/30/2005 0940

Analyte	Result	Qual	Units	RL	Dil	Method	Any Batch	Date Analyzed
Percent Solids	98		%	0.10	1.0	160.3	400-5250	05/04/2005 0000

QUALITY CONTROL RESULTS

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.2

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
Metals				
Prep Batch: 400-5531				
LCS 400-5531/22-A	Lab Control Spike	Solid	7471A	
MB 400-5531/23-A	Method Blank	Solid	7471A	
400-1274-A-1-D MS	Matrix Spike	Solid	7471A	
400-1274-A-1-D MSD	Matrix Spike Duplicate	Solid	7471A	
400-1274-A-1-F	AP1 CELL/503228-01	Solid	7471A	
400-1274-A-2-F	WEST LINE CELL/503228-02	Solid	7471A	
Analysis Batch: 400-5721				
LCS 400-5531/22-A	Lab Control Spike	Solid	7471A	400-5531
MB 400-5531/23-A	Method Blank	Solid	7471A	400-5531
400-1274-A-1-D MS	Matrix Spike	Solid	7471A	400-5531
400-1274-A-1-D MSD	Matrix Spike Duplicate	Solid	7471A	400-5531
400-1274-A-1-F	AP1 CELL/503228-01	Solid	7471A	400-5531
400-1274-A-2-F	WEST LINE CELL/503228-02	Solid	7471A	400-5531
General Chemistry				
Analysis Batch: 400-5250				
400-1274-A-1	AP1 CELL/503228-01	Solid	160.3	
400-1274-A-2	WEST LINE CELL/503228-02	Solid	160.3	

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description
-------------	-----------	-------------

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

[illegible]

PROJECT INFORMATION			SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY:		1. RELINQUISHED BY:	
PROJECT #:	503228		Total Number of Containers		PENSACOLA - STL-FL		Signature:	Time:		2.
PROJ. NAME:	LODE		Chain of Custody Seals		ESL - OR		Munroe June 1700		UPS	
QC LEVEL:	STD IV		Received Intact?		ATEL - AZ		Printed Name:	Date:		
QC REQUIRED:	MS MSD BLANK		Received Good Cond/Cold		ATEL - MARION		Munroe June 3/29/65			
TAT:	STANDARD RUSH!!		LAB NUMBER:		ATEL - MELMORE		Pinnacle Laboratories, Inc.		Company	
COMMENTS: DUE DATE: 4/12 RUSH SURCHARGE: - CLIENT DISCOUNT: - SPECIAL CERTIFICATION REQUIRED: YES (NO)			FCL		1.		RECEIVED BY:		2.	
			EHL		Time:		Signature:		Time:	
			GEL		Date:		Signature:		Date:	
			WCAS		Date:		Signature:		Date:	
			WOHL		Date:		Signature:		Date:	
			Company		Company		Company		Company	

**STL PENSACOLA
Certifications, Memberships & Affiliations**

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL), expires 06/30/05

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater), expires 01/11/05

Arkansas Department of Pollution Control and Ecology, (88-0689) (Environmental), expires 07/01/05

California Department of Health Services, ELAP Laboratory ID No. 2510 (Hazardous Waste and Wastewater), expires 03/31/06

Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater), expires 09/30/05

Florida DOH, NELAP Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater), expires 06/30/05

Florida DEP/DOH CompQAP # 980156

Illinois Environmental Laboratory Accreditation Program (ELAP), NELAP Laboratory ID No. 200041 (Wastewater and Hazardous Waste), expires 10/09/04

Iowa Department of Natural Resources, Laboratory ID No. 367 (Wastewater, UST, Solid Waste, & Contaminated Sites), expires 08/01/06

Kansas Department of Health & Environment, NELAP Laboratory ID No. E10253 (Wastewater and Hazardous Waste), expires 10/31/04

Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water), expires 12/31/04

Kentucky Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST), expires 11/7/05

Louisiana DEQ, LELAP, NELAP Laboratory ID No. 02075, Agency Interest ID 30748. Environmental, expires 6/30/05

Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida), expires 09/30/05

Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater), expires 06/30/05

Michigan Bureau of E&OcCH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida), expires 06/30/05

New Hampshire DES ELAP, NELAP Laboratory ID No. 250502 (Drinking Water & Wastewater), expires 08/16/05

New Jersey DEP&E, NELAP Laboratory ID No. FL006 (Wastewater and Hazardous Waster), expires 06/30/05

North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater), expires 12/31/05

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Arizona), expires 06/30/04

Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater), expires 08/31/05

Pennsylvania Department of Environmental Resources, NELAP Laboratory ID No. 68-467 (Drinking Water & Wastewater), expires 12/01/04

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL), expires 06/30/05

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water), expires 10/15/07

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL), expires 06/30/05

West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater), expires 04/30/05

EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031

NFESC (Naval Facilities Engineering Services Center), expires September 7, 2004

USACE (United States Army Corps. of Engineers), MRD, expires July 16, 2005

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

certlist\condcert.lst revised 05/04/05

ANALYTICAL REPORT

Job Number: 400-1274.1

Job Description: 503228: LODE-Giant Landfarm

For:

Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Attention: Mitch Rubenstein



Marty Edwards
Project Manager I
medwards@stl-inc.com

05/03/2005

The test results in this report meet all NELAP requirements for accredited parameters. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced except in full with written approval from the laboratory.

METHOD SUMMARY

Client: Pinnacle Laboratories

Job Number: 400-1274.1

Description	Method	Preparation Method
Matrix: Solid		
Inductively Coupled Plasma - Atomic Emission Spectrometry Acid Digestion of Sediments, Sludges, and Soils	SW846 6010B	SW846 3050B
Percent Moisture	EPA 160.3	
Alkalinity, Titration Method Deionized Water Leaching Procedure (Routine)	SM18 2320B	ASTM NONE
Sulfate (Turbidimetric) Deionized Water Leaching Procedure (Routine)	SW846 9038	ASTM NONE
Chloride (Colormetric, Automated Ferricyanide AAll) Deionized Water Leaching Procedure (Routine)	SW846 9251	ASTM NONE

REFERENCES

EPA - US Environmental Protection Agency

SM18 - "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986
And Its Updates.

SAMPLE SUMMARY

Client: Pinnacle Laboratories

Job Number: 400-1274.1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
400-1274-1	AP1 CELL/503228-01	Solid	03/29/2005 0829	03/30/2005 0940
400-1274-2	WEST LINE CELL/503228-02	Solid	03/29/2005 0849	03/30/2005 0940

SAMPLE RESULTS

Analytical Data

Client: Pinnacle Laboratories

Job Number: 400-1274.1

Client Sample ID: AP1 CELL/503228-01

Lab Sample ID: 400-1274-1

Date Sampled: 03/29/2005 0829

Client Matrix: Solid % Moisture: 6.1

Date Received: 03/30/2005 0940

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 400-3758

Instrument ID: ICP-AES

Preparation: 3050B

Prep Batch: 400-3519

Lab File ID: APR08A

Dilution: 1.0

Initial Weight/Volume: 1.07 g

Date Analyzed: 04/09/2005 0448

Final Weight/Volume: 100 mL

Date Prepared: 04/05/2005 1738

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Silver		<0.50		0.50
Arsenic		1.8		0.50
Barium		90		1.0
Calcium		4300		50
Cadmium		<0.50		0.50
Chromium		2.6		0.50
Potassium		630		100
Magnesium		1000		50
Sodium		<100		100
Lead		3.4		0.50
Selenium		<1.0		1.0

Analytical Data

Client: Pinnacle Laboratories

Job Number: 400-1274.1

Client Sample ID: WEST LINE CELL/503228-02

Lab Sample ID: 400-1274-2

Date Sampled: 03/29/2005 0849

Client Matrix: Solid % Moisture: 2.0

Date Received: 03/30/2005 0940

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 400-3758

Instrument ID: ICP-AES

Preparation: 3050B

Prep Batch: 400-3519

Lab File ID: APR08A

Dilution: 1.0

Date Analyzed: 04/09/2005 0454

Initial Weight/Volume: 1.48 g

Date Prepared: 04/05/2005 1738

Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Silver		<0.34		0.34
Arsenic		1.8		0.34
Barium		200		0.69
Calcium		5100		34
Cadmium		<0.34		0.34
Chromium		2.5		0.34
Potassium		630		69
Magnesium		1100		34
Sodium		<69		69
Lead		3.3		0.34
Selenium		<0.69		0.69

Analytical Data

Client: Pinnacle Laboratories

Job Number: 400-1274.1

General Chemistry

Client Sample ID: AP1 CELL/503228-01

Lab Sample ID: 400-1274-1

Client Matrix: Solid

% Moisture: 6.1

Date Sampled: 03/29/2005 0829

Date Received: 03/30/2005 0940

Analyte	Result	Qual	Units	RL	Dil	Method	Anly Batch	Date Analyzed
Sulfate	<110		mg/Kg	110	1.0	9038	400-3432	04/04/2005 1602
	DryWt Corrected: Y			Prep Batch: 400-3428		Date Prepared: 04/04/2005 1000		
Chloride	120		mg/Kg	43	1.0	9251	400-3439	04/04/2005 1529
	DryWt Corrected: Y			Prep Batch: 400-3437		Date Prepared: 04/04/2005 1000		
Bicarbonate Alkalinity as CaCO ₃	580		mg/Kg	21	1.0	2320B	400-5117	04/29/2005 1300
	DryWt Corrected: Y			Prep Batch: 400-4984		Date Prepared: 04/29/2005 1200		
Carbonate Alkalinity as CaCO ₃	23		mg/Kg	21	1.0	2320B	400-5117	04/29/2005 1300
	DryWt Corrected: Y			Prep Batch: 400-4984		Date Prepared: 04/29/2005 1200		
Alkalinity, Total	600		mg/Kg	21	1.0	2320B	400-5117	04/29/2005 1300
	DryWt Corrected: Y			Prep Batch: 400-4984		Date Prepared: 04/29/2005 1200		

Analyte	Result	Qual	Units	RL	RL	Dil	Method	Anly Batch	Date Analyzed
Percent Solids	94		%	0.10	0.10	1.0	160.3	400-3184	03/30/2005 0000

Client Sample ID: WEST LINE CELL/503228-02

Lab Sample ID: 400-1274-2

Client Matrix: Solid

% Moisture: 2.0

Date Sampled: 03/29/2005 0849

Date Received: 03/30/2005 0940

Analyte	Result	Qual	Units	RL	Dil	Method	Anly Batch	Date Analyzed
Sulfate	<100		mg/Kg	100	1.0	9038	400-3432	04/04/2005 1602
	DryWt Corrected: Y			Prep Batch: 400-3428		Date Prepared: 04/04/2005 1000		
Chloride	<41		mg/Kg	41	1.0	9251	400-3439	04/04/2005 1529
	DryWt Corrected: Y			Prep Batch: 400-3437		Date Prepared: 04/04/2005 1000		
Bicarbonate Alkalinity as CaCO ₃	600		mg/Kg	20	1.0	2320B	400-5117	04/29/2005 1300
	DryWt Corrected: Y			Prep Batch: 400-4984		Date Prepared: 04/29/2005 1200		
Carbonate Alkalinity as CaCO ₃	<20		mg/Kg	20	1.0	2320B	400-5117	04/29/2005 1300
	DryWt Corrected: Y			Prep Batch: 400-4984		Date Prepared: 04/29/2005 1200		
Alkalinity, Total	620		mg/Kg	20	1.0	2320B	400-5117	04/29/2005 1300
	DryWt Corrected: Y			Prep Batch: 400-4984		Date Prepared: 04/29/2005 1200		

Analyte	Result	Qual	Units	RL	RL	Dil	Method	Anly Batch	Date Analyzed
Percent Solids	98		%	0.10	0.10	1.0	160.3	400-3184	03/30/2005 0000

QUALITY CONTROL RESULTS

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
Metals				
Prep Batch: 400-3519				
LCS 400-3519/24-A	Lab Control Spike	Solid	3050B	
MB 400-3519/23-A	Method Blank	Solid	3050B	
400-1274-A-1-D	AP1 CELL/503228-01	Solid	3050B	
400-1274-A-2-D	WEST LINE CELL/503228-02	Solid	3050B	
400-1321-A-5-A MS	Matrix Spike	Solid	3050B	
400-1321-A-5-A MSD	Matrix Spike Duplicate	Solid	3050B	
Analysis Batch:400-3758				
LCS 400-3519/24-A	Lab Control Spike	Solid	6010B	400-3519
MB 400-3519/23-A	Method Blank	Solid	6010B	400-3519
400-1274-A-1-D	AP1 CELL/503228-01	Solid	6010B	400-3519
400-1274-A-2-D	WEST LINE CELL/503228-02	Solid	6010B	400-3519
400-1321-A-5-A MS	Matrix Spike	Solid	6010B	400-3519
400-1321-A-5-A MSD	Matrix Spike Duplicate	Solid	6010B	400-3519

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
General Chemistry				
Analysis Batch:400-3184				
400-1274-A-1	AP1 CELL/503228-01	Solid	160.3	
400-1274-A-2	WEST LINE CELL/503228-02	Solid	160.3	
Prep Batch: 400-3428				
LCS 400-3428/2-A	Lab Control Spike	Solid	NONE	
MB 400-3428/1-A	Method Blank	Solid	NONE	
400-1274-A-1-A	AP1 CELL/503228-01	Solid	NONE	
400-1274-A-1-A MS	Matrix Spike	Solid	NONE	
400-1274-A-1-A MSD	Matrix Spike Duplicate	Solid	NONE	
400-1274-A-2-A	WEST LINE CELL/503228-02	Solid	NONE	
Prep Batch: 400-3437				
LCS 400-3437/2-A	Lab Control Spike	Solid	NONE	
MB 400-3437/1-A	Method Blank	Solid	NONE	
400-1274-A-1-B	AP1 CELL/503228-01	Solid	NONE	
400-1274-A-1-B MS	Matrix Spike	Solid	NONE	
400-1274-A-1-B MSD	Matrix Spike Duplicate	Solid	NONE	
400-1274-A-2-B	WEST LINE CELL/503228-02	Solid	NONE	
Prep Batch: 400-4984				
LCS 400-4984/2-A	Lab Control Spike	Solid	NONE	
MB 400-4984/1-A	Method Blank	Solid	NONE	
400-1274-A-1-C MS	Matrix Spike	Solid	NONE	
400-1274-A-1-C MSD	Matrix Spike Duplicate	Solid	NONE	
400-1274-A-1-E	AP1 CELL/503228-01	Solid	NONE	
400-1274-A-2-E	WEST LINE CELL/503228-02	Solid	NONE	
Analysis Batch:400-3432				
LCS 400-3428/2-A	Lab Control Spike	Solid	9038	400-3428
MB 400-3428/1-A	Method Blank	Solid	9038	400-3428
400-1274-A-1-A	AP1 CELL/503228-01	Solid	9038	400-3428
400-1274-A-1-A MS	Matrix Spike	Solid	9038	400-3428
400-1274-A-1-A MSD	Matrix Spike Duplicate	Solid	9038	400-3428
400-1274-A-2-A	WEST LINE CELL/503228-02	Solid	9038	400-3428
Analysis Batch:400-3439				
LCS 400-3437/2-A	Lab Control Spike	Solid	9251	400-3437
MB 400-3437/1-A	Method Blank	Solid	9251	400-3437
400-1274-A-1-B	AP1 CELL/503228-01	Solid	9251	400-3437
400-1274-A-1-B MS	Matrix Spike	Solid	9251	400-3437
400-1274-A-1-B MSD	Matrix Spike Duplicate	Solid	9251	400-3437
400-1274-A-2-B	WEST LINE CELL/503228-02	Solid	9251	400-3437

STL Pensacola

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
General Chemistry				
Analysis Batch:400-5117				
LCS 400-4984/2-A	Lab Control Spike	Solid	2320B	400-4984
MB 400-4984/1-A	Method Blank	Solid	2320B	400-4984
400-1274-A-1-C MS	Matrix Spike	Solid	2320B	400-4984
400-1274-A-1-C MSD	Matrix Spike Duplicate	Solid	2320B	400-4984
400-1274-A-1-E	AP1 CELL/503228-01	Solid	2320B	400-4984
400-1274-A-2-E	WEST LINE CELL/503228-02	Solid	2320B	400-4984

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry
Method Blank - Batch: 400-3519

Lab ID: MB 400-3519/23-A

Date Analyzed: 04/09/2005 0230

Dilution: 1.0

Matrix: Solid

Units: mg/Kg

Analyte	Result	Qualifier	RL
Silver	<0.50		0.50
Arsenic	<0.50		0.50
Barium	<1.0		1.0
Calcium	<50		50
Cadmium	<0.50		0.50
Chromium	<0.50		0.50
Potassium	<100		100
Magnesium	<50		50
Sodium	<100		100
Lead	<0.50		0.50
Selenium	<1.0		1.0

Laboratory Control Sample - Batch: 400-3519

Lab ID: LCS 400-3519/24-A

Date Analyzed: 04/09/2005 0236

Dilution: 1.0

Matrix: Solid

Units: mg/Kg

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Silver	125	130	105	53 - 147	
Arsenic	155	140	92	80 - 120	
Barium	242	240	99	82 - 118	
Calcium	3190	3200	101	79 - 121	
Cadmium	123	120	95	81 - 119	
Chromium	66.8	62	94	79 - 121	
Potassium	1850	1700	90	71 - 129	
Magnesium	1960	1900	96	77 - 123	
Sodium	428	400	93	56 - 144	
Lead	137	130	97	80 - 120	
Selenium	61.7	51	83	76 - 124	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry
Matrix Spike/Spike Duplicate - Batch: 400-3519

MS Lab ID: 400-1321-A-5-A MS

Date Analyzed: 04/09/2005 0307

Dilution: 1.0

MSD Lab ID: 400-1321-A-5-A MSD

Date Analyzed: 04/09/2005 0313

Dilution: 1.0

Matrix: Solid

Analyte	% Recovery		Recovery Limits	RPD	RPD Limit	Qualifier
	MS	MSD				
Silver	99	98	75 - 125	0	20	
Arsenic	96	94	75 - 125	1	20	
Barium	94	99	75 - 125	4	20	
Calcium	98	94	75 - 125	4	20	
Cadmium	99	97	75 - 125	1	20	
Chromium	105	103	75 - 125	2	20	
Potassium	94	95	75 - 125	1	20	
Magnesium	103	96	75 - 125	7	20	
Sodium	97	97	75 - 125	1	20	
Lead	102	102	75 - 125	0	20	
Selenium	86	84	75 - 125	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

2320B Alkalinity, Titration Method**Method Blank - Batch: 400-4984**Lab ID: MB 400-4984/1-A
Matrix: SolidDate Analyzed: 04/29/2005 1300
Units: mg/Kg

Dilution: 1.0

Analyte	Result	Qualifier	RL
Alkalinity, Total	<20		20
Bicarbonate Alkalinity as CaCO ₃	NA		20
Carbonate Alkalinity as CaCO ₃	NA		20

Laboratory Control Sample - Batch: 400-4984Lab ID: LCS 400-4984/2-A
Matrix: SolidDate Analyzed: 04/29/2005 1300
Units: mg/Kg

Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Alkalinity, Total	250	250	102	90 - 110	

Matrix Spike/Spike Duplicate - Batch: 400-4984MS Lab ID: 400-1274-A-1-C MS
MSD Lab ID: 400-1274-A-1-C MSD
Matrix: SolidDate Analyzed: 04/29/2005 1300
Date Analyzed: 04/29/2005 1300Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery		Recovery Limits	RPD	RPD Limit	Qualifier
	MS	MSD				
Alkalinity, Total	126	107	75 - 125	8	20	N

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

9038 Sulfate (Turbidimetric)
Method Blank - Batch: 400-3428

Lab ID: MB 400-3428/1-A
Matrix: Solid

Date Analyzed: 04/04/2005 1602
Units: mg/Kg

Dilution: 1.0

Analyte	Result	Qualifier	RL
Sulfate	<100		100

Laboratory Control Sample - Batch: 400-3428

Lab ID: LCS 400-3428/2-A
Matrix: Solid

Date Analyzed: 04/04/2005 1602
Units: mg/Kg

Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Sulfate	20.0	20	100	90 - 110	

Matrix Spike/Spike Duplicate - Batch: 400-3428

MS Lab ID: 400-1274-A-1-A MS
MSD Lab ID: 400-1274-A-1-A MSD
Matrix: Solid

Date Analyzed: 04/04/2005 1602
Date Analyzed: 04/04/2005 1602

Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery		Recovery Limits	RPD	RPD Limit	Qualifier
	MS	MSD				
Sulfate	95	94	59 - 146	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Pinnacle Laboratories

Job Number: 400-1274.1

9251 Chloride (Colormetric, Automated Ferricyanide AAll)**Method Blank - Batch: 400-3437**Lab ID: MB 400-3437/1-A
Matrix: SolidDate Analyzed: 04/04/2005 1529
Units: mg/Kg

Dilution: 1.0

Analyte	Result	Qualifier	RL
Chloride	<40		40

Laboratory Control Sample - Batch: 400-3437Lab ID: LCS 400-3437/2-A
Matrix: SolidDate Analyzed: 04/04/2005 1529
Units: mg/Kg

Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Chloride	50.0	50	100	90 - 110	

Matrix Spike/Spike Duplicate - Batch: 400-3437MS Lab ID: 400-1274-A-1-B MS
MSD Lab ID: 400-1274-A-1-B MSD
Matrix: SolidDate Analyzed: 04/04/2005 1529
Date Analyzed: 04/04/2005 1529Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery		Recovery Limits	RPD	RPD Limit	Qualifier
	MS	MSD				
Chloride	95	94	75 - 125	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

DATA REPORTING QUALIFIERS

Client: Pinnacle Laboratories

Job Number: 400-1274.1

Lab Section	Qualifier	Description
General Chemistry	N	MS, MSD: Spike recovery exceeds upper or lower control limits.

Network Project Manager: Jacinta Tenorio

Jacinta Tenorio

Pinnacle Laboratories, Inc.

2709-D Pan American Freeway, NE

Albuquerque, NM 87107

(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

[illegible]

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY:		1. RELINQUISHED BY:	
PROJECT #:	503228	Total Number of Containers		PENSACOLA - STL-FL		Signature:		Signature: UPS	
PROJ. NAME:	LOPE	Chain of Custody Seals		ESL - OR				Time: June 1700	
QC LEVEL:	STD IV	Received Intact?		ATEL - AZ		Printed Name:		Date:	
QC REQUIRED:	MS MSD BLANK	Received Good Cond/Cold		ATEL - MARION				Date:	
TAT:	STANDARD RUSH!	LAB NUMBER:		ATEL - MELMORE				Date:	
				FCL		1. RECEIVED BY:		2.	
DUE DATE:		COMMENTS:		EHL		Signature:		Signature: UPS	
RUSH SURCHARGE:				GEL				Time: June 094	
CLIENT DISCOUNT:				WCAS		Printed Name:		Date: June 33	
SPECIAL CERTIFICATION				WOHL				Date:	
REQUIRED: YES (NO)						Printed Name:		Date:	
								Date:	
						Company:		Company:	

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL), expires 06/30/05

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater), expires 01/11/05

Arkansas Department of Pollution Control and Ecology, (88-0689) (Environmental), expires 07/01/05

California Department of Health Services, ELAP Laboratory ID No. 2510 (Hazardous Waste and Wastewater), expires 03/31/06

Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater), expires 09/30/05

Florida DOH, NELAP Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater), expires 06/30/05

Florida DEP/DOH CompQAP # 980156

Illinois Environmental Laboratory Accreditation Program (ELAP), NELAP Laboratory ID No. 200041 (Wastewater and Hazardous Waste), expires 10/09/04

Iowa Department of Natural Resources, Laboratory ID No. 367 (Wastewater, UST, Solid Waste, & Contaminated Sites), expires 08/01/04

Kansas Department of Health & Environment, NELAP Laboratory ID No. E10253 (Wastewater and Hazardous Waste), expires 10/31/04

Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water), expires 12/31/04

Kentucky Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST), expires 11/7/05.

Louisiana DEQ, LELAP, NELAP Laboratory ID No. 02075, Agency Interest ID 30748. Environmental, expires 6/30/05

Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida), expires 12/31/04

Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater), expires 06/30/05

Michigan Bureau of E&OcCH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida), expires 06/30/05

New Hampshire DES ELAP, NELAP Laboratory ID No. 250502 (Drinking Water & Wastewater), expires 08/16/05

New Jersey DEP&E, NELAP Laboratory ID No. FL006 (Wastewater and Hazardous Waster), expires 06/30/05.

North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater), expires 12/31/04.

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Arizona), expires 06/30/04

Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater), expires 08/31/05

Pennsylvania Department of Environmental Resources, NELAP Laboratory ID No. 68-467 (Drinking Water & Wastewater), expires 12/01/04

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL), expires 06/30/05

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water), expires 08/03/04

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL), expires 06/30/05

West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater), expires 04/30/05.

EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031

NFESC (Naval Facilities Engineering Services Center), expires September 7, 2004.

USACE (United States Army Corps. of Engineers), MRD, expires July 16, 2005.

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

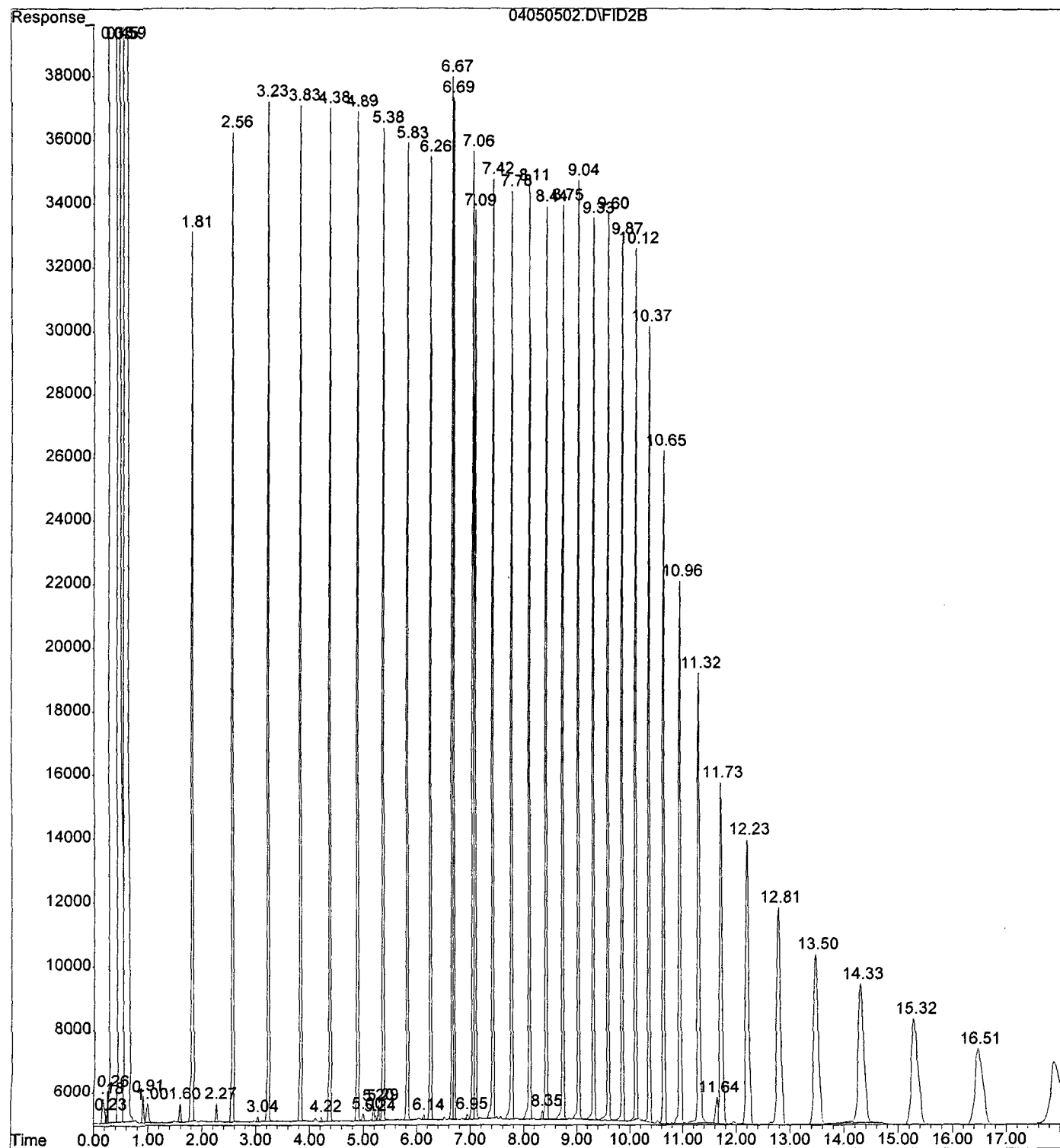
certlist\condcert.lst revised 9/29/04

SHADED AREAS ARE FOR LAB USE ONLY.

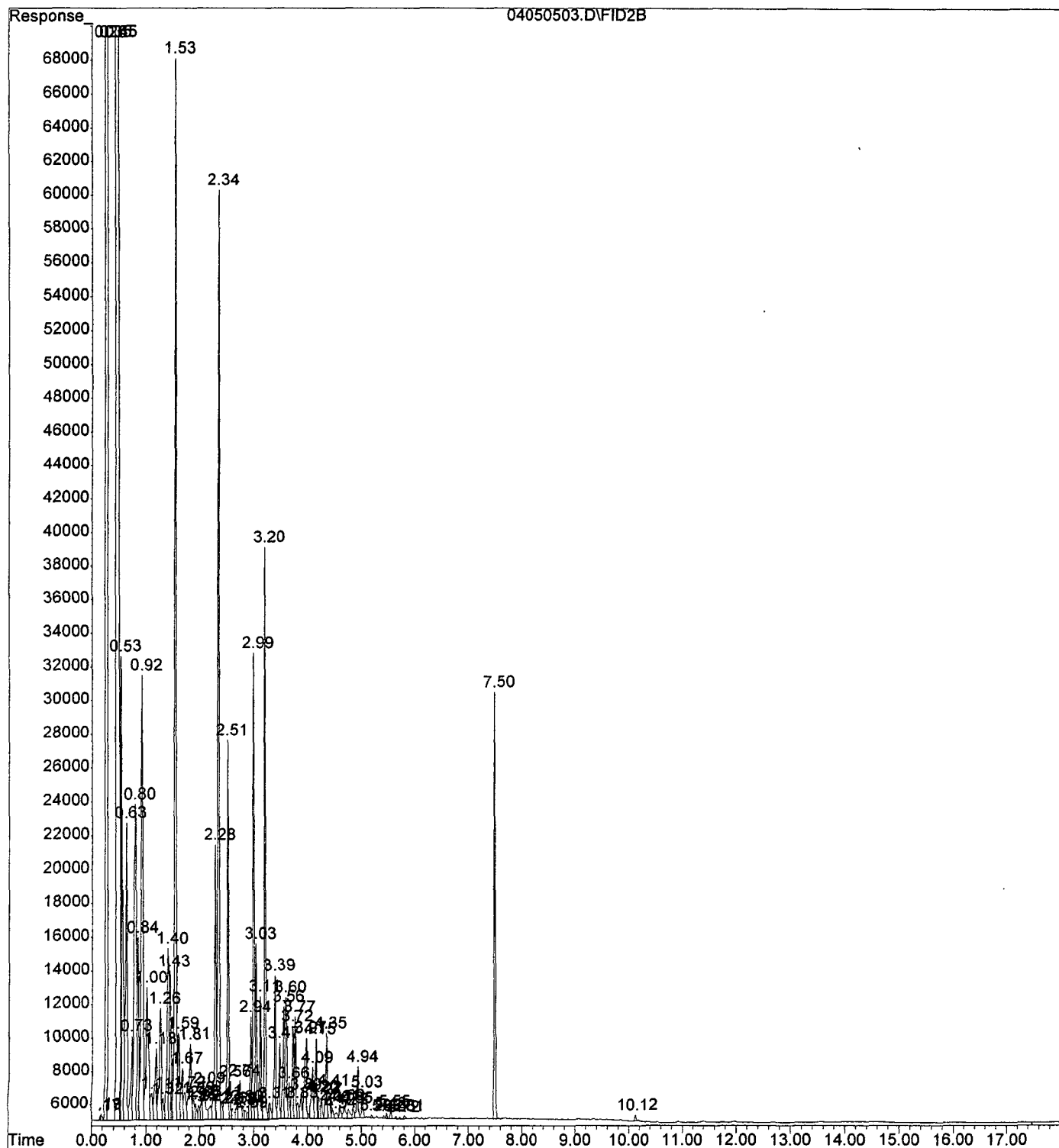
PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]

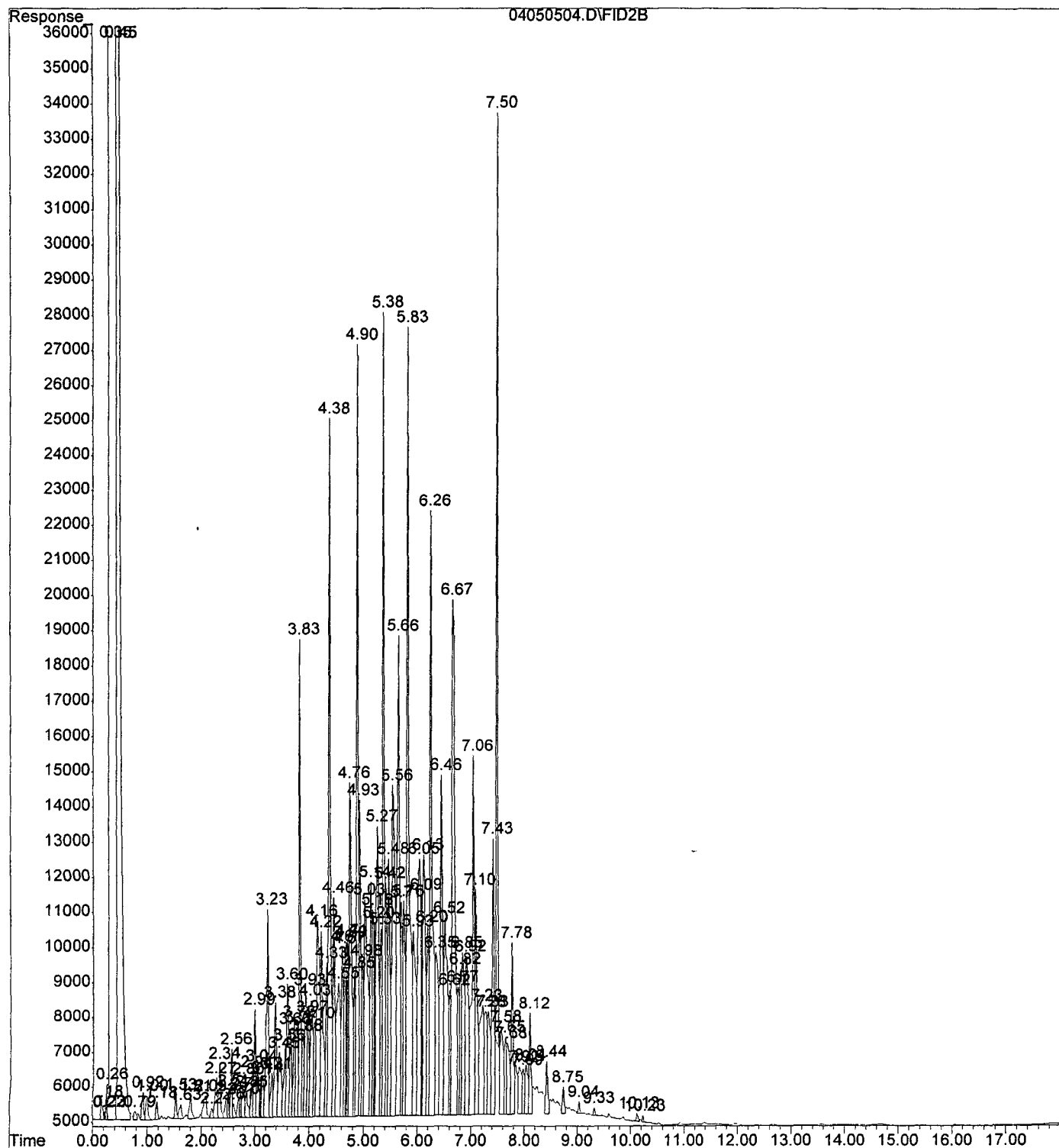
File : C:\HPCHEM\2\DATA\040505F\04050502.D
Operator : DSR
Acquired : 5 Apr 2005 13:17 using AcqMethod TPH0131.M
Instrument : FID-1
Sample Name: RT
Misc Info : GC5-14-17
Vial Number: 2



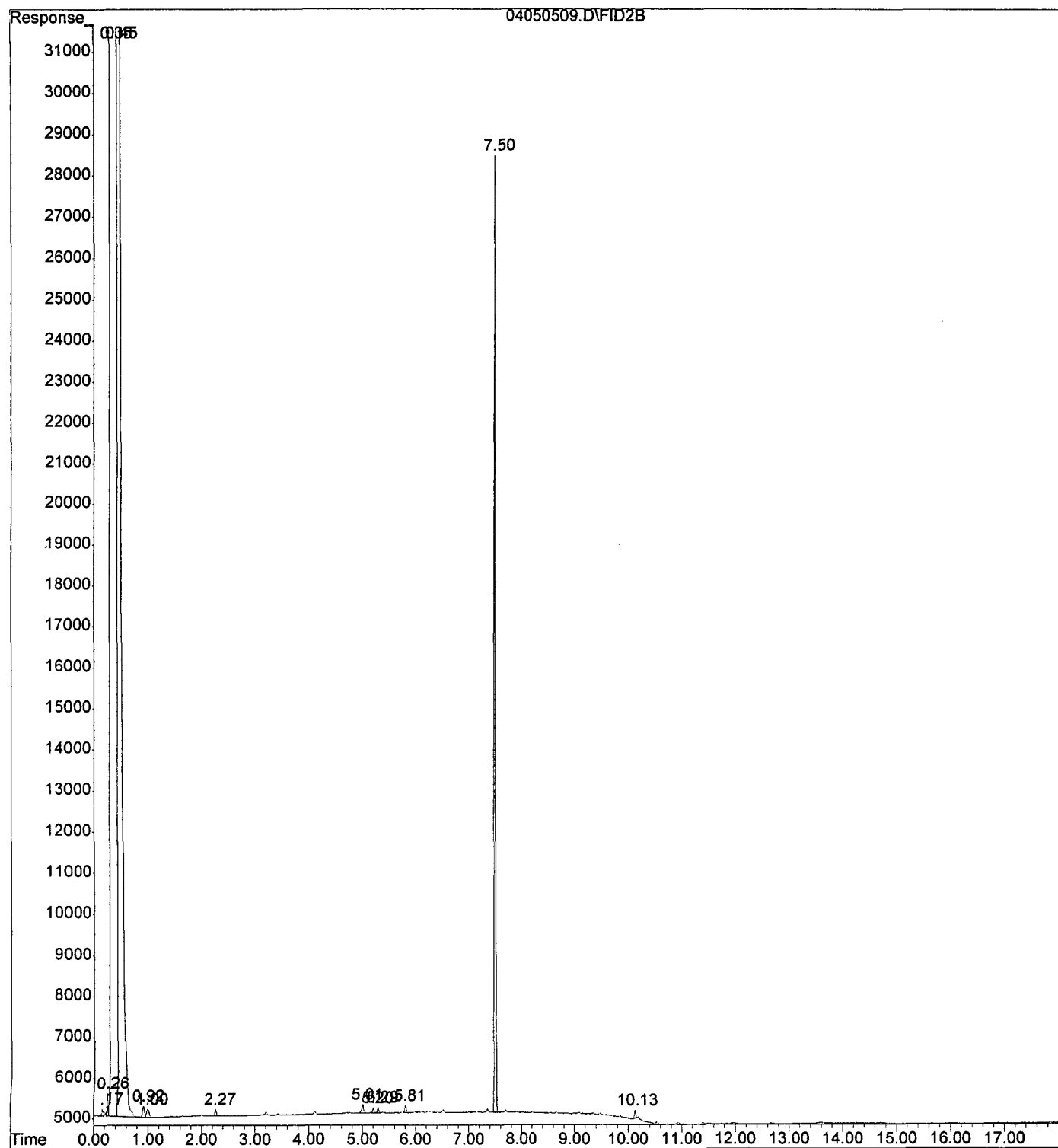
File : C:\HPCHEM\2\DATA\040505F\04050503.D
Operator : DSR
Acquired : 5 Apr 2005 13:45 using AcqMethod TPH0131.M
Instrument : FID-1
Sample Name: GRO CCV 200PPM
Misc Info : GC5-17-13
Vial Number: 3



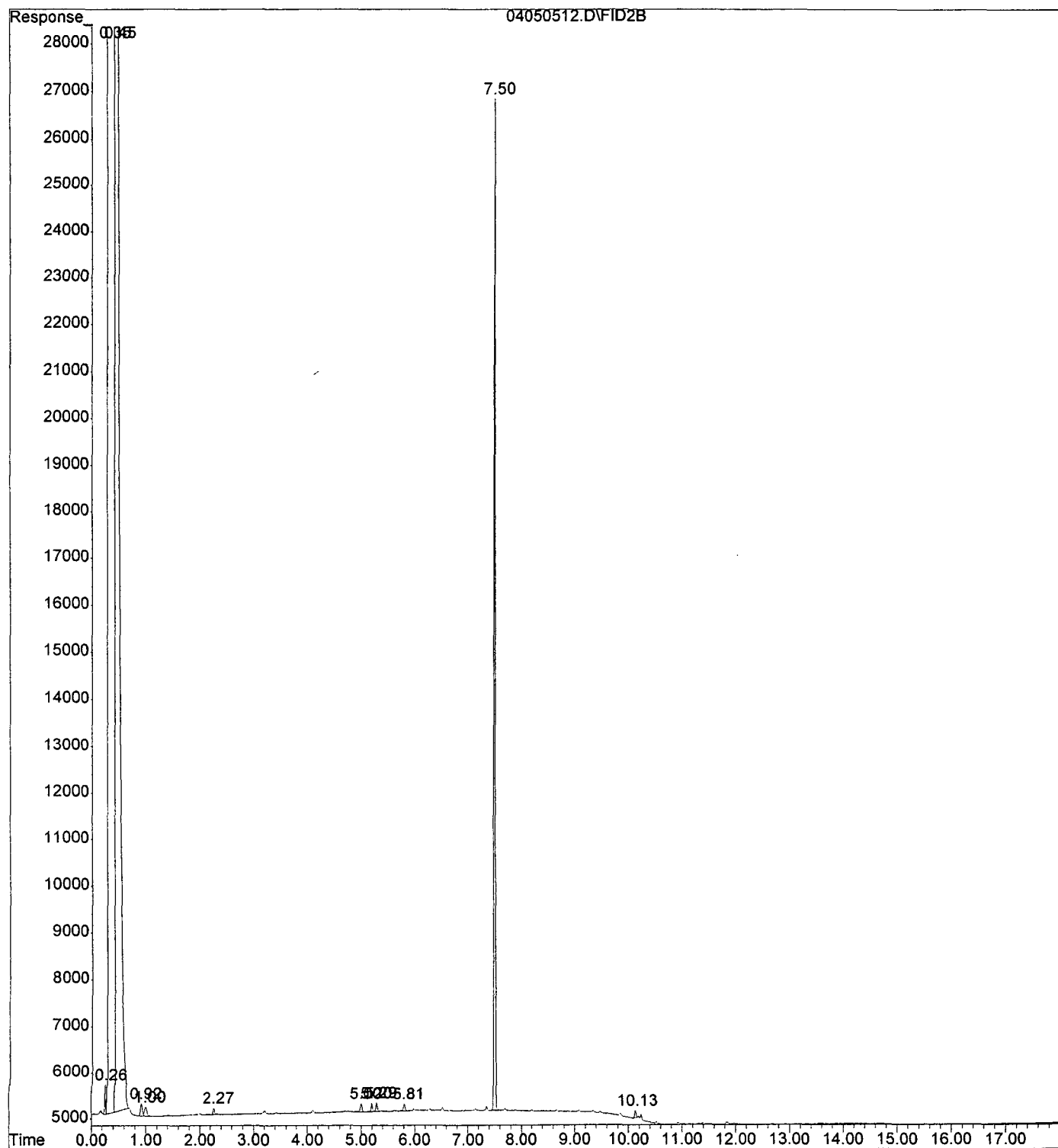
File : C:\HPCHEM\2\DATA\040505F\04050504.D
Operator : DSR
Acquired : 5 Apr 2005 14:12 using AcqMethod TPH0131.M
Instrument : FID-1
Sample Name: DRO CCV 200PPM
Misc Info : GC5-17-16
Vial Number: 4



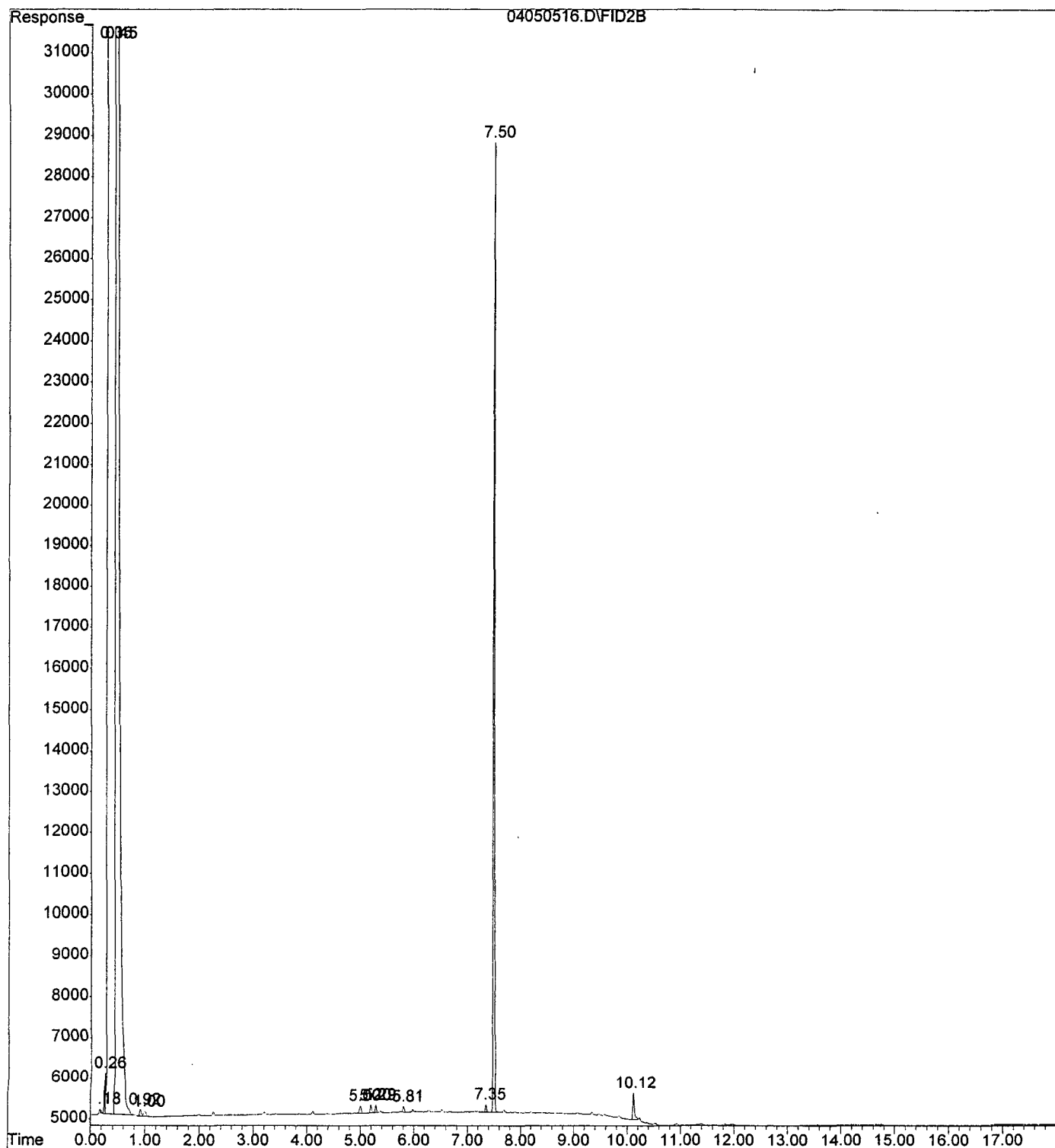
File : C:\HPCHEM\2\DATA\040505F\04050509.D
Operator : DSR
Acquired : 5 Apr 2005 16:29 using AcqMethod TPH0131.M
Instrument : FID-1
Sample Name: SRB 040505
Misc Info : 10G/10ML 04/05
Vial Number: 9



File : C:\HPCHEM\2\DATA\040505F\04050512.D
Operator : DSR
Acquired : 5 Apr 2005 17:50 using AcqMethod TPH0131.M
Instrument : FID-1
Sample Name: 503228-01
Misc Info : 10G/10ML 04/05
Vial Number: 12



File : C:\HPCHEM\2\DATA\040505F\04050516.D
Operator : DSR
Acquired : 5 Apr 2005 19:39 using AcqMethod TPH0131.M
Instrument : FID-1
Sample Name: 503228-02
Misc Info : 10G/10ML 04/05
Vial Number: 16





Lodestar Services, Incorporated

PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

February 2, 2005

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

RE: 4th Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Mr. Martin,

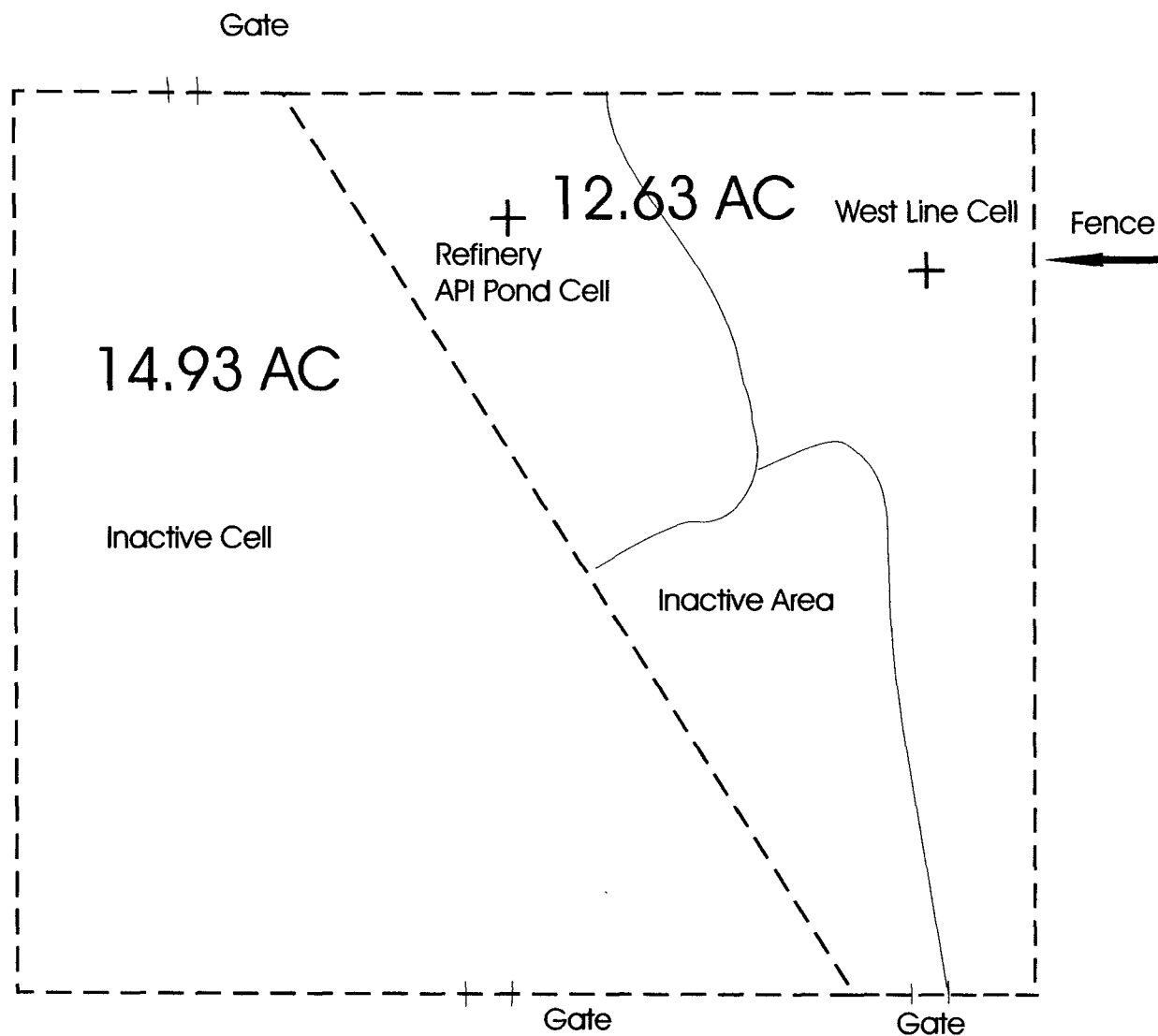
On December 14, 2004, Lodestar Services, Inc. collected 4th Quarter samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes (BTEX).

Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson (505) 632-4077.

Sincerely,

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
Mr. David Kirby, Giant Industries Arizona, Inc.
File



+ December 14, 2004
Fourth Quarter
Sample Location
Scale: 1 inch equals 200 feet

 Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 5/12/04
Cell dimensions are based on
Phillip Services Figure 1A dated
9/30/97



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **412248**
December 28, 2004

LODESTAR
26 CR 3500
FLORA VISTA, NM 87415

GIANT INDUSTRIES
111 COUNTY RD 4990
BLOOMFIELD, NM 87413

Project Name LANDFARM
Project Number (NONE)

Attention: MARTIN NEE/TIM KINNEY

On 12/15/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT : LODESTAR
PROJECT # : (NONE)
PROJECT NAME : LANDFARM

PINNACLE ID : 412248
DATE RECEIVED : 12/15/2004
REPORT DATE : 12/28/2004

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
412248 - 01	API CELL	NON-AQ	12/14/2004
412248 - 02	WEST LINE CELL	NON-AQ	12/14/2004



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
CLIENT : LODESTAR
PROJECT # : (NONE)
PROJECT NAME : LANDFARM

PINNACLE I.D. : 412248
ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	12/14/2004	12/16/2004	12/19/2004	1
02	WEST LINE CELL	NON-AQ	12/14/2004	12/16/2004	12/19/2004	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WEST LINE CELL
BENZENE	0.025	MG/KG	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
TOTAL XYLENES	0.050	MG/KG	< 0.050	< 0.050

SURROGATE:
BROMOFLUOROBENZENE (%)
SURROGATE LIMITS (65 - 120)

84 85

CHEMIST NOTES:
N/A



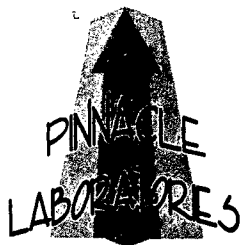
2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 412248
BLANK I. D.	: 121604	DATE EXTRACTED	: 12/16/2004
CLIENT	: LODESTAR	DATE ANALYZED	: 12/19/2004
PROJECT #	: (NONE)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050

SURROGATE:
BROMOFLUOROBENZENE (%) 89
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST : EPA 8021B
BATCH # : 121604
CLIENT : LODESTAR
PROJECT # : (NONE)
PROJECT NAME : LANDFARM

PINNACLE I.D. : 412248
DATE EXTRACTED : 12/16/2004
DATE ANALYZED : 12/19/2004
SAMPLE MATRIX : NON-AQ
UNITS : MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.955	96	0.918	92	4	(68 - 120)	20
TOLUENE	<0.025	1.00	0.936	94	0.906	91	3	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.943	94	0.910	91	4	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	2.83	94	2.73	91	4	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST : EPA 8021B
MSMSD # : 412248-01
CLIENT : LODESTAR
PROJECT # : (NONE)
PROJECT NAME : LANDFARM

PINNACLE I.D. : 412248
DATE EXTRACTED : 12/16/2004
DATE ANALYZED : 12/19/2004
SAMPLE MATRIX : NON-AQ
UNITS : MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.921	92	0.913	91	1	(68 - 120)	20
TOLUENE	<0.025	1.00	0.919	92	0.914	91	1	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.910	91	0.898	90	1	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	2.73	91	2.70	90	1	(58 - 120)	20

CHEMIST NOTES:
N/A

% Recovery =
$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

RPD (Relative Percent Difference) =
$$\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



CHAIN OF CUSTODY

DATE: 2/14/84 PAGE: 1 OF 1

PLI Accession # 98-0674

PROJECT MANAGER:					
COMPANY: <u>Luckstein</u> ADDRESS: <u>200 C 3500</u> <u>Floor V/SB AM 87415</u> <u>505 334 3791</u> PHONE: FAX: BILL TO: COMPANY: <u>Tim Kingery</u> <u>Carey</u> ADDRESS: <u>Dumont Road</u> SAMPLE ID: DATE: TIME: MATRIX: LABID:					
Petroleum Hydrocarbons (418.1) TPH					
(MOD.8015) Diesel/Direct Inject					
(M8015) Gas/Purge & Trap					
8021 (BTX)/8015 (Gasoline) MTBE					
8021 (BTX) DMTBE □ TMB □ PCE	X	X			
8021 (TCL)					
8021 (EDX)					
8021 (HALO)					
8021 (CUST)					
504.1 EDB □ DBCP □					
8260 (TCL) Volatile Organics					
8260 (Full) Volatile Organics □ PBMS					
8260 (CUST) Volatile Organics					
8260 (Landfill) Volatile Organics					
Pesticides/PCB (608/8081/8082)					
Herbicides (615/8151)					
Base/Neutral/Acid Compounds GC/MS (625/8270)					
Polynuclear Aromatics (610/8310/8270-SIMS)					
General Chemistry:					
Priority Pollutant Metals (13)					
Target Analyte List Metals (23)					
RCRA Metals (8)					
RCRA Metals by TCLP (Method1311)					
Metals:					
NUMBER OF CONTAINERS					

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.									
PROJECT INFORMATION			PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS						
PROJ. NO.:			(RUSH) ☐ 24hr* ☐ 48hr* ☐ 72hr* ☐ 1 WEEK (NORMAL) ☐						
PROJ. NAME: <i>Landform</i>			CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER						
P.O. NO.:			METHANOL PRESERVATION ☐		METALS ☐ TOTAL ☐ DISSOLVED				
SHIPPED VIA:			COMMENTS:						
SAMPLE RECEIPT									
NO. CONTAINERS: <i>2</i>									
CUSTODY/SEALS: <i>Y/N/A</i>									
RECEIVED/INTACT: <i>Y</i>									
BLUE/ICE: <i>53</i>									
RELINQUISHED BY: 1.			RELINQUISHED BY: 2.				RELINQUISHED BY: 2.		
Signature: <i>[Signature]</i>			Signature: <i>[Signature]</i>				Signature: <i>[Signature]</i>		
Printed Name: <i>[Name]</i>			Printed Name: <i>[Name]</i>				Printed Name: <i>[Name]</i>		
Date: <i>[Date]</i>			Date: <i>[Date]</i>				Date: <i>[Date]</i>		
Company: <i>[Company]</i>			Company: <i>[Company]</i>				Company: <i>[Company]</i>		
See Reverse side (Force Majeure)			RECEIVED BY: 1.				RECEIVED BY: 2.		
			Signature: <i>[Signature]</i>				Signature: <i>[Signature]</i>		
			Printed Name: <i>[Name]</i>				Printed Name: <i>[Name]</i>		
			Date: <i>[Date]</i>				Date: <i>[Date]</i>		
			Company: <i>[Company]</i>				Company: <i>[Company]</i>		



Lodestar Services, Incorporated
PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

November 24, 2004

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

RE: 3rd Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Mr. Martin,

On September 30, 2004, Lodestar Services, Inc. collected 3rd Quarter samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes (BTEX).

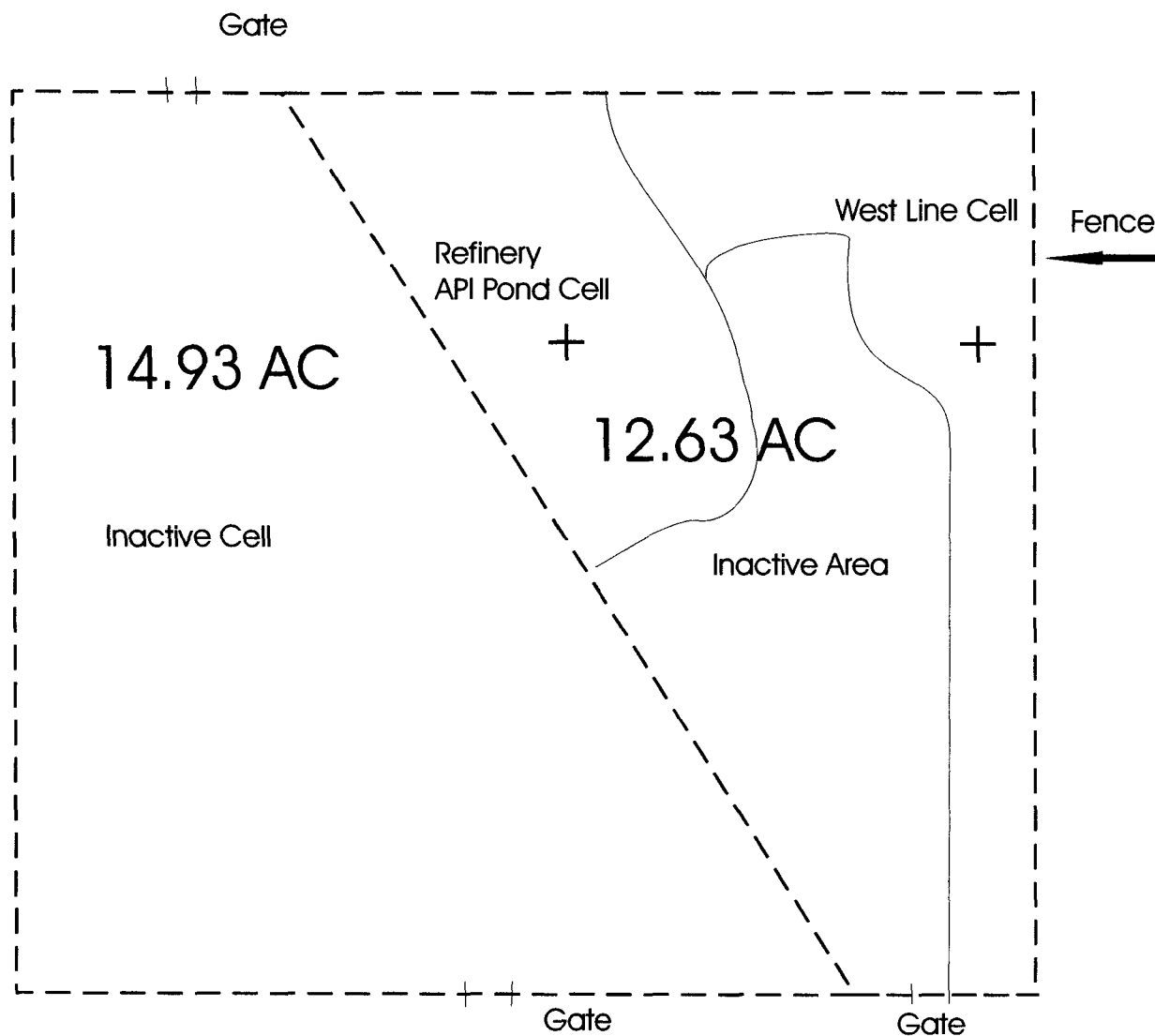
Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Bill Robertson (505) 632-4077.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin Nee", is written over a horizontal line.

Martin Nee

Cc: Mr. Bill Robertson, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
File



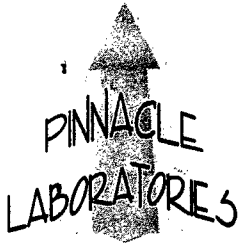
September 30, 2004
+ Third Quarter Sample
Location
Scale: 1 inch equals 200 feet

 Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 5/12/04
Cell dimensions are based on
Philip Services Figure 1A dated
9/30/97



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **410010**
October 19, 2004

LODESTAR
26 CR 3500
FLORA VISTA, NM 87415

Project Name Giant Landfarm
Project Number 30002.0

Attention: Martin Nee

On: 10/01/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

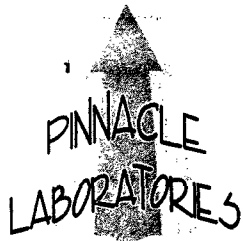
Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: LODESTAR	PINNACLE ID	: 410010
PROJECT #	: 30002.0	DATE RECEIVED	: 10/01/2004
PROJECT NAME	: Giant Landfarm	REPORT DATE	: 10/19/2004

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
410010 - 01	Landfarm Westline	NON-AQ	09/30/2004
410010 - 02	Landfarm API	NON-AQ	09/30/2004



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B
CLIENT : LODESTAR
PROJECT # : 30002.0
PROJECT NAME : Giant Landfarm

PINNACLE I.D. : 410010
ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	Landfarm Westline	NON-AQ	09/30/2004	10/03/2004	10/10/2004	1
02	Landfarm API	NON-AQ	09/30/2004	10/03/2004	10/10/2004	1

PARAMETER	DET. LIMIT	UNITS	Landfarm	
			Westline	Landfarm API
BENZENE	0.025	MG/KG	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
TOTAL XYLENES	0.050	MG/KG	< 0.050	< 0.050

SURROGATE:
BROMOFLUOROBENZENE (%)
SURROGATE LIMITS (65 - 120)

96 98

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B	PINNACLE I.D.	: 410010
BLANK I.D.	: 100304	DATE EXTRACTED	: 10/03/2004
CLIENT	: LODESTAR	DATE ANALYZED	: 10/10/2004
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Giant Landfarm	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050

SURROGATE:
BROMOFLUOROBENZENE (%) 100
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 410010
BATCH #	: 100304	DATE EXTRACTED	: 10/03/2004
CLIENT	: LODESTAR	DATE ANALYZED	: 10/10/2004
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Giant Landfarm	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.06	106	1.06	106	0	(68 - 120)	20
TOLUENE	<0.025	1.00	1.03	103	1.03	103	0	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.02	102	1.03	103	1	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	3.07	102	3.06	102	0	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 410010
MSMSD #	: 410001-01	DATE EXTRACTED	: 10/03/2004
CLIENT	: LODESTAR	DATE ANALYZED	: 10/11/2004
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Giant Landfarm	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.982	98	1.00	100	2	(68 - 120)	20
TOLUENE	<0.025	1.00	0.985	99	0.971	97	1	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.959	96	0.966	97	1	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	2.88	96	2.88	96	0	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : LODESTAR
PROJECT # : 30002.0
PROJECT NAME : Giant Landfarm

PINNACLE I.D. : 410010
ANALYST : DSR

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	Landfarm Westline	NON-AQ	09/30/2004	10/01/2004	10/04/2004	1
02	Landfarm API	NON-AQ	09/30/2004	10/01/2004	10/04/2004	1

PARAMETER	DET. LIMIT	UNITS	Landfarm Westline	Landfarm API
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	23
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	24
CALCULATED SUM:				47

SURROGATE:
O-TERPHENYL (%) 88 100
SURROGATE LIMITS (70-130)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 410010
BLANK I.D.	: 100104	DATE EXTRACTED	: 10/01/2004
CLIENT	: LODESTAR	DATE ANALYZED	: 10/04/2004
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Giant Landfarm	ANALYST	: DSR

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:
O-TERPHENYL (%) 98
SURROGATE LIMITS (70-130)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	:	410010
LCS/LCSD #	: 100104	DATE EXTRACTED	:	10/01/2004
CLIENT	: LODESTAR	DATE ANALYZED	:	10/04/2004
PROJECT #	: 30002.0	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: Giant Landfarm	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	183	92	165	83	10	(70-130)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 410010
MSMSD #	: 409192-07	DATE EXTRACTED	: 10/01/2004
CLIENT	: LODESTAR	DATE ANALYZED	: 10/04/2004
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: Giant Landfarm	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	16	200	194	89	191	88	2	(70-130)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

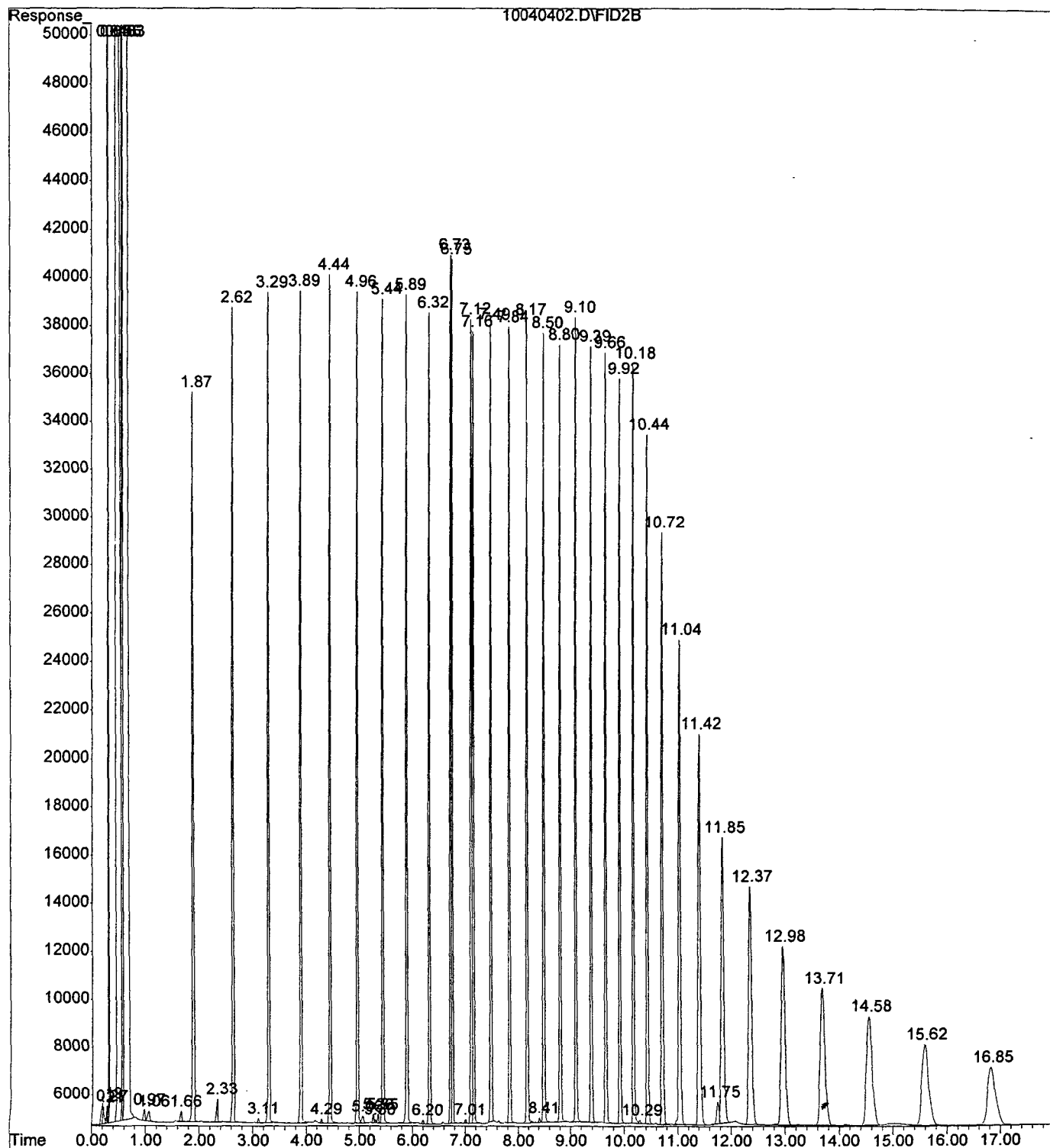
$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SHADED AREAS ARE FOR LAB USE ONLY.

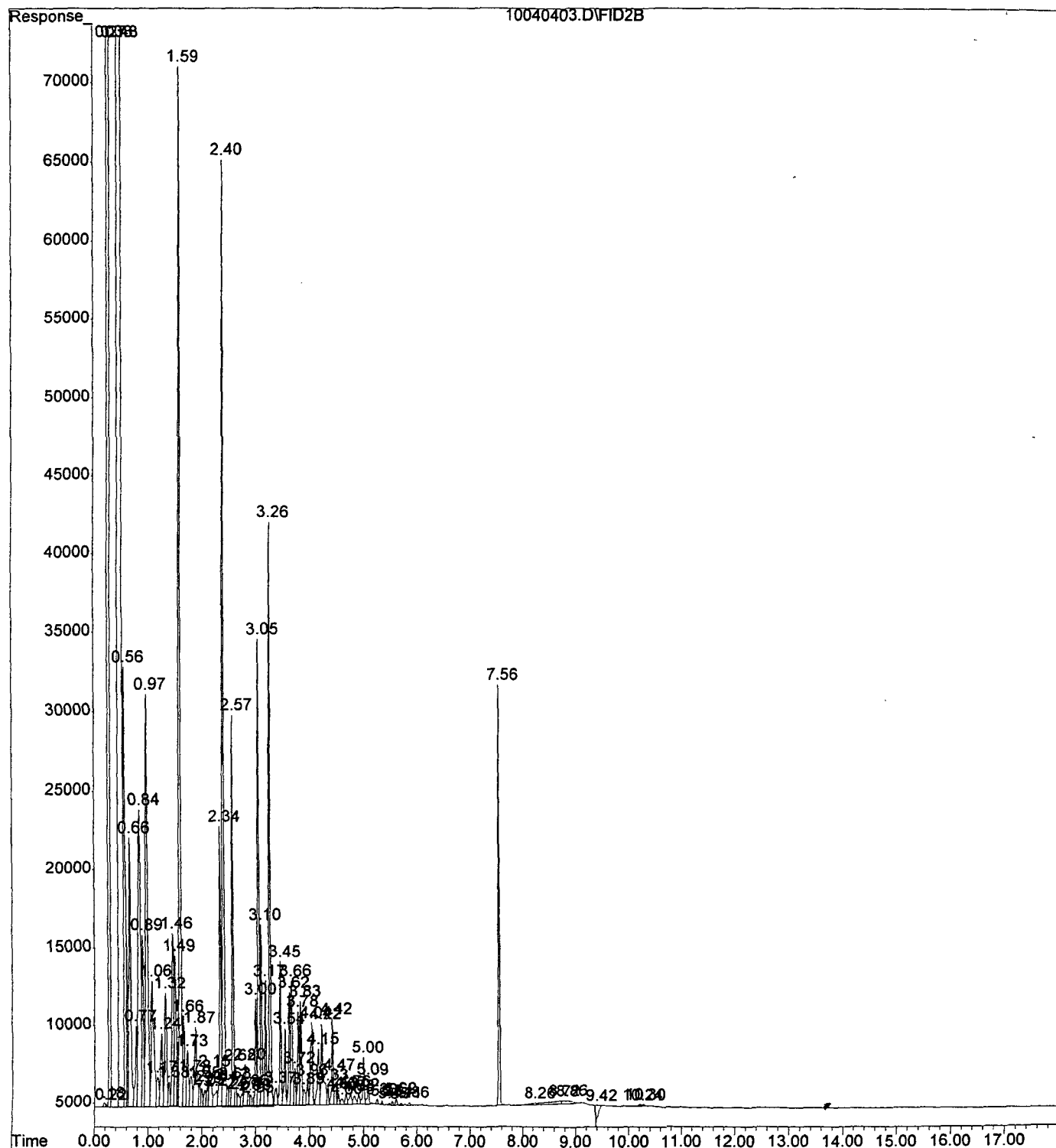
PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]

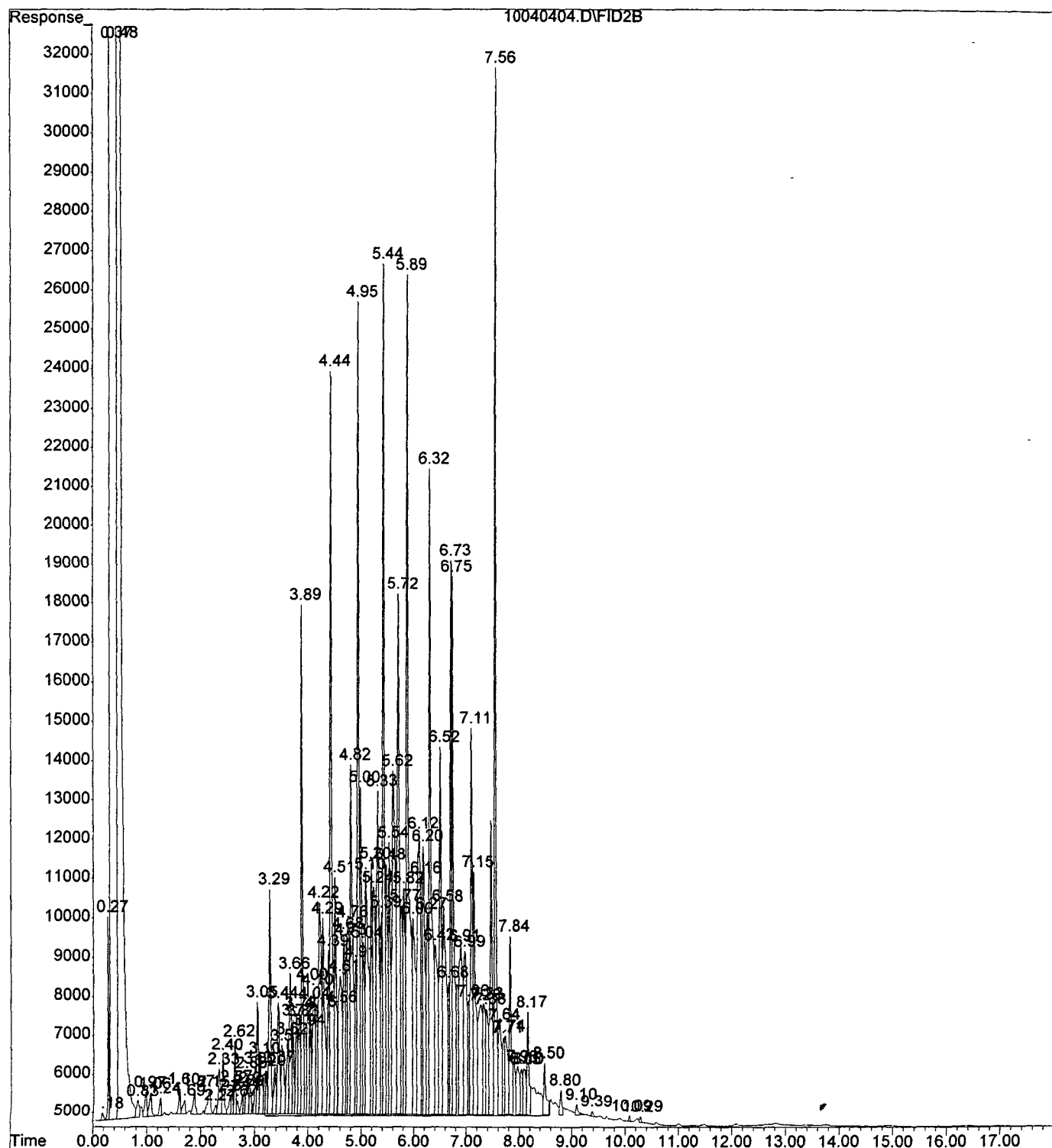
File : C:\HPCHEM\2\DATA\100404F\10040402.D
Operator : DSR
Acquired : 4 Oct 2004 8:31 using AcqMethod TPH0802.M
Instrument : FID-1
Sample Name: RT
Misc Info : GC5-06-05
Vial Number: 2



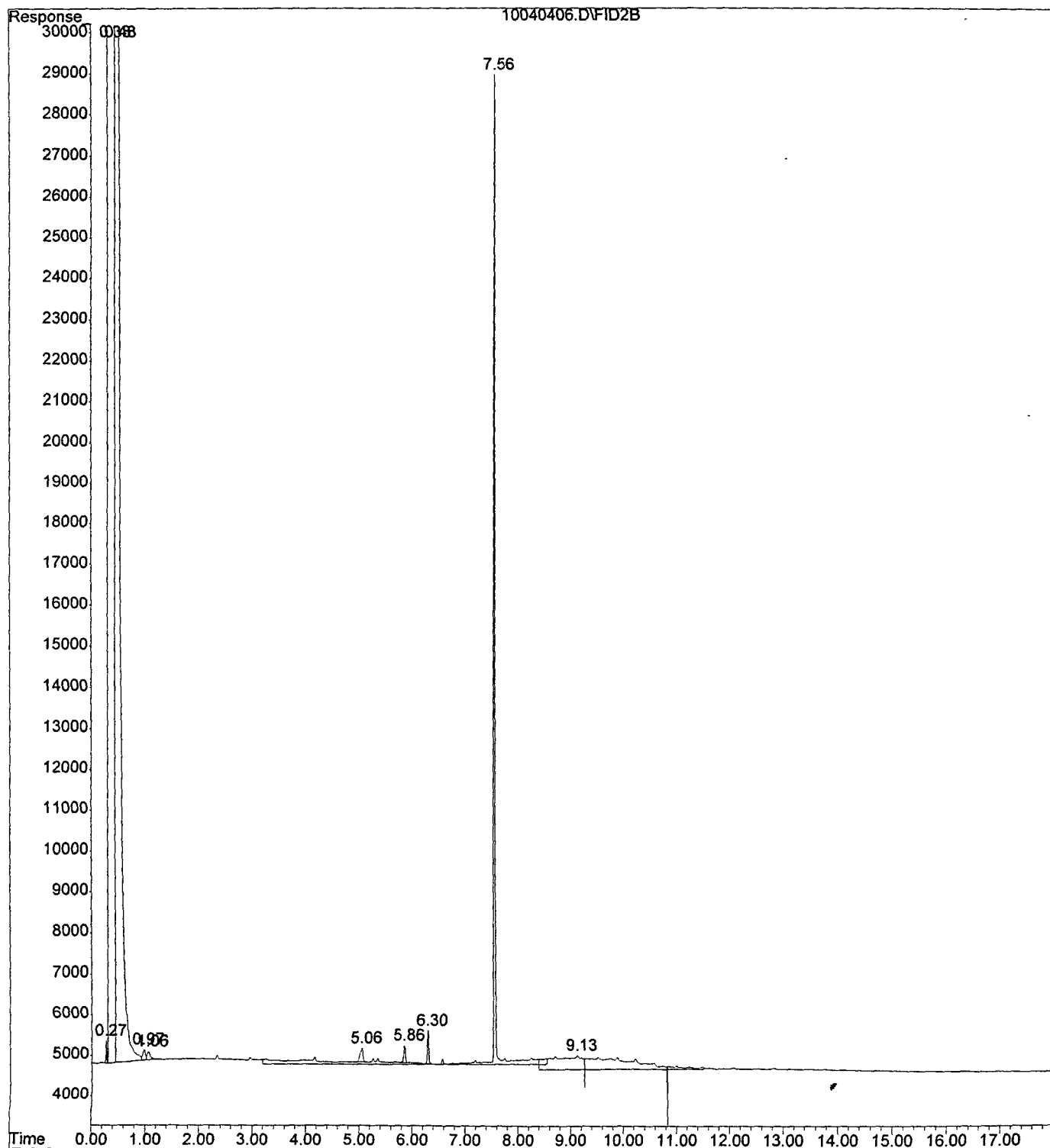
File : C:\HPCHEM\2\DATA\100404F\10040403.D
Operator : DSR
Acquired : 4 Oct 2004 8:59 using AcqMethod TPH0802.M
Instrument : FID-1
Sample Name: GRO CCV 200PPB
Misc Info : GC5-08-12
Vial Number: 3



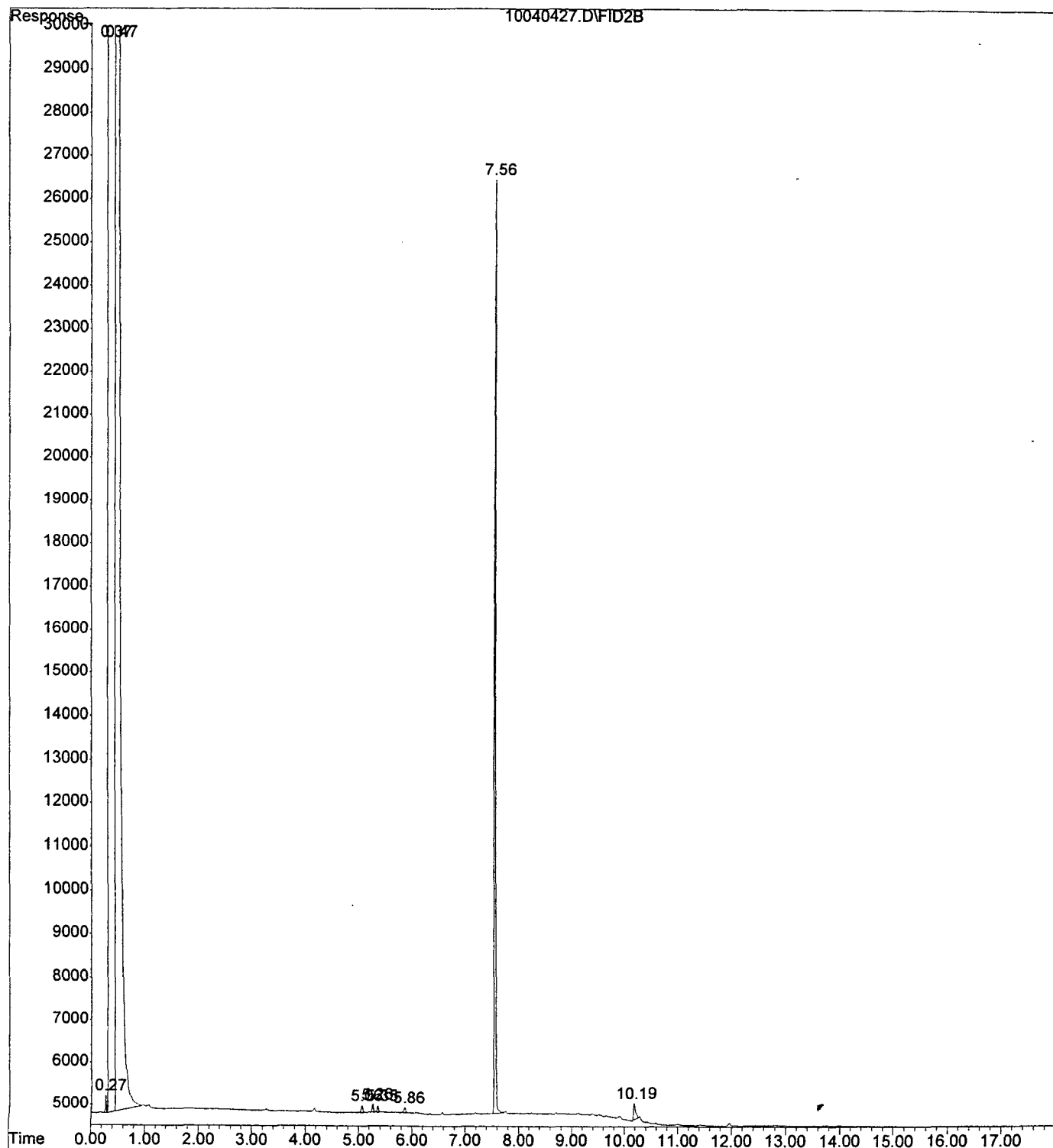
File : C:\HPCHEM\2\DATA\100404F\10040404.D
Operator : DSR
Acquired : 4 Oct 2004 9:27 using AcqMethod TPH0802.M
Instrument : FID-1
Sample Name: DRO CCV 200PPB
Misc Info : GC5-08-15
Vial Number: 4



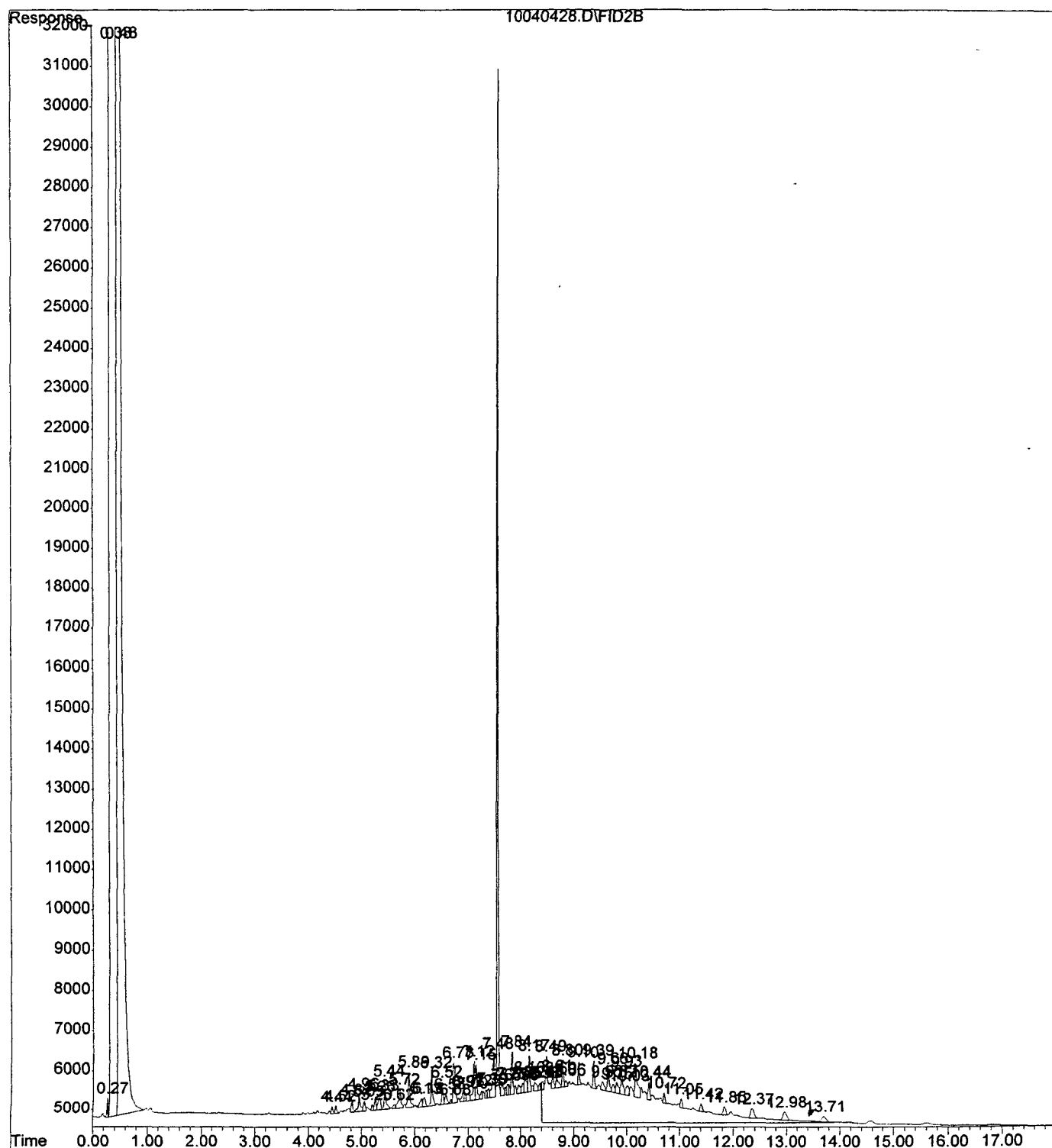
File : C:\HPCHEM\2\DATA\100404F\10040406.D
Operator : DSR
Acquired : 4 Oct 2004 10:40 using AcqMethod TPH0802.M
Instrument : FID-1
Sample Name: SRB 100104
Misc Info : 10G/10ML 10/01
Vial Number: 6



File : C:\HPCHEM\2\DATA\100404F\10040427.D
Operator : DSR
Acquired : 4 Oct 2004 20:24 using AcqMethod TPH0802.M
Instrument : FID-1
Sample Name: 410010-01
Misc Info : 10G/10ML 10/01
Vial Number: 25



File : C:\HPCHEM\2\DATA\100404F\10040428.D
Operator : DSR
Acquired : 4 Oct 2004 20:51 using AcqMethod TPH0802.M
Instrument : FID-1
Sample Name: 410010-02
Misc Info : 10G/10ML 10/01
Vial Number: 26





Lodestar Services, Incorporated

PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

RECEIVED

July 16, 2004

JUL 21 2004

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

**OIL CONSERVATION
DIVISION**

RE: 2nd Quarter Sampling at Giant's Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Ms. Kieling,

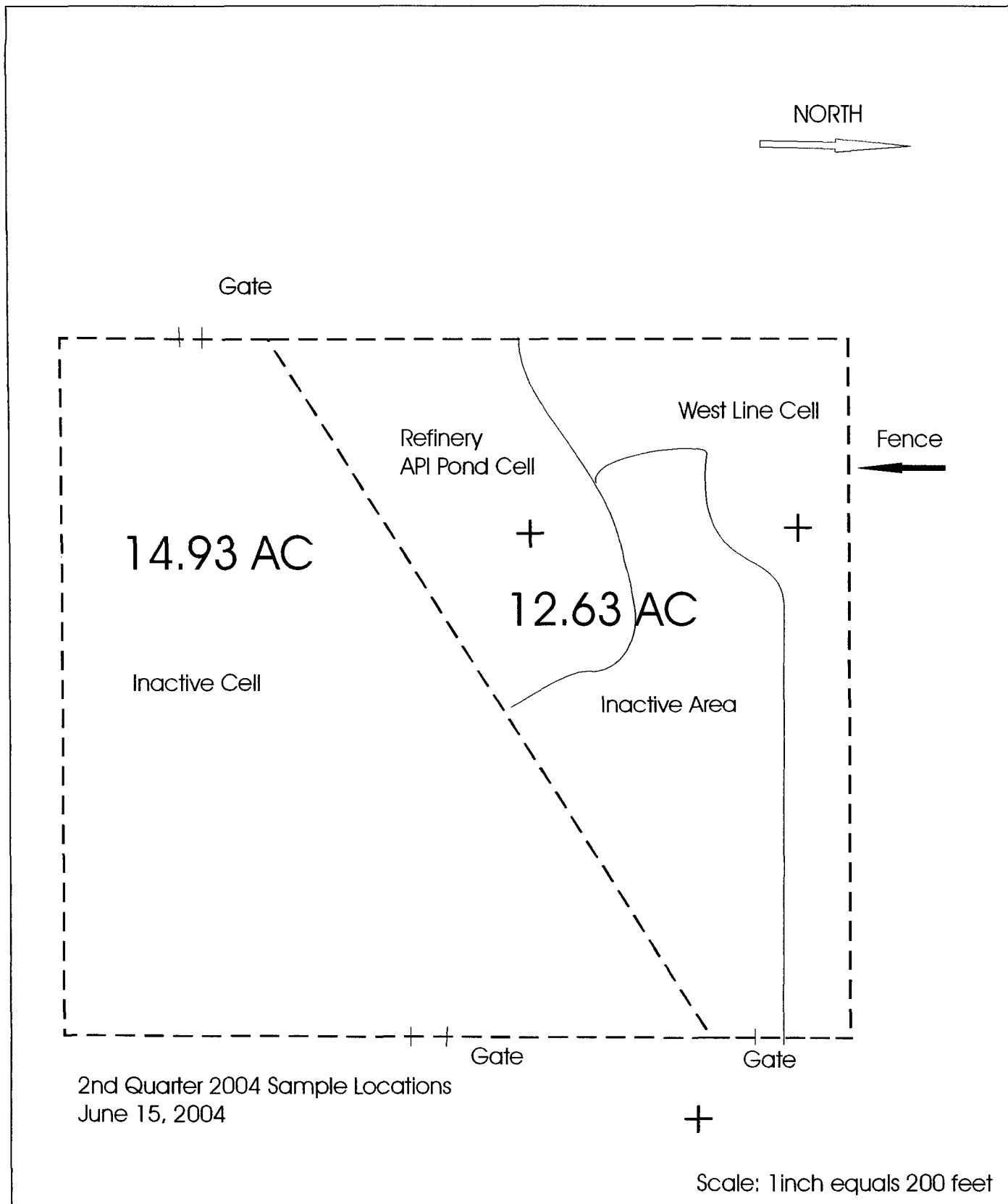
On June 15, 2004, Lodestar Services, Inc. collected 2nd Quarter samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for benzene, toluene, ethyl benzene, and xylenes (BTEX). None of the target analytes were detected in the samples.

Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Gary Winn (505) 632-4077.

Sincerely,

Martin Nee

Cc: Mr. Gary Winn, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
File

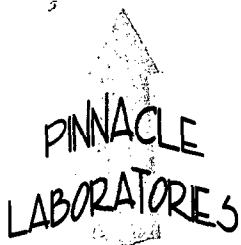



 Lodestar Services, Inc
 PO Box 3861
 Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 5/12/04
 Cell dimensions are based on
 Philip Services Figure 1A dated
 9/30/97



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **406064**
June 30, 2004

GIANT INDUSTRIES
111 COUNTY RD. 4990
BLOOMFIELD, NM 87413

LODESTAR
26 CR 3500
FLORA VISTA, NM 87413

Project Name LANDFARM
Project Number 30002

Attention: MARTIN NEE/GARY WINN

On 06/16/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: GIANT INDUSTRIES	PINNACLE ID	: 406064
PROJECT #	: 30002	DATE RECEIVED	: 06/16/04
PROJECT NAME	: LANDFARM	REPORT DATE	: 06/30/04
PINNACLE			
ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
406064 - 01	API CELL	NON-AQ	06/15/04
406064 - 02	WEST. LINE CELL	NON-AQ	06/15/04

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8260
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002
PROJECT NAME : LANDFARM

PINNACLE I.D. : 406064
ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	06/15/04	06/24/04	06/24/04	1
02	WEST LINE CELL	NON-AQ	06/15/04	06/24/04	06/24/04	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WEST LINE CELL
BENZENE	0.050	MG/KG	< 0.050	< 0.050
TOLUENE	0.050	MG/KG	< 0.050	< 0.050
ETHYLBENZENE	0.050	MG/KG	< 0.050	< 0.050
TOTAL XYLENES	0.10	MG/KG	< 0.10	< 0.10

SURROGATE:
BROMOFLUOROBENZENE (%) 98 97
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8260	PINNACLE I.D.	: 406064
BLANK I. D.	: 062404	DATE EXTRACTED	: 06/24/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/24/04
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	MG/KG	<0.050
TOLUENE	MG/KG	<0.050
ETHYLBENZENE	MG/KG	<0.050
TOTAL XYLENES	MG/KG	<0.10

SURROGATE:

BROMOFLUOROBENZENE (%)

95

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8260	PINNACLE I.D.	: 406064
BATCH #	: 062404	DATE EXTRACTED	: 06/24/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/24/04
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.050	1.00	0.946	95	0.984	98	4	(68 - 120)	20
TOLUENE	<0.050	1.00	1.00	100	1.05	105	5	(64 - 120)	20
ETHYLBENZENE	<0.050	1.00	0.998	100	1.04	104	4	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	2.95	98	3.10	103	5	(58 - 120)	20

CHEMIST NOTES:

N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8260	PINNACLE I.D.	: 406064
MSMSD #	: 406064-02	DATE EXTRACTED	: 06/24/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/24/04
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.050	1.00	0.953	95	0.953	95	0	(68 - 120)	20
TOLUENE	<0.050	1.00	1.00	100	1.01	101	1	(64 - 120)	20
ETHYLBENZENE	<0.050	1.00	1.00	100	1.01	101	1	(49 - 127)	20
TOTAL XYLENES	<0.10	3.00	2.94	98	2.98	99	1	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE
LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002
PROJECT NAME : LANDFARM

PINNACLE I.D. : 406064
ANALYST : DSR

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	06/15/04	06/21/04	06/24/04	1
02	WESTLINE CELL	NON-AQ	06/15/04	06/21/04	06/24/04	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WESTLINE CELL
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10
CALCULATED SUM:				

SURROGATE:
O-TERPHENYL (%) 73 73
SURROGATE LIMITS (70-130)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 406064
BLANK I.D.	: 062104	DATE EXTRACTED	: 06/21/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/22/04
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: DSR

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:

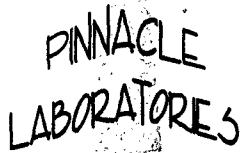
O-TERPHENYL (%)

81

SURROGATE LIMITS (70-130)

CHEMIST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	:	406064
LCS/LCSD #	: 062104	DATE EXTRACTED	:	06/21/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	:	06/22/04
PROJECT #	: 30002	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: LANDFARM	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	179	90	184	92	3	(70-130)	20

CHEMIST NOTES:
N/A

$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 406064
MSMSD #	: 406057-01	DATE EXTRACTED	: 06/21/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 06/22/04
PROJECT #	: 30002	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	5000	200	4450	-275	4780	-110	7	(70-130)	20
	M2			M1, M2		M1, M2			

CHEMIST NOTES:

M1 = Matrix spike compound does not meet criteria due to confirmed matrix effects.

M2 = Compound exceeded calibration range.

The LCS/LCSD confirms that the system was in control.

$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

CHAIN OF CUSTODY

DATE: 6-16-04 PAGE: 1 OF 1

File Accession #: 100-361600-100

7

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER:	M. Lee
COMPANY:	Lodestar Services
ADDRESS:	200 CR 3500
	Florida Vista N.W.
PHONE:	505 334 2791
FAX:	
BILL TO:	GARY WINN
	Giant
COMPANY:	111 CR 4990
ADDRESS:	Bloomfield N.W. 87443

[illegible]

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE

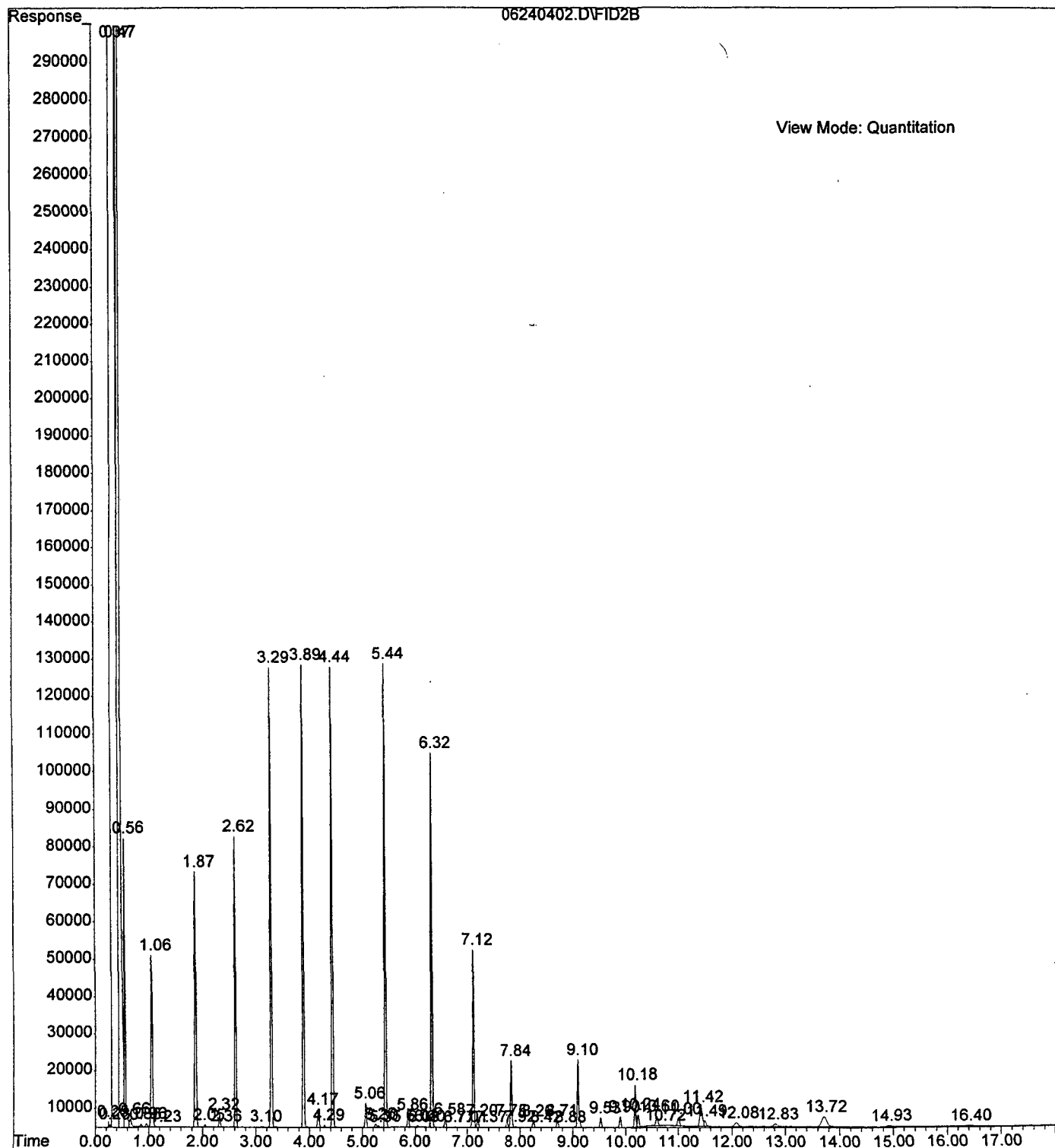
PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS				
PROJ. NO.:	50002	(RUSH)	☐ 24hr	☐ 48hr	☐ 72hr	☐ 1 WEEK (NORMAL)
		*NOT AVAILABLE ON ALL ANALYSES				
PROJ. NAME:	Land farm	CERTIFICATION REQUIRED		☐ NM	☐ SDWA	☐ AZ ☐ OTHER
P.O. NO.:		METHANOL PRESERVATION		☐	METALS	☐ TOTAL ☐ DISSOLVED

SHIPPED VIA: JNM 50	COMMENTS:	
SAMPLE RECEIPT		
NO CONTAINERS	2	
CUSTODY SEALS	WIN 10	
RECEIVED INTACT	Y	
BLUE ICE/ICE	6°C	

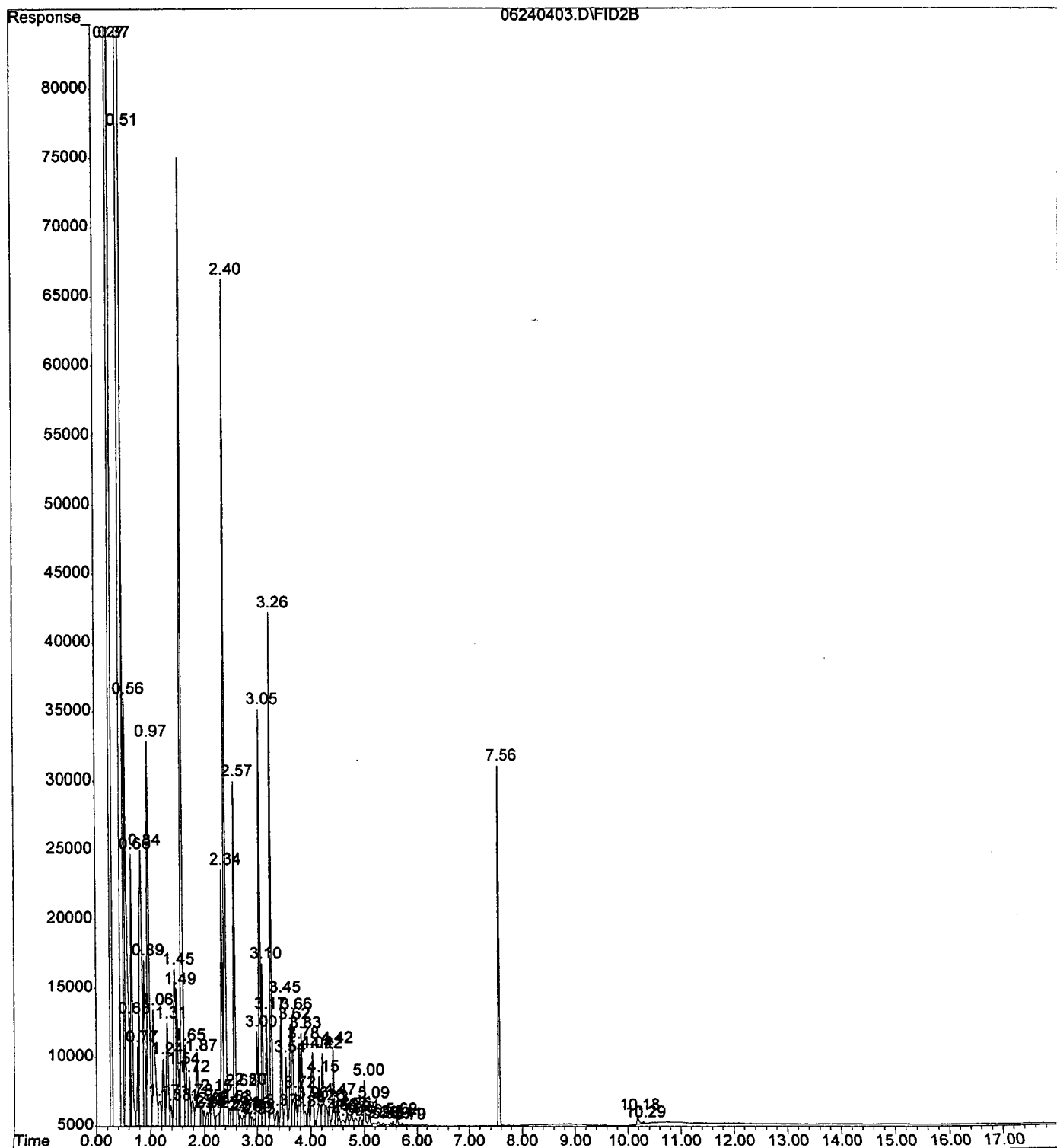
[illegible]

RELINQUISHED BY:	1	RELINQUISHED BY:	2
Signature: [Signature]	Time: 1000	Signature: [Signature]	Time: [Signature]
Printed Name: M Nee	Date: 6-16-04	Printed Name:	Date:
Company: odessa	See Reverse side (Folio Major)	Company:	
RECEIVED BY:	1	RECEIVED BY: (LAB)	2
Signature:	Time:	Signature: [Signature]	Time:
Printed Name:	Date:	Printed Name:	Date:
Company:		Company: Pinnacle Laboratories Inc.	

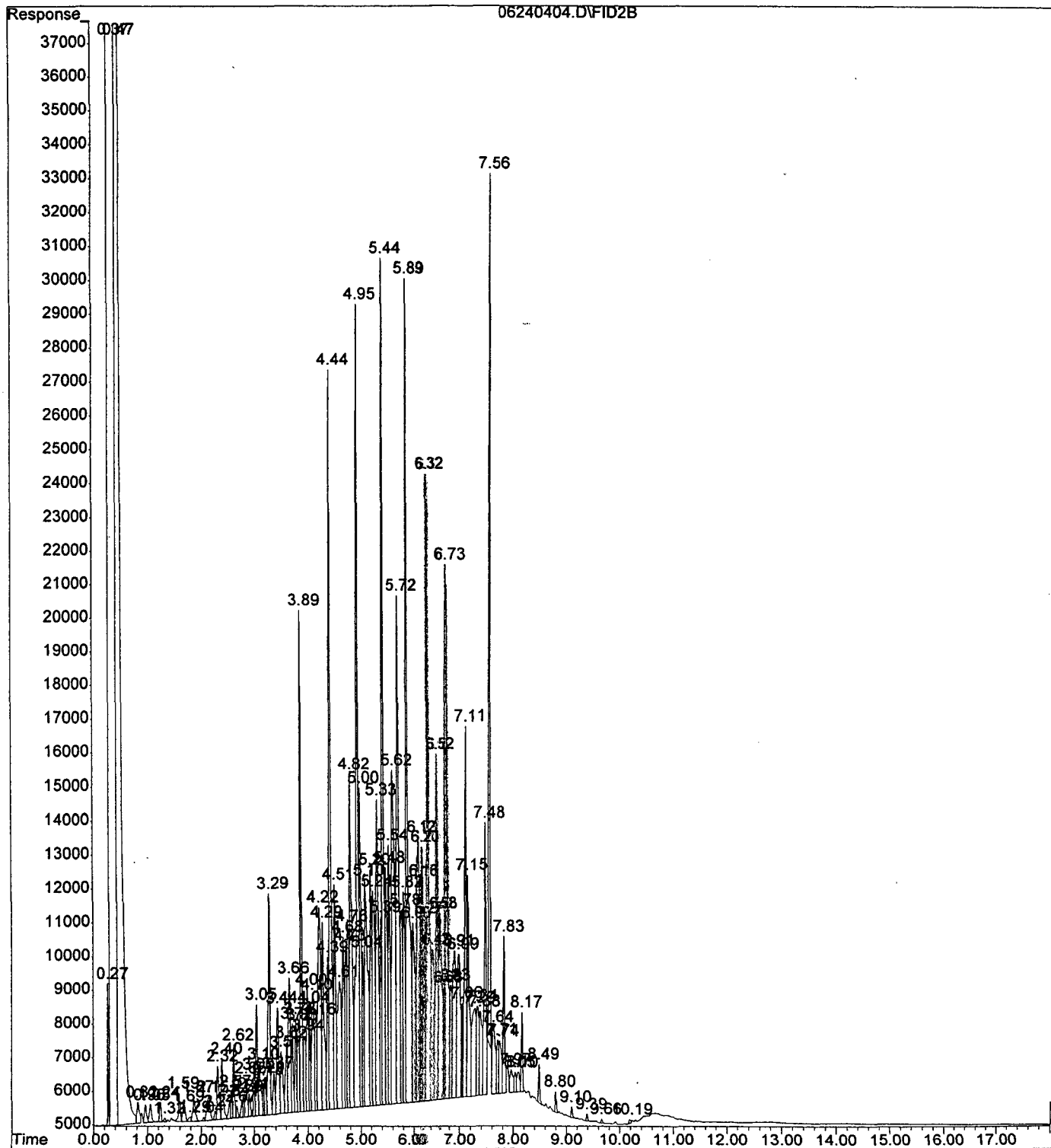
File : C:\HPCHEM\2\DATA\062404F\06240402.D
Operator : DSR
Acquired : 24 Jun 2004 8:29 using AcqMethod TPH0617.M
Instrument : FID-1
Sample Name: RT
Misc Info : GC4-150-02
Vial Number: 2



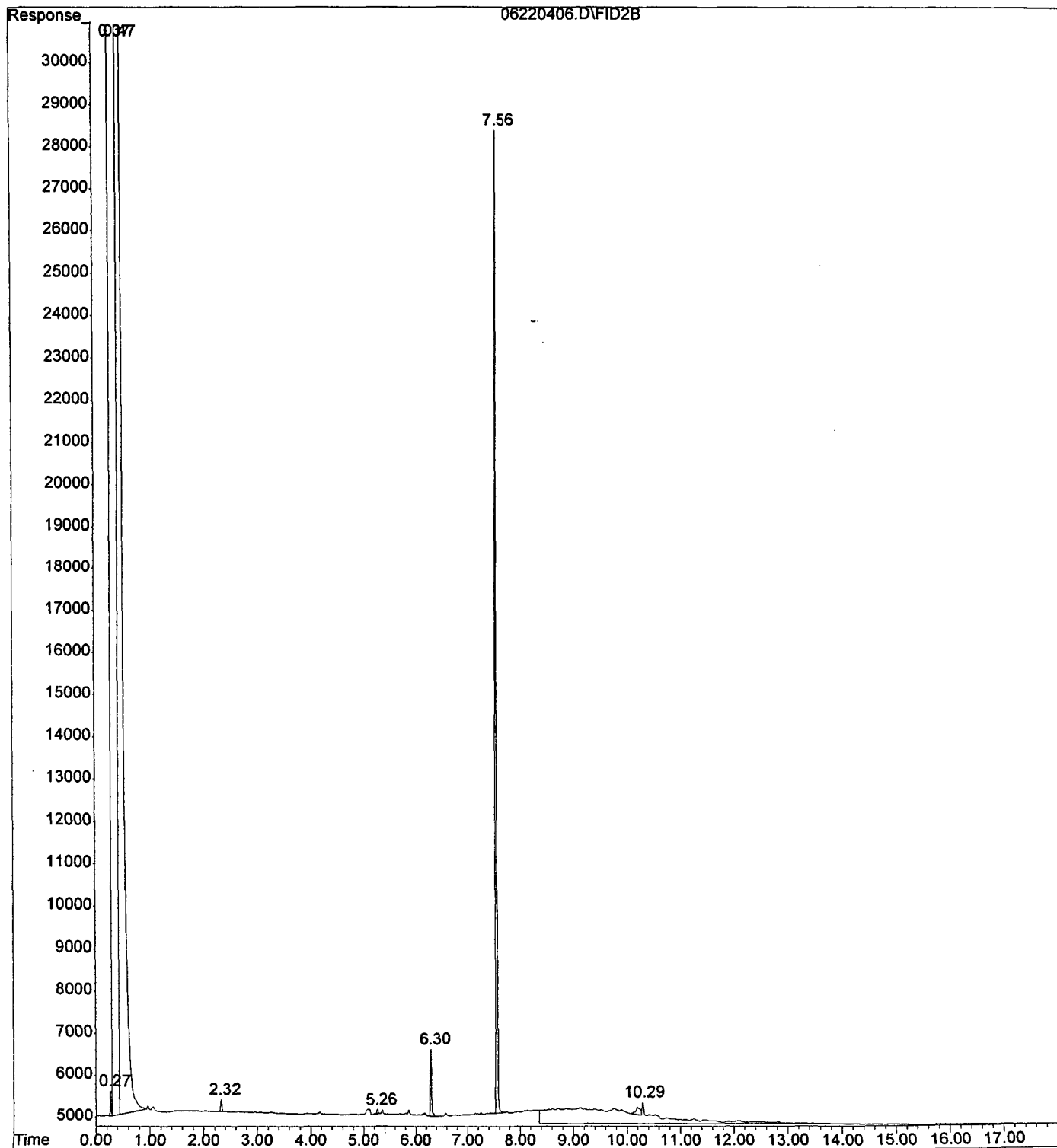
File : C:\HPCHEM\2\DATA\062404F\06240403.D
Operator : DSR
Acquired : 24 Jun 2004 8:57 using AcqMethod TPH0617.M
Instrument : FID-1
Sample Name: GRO CCV 200PPB
Misc Info : GC5-02-07
Vial Number: 3



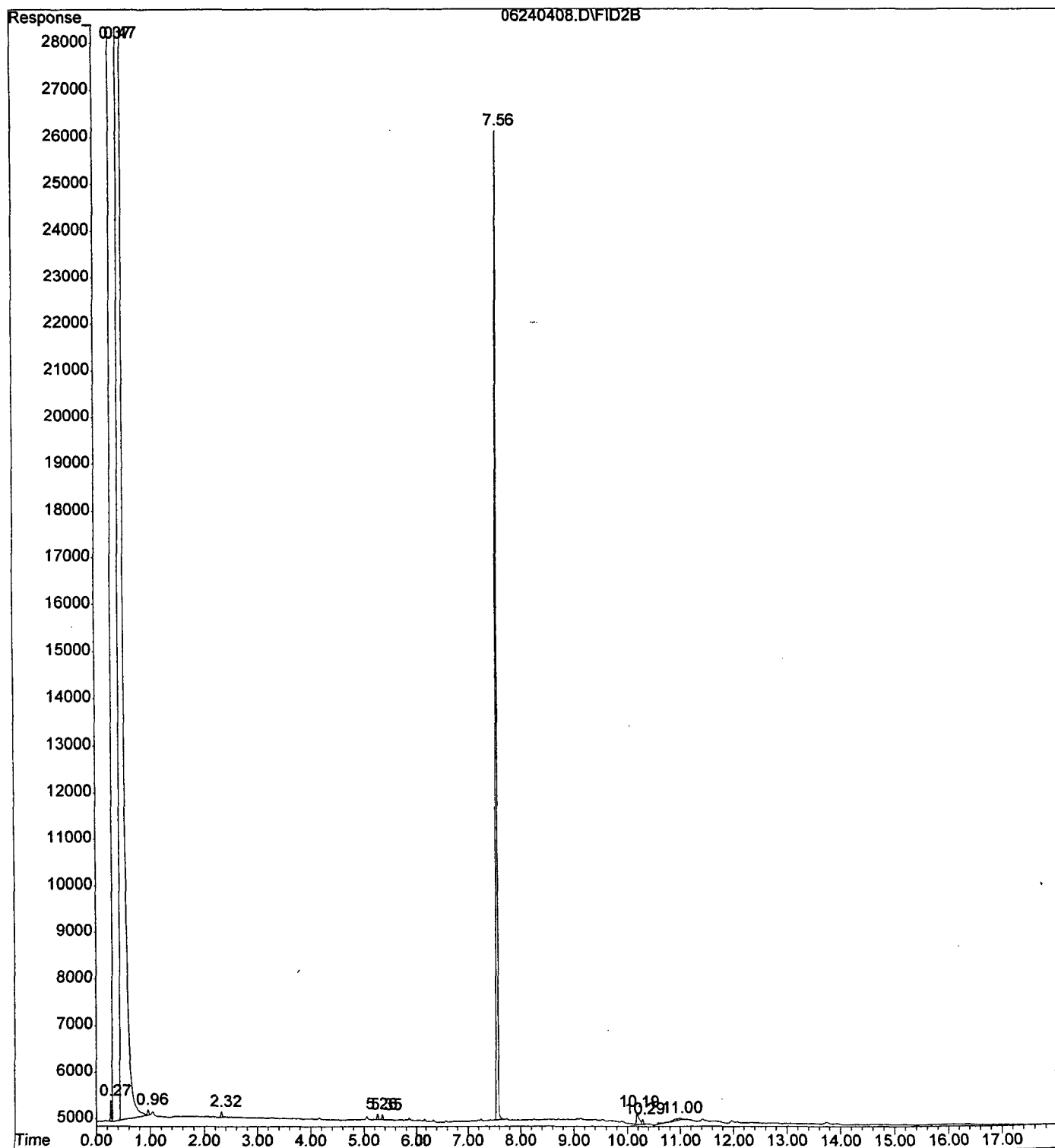
File : C:\HPCHEM\2\DATA\062404F\06240404.D
Operator : DSR
Acquired : 24 Jun 2004 9:25 using AcqMethod TPH0617.M
Instrument : FID-1
Sample Name: DRO CCV 200PPB
Misc Info : GC5-01-01
Vial Number: 4



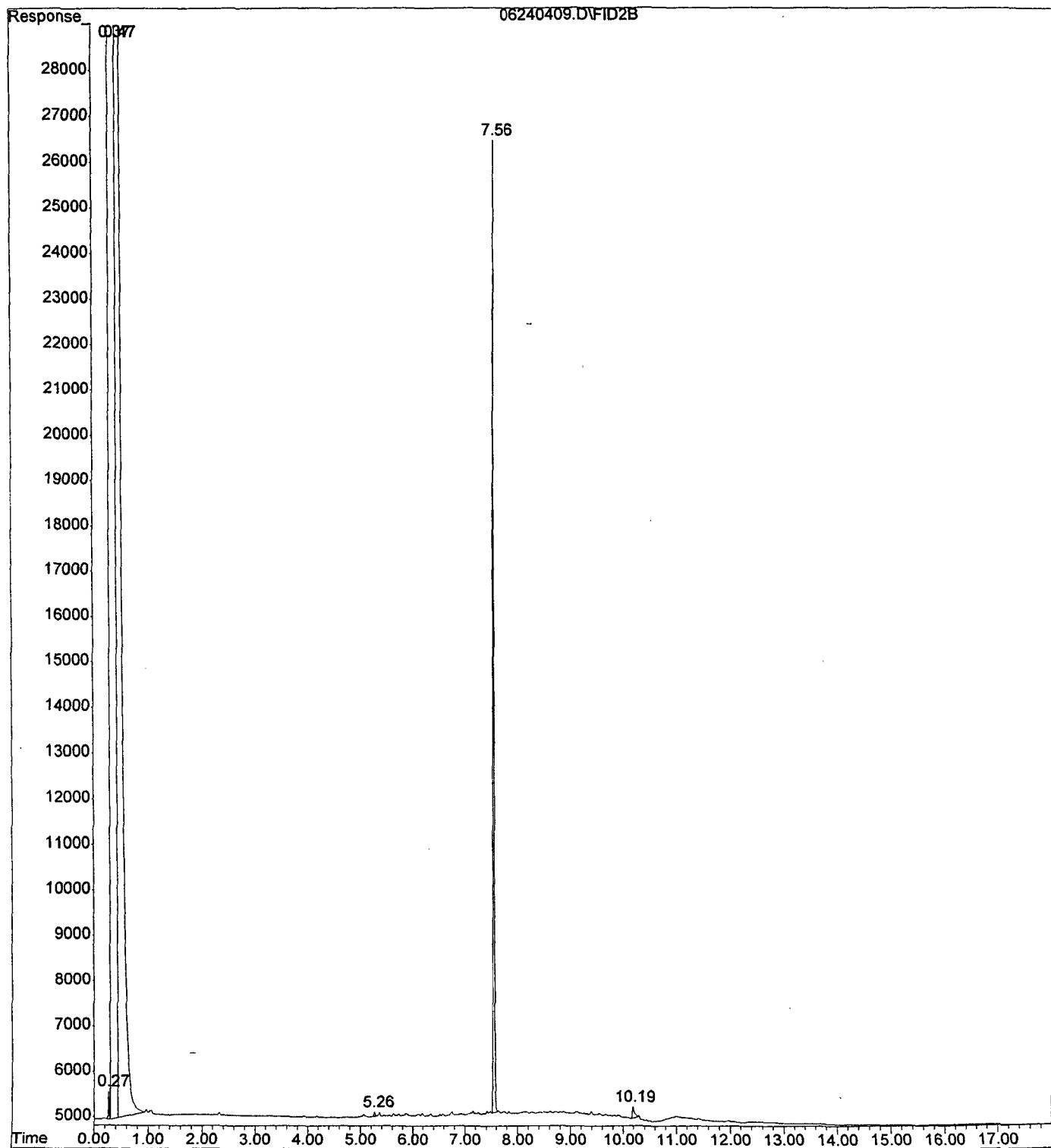
File : C:\HPCHEM\2\DATA\062204F\06220406.D
Operator : DSR
Acquired : 22 Jun 2004 11:09 using AcqMethod TPH0616.M
Instrument : FID-1
Sample Name: SRB 062104
Misc Info : 10G/10ML 06/21
Vial Number: 6



File : C:\HPCHEM\2\DATA\062404F\06240408.D
Operator : DSR
Acquired : 24 Jun 2004 11:18 using AcqMethod TPH0617.M
Instrument : FID-1
Sample Name: 406064-01RR
Misc Info : 10G/10ML 06/21
Vial Number: 6



File : C:\HPCHEM\2\DATA\062404F\06240409.D
Operator : DSR
Acquired : 24 Jun 2004 11:46 using AcqMethod TPH0617.M
Instrument : FID-1
Sample Name: 406064-02RR
Misc Info : 10G/10ML 06/21
Vial Number: 7





PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

RECEIVED

May 18, 2004

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

MAY 24 2004
Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

**RE: Annual Sampling at Giant's Centralized Surface Waste Management Landfarm
Facility NM -02-0010**

Dear Ms. Kieling,

On March 30, 2004, Lodestar Services, Inc. collected annual samples from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. Samples were collected from each of the two active landfarm cells as shown on Figure 1. Each sample was collected using a hand powered auger from three feet beneath native ground surface. Each sample was placed in an eight ounce glass jar and stored on ice during shipping to Pinnacle Laboratories in Albuquerque, NM. Strict chain-of-custody procedures were followed during shipping. Pinnacle laboratories analyzed the samples for the following constituents:

Total Petroleum Hydrocarbons
Benzene, Toluene, Ethyl benzen, and Xylenes
Major Ions (Na, Ca, Mg, K, Cl-,SO₄, CO₃, and HCO₃)
RCRA Metals (As, Ba, Cd, Cr, Pb, Se, Ag, and Hg)

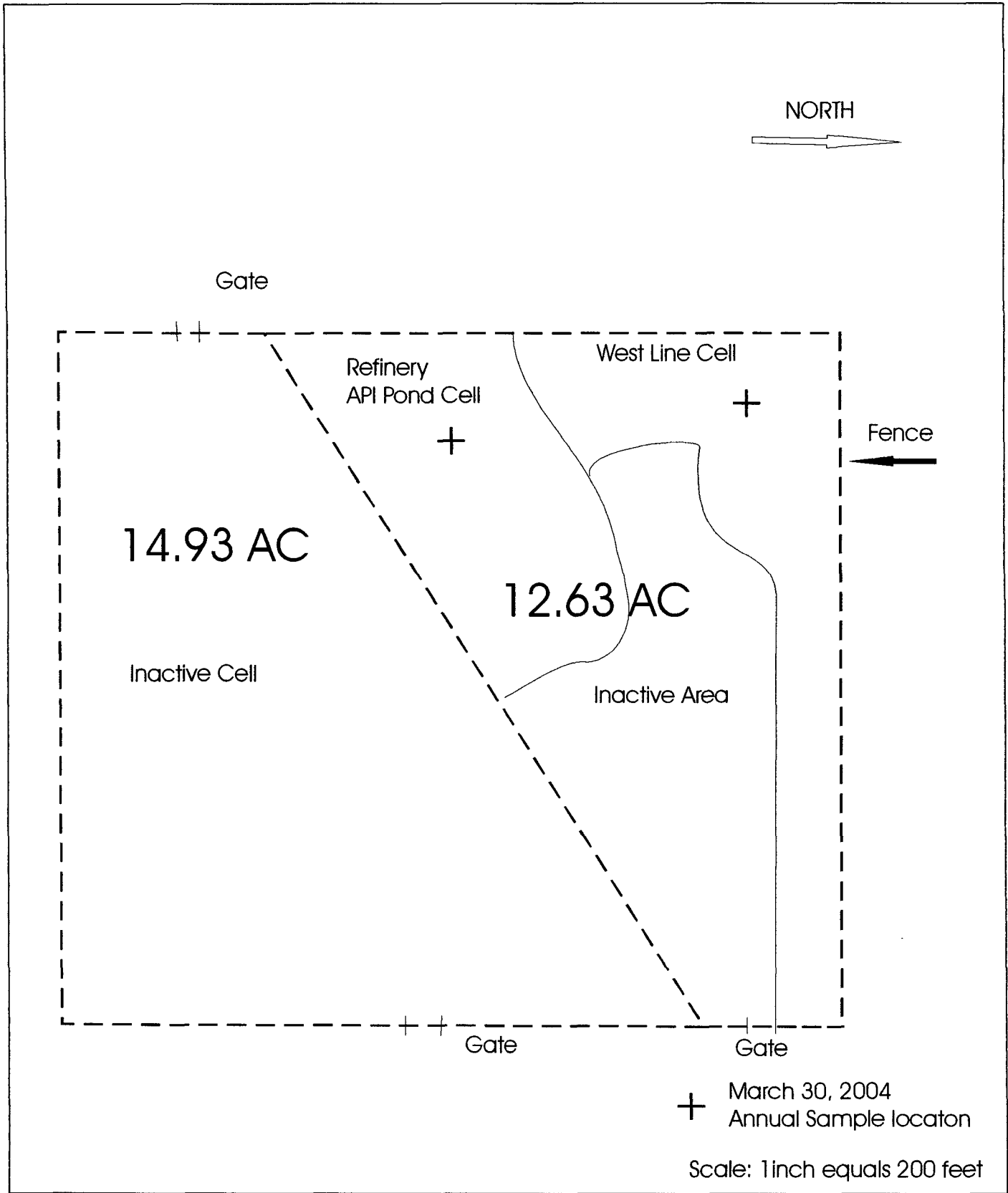
The attached analytical results are consistent with the original baseline data collected on March 27, 1998.

Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Gary Winn (505) 632-4077.

Sincerely,

Martin Nee

Cc: Mr. Gary Winn, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
File



 Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 5/12/04
Cell dimensions are based on
Phillip Services Figure 1A dated
9/30/97



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **403139**
April 24, 2004

GIANT INDUSTRIES
111 COUNTY RD. 4990
BLOOMFIELD, NM 87413

LODESTAR SERVICES INC
26 CR3500
FLORA VISTA, NM 87415

Project Name LANDFARM
Project Number 30002.0

Attention: GARY WINN/MARTIN NEE

On 03/31/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** 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.

EPA method 8021/8015 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

All remaining analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

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

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

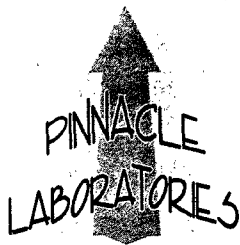
MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: GIANT INDUSTRIES	PINNACLE ID	: 403139
PROJECT #	: 30002.0	DATE RECEIVED	: 03/31/04
PROJECT NAME	: LANDFARM	REPORT DATE	: 04/24/04
PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
403139 - 01	API CELL	NON-AQ	03/30/04
403139 - 02	WEST LINE CELL	NON-AQ	03/30/04



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002.0
PROJECT NAME : LANDFARM

PINNACLE I.D. : 403139
ANALYST : BP

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	03/30/04	04/01/04	04/02/04	1
02	WEST LINE CELL	NON-AQ	03/30/04	04/01/04	04/02/04	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WEST LINE CELL
FUEL HYDROCARBONS	10	MG/KG	< 10	< 10
HYDROCARBON RANGE			C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE
BENZENE	0.025	MG/KG	< 0.025	< 0.025
TOLUENE	0.025	MG/KG	< 0.025	< 0.025
ETHYLBENZENE	0.025	MG/KG	< 0.025	< 0.025
TOTAL XYLENES	0.050	MG/KG	< 0.050	< 0.050

SURROGATE:
BROMOFLUOROBENZENE (%) 94 95
SURROGATE LIMITS (65 - 120)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 403139
BLANK I.D.	: 040104	DATE EXTRACTED	: 04/01/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/02/04
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/KG	<10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.050

SURROGATE:
BROMOFLUOROBENZENE (%) 98
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

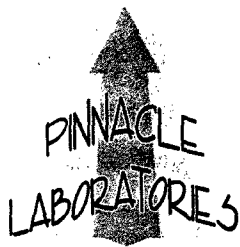
TEST	: EPA 8015B GRO	PINNACLE I.D.	:	403139
BATCH #	: 040104	DATE EXTRACTED	:	04/01/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	:	04/02/04
PROJECT #	: 30002.0	SAMPLE MATRIX	:	NON-AQ
PROJECT NAME	: LANDFARM	UNITS	:	MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	53.7	107	52.8	106	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:
N/A

$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

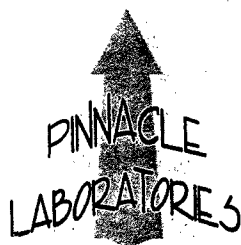
TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 403139
BATCH #	: 040104	DATE EXTRACTED	: 04/01/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/02/04
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.02	102	1.01	101	1	(68 - 120)	20
TOLUENE	<0.025	1.00	0.989	99	0.991	99	0	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.01	101	1.01	101	0	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	2.97	99	2.98	99	0	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

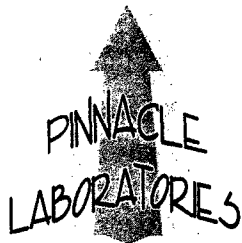
TEST	: EPA 8015B GRO	PINNACLE I.D.	: 403139
MSMSD #	: 403139-02	DATE EXTRACTED	: 04/01/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/02/04
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	50.0	52.1	104	50.7	101	3	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING GASOLINE									

CHEMIST NOTES:
N/A

$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST : EPA 8021B MODIFIED
MSMSD # : 403139-02
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002.0
PROJECT NAME : LANDFARM

PINNACLE I.D. : 403139
DATE EXTRACTED : 04/01/04
DATE ANALYZED : 04/02/04
SAMPLE MATRIX : NON-AQ
UNITS : MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.983	98	0.988	99	1	(68 - 120)	20
TOLUENE	<0.025	1.00	0.959	96	0.971	97	1	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.970	97	0.988	99	2	(49 - 127)	20
TOTAL XYLENES	<0.050	3.00	2.86	95	2.91	97	2	(58 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : GIANT INDUSTRIES
PROJECT # : 30002.0
PROJECT NAME : LANDFARM

PINNACLE I.D. : 403139
ANALYST : KAN

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	API CELL	NON-AQ	03/20/04	04/02/04	04/19/04	1
02	WEST LINE CELL	NON-AQ	03/20/04	04/02/04	04/19/04	1

PARAMETER	DET. LIMIT	UNITS	API CELL	WEST LINE CELL	#REF!
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	
FUEL HYDROCARBONS, C10-C22	10	MG/KG	< 10	< 10	
FUEL HYDROCARBONS, C22-C36	10	MG/KG	< 10	< 10	
CALCULATED SUM:					

SURROGATE:
O-TERPHENYL (%)
SURROGATE LIMITS (70-130)

75 83

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
EXTRACTION BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 403139
BLANK I.D.	: 040204	DATE EXTRACTED	: 04/02/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/19/04
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	ANALYST	: KAN

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 10
FUEL HYDROCARBONS, C22-C36	MG/KG	< 10

SURROGATE:

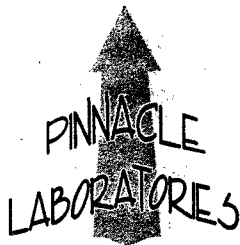
O-TERPHENYL (%)

92

SURROGATE LIMITS (70-130)

CHEMIST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

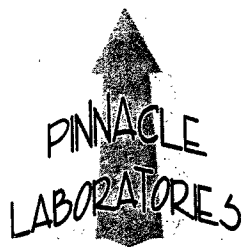
TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 403139
LCS/LCSD #	: 040204	DATE EXTRACTED	: 04/02/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/06/04
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	179	90	206	103	14	(70-130)	20

CHEMIST NOTES:
N/A

$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 403139
MSMSD #	: 403139-01	DATE EXTRACTED	: 04/02/04
CLIENT	: GIANT INDUSTRIES	DATE ANALYZED	: 04/06/04
PROJECT #	: 30002.0	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: LANDFARM	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<10	200	174	87	174	87	0	(70-130)	20

CHEMIST NOTES:
N/A

$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

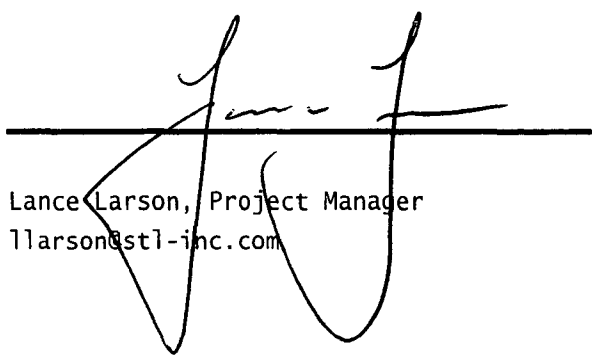
$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Report

For: Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

CC:

Order Number: C404047
SDG Number:
Client Project ID:
Project: 403139 GI-LANDFARM
Report Date: 04/16/2004
Sampled By: Client
Sample Received Date: 04/01/2004
Requisition Number:
Purchase Order:



Lance Larson, Project Manager
llarson@stl-inc.com

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Sample Summary

Order: C404047
Date Received: 04/01/2004

Client: Pinnacle Laboratories
Project: 403139 GI-LANDFARM

Client Sample ID
API CELL/403139-01
WEST LINE CELL/403139-02

Lab Sample ID
C404047*1
C404047*2

Matrix
Solid
Solid

Date Sampled
03/30/2004 09:04
03/30/2004 09:20

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
04047-1	API CELL/403139-01	Solid	04/01/04	03/30/04 09:04	
04047-2	WEST LINE CELL/403139-02	Solid	04/01/04	03/30/04 09:20	

Lab Sample IDs

Parameter	Units	04047-1	04047-2
CO2 and Forms of Alkalinity (45000)			
Bicarbonate (2320/4500)	mg/kg dw	1900	820
Carbon Dioxide, Free	mg/kg dw	<21	<22
Carbonate (2320/4500)	mg/kg dw	100	48
Hydroxide	mg/kg dw	<21	<22
Carbon Dioxide, Total	mg/kg dw	1700	750
Percent Solids		96	93
Dilution Factor		20	20
Analysis Date		04/07/04	04/07/04
Batch ID		AES001	AES001
Analyst		ST	ST

Alkalinity (to pH 4.5) as CaCO3 (2320B)

Alkalinity (to pH 4.5) as CaCO3	mg/kg dw	1900	870
Percent Solids		96	93
Dilution Factor		20	20
Prep Date		04/07/04	04/07/04
Analysis Date		04/07/04	04/07/04
Batch ID		AES001	AES001
Prep Method		SOP 805	SOP 805
Analyst		ST	ST

Chloride (9251)

Chloride	mg/kg dw	570	310
Percent Solids		96	93
Dilution Factor		20	20
Prep Date		04/06/04	04/06/04
Analysis Date		06/04/04	06/04/04
Batch ID		S002	S002
Prep Method		SOP 885	SOP 885
Analyst		CR	CR

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
04047-1	API CELL/403139-01	Solid	04/01/04	03/30/04 09:04	
04047-2	WEST LINE CELL/403139-02	Solid	04/01/04	03/30/04 09:20	

Parameter	Units	Lab Sample IDs	
		04047-1	04047-2

Sulfate as SO4 (375.4-EXT)

Sulfate as SO4	mg/kg dw	830	860
Percent Solids		96	93
Dilution Factor		20	20
Prep Date		04/06/04	04/06/04
Analysis Date		06/04/04	06/04/04
Batch ID		S002	S002
Prep Method		SOP 819	SOP 819
Analyst		CR	CR

Metals (6010B)

Calcium	mg/kg dw	2500	3100
Magnesium	mg/kg dw	1100	1100
Potassium	mg/kg dw	690	810
Sodium	mg/kg dw	180	<100
Percent Solids		96	93
Dilution Factor		1	1
Prep Date		04/05/04	04/05/04
Analysis Date		04/09/04	04/09/04
Batch ID		PS064	PS064
Prep Method		3050B	3050B
Analyst		GSP	GSP
Quantitation Factor		97.35	102.4

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
04047-1	API CELL/403139-01	Solid	04/01/04	03/30/04 09:04	
04047-2	WEST LINE CELL/403139-02	Solid	04/01/04	03/30/04 09:20	

Parameter	Units	Lab Sample IDs	
		04047-1	04047-2

RCRA Metals (6010B)

Arsenic	mg/kg dw	2.3	2.6
Barium	mg/kg dw	52	78
Cadmium	mg/kg dw	<0.49	<0.51
Chromium	mg/kg dw	2.8	3.5
Lead	mg/kg dw	3.4	4.3
Selenium	mg/kg dw	<0.97	<1.0
Silver	mg/kg dw	<0.49	<0.51
Percent Solids		96	93
Dilution Factor		1	1
Prep Date		04/05/04	04/05/04
Analysis Date		04/09/04	04/09/04
Batch ID		PS064	PS064
Prep Method		3050B	3050B
Analyst		GSP	GSP
Quantitation Factor		97.35	102.4

Mercury (7471A)

Mercury	mg/kg dw	<0.0082	<0.0085
Percent Solids		96	93
Dilution Factor		1	1
Prep Date		04/05/04	04/05/04
Analysis Date		04/06/04	04/06/04
Batch ID		HGS020	HGS020
Prep Method		7471A	7471A
Analyst		KN	KN
Quantitation Factor		40.92	42.67

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
04047-3	Method Blank	Solid	04/01/04		
04047-4	Lab Control Standard % Recovery	Solid	04/01/04		
04047-5	Matrix Spike % Recovery	Solid	04/01/04		
04047-6	Matrix Spike Duplicate % Recovery	Solid	04/01/04		

Lab Sample IDs

Parameter	Units	04047-3	04047-4	04047-5	04047-6
-----------	-------	---------	---------	---------	---------

CO2 and Forms of Alkalinity (4500D)

Bicarbonate (2320/4500)	mg/kg dw	N/A	N/A	N/A	N/A
-------------------------	----------	-----	-----	-----	-----

Alkalinity (to pH 4.5) as CaCO3 (2320B)

Alkalinity (to pH 4.5) as CaCO3	mg/kg dw	<20	97 %	97 %	96 %
Dilution Factor		20			
Prep Date		04/07/04			
Analysis Date		04/07/04			
Batch ID		AES001	AES001	AES001	AES001
Prep Method		SOP 805			
Analyst		ST			

Chloride (9251)

Chloride	mg/kg dw	<40	103 %	105 %	106 %
Dilution Factor		20			
Prep Date		04/06/04			
Analysis Date		06/04/04			
Batch ID		S002	CKS002	CKS002	CKS002
Prep Method		SOP 885			
Analyst		CR			

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
04047-3	Method Blank	Solid	04/01/04		
04047-4	Lab Control Standard % Recovery	Solid	04/01/04		
04047-5	Matrix Spike % Recovery	Solid	04/01/04		
04047-6	Matrix Spike Duplicate % Recovery	Solid	04/01/04		

Parameter	Units	Lab Sample IDs			
		04047-3	04047-4	04047-5	04047-6

Sulfate as SO4 (375.4-EXT)

Sulfate as SO4	mg/kg dw	<40	104 %	86 %	86 %
Dilution Factor		20			
Prep Date		04/06/04			
Analysis Date		06/04/04			
Batch ID		S002	SES002	SES002	SES002
Prep Method		SOP 819			
Analyst		CR			

Metals (6010B)

Calcium	mg/kg dw	<50	88 %	134 %N	105 %
Magnesium	mg/kg dw	<50	88 %	107 %	103 %
Potassium	mg/kg dw	<100	79 %	93 %	88 %
Sodium	mg/kg dw	<100	74 %	87 %	83 %
Dilution Factor		1			
Prep Date		04/05/04			
Analysis Date		04/09/04			
Batch ID		PS064	PS064	PS064	PS064
Prep Method		3050B			
Analyst		GSP			
Quantitation Factor		100.0			

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
04047-3	Method Blank	Solid	04/01/04		
04047-4	Lab Control Standard % Recovery	Solid	04/01/04		
04047-5	Matrix Spike % Recovery	Solid	04/01/04		
04047-6	Matrix Spike Duplicate % Recovery	Solid	04/01/04		

Parameter	Units	Lab Sample IDs			
		04047-3	04047-4	04047-5	04047-6

RCRA Metals (6010B)

Arsenic	mg/kg dw	<0.50	86 %	90 %	90 %
Barium	mg/kg dw	<1.0	85 %	126 %N	190 %N
Cadmium	mg/kg dw	<0.50	87 %	93 %	93 %
Chromium	mg/kg dw	<0.50	89 %	96 %	94 %
Lead	mg/kg dw	<0.50	89 %	95 %	94 %
Selenium	mg/kg dw	<1.0	76 %	79 %	78 %
Silver	mg/kg dw	<0.50	87 %	91 %	89 %
Dilution Factor		1			
Prep Date		04/05/04			
Analysis Date		04/09/04			
Batch ID		PS064	PS064	PS064	PS064
Prep Method		3050B			
Analyst		GSP			
Quantitation Factor		100.0			

Mercury (7471A)

Mercury	mg/kg	<0.0083	100 %	101 %	101 %
Dilution Factor		1			
Prep Date		04/05/04			
Analysis Date		04/06/04			
Batch ID		HGS020	HGS020	HGS020	HGS020
Prep Method		7471A			
Analyst		KN			
Quantitation Factor		41.67			

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Order Number: C404047

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

STL Pensacola

PROJECT SAMPLE INSPECTION FORM

SEVERN
TRENT

STL

Lab Order #: C404047

Date Received: 4/16/14

1. Was there a Chain of Custody? ☒ Yes ☐ No*

2. Was Chain of Custody properly filled out and relinquished? ☒ Yes ☐ No*

3. Were all samples properly labeled and identified? ☒ Yes ☐ No*

4. Were samples received cold? ☒ Yes ☐ No* N/A
(Criteria: 2° - 6°C: STL-SOP 1055)

5. Did samples require splitting or compositing? Yes* ☒ No

6. Were samples received in proper containers for analysis requested? ☒ Yes ☐ No*

7. Were all sample containers received intact? ☒ Yes ☐ No*

8. Were samples checked for preservative? (Check pH of all H₂O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)* Yes ☐ No* ☒ N/A

9. Is there sufficient volume for analysis requested? ☒ Yes ☐ No* N/A (Can)

10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) ☒ Yes ☐ No*

11. Is Headspace visible > 1/4" in diameter in VOA vials?* Yes* ☐ No ☒ N/A

12. Were Trip Blanks Received? Yes ☐ No ☒ N/A

13. If sent, were matrix spike bottles returned? Yes ☐ No* ☒ N/A

14. If sent, were T-Handles returned? Yes ☐ No* ☒ N/A

15. If any issues, how was PM notified? PSIF ☐ Verbal ☐

Airbill Number(s): 12878168 014644 1957

Shipped By: ☒ UPS ☐ FedX ☐ HD ☐ BUS ☐ ABX

(HD - Hand Delivery)

Cooler Numbers & Temp(s) (°C): Chest 5.4°C IH

(IE. 340L-4°C-CCK8 -- LIST THERMOMETER NUMBER FOR VERIFICATION)

Out of Control Events and Inspection Comments (list sample IDs/Tests where appropriate):

1-3. COC/Sample ID/COC discrepancy: Samples must be shared by Watchman + Metals

4. Insufficient Ice ☐ Delay in delivery ☐ Other ☐

5. Samples were Split ☐ Composited ☐ Requested by: Client ☐ PM ☐ Other: _____

6. Improper Containers (ID/Size/desc): _____

7. Broken bottles/Test: _____

8. Incorrect pH: _____

9. Test/Matrix/Volume: _____

10. Out of Holding Time/Test: _____

11. VOA headspace > 1/4" (list ~ size) _____

List additional comments by above number: _____

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: MHS Date: 4/16/14

Logged By: MHS Date: 4/21/14

- * Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O₂, Residual CU) as out of hold time, therefore, these samples will not be documented on this PSIF.
- * All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"
- * All pH results for North Carolina, New York, and other requested samples are to be recorded on the pH log provided (STL-SOP 938).
- * According to EPA, 1/4" of headspace is acceptable in 40 ml vials requiring volatile analysis.

Organic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
D	The result was obtained from a dilution.
E	The result exceeds the calibration range.
J	Estimated value because the analyte concentration is less than the reporting limit.
M	A matrix effect was present.
N	Presumptive evidence of a compound. The compound was identified qualitatively or as a Tentatively Identified Compound.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
P	Second-column or detector confirmation exceeded method criteria. Appropriate value is reported and data is flagged/qualified as instructed by method/regulation.
U or < or ND	The analyte was not detected.
*	The result is not within control limit(s).

Inorganic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
E	The reported value is estimated because of the presence of interference.
J	Estimated value because the analyte concentration is less than the reporting limit.
N	The spiked sample recovery is not within control limits.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
U or < or ND	The analyte was not detected.
*	Duplicate analysis not within control limits
M	The duplicate injection precision was not met.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance and post spike recovery is greater than or equal to 40%, the sample is flagged with a "W" and no further action is required.
+	The Standard Additions Correlation Coefficient is <0.995.
L	The result is not within control limit(s).

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit
RL	STL Pensacola Reporting Limit
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)

Florida Projects Inorganic/Organic

Refer to FL DEP 62-160; Table 4 Data Qualifier Codes. FL DEP Rule 62-160, Table 1 lists the Florida sites which require data qualifiers.

Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

Severn Trent Laboratories Inc.

STL Pensacola • 3355 McLemore Dr • Pensacola, FL 32514

Tel 850 474 1001 Fax 850 484 5315 • www.stl-inc.com



STL PENSACOLA **Certifications, Memberships & Affiliations**

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (88-0689) (Environmental)

California Department of Health Services, **ELAP** Laboratory ID No. I-2510 (Hazardous Waste and Wastewater)

Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater)

Florida DOH, **NELAP** Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida DEP/DOH CompQAP # 980156

Illinois Environmental Laboratory Accreditation Program (ELAP), **NELAP** Laboratory ID No. 200041 (Wastewater and Hazardous Waste)

Iowa Department of Natural Resources, Laboratory ID No. 367 (WW & UST)

Kansas Department of Health & Environment, **NELAP** Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water)

Kentucky Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST)

Louisiana DEQ, LELAP, **NELAP** Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental)

Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater)

Michigan Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, **NELAP** Laboratory ID No. 250502 (Drinking Water & Wastewater)

New Jersey DEP&E, **NELAP** Laboratory ID No. FL006 (Wastewater and Hazardous Waster)

North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida)

Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Pennsylvania Department of Environmental Resources, **NELAP** Laboratory ID No. 68-467 (Drinking Water & Wastewater)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater)

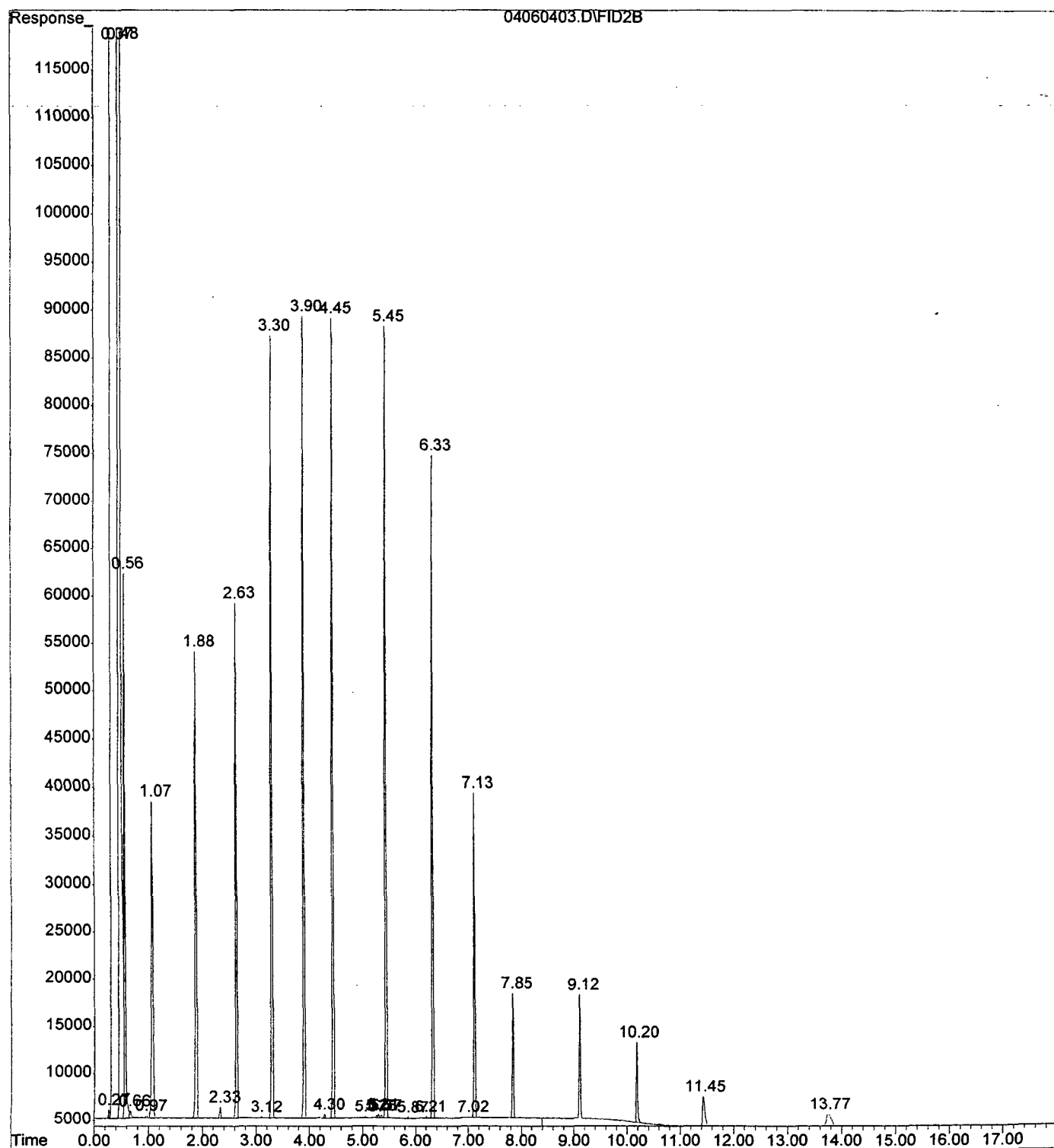
EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031

NFESC (Naval Facilities Engineering Services Center)

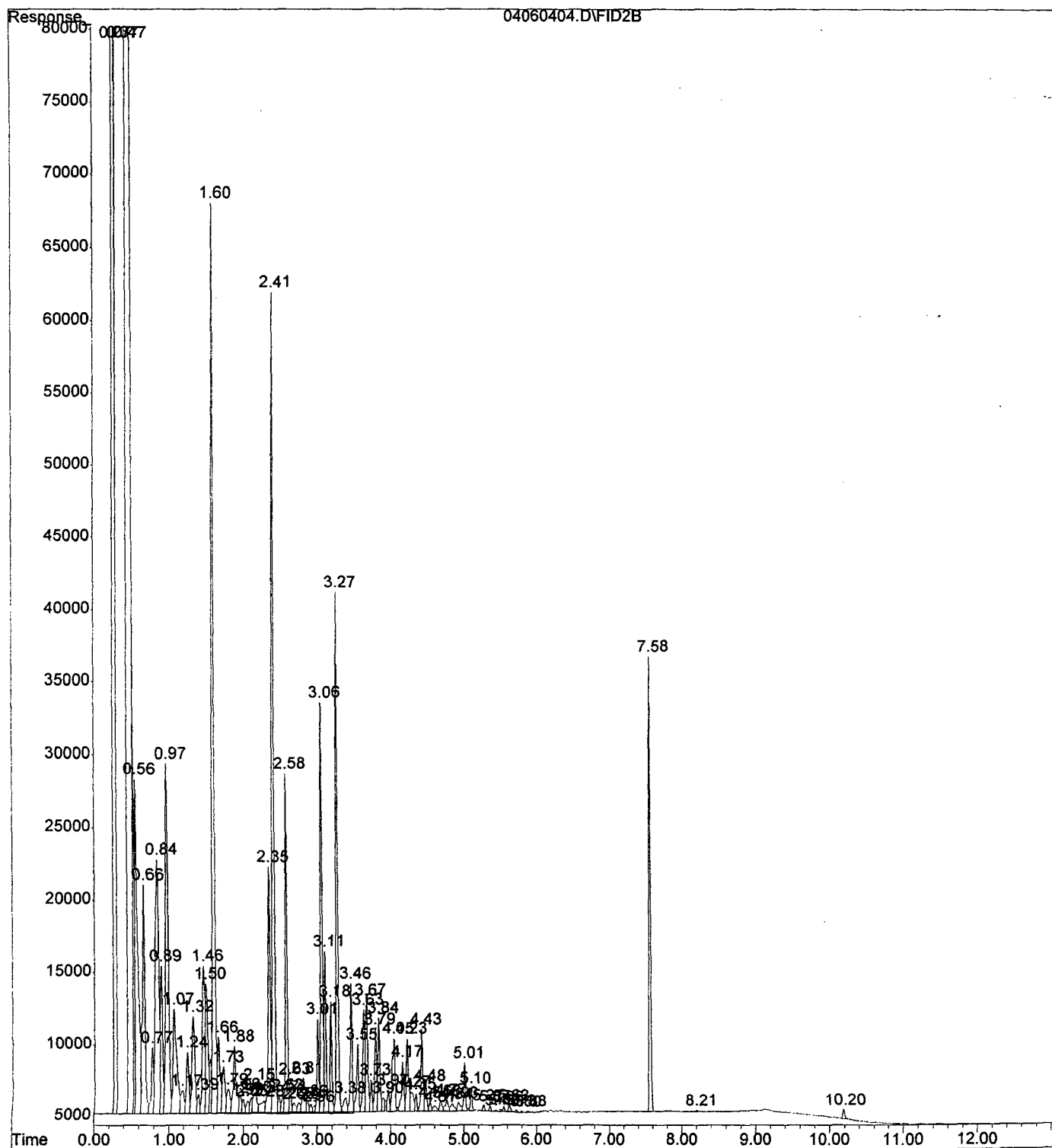
USACE (United States Army Corps. of Engineers), MRD

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

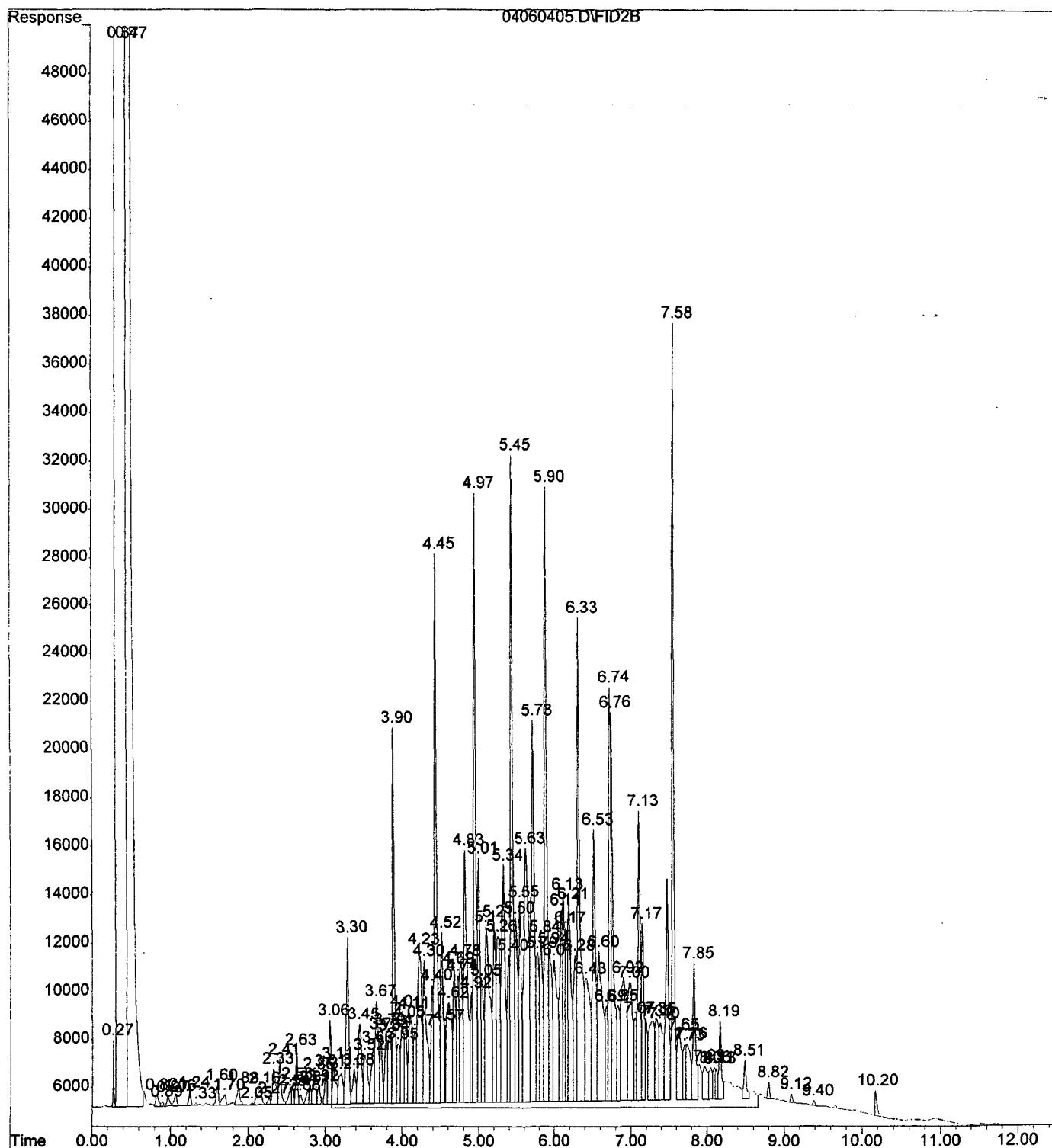
File : C:\HPCHEM\2\DATA\040604F\04060403.D
Operator : KAN
Acquired : 6 Apr 2004 15:00 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: RT
Misc Info : GC4-142-14
Vial Number: 2



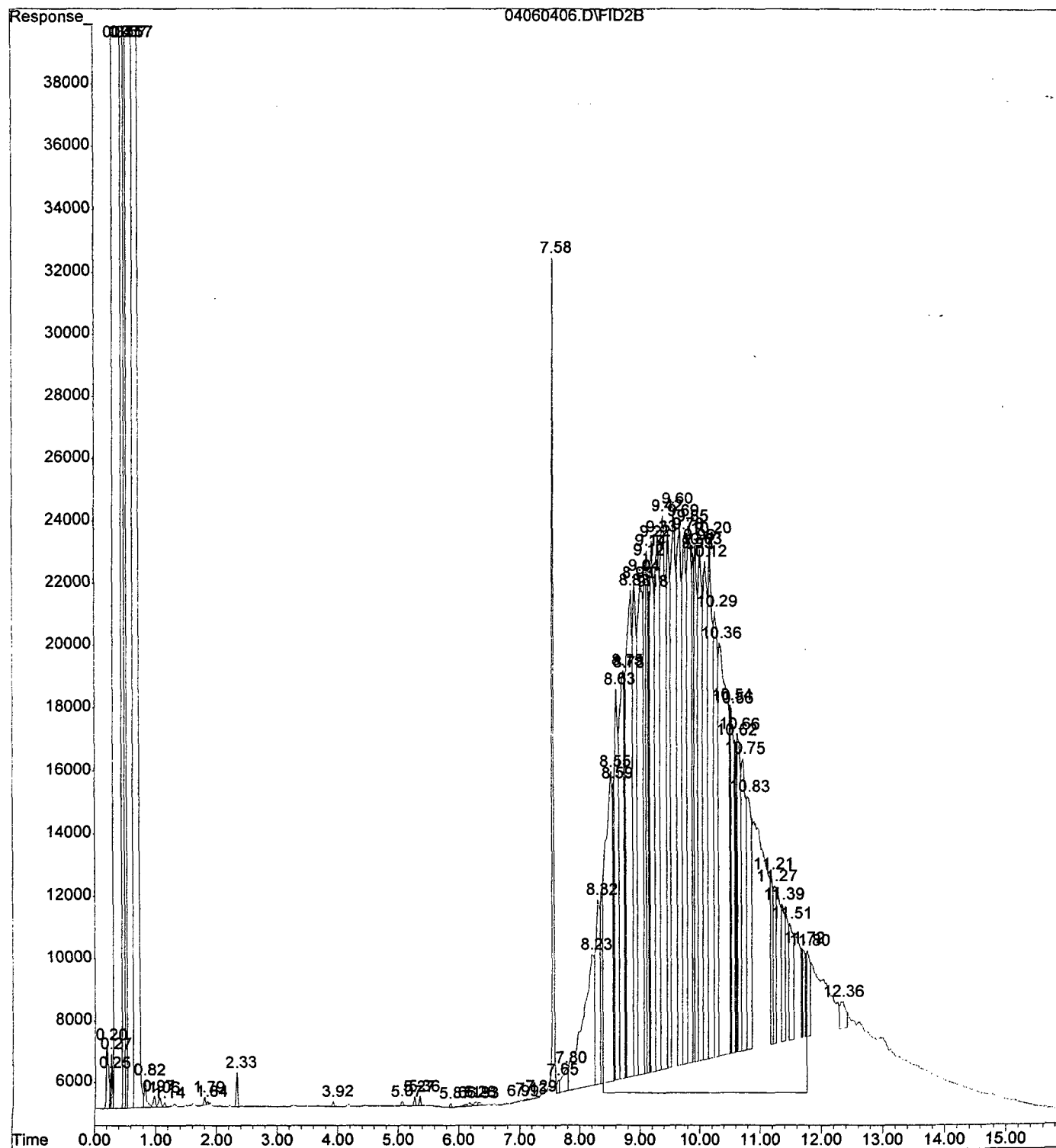
File : C:\HPCHEM\2\DATA\040604F\04060404.D
Operator : KAN
Acquired : 6 Apr 2004 15:28 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: GRO CCV 200PPB
Misc Info : GC4-142-15
Vial Number: 3



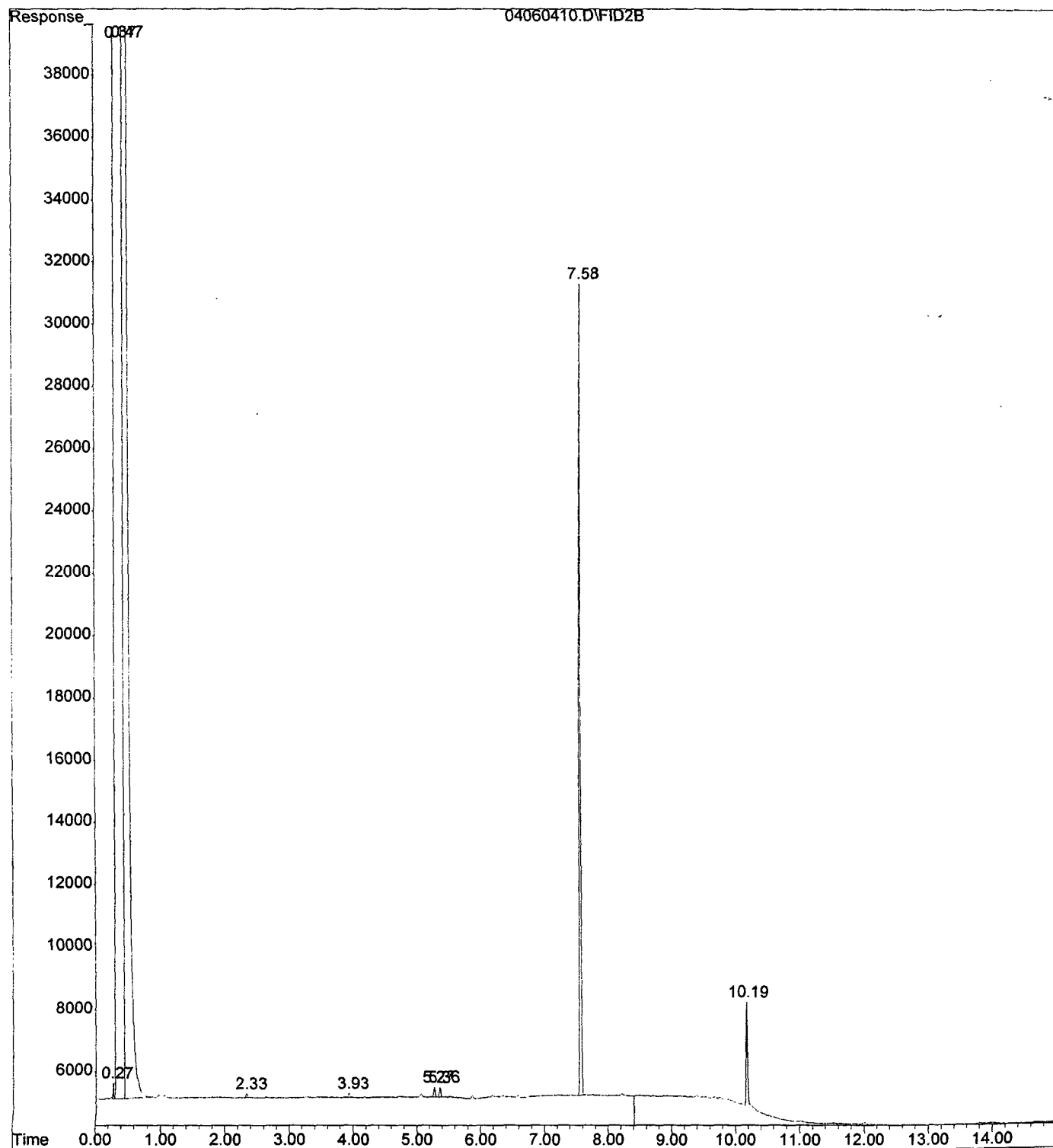
File : C:\HPCHEM\2\DATA\040604F\04060405.D
Operator : KAN
Acquired : 6 Apr 2004 15:56 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: DRO CCV 200PPB
Misc Info : GC4-139-19
Vial Number: 4



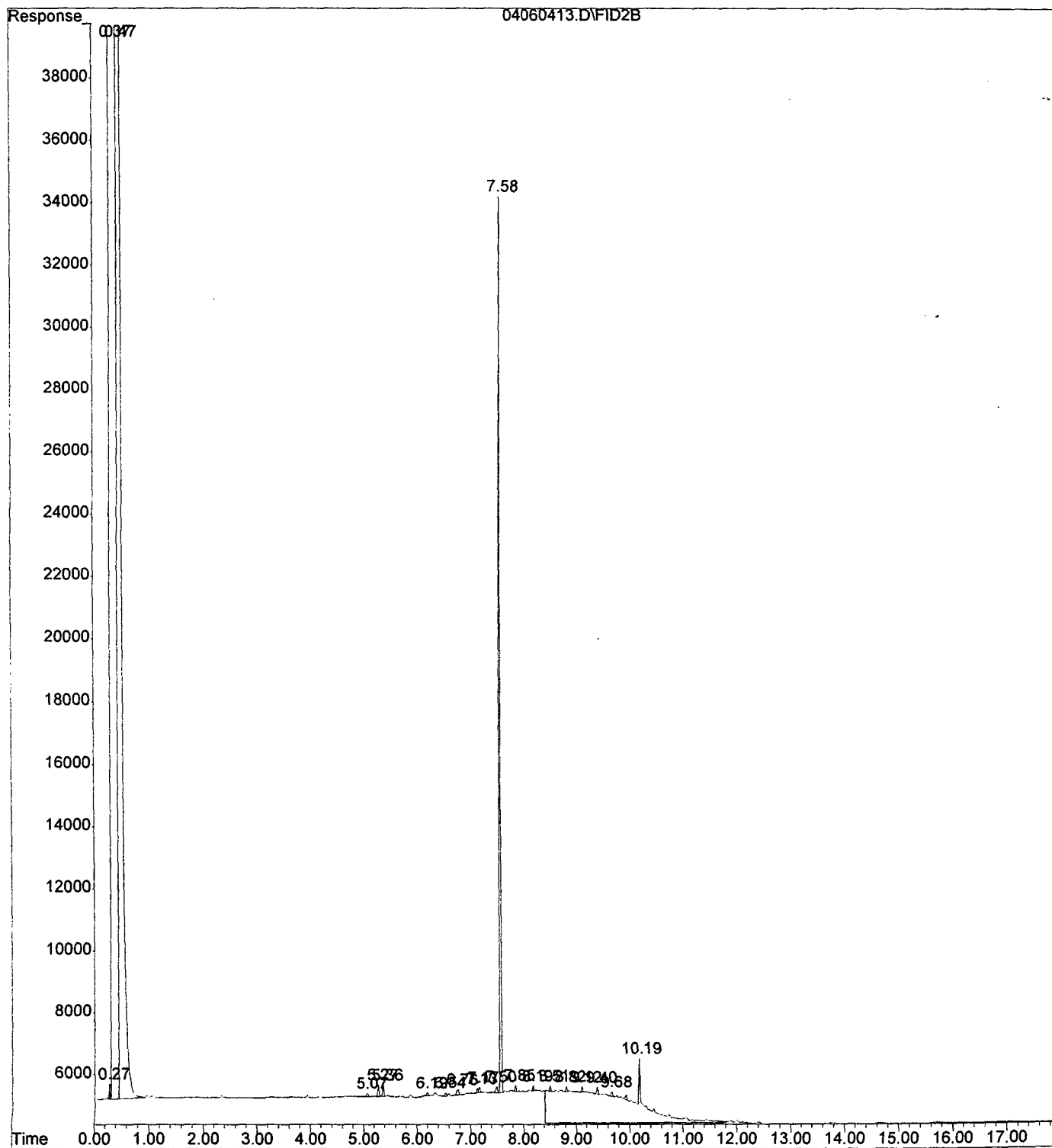
File : C:\HPCHEM\2\DATA\040604F\04060406.D
Operator : KAN
Acquired : 6 Apr 2004 16:23 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: ORO CCV 500PPB
Misc Info : GC4-141-07
Vial Number: 5



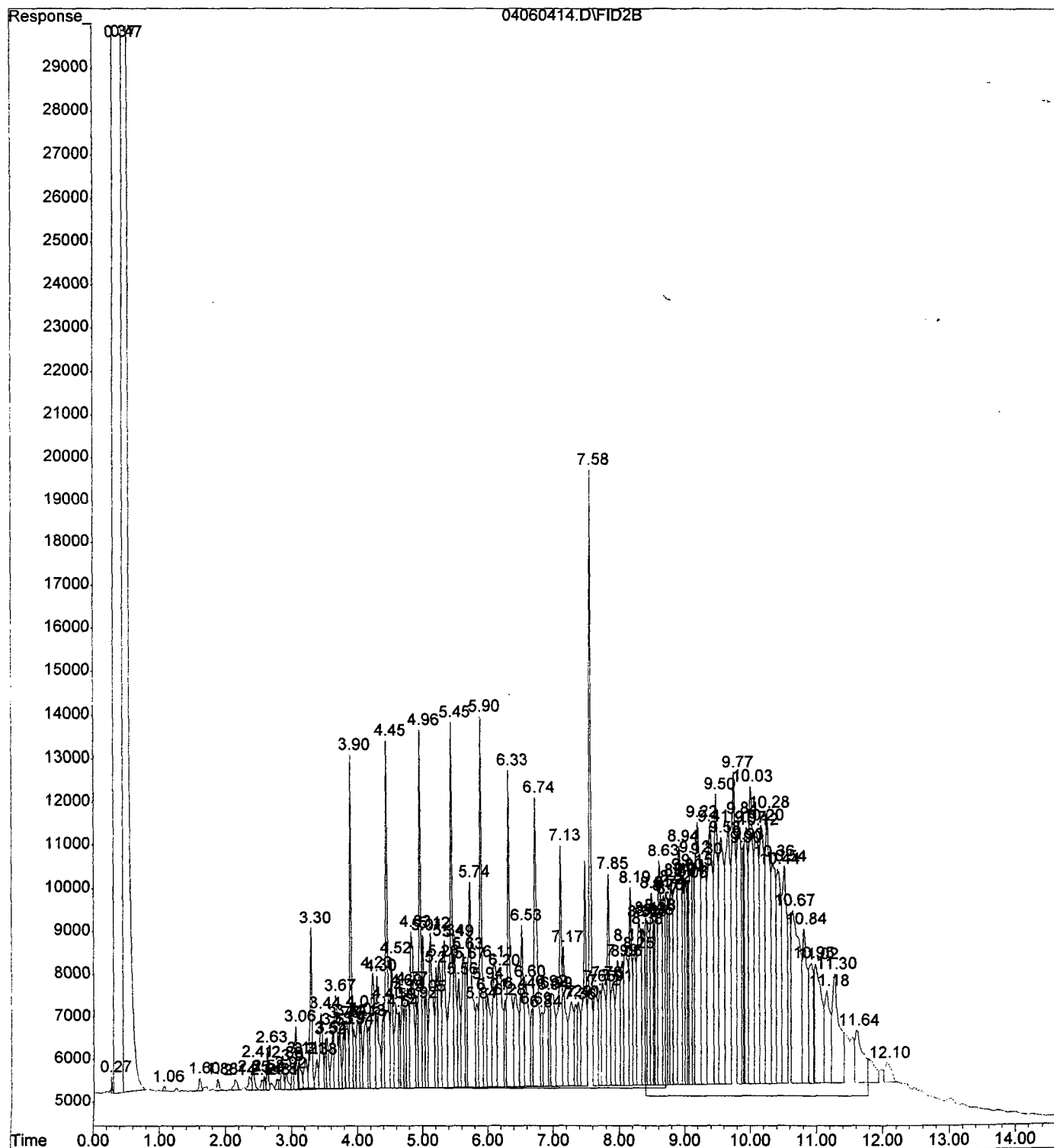
File : C:\HPCHEM\2\DATA\040604F\04060410.D
Operator : KAN
Acquired : 6 Apr 2004 18:15 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: 403139-01
Misc Info : 10MG/10ML 040204
Vial Number: 9



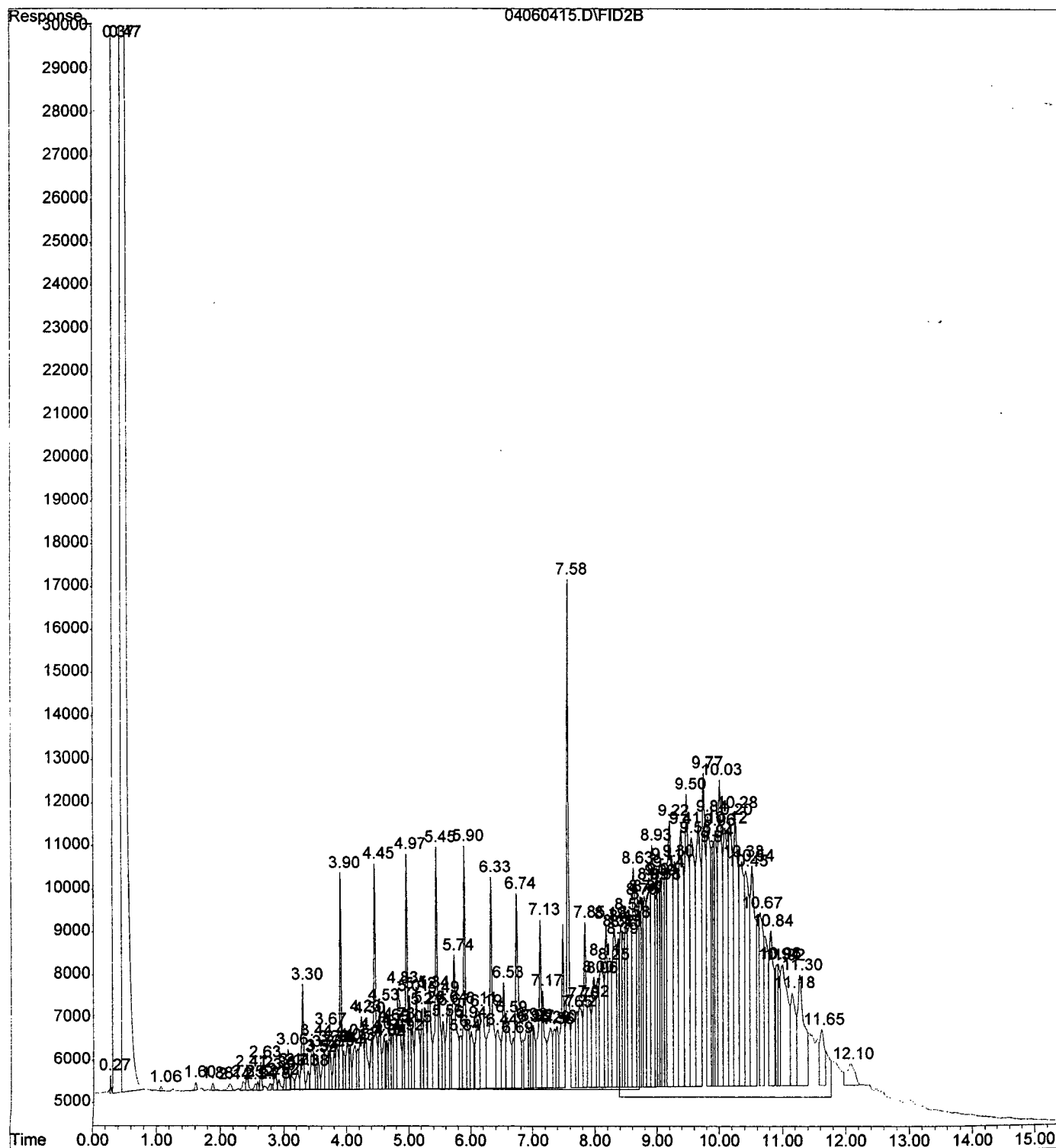
File : C:\HPCHEM\2\DATA\040604F\04060413.D
Operator : KAN
Acquired : 6 Apr 2004 19:38 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: 403139-02
Misc Info : 10MG/10ML 040204
Vial Number: 12



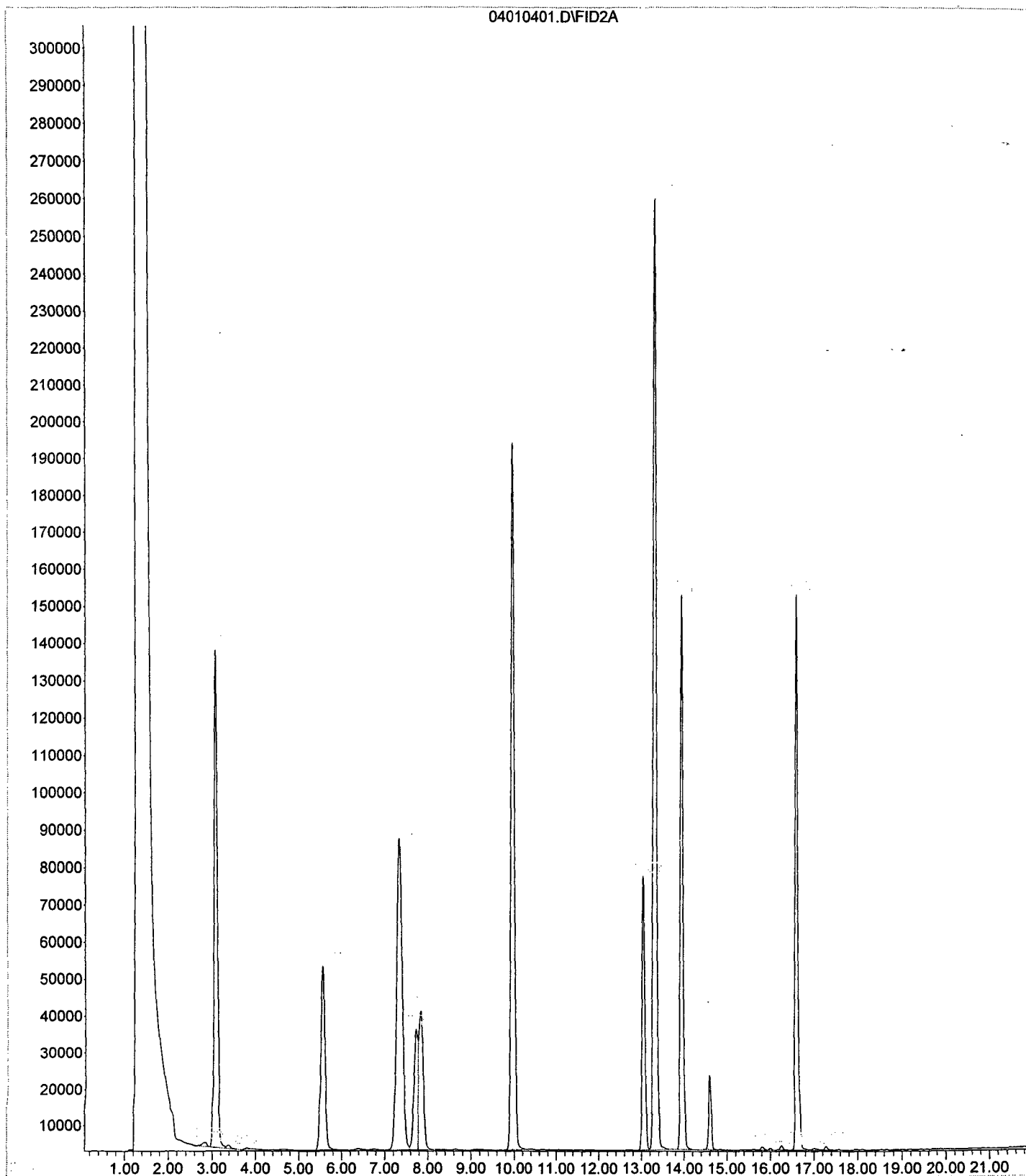
File : C:\HPCHEM\2\DATA\040604F\04060414.D
Operator : KAN
Acquired : 6 Apr 2004 20:06 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: 403121-01
Misc Info : 10MG/10ML 040204
Vial Number: 13



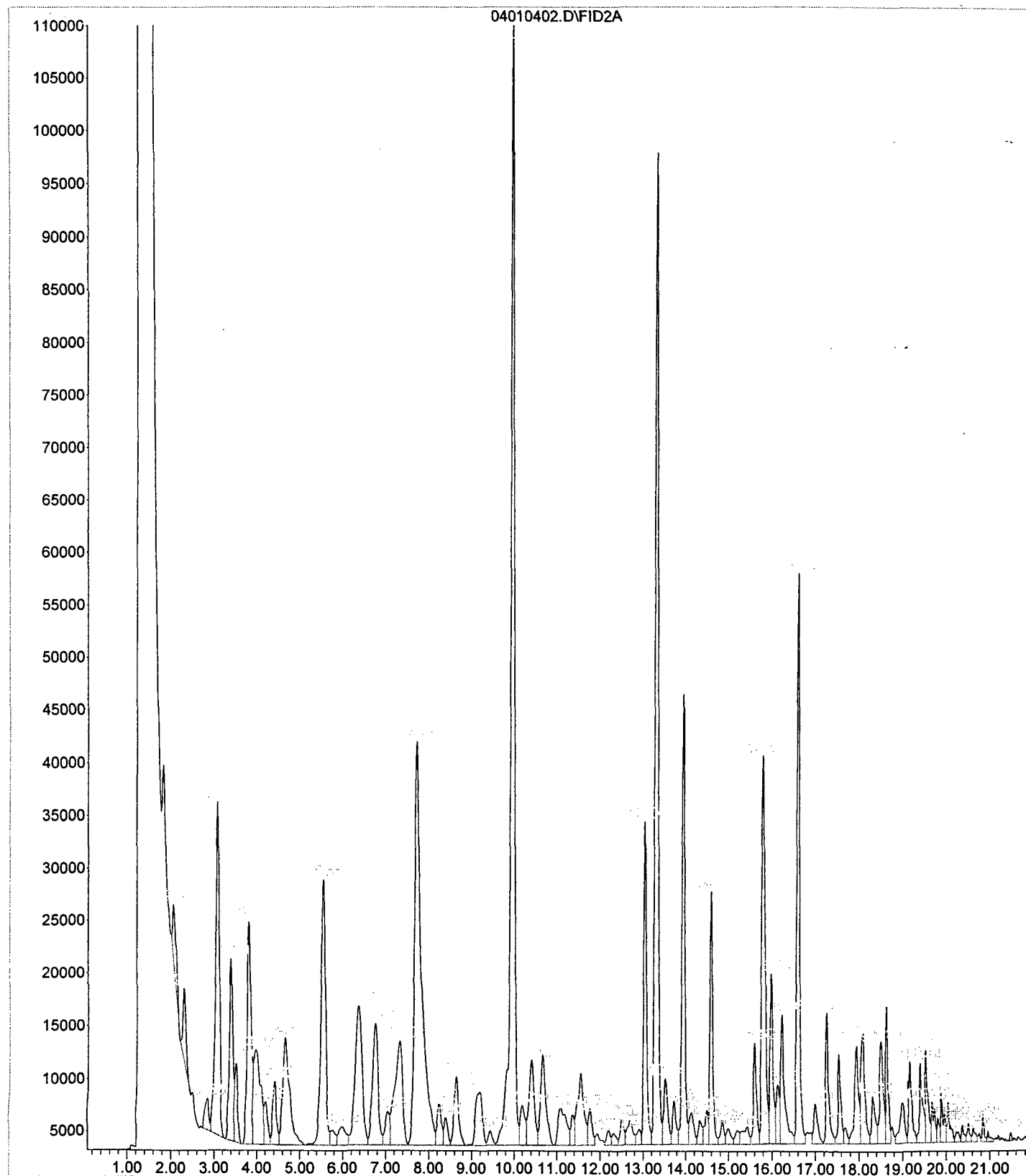
File : C:\HPCHEM\2\DATA\040604F\04060415.D
Operator : KAN
Acquired : 6 Apr 2004 20:33 using AcqMethod TPH0317.M
Instrument : FID-1
Sample Name: 403121-02
Misc Info : 10MG/10ML 040204
Vial Number: 14



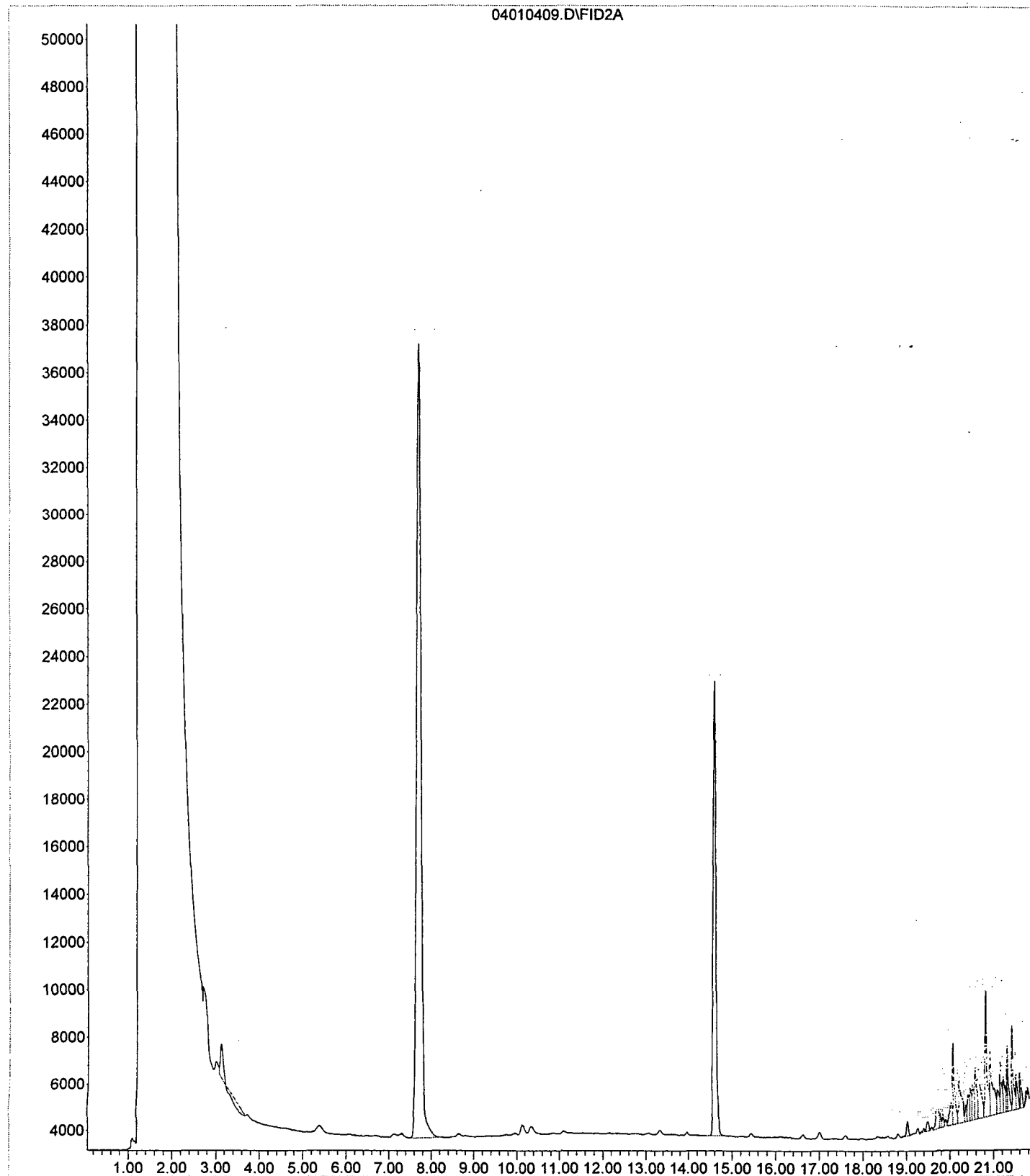
File : C:\HPCHEM\1\DATA\040104\04010401.D
Operator : BP
Acquired : 1 Apr 2004 20:24 using AcqMethod BG112403.M
Instrument : GC-2
Sample Name: GRO RT STD
Misc Info : 10uL GC4-140-05
Vial Number: 1



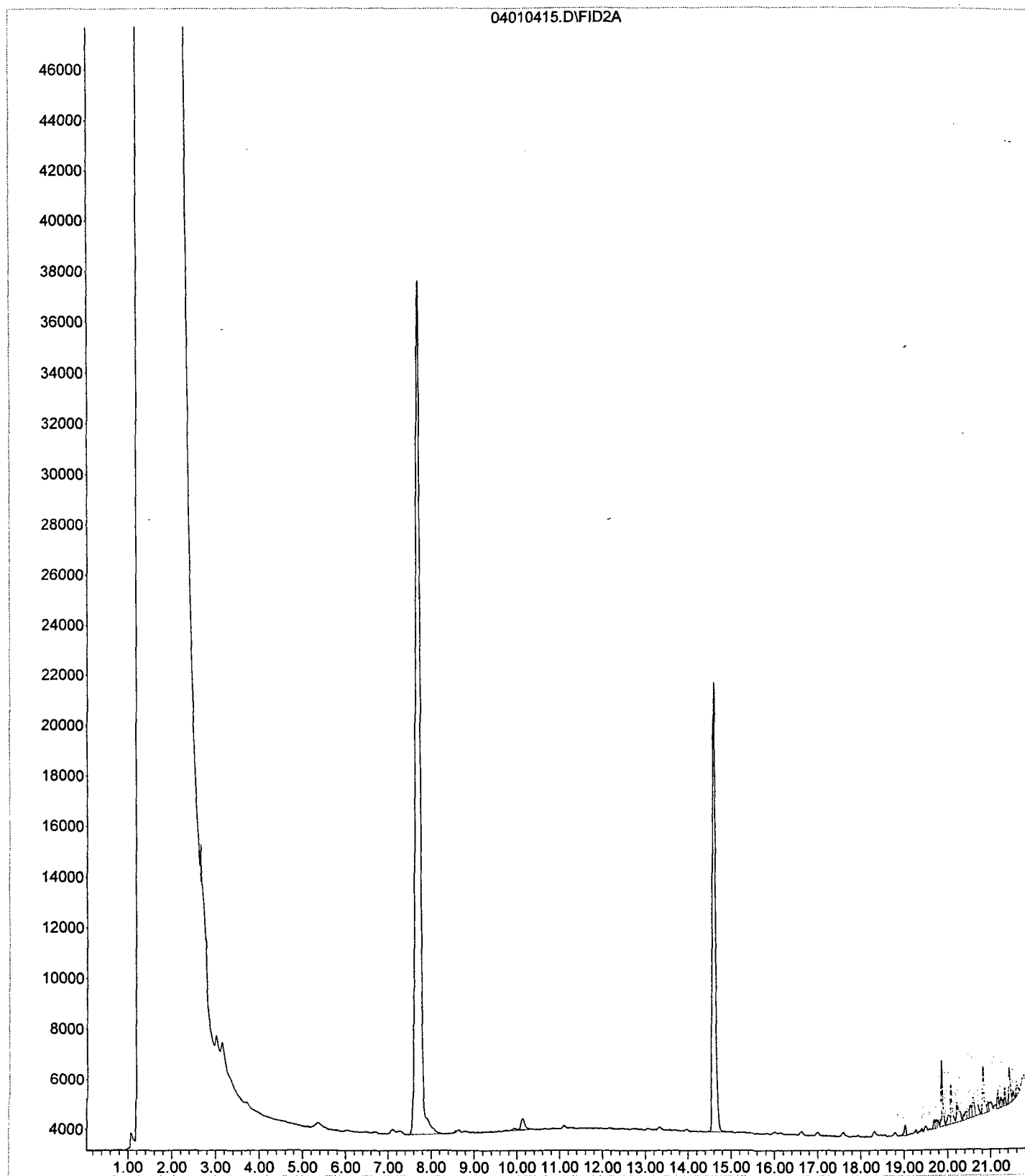
File : C:\HPCHEM\1\DATA\040104\04010402.D
Operator : BP
Acquired : 1 Apr 2004 20:55 using AcqMethod BG112403.M
Instrument : GC-2
Sample Name: GRO CCV 1000ppb
Misc Info : 10uL GC4-131-18
Vial Number: 2



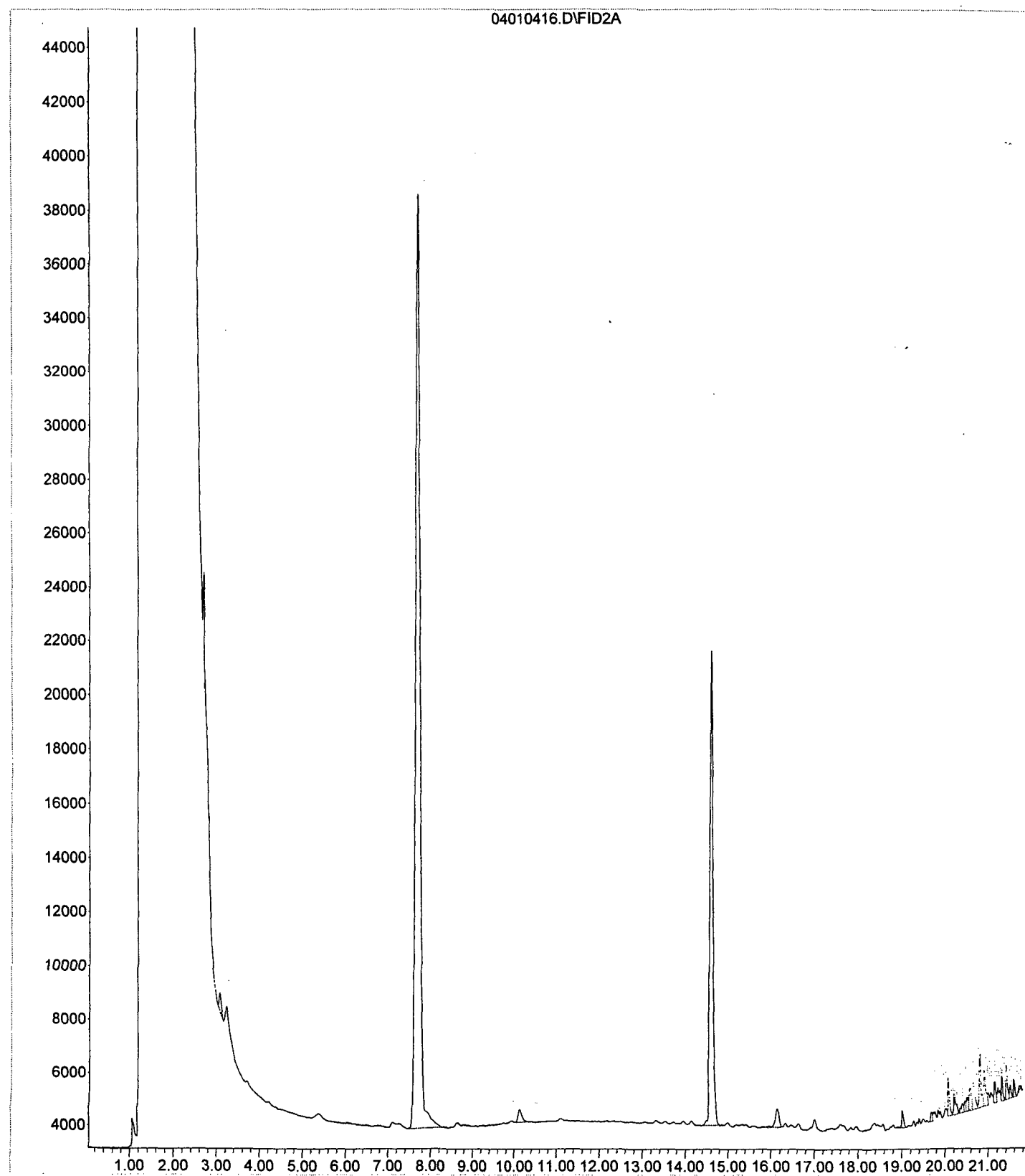
File : C:\HPCHEM\1\DATA\040104\04010409.D
Operator : BP
Acquired : 2 Apr 2004 00:35 using AcqMethod BG112403.M
Instrument : GC-2
Sample Name: SRB-040104
Misc Info : 100uL SOIL
Vial Number: 9



File : C:\HPCHEM\1\DATA\040104\04010415.D
Operator : BP
Acquired : 2 Apr 2004 3:43 using AcqMethod BG112403.M
Instrument : GC-2
Sample Name: 403139-01 1X
Misc Info : 100uL SOIL
Vial Number: 15



File : C:\HPCHEM\1\DATA\040104\04010416.D
Operator : BP
Acquired : 2 Apr 2004 4:15 using AcqMethod BG112403.M
Instrument : GC-2
Sample Name: 403139-02 1X
Misc Info : 100uL SOIL
Vial Number: 16



STATE OF NEW MEXICO
ENERGY MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal Time 3:00 pm Date 3-11-04

Originating Party

Gary Winn

Other Parties

Martyn

Subject

Land Farm Manager For Giant Land Farm
Make sure all correspondence goes through him

Discussion

Conclusions or Agreements

Distribution

Signed

Martyn



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

March 8, 2004

Lori Wrotenberg

Director

Oil Conservation Division

Mr. Timothy Kinney
Giant Industries Arizona, Inc.
111 County Road 4990
Bloomfield, NM 87413

**RE: Approval for Discontinued Maintenance Status
Giant Industries Arizona, Inc., Permit NM-02-0010
NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM,
San Juan County, New Mexico.**

Dear Mr. Kinney:

The New Mexico Oil Conservation Division (OCD) has received Loadstar Services, Inc. letter dated March 1, 2004 on behalf of Giant Industries Arizona, Inc. and has reviewed the analytical data concerning remediated soils within Cells 1. Based on the information provided, Cell 1 is hereby approved for discontinued maintenance status and the addition of another lift of contaminated soil. Note that with the addition of successive lifts Giant must resume maintenance and treatment zone monitoring. The treatment zone monitoring depth must be adjusted to reach the 2-3 foot zone below the original native ground surface. If Giant wants to move the soils from the facility, separate OCD authorization must be granted.

Please be advised that OCD approval does not relieve Giant of liability should their operation result in pollution of the ground water, surface water or the environment. In addition, OCD approval does not relieve Giant of the responsibility for compliance with other federal, state, local laws and/or regulations.

If you have any further questions please do not hesitate to contact me at (505) 476-3488.

Sincerely,

Martyne J. Kielling
Environmental Geologist

xc: Aztec OCD Office
Martin Nee, Loadstar Services, Inc., P.O. Box 3861 Farmington, NM 87499-3861



PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

RECEIVED

MAR 05 2004

Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

March 1, 2004

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

RE: Centralized Surface Waste Management Landfarm Facility NM -02-0010

Dear Ms. Kieling,

On February 9, 2004, Lodestar Services, Inc. collected a 5 point composite sample from Giant Industries Arizona, Inc.'s (Giant) landfarm, permit number NM-02-0010, located in the NW/4 SE/4 of Section 16, Township 25 North, Range 12 West, NMPM, San Juan County, NM. The sample was from material previously landfarmed within the original fifteen-acre cell. The intent of sample collection was to determine if the material within the original cell was of acceptable concentrations of hydrocarbons to discontinue disking and to add a subsequent lift in accordance with the New Mexico Oil Conservation Division (OCD) Rule 711.

Approximately 24 ounces of soil was collected at each of the locations shown on the attached Landfarm Cell Diagram. Soil was collected from approximately three inches beneath the top of the six inch thick lift. Each sample was immediately placed in a 1 gallon plastic bag and sealed. Once each of the five samples had been collected the material was thoroughly mixed and an eight ounce laboratory sample jar filled and sealed. The sample was then labeled with the sampler's initials, time, date and location, and placed on ice. The sample was then delivered to Envirotech Inc.'s laboratory in Farmington, NM following strict chain of custody procedures. The sample was analyzed for benzene, toluene, ethylbenzene, xylenes, (BTEX) and total petroleum hydrocarbons, by USEPA methods, 8021 and 8015, respectively.

The laboratory report is attached. The following laboratory results have been converted from micrograms per kilogram and milligrams per kilogram for comparison to NMOCD standards.

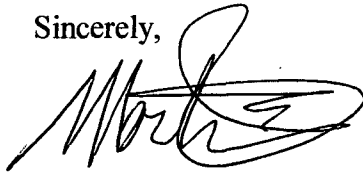
Analyte	Result	NMOCD Standard
Benzene	Not detected	10 ppm
Toluene	0.030 ppm	
Ethylbenzene	0.019 ppm	
Xylenes	0.332 ppm	
Total BTEX	0.381 ppm	50 ppm
Total Petroleum Hydrocarbons	8.1 ppm	100 ppm

Ms. Martyne Kieling
March 1, 2004
Page 2 of 2

Based on the results of sampling presented above, Giant herein requests permission to discontinue disking the existing material and approval for the addition of future lifts. In the event that future lifts are added disking will resume.

We look forward to your approval of this proposed work. Should you have any questions or require additional information please do not hesitate to call me at (505) 334-2791 or Gary Winn (505) 632-4077.

Sincerely,



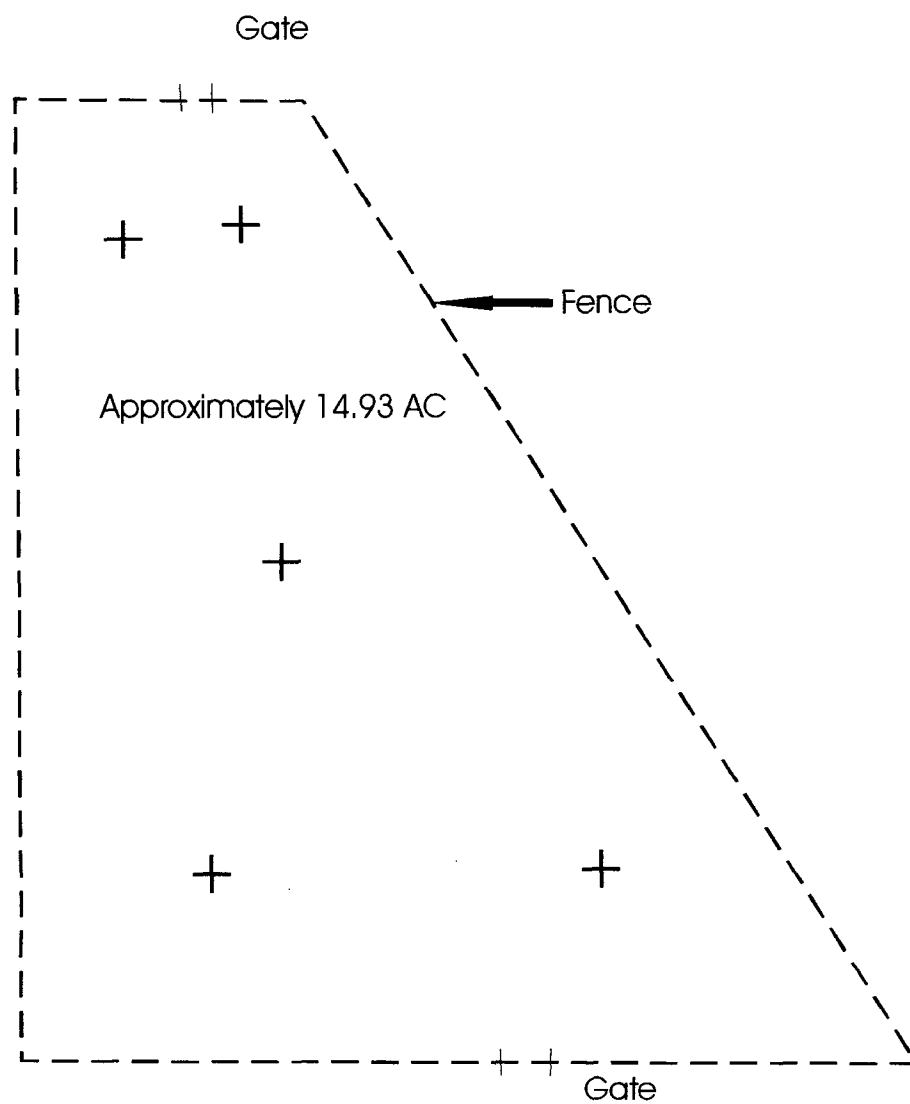
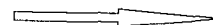
Martin Nee

Cc: Mr. Gary Winn, Giant Industries Arizona, Inc
Mr. Tim Kinney, Giant Industries Arizona, Inc.
File

✦ **Lodestar Services, Incorporated**

PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

NORTH



+ Sample location

Scale: 1 inch equals 200 feet

 Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

Landfarm Cell Diagram

Figure 1

Drawn By MJN 3/1/04
Cell dimensions are based on
Philip Services Figure 1A dated
9/30/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

February 13, 2004

Mr. Martin Nee
Lodestar Service
#26 CR 3500
Flora Vista, New Mexico 87415

Phone: (505) 334-2791
Cell: (505) 320-9675

Client No.: 97059-007

Dear Mr. Nee,

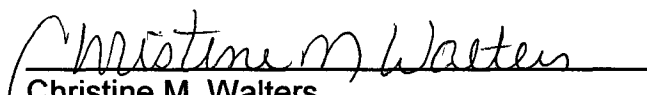
Enclosed are the analytical results for the sample collected from the location designated as "Bisti Land Farm". One soil sample was collected by Giant designated personnel on 2/09/04, and delivered to the Envirotech laboratory on 2/09/04 for Total Petroleum Hydrocarbons (TPH) per USEPA Method 8015 and BTEX per USEPA Method 8021.

The sample was documented on Envirotech Chain of Custody No. 11723 and assigned Laboratory Nos. 27817 (5 Pt. Composite) for tracking purposes.

The sample was analyzed on 2/12/04 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.


Christine M. Walters
Lab Coordinator / Environmental Scientist

enclosure

CMW/cmw

C:/files/labreports/giant/.wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Giant	Project #:	97059-007
Sample ID:	5 pt Composite	Date Reported:	02-12-04
Laboratory Number:	27817	Date Sampled:	02-09-04
Chain of Custody:	11723	Date Received:	02-09-04
Sample Matrix:	Soil	Date Analyzed:	02-12-04
Preservative:	Cool	Date Extracted:	02-09-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	30.5	1.7
Ethylbenzene	18.7	1.5
p,m-Xylene	287	2.2
o-Xylene	45.1	1.0
Total BTEX	381	

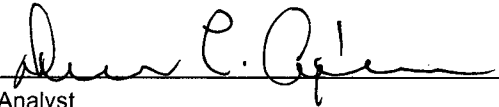
ND - Parameter not detected at the stated detection limit.

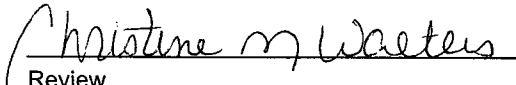
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Bisti Land Farm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	02-12-BTEX QA/QC	Date Reported:	02-12-04
Laboratory Number:	27816	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-12-04
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff:	Blank Conc	Detect Limit
		Accept Range 0 - 15%			
Benzene	4.2776E-002	4.2905E-002	0.3%	ND	0.2
Toluene	4.8966E-002	4.9064E-002	0.2%	ND	0.2
Ethylbenzene	7.4036E-002	7.4259E-002	0.3%	ND	0.2
p,m-Xylene	6.8275E-002	6.8480E-002	0.3%	ND	0.2
o-Xylene	5.5866E-002	5.5978E-002	0.2%	ND	0.1

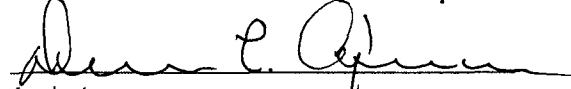
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	41.2	40.7	1.2%	0 - 30%	1.8
Toluene	787	772	2.0%	0 - 30%	1.7
Ethylbenzene	418	409	2.0%	0 - 30%	1.5
p,m-Xylene	2,600	2,570	1.2%	0 - 30%	2.2
o-Xylene	927	911	1.7%	0 - 30%	1.0

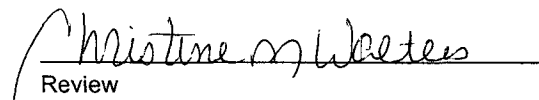
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	41.2	50.0	91.1	99.9%	39 - 150
Toluene	787	50.0	836	99.8%	46 - 148
Ethylbenzene	418	50.0	467	99.8%	32 - 160
p,m-Xylene	2,600	100	2,690	99.6%	46 - 148
o-Xylene	927	50.0	975	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for samples 27816 - 27817, 27824 - 27825, 27829 - 27830.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

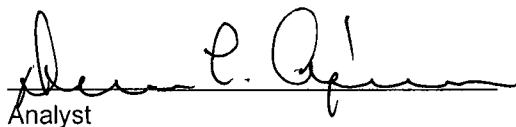
Client:	Giant	Project #:	97059-007
Sample ID:	5 pt Composite	Date Reported:	02-12-04
Laboratory Number:	27817	Date Sampled:	02-09-04
Chain of Custody No:	11723	Date Received:	02-09-04
Sample Matrix:	Soil	Date Extracted:	02-09-04
Preservative:	Cool	Date Analyzed:	02-12-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

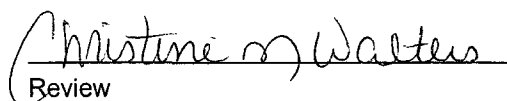
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.1	0.2
Diesel Range (C10 - C28)	7.0	0.1
Total Petroleum Hydrocarbons	8.1	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Bisti Land Farm.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	02-12-TPH QA/QC	Date Reported:	02-12-04
Laboratory Number:	27815	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-12-04
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	04-29-03	1.8591E-002	1.8572E-002	0.10%	0 - 15%
Diesel Range C10 - C28	04-29-03	1.5507E-002	1.5492E-002	0.10%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

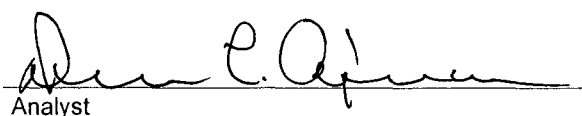
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	6.5	6.4	1.5%	0 - 30%

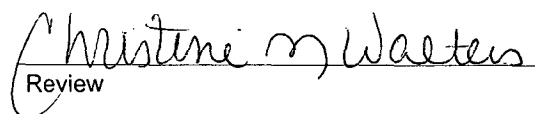
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100%	75 - 125%
Diesel Range C10 - C28	6.5	250	256	99.8%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for samples 27815 - 27817, 27824 - 27825, 27829 - 27830.


Analyst


Review

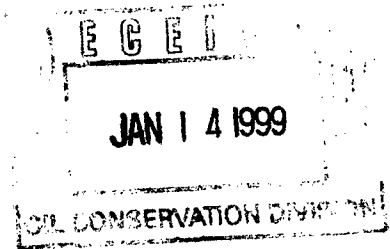
11723

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615



111 Road 4990
Bloomfield, New Mexico 87413

505
632.8006



Martyne J. Kieling
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Soil Samples Giant Mid-Continent Landfarm
OCD Rule 711 Permit Approval NM-02-0010
NW/4 SE/4 of Section 16, Township 25 North, Range 12, NMPM
San Juan County, New Mexico

Dear Ms. Kieling

Attached please find the first soil sample of the above described Giant Mid-Continent Landfarm. Under the Treatment Zone Monitoring section this sample was taken six months after the first contaminated soil was received. We will continue to sample each quarter.

If you have questions or need further explanation, please call.

Sincerely,

A handwritten signature in cursive script that reads "Barry G. Holman".

Barry G. Holman
Safety/Environment Manager
Giant Transportation
(505)-632-4077

Client:	Giant Mid-Continent	Project #:	98094-01
Sample ID:	Cell 1/2 CL @ 24 - 36	Date Reported:	11-17-98
Laboratory Number:	E176	Date Sampled:	11-12-98
Chain of Custody:	6390	Date Received:	11-12-98
Sample Matrix:	Soil	Date Analyzed:	11-17-98
Preservative:	Cool	Date Extracted:	11-16-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	16.4	8.8
Toluene	9.0	8.4
Ethylbenzene	9.2	7.6
p,m-Xylene	17.3	10.8
o-Xylene	12.4	5.2
Total BTEX	64.3	

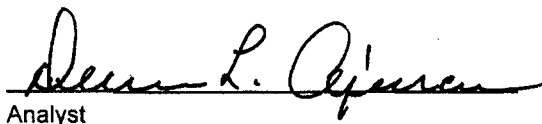
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	96 %
	Bromofluorobenzene	96 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm NW SE Sec 16, T25N, R12W.
6 Month Sample; Background.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	11-17-BTEX QA/QC	Date Reported:	11-17-98
Laboratory Number:	E176	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-17-98
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	3.7569E-002	3.7834E-002	0.7%	ND	0.2
Toluene	1.2324E-002	1.2386E-002	0.5%	ND	0.2
Ethylbenzene	1.5149E-002	1.5210E-002	0.4%	ND	0.2
p,m-Xylene	1.2209E-002	1.2270E-002	0.5%	ND	0.2
o-Xylene	1.2474E-002	1.2562E-002	0.7%	ND	0.1

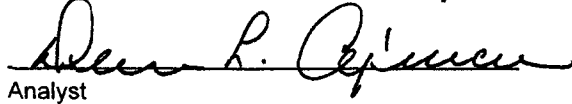
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	16.4	16.3	0.6%	0 - 30%	8.8
Toluene	9.0	8.9	1.1%	0 - 30%	8.4
Ethylbenzene	9.2	9.1	1.1%	0 - 30%	7.6
p,m-Xylene	17.3	17.1	1.2%	0 - 30%	10.8
o-Xylene	12.4	12.4	0.0%	0 - 30%	5.2

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	16.4	50.0	66.2	99%	39 - 150
Toluene	9.0	50.0	58.9	100%	46 - 148
Ethylbenzene	9.2	50.0	59.1	100%	32 - 160
p,m-Xylene	17.3	100.0	117	100%	46 - 148
o-Xylene	12.4	50.0	62.3	99%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for sample E176.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

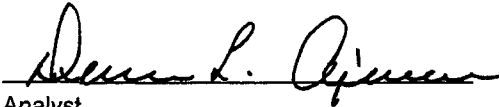
Client:	Giant Mid-Continent	Project #:	98094-01
Sample ID:	Cell 1/2 CL @ 24 - 36	Date Reported:	11-17-98
Laboratory Number:	E176	Date Sampled:	11-12-98
Chain of Custody No:	6390	Date Received:	11-12-98
Sample Matrix:	Soil	Date Extracted:	11-16-98
Preservative:	Cool	Date Analyzed:	11-17-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Land Farm NW SE Sec16, T25N, R12W.
6 Month Sample; Background.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-17-TPH QA/QC	Date Reported:	11-17-98
Laboratory Number:	E176	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-17-98
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	11-11-98	1.3104E-001	1.3092E-001	0.09%	0 - 15%
Diesel Range C10 - C28	11-11-98	7.6027E-002	7.5981E-002	0.06%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

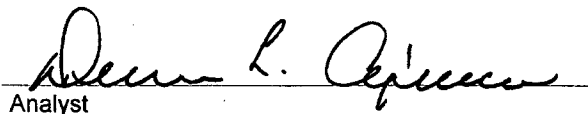
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

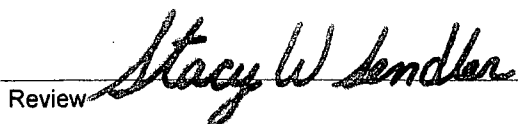
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for sample E176.


Analyst


Review

0639

Client / Project Name GRANT Mid-Continent						Project Location LANDFARM NW SE Sec 16, T25N, R12W								ANALYSIS / PARAMETERS											
Sampler: HARRIS K BROWN									Client No. 98094-01																
Sample Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers																				
Ceil 1/2 # @ 24-36"	11-12-98	9:25	E176	Soil	1 ✓ ✓	8015 #PL 8021 BTD																			
										6 month sample; Background															
Relinquished by: (Signature) <i>[Signature]</i>												Date	Time	Received by: (Signature) <i>[Signature]</i>		Date	Time								
Relinquished by: (Signature) <i>[Signature]</i>												11-12-98	11:20	Received by: (Signature) <i>[Signature]</i>		11-12-98	11:22								
Relinquished by: (Signature)														Received by: (Signature)											
ENVIROTECH INC.																									
5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615																									
Sample Receipt <table border="1"> <thead> <tr> <th></th> <th>Y</th> <th>N</th> <th>N/A</th> </tr> </thead> <tbody> <tr> <td>Received Intact</td> <td align="center">✓</td> <td></td> <td></td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td align="center">✓</td> <td></td> <td></td> </tr> </tbody> </table>															Y	N	N/A	Received Intact	✓			Cool - Ice/Blue Ice	✓		
	Y	N	N/A																						
Received Intact	✓																								
Cool - Ice/Blue Ice	✓																								

5/8/98



Dear Denny -

Here's a copy of the
baseline soil analytical results
for the Giant handfarm. If you
need any addl. info, please don't
hesitate to call me at 326-2262.

Best Regards,

Dave Cesark

CC: Tim Kinney - Giant

~~Monty Kinney - OGD, SF~~

Chain of Custody Record — Nonchemical Samples

210 West Sand Bank Road
P.O. Box 230
Columbia, IL 62236-0230

~~(618) 281-7173~~ Phone 505.326.2362
~~(618) 281-5120~~ FAX 2388

COC Serial No. G 3630

[illegible]

Relinquished by:

Received By:

Signature 	Date 3/27 DC	Time 14:20 DC	Signature 	Date 3/28/98	Time 10:00

Carrier: UPS

Airbill No. N301 0214 268

Shipping and Lab Notes:

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

ANALYTICAL RESULTS FOR
PHILIP ENVIRONMENTAL
Attention: Dave Cesark
4000 Monroe Rd.
Farmington, NM 87401

April 15, 1998
Receiving Date: 03/28/98
Sample Type: Soil
Project No: 16958
Project Location: NA
COC# G 3630

Prep Date: 04/10/98
Analysis Date: 04/11/98
Sampling Date: 03/27/98
Sample Condition: Intact & Cool
Sample Received by: BW
Project Name: Giant - Landfarm
Baseline

TA#	FIELD CODE	DRO (mg/kg)
T95949/981171	BL-1	<50
METHOD BLANK		<50
REPORTING LIMIT		50
ICV		200
CCV		211
RPD		8
% Extraction Accuracy		80
% Instrument Accuracy		82

METHODS: EPA SW 846-8015 Diesel.
CHEMIST: MS
SPIKE: 250 mg/kg.
CV: 250 mg/L.



Director, Dr. Blair Leftwich

4-15-98

DATE

TRACE ANALYSIS, INC.

ANALYTICAL REPORT

CLIENT PHILIP SERVICES
4000 MONROE ROAD
FARMINGTON, NM 87401

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296
4725 Ringley Avenue, Suite A El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

SAMPLE NO. : 981171
INVOICE NO.: 22101871
REPORT DATE: 04-10-98
REVIEWED BY: *WJ*
PAGE : 1 OF 2

CLIENT SAMPLE ID : BL-1
SAMPLE TYPE: Soil
SAMPLED BY: D Cesark
SUBMITTED BY: D Cesark
SAMPLE SOURCE: Giant-Landfarm Baseline
ANALYST: K. Costa

AUTHORIZED BY : D. CESARK
CLIENT P.O. : --
SAMPLE DATE: 03-27-98
SUBMITTAL DATE : 03-28-98
EXTRACTION DATE: 04-07-98
ANALYSIS DATE ..: 04-07-98

Petroleum Contaminants by 8020A

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
Ethylbenzene	<50.	ug/Kg	50.
Total Xylenes	<50.	ug/Kg	50.

W. J. Costa

TRACE ANALYSIS, INC.

ANALYTICAL REPORT

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A
CLIENT PHILIP SERVICES
4000 MONROE ROAD
FARMINGTON, NM 87401

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

SAMPLE NO. : 981171
INVOICE NO. : 22101871
REPORT DATE: 04-10-98
REVIEWED BY: *WJ*
PAGE : 2 OF 2

DATA TABLE (Cont.)

Surrogate Information -

	<u>Percent Recovery</u>	<u>Range</u>
Trifluorotoluene	100.5	64-135

TRACE ANALYSIS, INC.

ANALYTICAL REPORT

CLIENT PHILIP SERVICES
4000 MONROE ROAD
FARMINGTON, NM 87401

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
800•378•1296
806•794•1296
FAX 806•794•1298

SAMPLE NO. : 981171
INVOICE NO. : 22101871
REPORT DATE: 04-14-98
REVIEWED BY: *Wc 7*
PAGE : 1 OF 2

CLIENT SAMPLE ID : BL-1
SAMPLE TYPE: Soil
SAMPLED BY: D Cesarck
SUBMITTED BY: D Cesarck
SAMPLE SOURCE: Giant-Landfarm Baseline

AUTHORIZED BY : D. CESARK
CLIENT P.O. : --
SAMPLE DATE: 03-27-98
SUBMITTAL DATE : 03-28-98
EXTRACTION DATE: --

REMARKS -

Detection limit was raised as sample was analyzed diluted to avoid matrix interference for the following parameters: Cr and Se.
Matrix spike and matrix duplicate were out of acceptance criteria range for Arsenic possibly due to matrix interference.

Inorganic Chemistry-Total Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Arsenic	2.8	mg/Kg	1.3	03-30-98	SW 7060A	N. Munir
Total Barium	180	mg/Kg	25.	03-31-98	SW 7080A	N. Munir
Total Cadmium	<1.3	mg/Kg	1.3	03-31-98	SW 7130	N. Munir
Total Calcium	2500	mg/Kg	25.	03-31-98	SW 7140	N. Munir
Total Chromium	<5.0	mg/Kg	5.0	03-31-98	SW 7190	N. Munir
Total Lead	6.8	mg/Kg	4.0	03-31-98	SW 7420	N. Munir
Total Magnesium	1300	mg/Kg	25.	03-31-98	SW 7450	N. Munir
Total Mercury	<0.50	mg/Kg	0.50	04-02-98	SW-7471	N. Munir

(1) Copy to Client

Wc 7

ANALYTICAL RESULTS REPORTED HEREIN APPLY ONLY TO THE SAMPLES TESTED. FURTHERMORE, THIS REPORT CAN ONLY BE COPIED IN ITS ENTIRETY.

TRACE ANALYSIS, INC.

ANALYTICAL REPORT

CLIENT PHILIP SERVICES
4000 MONROE ROAD
FARMINGTON, NM 87401

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
800•378•1296
806•794•1296
888•588•3443
915•585•3443
E-Mail: lab@traceanalysis.com

4725 Ripley Avenue, Suite A
El Paso, Texas 79922

SAMPLE NO.: 981171
INVOICE NO.: 22101871
REPORT DATE: 04-14-98
REVIEWED BY: *mc*
PAGE : 2 OF 2

D A T A T A B L E (Continue)

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Potassium	810	mg/Kg	25.	03-31-98	SW 7610	N. Munir
Total Selenium	<2.5	mg/Kg	2.5	03-31-98	SW 7741A	N. Munir
Total Silver	<1.3	mg/Kg	1.3	03-31-98	SW 7760A	N. Munir
Total Sodium	90.	mg/Kg	25.	03-21-98	SW 7770	N. Munir
Sulfate	140	mg/Kg	50.	04-06-98	EPA-300.0	A. Donohue
Chloride	<50.	mg/Kg	50.	04-06-98	EPA-300.0	A. Donohue
Carbonate	26.	mg/Kg	5.0	04-06-98		A. Donohue
Bicarbonate	110	mg/Kg	5.0	04-06-98		A. Donohue