



27 February 1997
Project 3095

97 FEB 28 PM 3:46

Ms. Susan Hugo
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, CA 94502

Subject: Underground Storage Tank
 Emeryville Warehouse Site
 1500 Park Street, Emeryville

Dear Ms. Hugo:

Per our telephone conversations, Geomatrix Consultants, Inc. (Geomatrix) has sampled product contained in the underground storage tank (UST) located at the Emeryville Warehouse at 1500 Park Street in Emeryville, California (the Site). The purpose of the sampling was to confirm the product in the UST is petroleum and does not contain volatile organic compounds of concern. According to a former facility manager, the UST has not been used since at least the 1970's when the facility was converted to work space for artists and woodworkers.

Geomatrix collected a sample of the product on 3 February 1997 using a disposable bailer lowered through the UST fill port. The depth to product was measured to be 4.2 feet below ground surface. Since groundwater is approximately 7 feet below ground surface, significant leakage from the UST may not have occurred.

The sample was transported to Friedman & Bruya, Inc., of Seattle, Washington, a State-certified analytical laboratory, under Geomatrix chain-of-custody procedures. Analysis for "fingerprint" characterization indicated that the sample was a crude oil such as Bunker C. Analysis for volatile compounds using EPA Method 8260 did not detect compounds other than those typically associated with petroleum hydrocarbons (i.e., benzene, naphthalene). A copy of the analytical laboratory report is attached.

Based on the laboratory results, the tank appears to have contained only petroleum hydrocarbons. On behalf of our client, Emerylofts Development Company, we request your approval to remove the UST in accordance with local and State regulations during redevelopment of the Site later this year. This approval is necessary for our client to obtain a building permit from the City of Emeryville. If you concur with this approach, a brief letter from you indicating your approval will facilitate issuance of a building permit.



Ms. Susan Hugo
Alameda County Health Care Services Agency
27 February 1997
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Please call either of the undersigned if you have any questions or require additional information. Thank you for your assistance.

Sincerely yours,

GEOMATRIX CONSULTANTS, INC.

Daniel Del Grande, P.E.
Project Engineer

Tom Graf
Vice President

DG/TG/dm
I:\WPDOCS\3095\EMERY.DOC

Attachment

cc: Mr. Dan McNevin, Emerylofts Development Company
Cheri Page, Geomatrix Consultants Inc.

- 100 Bush St
26 Floor
SF 94104

(415) 616-9944

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS
PROTECTION

James E. Bruya, Ph.D.
Beth M. Albertson, M.S.
Bradley T. Benson
Kelley D. Wilt

97 FEB 28 PM 3:46

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044

February 11, 1997

Dan Del Grande, Project Manager
Geomatrix Consultants, Inc.
100 Pine Street, Suite 1000
San Francisco, CA 94111-5112

Dear Mr. Del Grande:

Included are the results from the testing of material submitted on February 4, 1997 from your 3095 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kelley Wilt
Chemist

keh

Enclosures

FAX: (415) 434-1365
GMC0211R.DOC

Date of Report: February 11, 1997

Date Received: February 4, 1997

Project: 3095

Date Samples Extracted: February 4, 1997

Date Extracts Analyzed: February 4, 1997

**RESULTS FROM THE ANALYSIS OF THE PRODUCT SAMPLE
FOR FINGERPRINT CHARACTERIZATION
BY CAPILLARY GAS CHROMATOGRAPHY
USING A FLAME IONIZATION DETECTOR (FID)
AND ELECTRON CAPTURE DETECTOR (ECD)**

Sample ID

GC Characterization

P-1

The GC trace using the flame ionization detector (FID) showed the presence of medium to high boiling compounds. The patterns displayed by these peaks are indicative of a crude oil or crude oil residuum such as Bunker C.

The medium boiling compounds appeared as a pattern of peaks eluting from *n*-C₆ to beyond *n*-C₃₆ showing a maximum near *n*-C₂₉. A regular pattern of the *n*-alkanes is seen for the medium boiling product.

The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260

Client Sample ID: P-1
 Date Received: 02/04/97
 Date Extracted: 02/04/97
 Date Analyzed: 02/06/97
 Matrix: Product
 Units: ug/g (ppm)

Client: Geomatrix Consultants, Inc.
 Project: 3095
 Lab ID: 75634 RR 400 uL
 Data File: 020613.D
 Instrument: GCMS1
 Operator: SB

Surrogates:	% Recovery	Lower Limit	Upper Limit
Dibromofluoromethane	95	89	114
1,2-Dichloroethane-d4	95	77	120
Toluene-d8	114	95	119
4-Bromofluorobenzene	108	94	114

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<10	1,3-Dichloropropane	<10
Chloromethane	<10	Tetrachloroethene	<10
Vinyl chloride	<10	Dibromochloromethane	<10
Bromomethane	<10	1,2-Dibromoethane (EDB)	<10
Chloroethane	<10	Chlorobenzene	<10
Trichlorofluoromethane	<10	Ethylbenzene	20
Acetone	<100	1,1,1,2-Tetrachloroethane	<10
1,1-Dichloroethene	<10	m,p-Xylene	100
Methylene chloride	<10	o-Xylene	50
trans-1,2-Dichloroethene	<10	Styrene	<10
1,1-Dichloroethane	<10	Isopropylbenzene	<10
2,2-Dichloropropane	<10	Bromoform	<10
cis-1,2-Dichloroethene	<10	n-Propylbenzene	20
Chloroform	<10	Bromobenzene	<10
2-Butanone (MEK)	<100	1,3,5-Trimethylbenzene	80
1,2-Dichloroethane (EDC)	<10	1,1,2,2-Tetrachloroethane	<10
1,1,1-Trichloroethane	<10	1,2,3-Trichloropropane	<10
1,1-Dichloropropene	<10	4-Chlorotoluene	<10
Carbon Tetrachloride	<10	tert-Butylbenzene	<10
Benzene	<10	1,2,4-Trimethylbenzene	170
Trichloroethene	<10	sec-Butylbenzene	10
1,2-Dichloropropane	<10	p-Isopropyltoluene	30
Bromodichloromethane	<10	1,3-Dichlorobenzene	<10
Dibromomethane	<10	1,4-Dichlorobenzene	<10
4-Methyl-2-Pentanone (MIBK)	<100	1,2-Dichlorobenzene	<10
cis-1,3-Dichloropropene	<10	1,2-Dibromo-3-chloropropane	<10
Toluene	30	1,2,4-Trichlorobenzene	<10
trans-1,3-Dichloropropene	<10	Hexachlorobutadiene	<10
1,1,2-Trichloroethane	<10	Naphthalene	550
2-Hexanone	<100	1,2,3-Trichlorobenzene	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260

Client Sample ID:	Method Blank	Client:	Geomatrix Consultants, Inc.
Date Received:	02/04/97	Project:	3095
Date Extracted:	0204/97	Lab ID:	SO 0204 MB O7-68
Date Analyzed:	02/04/97	Data File:	020411.D
Matrix:	Product	Instrument:	GCMS1
Units:	ug/g (ppm)	Operator:	SB

Surrogates:	% Recovery	Lower Limit	Upper Limit
Dibromofluoromethane	106	89	114
1,2-Dichloroethane-d4	103	77	120
Toluene-d8	109	95	119
4-Bromofluorobenzene	107	94	114

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<10	1,3-Dichloropropane	<10
Chloromethane	<10	Tetrachloroethene	<10
Vinyl chloride	<10	Dibromochloromethane	<10
Bromomethane	<10	1,2-Dibromoethane (EDB)	<10
Chloroethane	<10	Chlorobenzene	<10
Trichlorofluoromethane	<10	Ethylbenzene	<10
Acetone	<100	1,1,1,2-Tetrachloroethane	<10
1,1-Dichloroethene	<10	m,p-Xylene	<10
Methylene chloride	<10	o-Xylene	<10
trans-1,2-Dichloroethene	<10	Styrene	<10
1,1-Dichloroethane	<10	Isopropylbenzene	<10
2,2-Dichloropropane	<10	Bromoform	<10
cis-1,2-Dichloroethene	<10	n-Propylbenzene	<10
Chloroform	<10	Bromobenzene	<10
2-Butanone (MEK)	<100	1,3,5-Trimethylbenzene	<10
1,2-Dichloroethane (EDC)	<10	1,1,2,2-Tetrachloroethane	<10
1,1,1-Trichloroethane	<10	1,2,3-Trichloropropane	<10
1,1-Dichloropropene	<10	4-Chlorotoluene	<10
Carbon Tetrachloride	<10	tert-Butylbenzene	<10
Benzene	<10	1,2,4-Trimethylbenzene	<10
Trichloroethene	<10	sec-Butylbenzene	<10
1,2-Dichloropropane	<10	p-Isopropyltoluene	<10
Bromodichloromethane	<10	1,3-Dichlorobenzene	<10
Dibromomethane	<10	1,4-Dichlorobenzene	<10
4-Methyl-2-Pentanone (MIBK)	<100	1,2-Dichlorobenzene	<10
cis-1,3-Dichloropropene	<10	1,2-Dibromo-3-chloropropane	<10
Toluene	<10	1,2,4-Trichlorobenzene	<10
trans-1,3-Dichloropropene	<10	Hexachlorobutadiene	<10
1,1,2-Trichloroethane	<10	Naphthalene	<10
2-Hexanone	<100	1,2,3-Trichlorobenzene	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: February 11, 1997

Date Received: February 4, 1997

Project: 3095

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF PRODUCT
SAMPLES FOR VOLATILES BY EPA METHOD 8260**

Laboratory Code: 75440 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
1,1-Dichloroethene	µg/g (ppm)	<100	<100	nm	0-20
Benzene	µg/g (ppm)	170	170	0	0-20
Trichloroethene	µg/g (ppm)	<100	<100	nm	0-20
Toluene	µg/g (ppm)	710	710	0	0-20
Chlorobenzene	µg/g (ppm)	<100	<100	nm	0-20

Laboratory Code: 75440 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
1,1-Dichloroethene	µg/g (ppm)	5,000	<100	92	93	65-135	1
Benzene	µg/g (ppm)	5,000	170	100	101	65-135	1
Trichloroethene	µg/g (ppm)	5,000	<100	105	108	65-135	3
Toluene	µg/g (ppm)	5,000	710	102	104	65-135	2
Chlorobenzene	µg/g (ppm)	5,000	<100	103	102	65-135	1

Laboratory Code: Spike Blank

Analyte	Reporting Units	Spike Level	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
1,1-Dichloroethene	µg/g (ppm)	5,000	98	97	65-135	1
Benzene	µg/g (ppm)	5,000	99	101	65-135	2
Trichloroethene	µg/g (ppm)	5,000	107	108	65-135	1
Toluene	µg/g (ppm)	5,000	103	104	65-135	1
Chlorobenzene	µg/g (ppm)	5,000	103	105	65-135	2

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

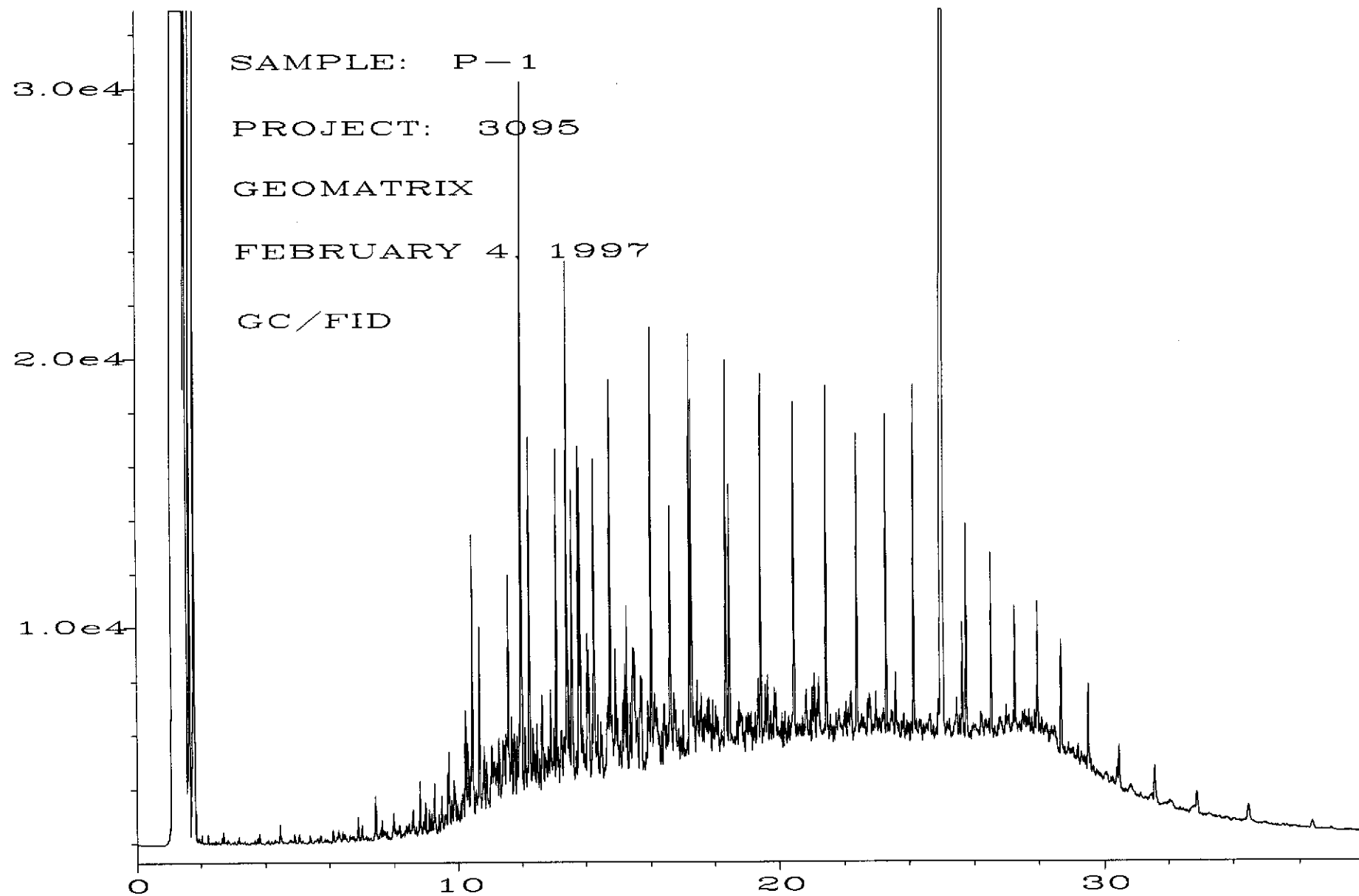


Fig. 1 in C:\HPCHEM\4\DATA\02-04-97\016F1301.D

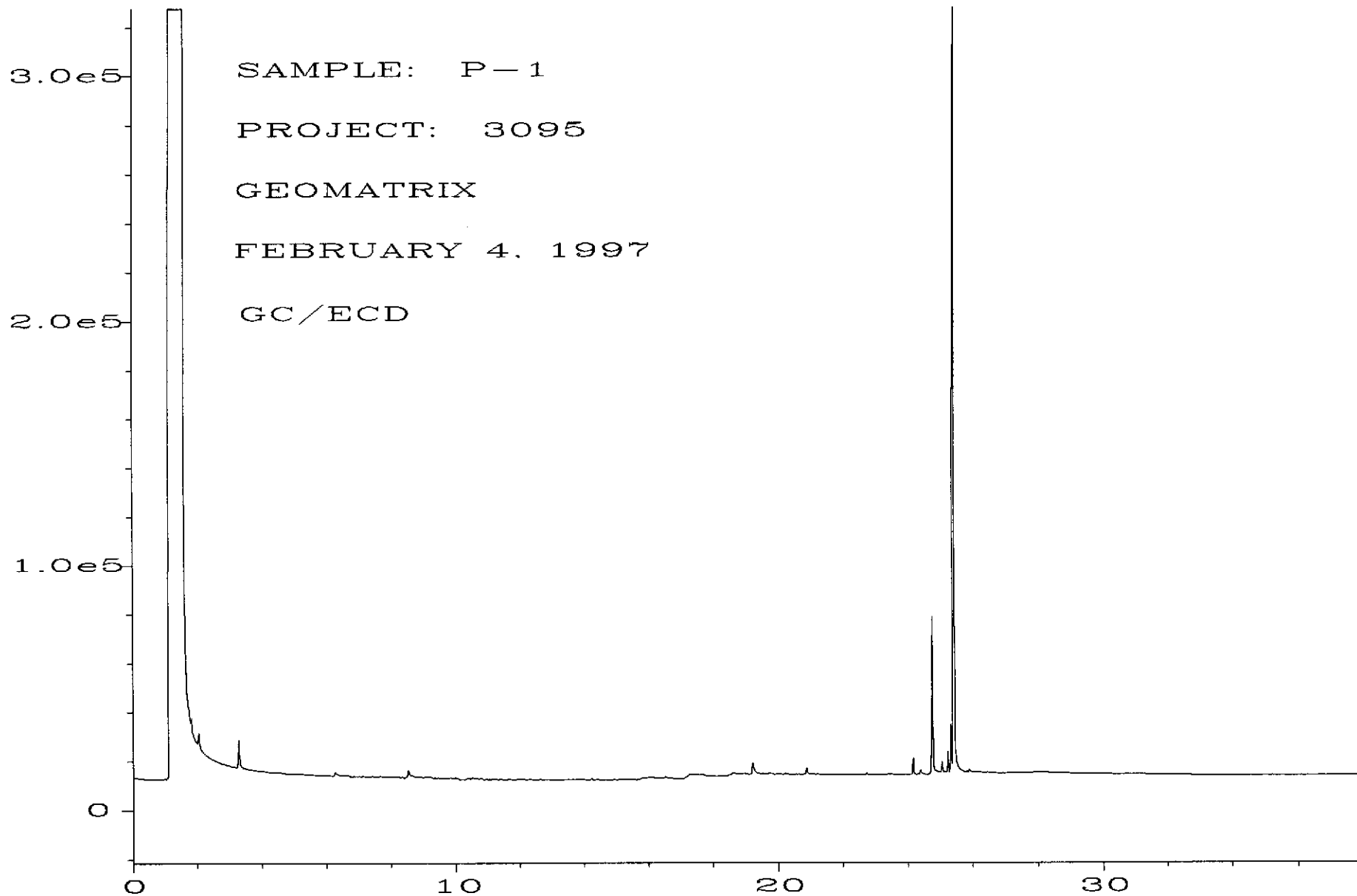


Fig. 2 in C:\HPCHEM\4\DATA\02-04-97\016R1301.D

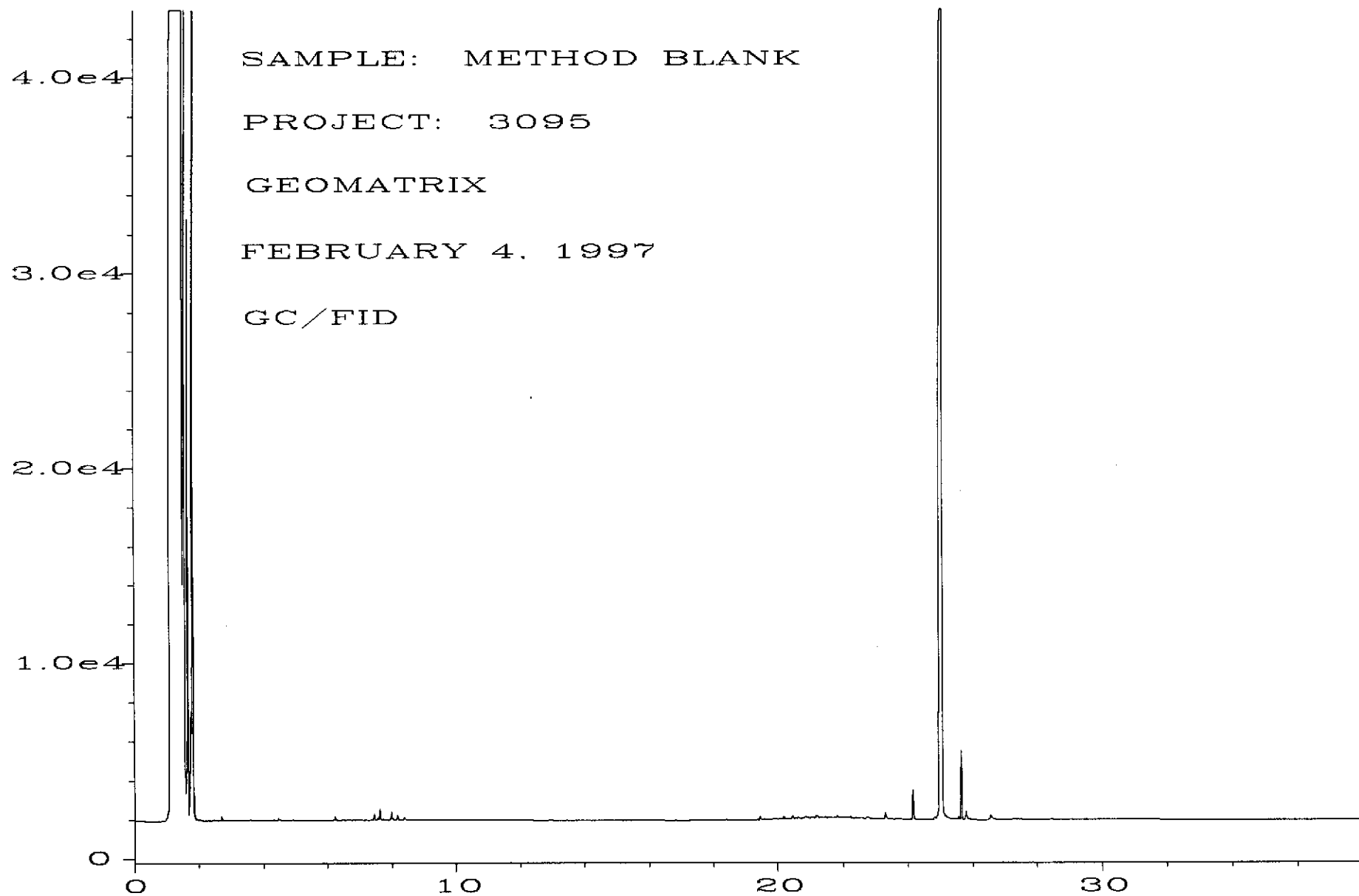


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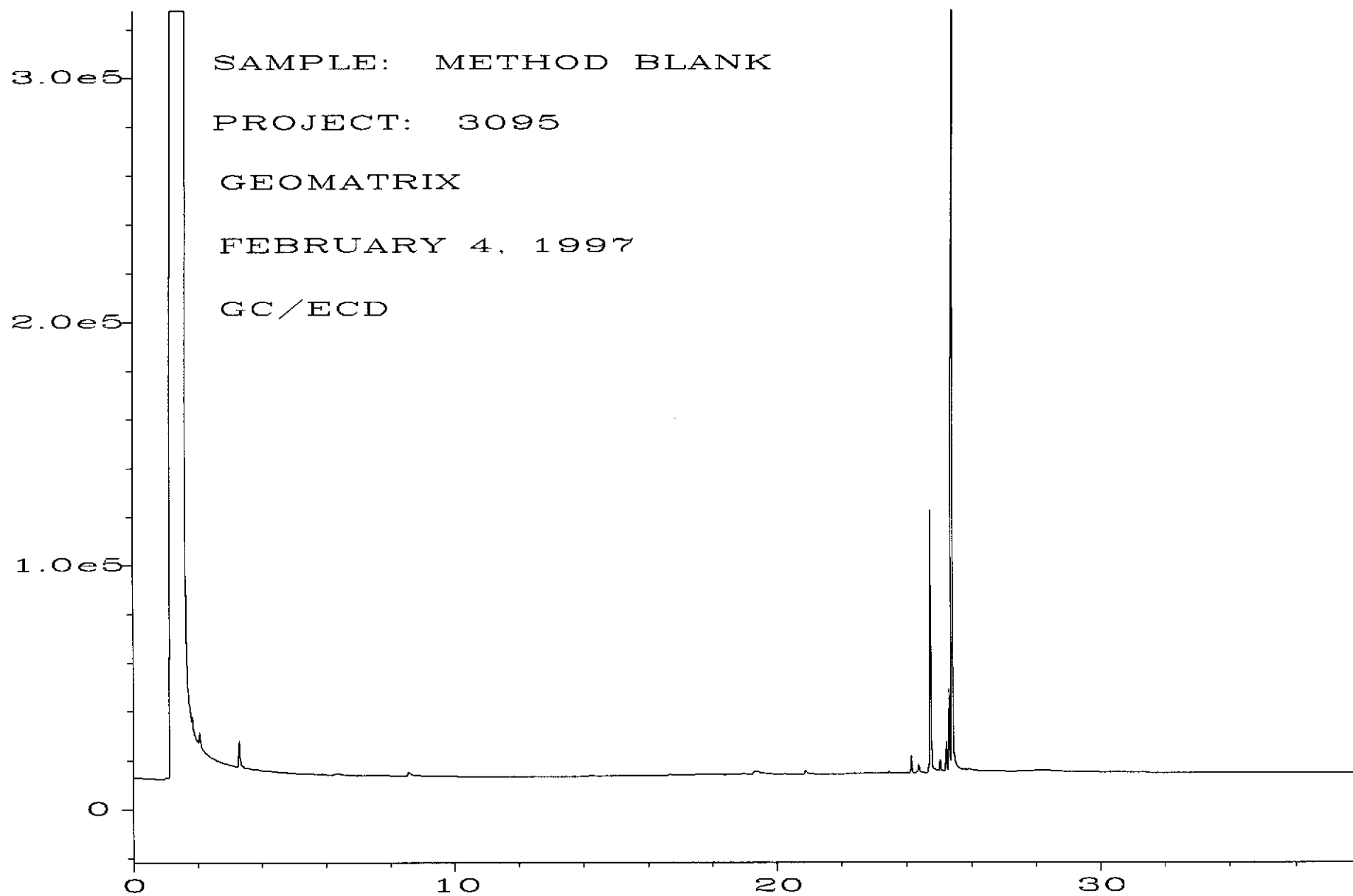


Fig. 2 in C:\HPCHEM\4\DATA\02-04-97\015R1301.D

n-ALKANE STANDARD

GC/FID

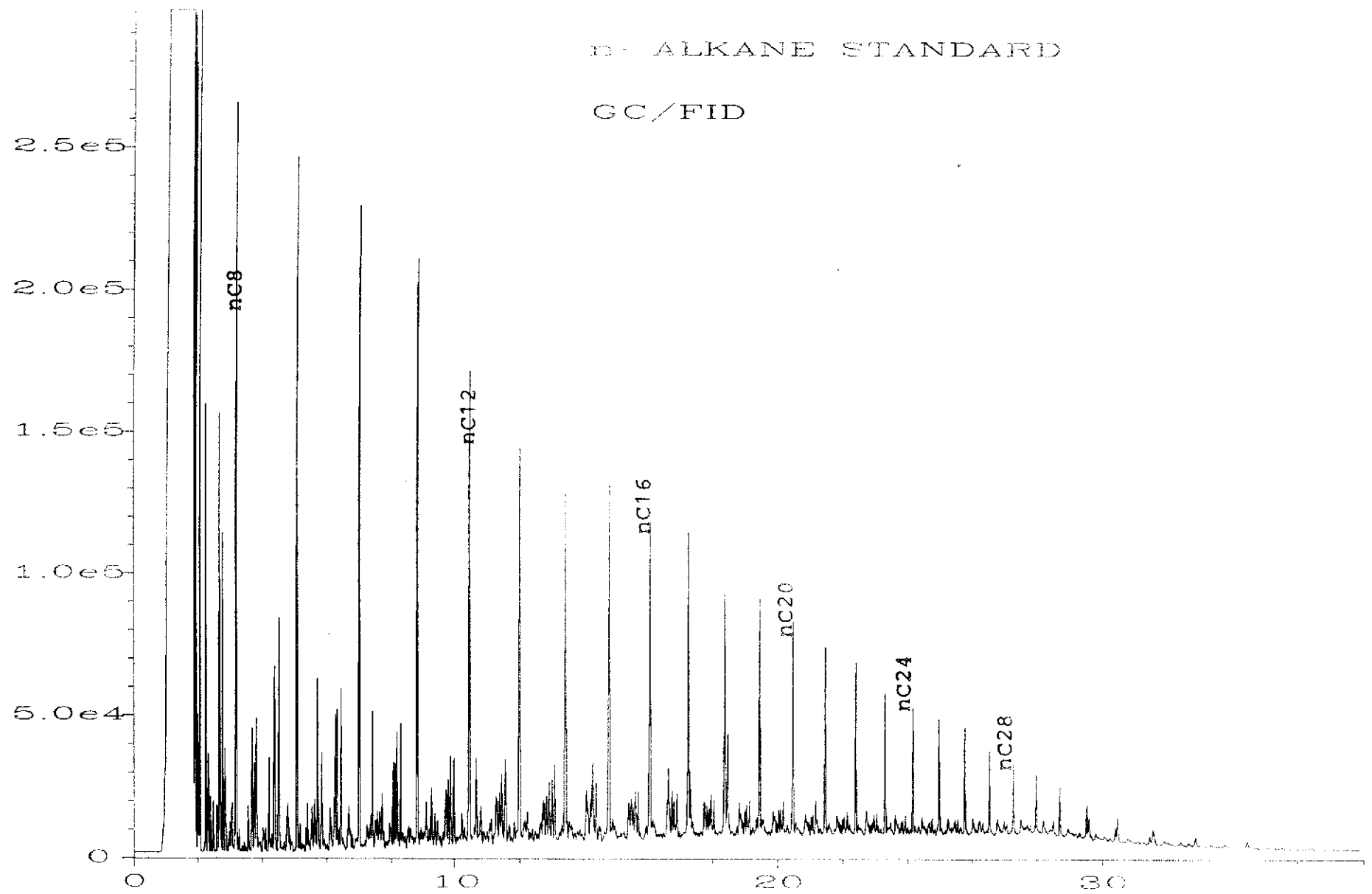


Fig. 1 in C:\NHP\CHEM\4\DATA\02-04-97\097F1601.D

3095

ANALYSES

REMARKS

Samples (Signatures):			EPA Method 8010	EPA Method 8020	EPA Method 8240	EPA Method 8270	TPH as gasoline	TPH as diesel	TPH as BTEX	EPA 8260	Fuel Scan	Cooled	Soil (S) or water (W)	Acidified	Number of containers
Date	Time	Sample Number													
2/3/97	1535	P-1								X	X	Y	W	N	3
(The rest of the table is crossed out with a diagonal line)															

Additional comments:

Note: All VOA's are 100% product

LAB 212

75634-636

Turnaround time: 7-Day T-A-T

Results to: Dan Del Grande

Total No. of containers: 3

Relinquished by: Jeffrey A. Austin

Signature: [Signature]

Printed name:

Date: 2/3/97

Relinquished by:

Signature:

Printed name:

Date:

Relinquished by:

Signature:

Printed name:

Date:

Method of shipment: Fed Ex.

Laboratory comments and Log No.:

Company: Geomatrix

Company:

Company:

Received by:

Signature:

Time: 1700

Received by: Sample Rec.

Signature: [Signature]

Printed name: S. Osborn

Time: 2/4/97

Received by:

Signature:


Time:

Printed name:

Company: F&B, Inc

Printed name:

Company:

 Geomatrix Consultants
100 Pine St. 10th Floor
San Francisco, CA 94111
(415) 434-9400