BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Transmitted Via U.S. Mail

October 14, 1996

Mr. Barney M. Chan
Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: Subsurface Investigation Report
United Parcel Service
8400 Pardee Drive
Oakland, CA
Project #: 36768.01

Dear Mr. Chan:

In your September 12, 1996, letter to Ms. Linda Lyons of United Parcel Service (UPS) concerning the above referenced Blasland, Bouck & Lee, Inc. (BBL) report, you indicated that five items needed to be addressed prior to granting case closure as a low risk site. The items you identified include the following:

- Removal of free product from monitoring well MW-2,
- Provide a written description of BBL's qualitative observations of each Geoprobe location,
- Provide the gas chromatogram of all diesel analysis and the diesel standard used and the chromatogram of the sample from TW-8 should be reexamined to assess if it is diesel,
- Analyze a ground water or free product sample from monitoring well MW-2 for polynuclear aromatics using EPA Test Method 8100,
- Conduct semi-annual ground water monitoring of the three existing monitoring wells.

You indicated in your letter that based on the results of semi-annual monitoring, the site will be revisited on a yearly basis to determine if closure is appropriate. BBL has prepared the following response to the five items identified in your letter.

As reported in BBL's September 6, 1996, report, approximately 1/4 inch of floating product was observed in monitoring well MW-2 during the investigation. In July BBL collected a sample of this material for fingerprinting by the laboratory. Approximately 20 milliliters of the material were collected, all of which came from product dripping off the bailer exterior because there was such a small amount of material

present. On October 9, 1996, BBL personnel visited the site to remove floating product present in monitoring well MW-2. As with the July sampling, a bailer could not be used for product removal because there was such a small amount of material present. Therefore, sorbent pads were inserted in the well to remove the small amount of floating material and the residual product smeared on the inside of the casing. This process was repeated several times. The well was then inspected to ascertain if the material reappeared after approximately six hours and 30 hours. No additional material was present during subsequent observations.

Attached are gas chromatograms for each grab ground water sample analyzed and a table summarizing BBL's qualitative observations from each Geoprobe location. Inspection of the chromatograms reveals that the majority show peaks well outside the diesel range. The laboratory has indicated that chromatograms from TW-8 and the floating product show a response within the diesel standard range. Even though the chromatograms fall within the diesel standard range, they exhibit significant variations from the standard, such that the laboratory has qualified their findings by stating that the chromatograms for TW-8 and the product from monitoring well MW-2 are indicative of a weathered diesel. There are several lines of evidence indicating that the material identified as a weathered diesel at TW-8 and MW-2 is likely not associated with the UPS operations, including: (1) hydrocarbons not associated with UPS operations have been detected in samples analyzed and are believed to be associated with imported backfill material, (2) chromatograms for TW-8 and the floating product are very similar, and (3) sampling location TW-8 is approximately 95 feet upgradient from the diesel fueling area, therefore there is no transport mechanism to allow the material to migrate from the fueling area to this location.

BBL believes that the most recent investigation sufficiently characterized the site to document that petroleum hydrocarbons detected likely originate from the imported fill material. This information coupled with the existing five years of monitoring data are believed to be sufficient to allow this site to be closed as a low risk ground water case, without the collection of additional ground water quality data.

If you have any questions regarding the attached information or wish to discuss the findings in greater detail, please feel free to contact me at (415) 898-7208.

For future reference, the mailing address for Ms. Linda Lyons is 55 Glenlake Parkway NE, Atlanta, Georgia, 30328. The local United Parcel Service contact is Ms. Caroline A. Ehrlich, Plant Engineering, 8400 Pardee Drive, Oakland, California 94621.

Very truly yours,

BLASLAND, BOUCK & LEE, INC.

R. Bruce Scheibach, R.G., C.H.
Associate Hydrogeologist

Attachments

cc: Ms. Linda Lyons, UPS
Ms. Caroline Ehrlich, UPS

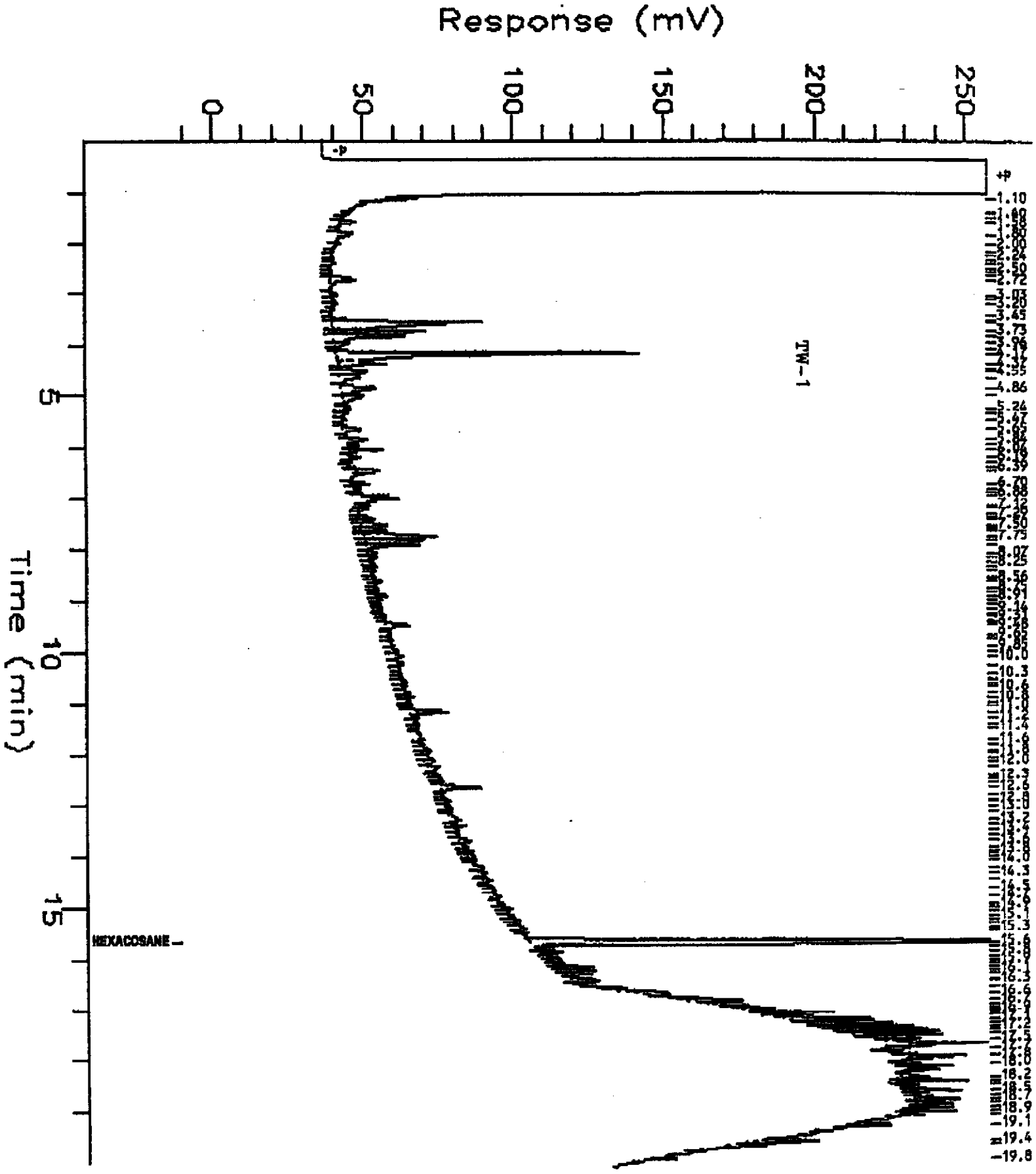
3691001.C

Table 1.
Qualitative
United Parcel Service
8400 Pardee Drive
Oakland, California

Sample Number	Depth to Water	Hydrocarbon Odor	Floating Product	Grab Ground Water Analyzed	Comments
TW-1	4.5	None	No	Yes	
TW-2	9.5	Slight	No	Yes	
TW-3	dry at 15'	No Sample	No Sample	No	
TW-4	9	None	No	No	
TW-5	9.5	None	No	No	
TW-6	4.5	None	No	Yes	
TW-7	5	None	No	Yes	
TW-8	4.5	Strong	No	Yes	minute black globules present
TW-9	5	None	No	Yes	
TW-10	9.5	Strong	No	No	minute black globules present
TW-11	9	Moderate	No	No	
TW-12	9	Moderate	No	No	sheen present
TW-13	dry at 15'	No Sample	No	No	
MW-1	2.62	Moderate	No	No	
MW-2	4.51	Strong	Yes	No	product analyzed
MW-3	2.63	Moderate	No	No	

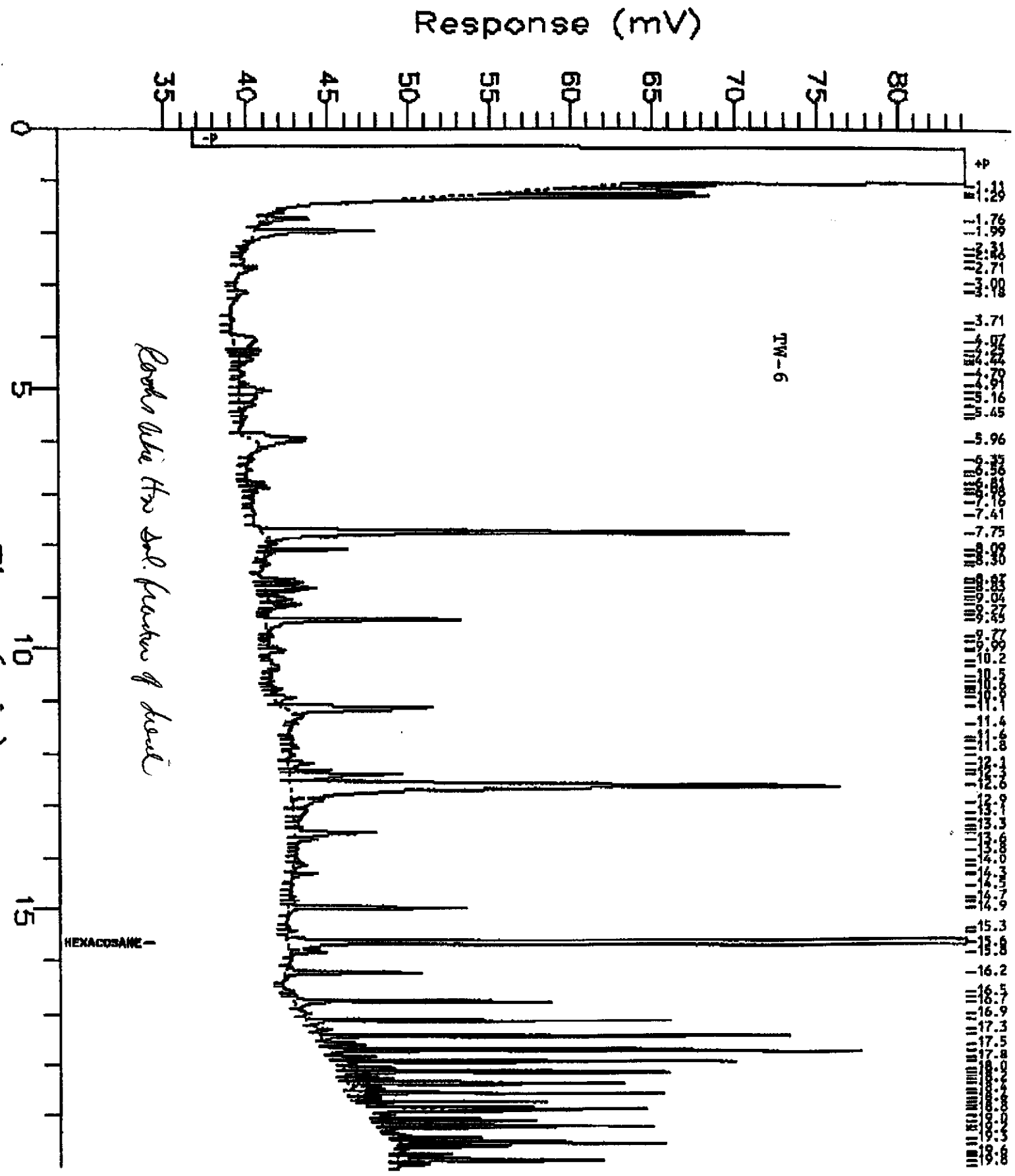
Sample Name : 125963-003,500:2.5
FileName : G:\GC11\CHB\175b041.raw
Method : DUL208SL.ins
Start Time : 0.01 min End Time : 19.97 min
Scale Factor: 0 Plot Offset: -11 mV

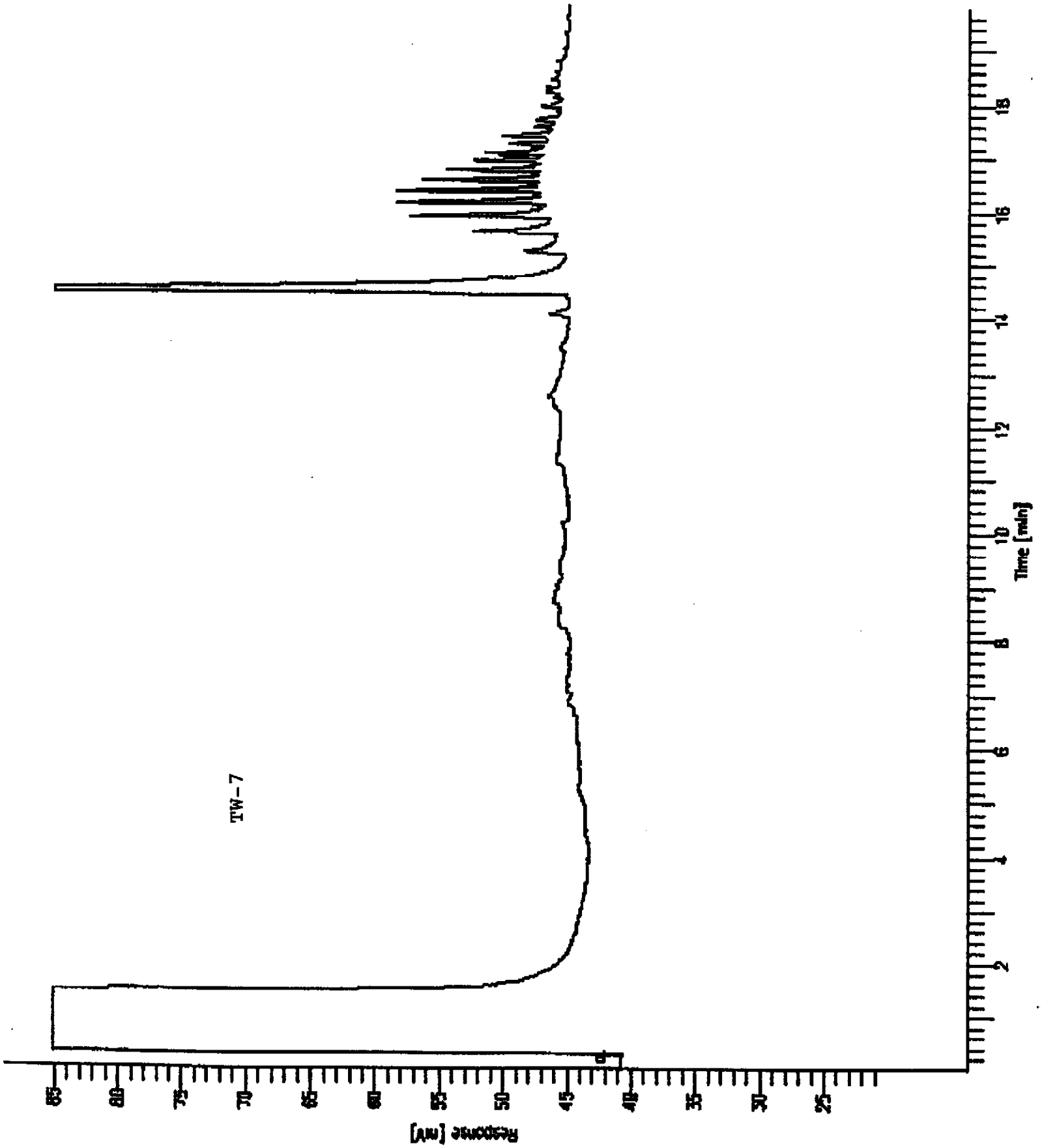
Sample #: 28298 Page 1 of 1
Date : 6/24/96 09:33 AM
Time of Injection: 6/22/96 11:27 AM
Low Point : -11.42 mV High Point : 257.58 mV
Plot Scale: 269 mV



Sample Name : 125963-005,500:2.5
FileName : g:\gc11\chb\173b034.raw
Method : DUL20BSL.ine
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: -1 Plot Offset: 34 mV

Sample #: 28298 Page 1 of 1
Date : 6/22/96 08:12 AM
Time of Injection: 6/22/96 07:51 AM
Low Point : 34.24 mV High Point : 84.24 mV
Plot Scale: 50 mV





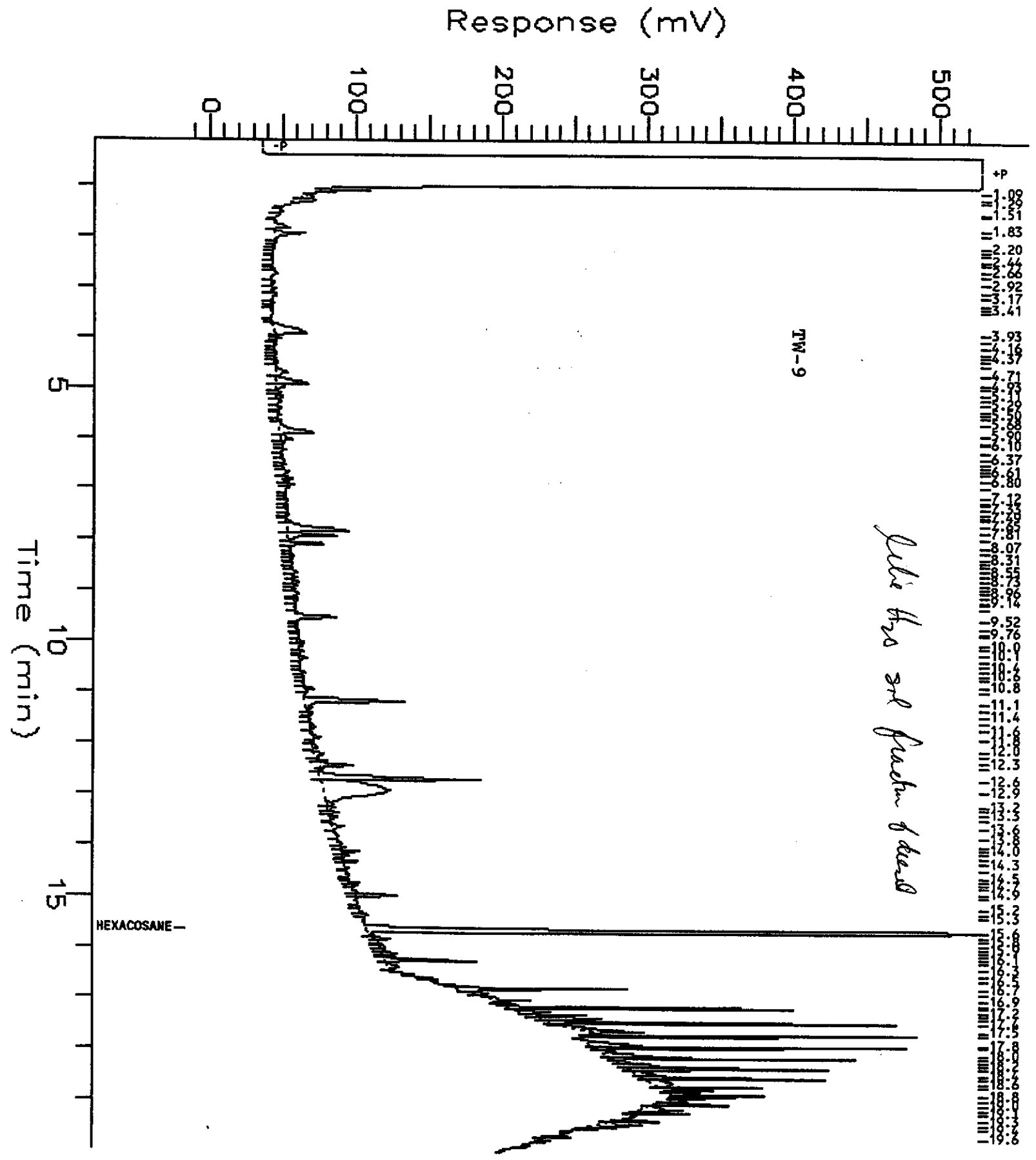
Sample Name : S,125969-001,28327
FileName : C:\GC15\CHB\177B051.RAW
Method : BTEHJ.MTH
Start Time : 0.01 MIN End Time : 19.00 MIN
Scale Factor: 0.0 Plot Offset: 21 MV

Sample #: 500:2.5 Page 1 of 1
Date : 7/1/96 11:38 AM
Time of Injection: 6/27/96 10:18 PM
Low Point : 20.90 MV High Point : 85.12 MV
Plot Scale: 64.2 MV

TEH Chromatogram - GC 11 Ch B

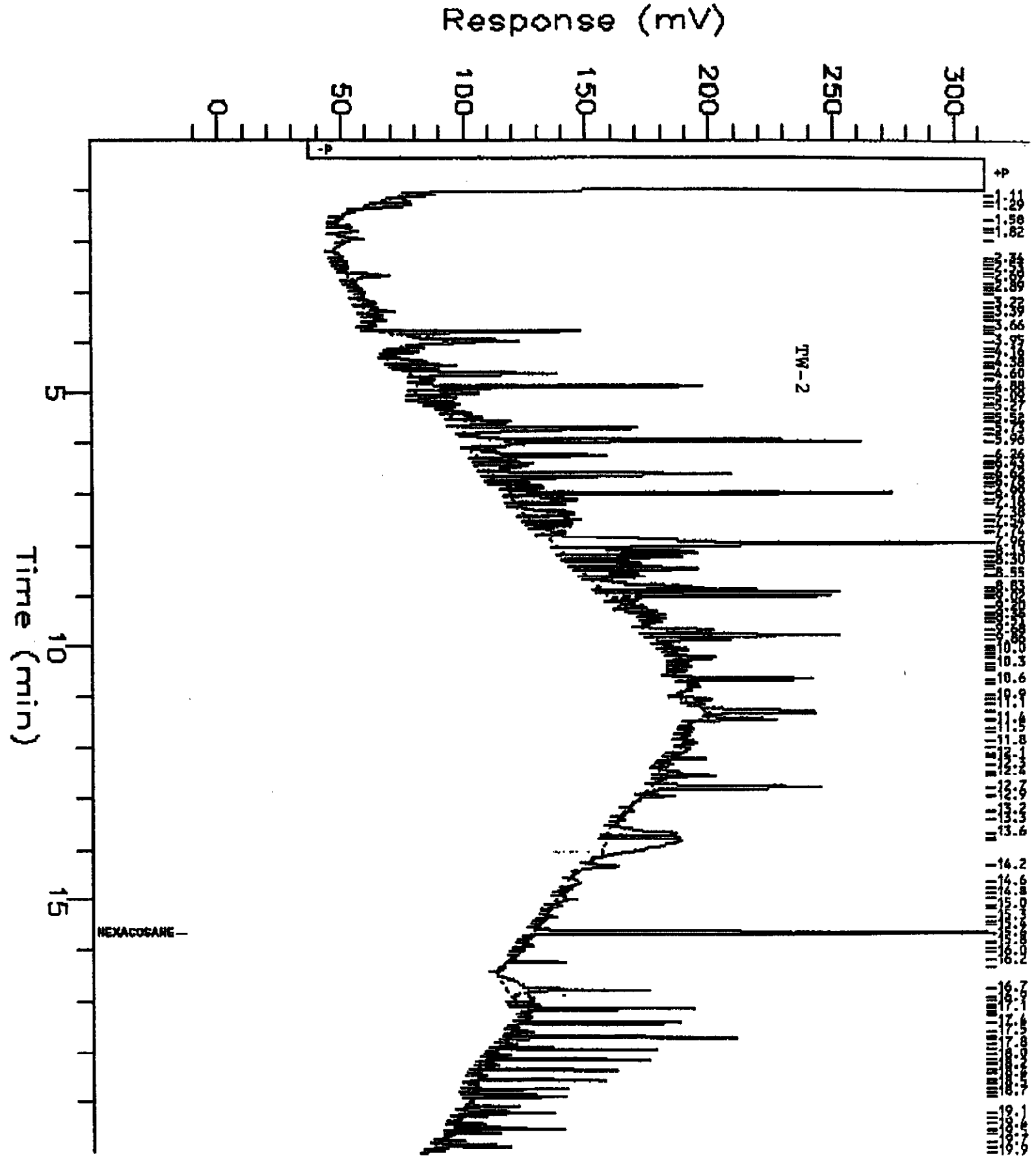
Sample Name : 125963-002,500:2.5
FileName : G:\GC11\CHB\173b042.raw
Method : DUL20BSL.ins
Start Time : 0.08 min End Time : 20.00 min
Scale Factor: 0 Plot Offset: -16 mV

Sample #: 28298 Page 1 of 1
Date : 6/24/96 09:34 AM
Time of Injection: 6/22/96 11:57 AM
Low Point : -15.90 mV High Point : 529.68 mV
Plot Scale: 546 mV



Sample Name : 125963-004,500:2.5
FileName : G:\GC11\CNB\173b040.raw
Method : DUL20BSL.ins
Start Time : 0.01 min End Time : 20.00 min
Scale Factor: 0 Plot Offset: -14 mV

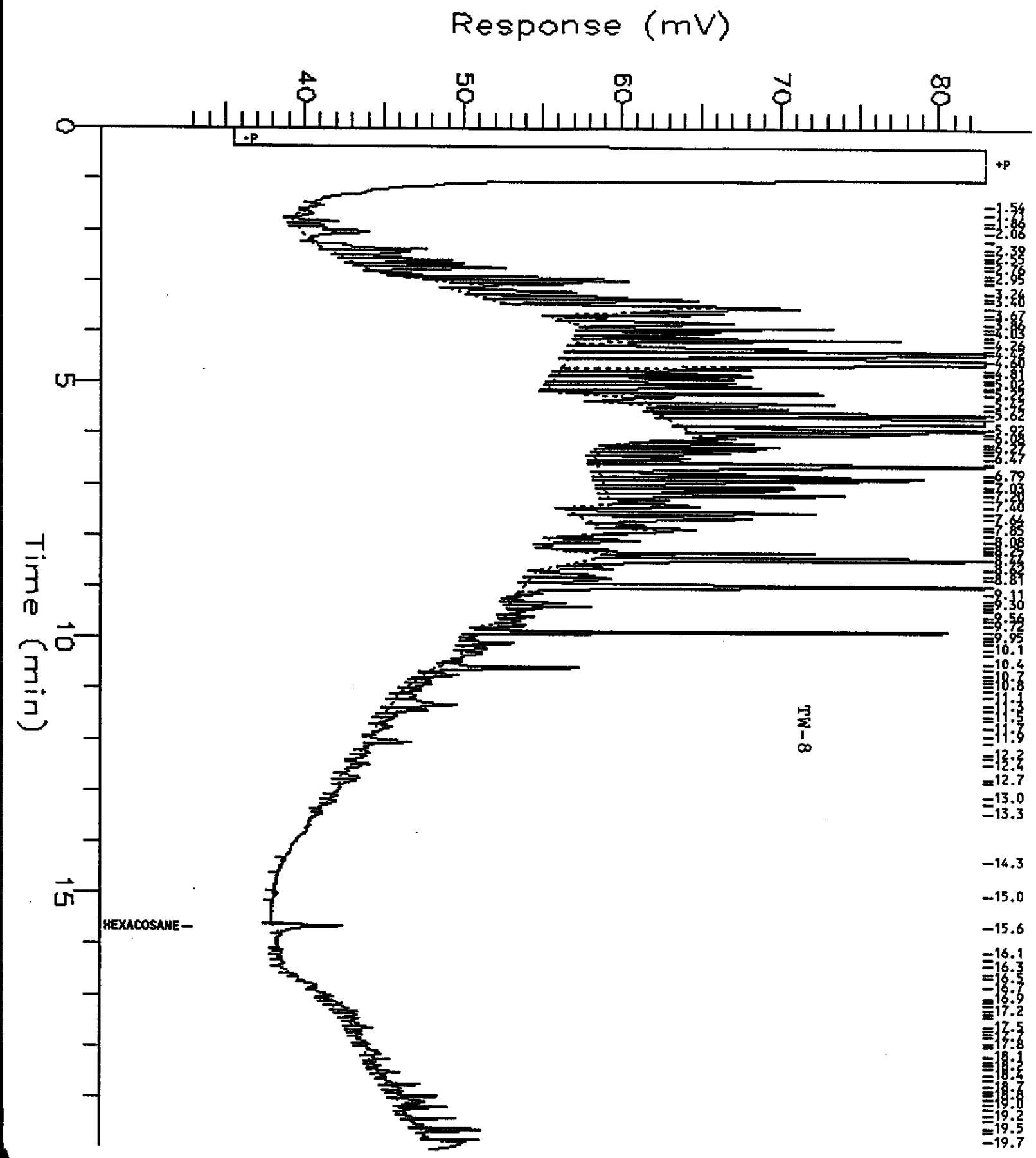
Sample #: 28298 Page 1 of 1
Date : 6/24/96 09:32 AM
Time of Injection: 6/22/96 10:56 AM
Low Point : -14.11 mV High Point : 313.04 mV
Plot Scale: 327 mV



TEH Chromatogram - GC 11 Ch B

Sample Name : 125963-001,50:100
FileName : g:\gc11\chb\177b003.raw
Method : DUL20BSL.ins
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: -1 Plot Offset: 33 mV

Sample #: 28298 Page 1 of 1
Date : 6/25/96 12:17 PM
Time of Injection: 6/25/96 11:41 AM
Low Point : 32.97 mV High Point : 82.97 mV
Plot Scale: 50 mV

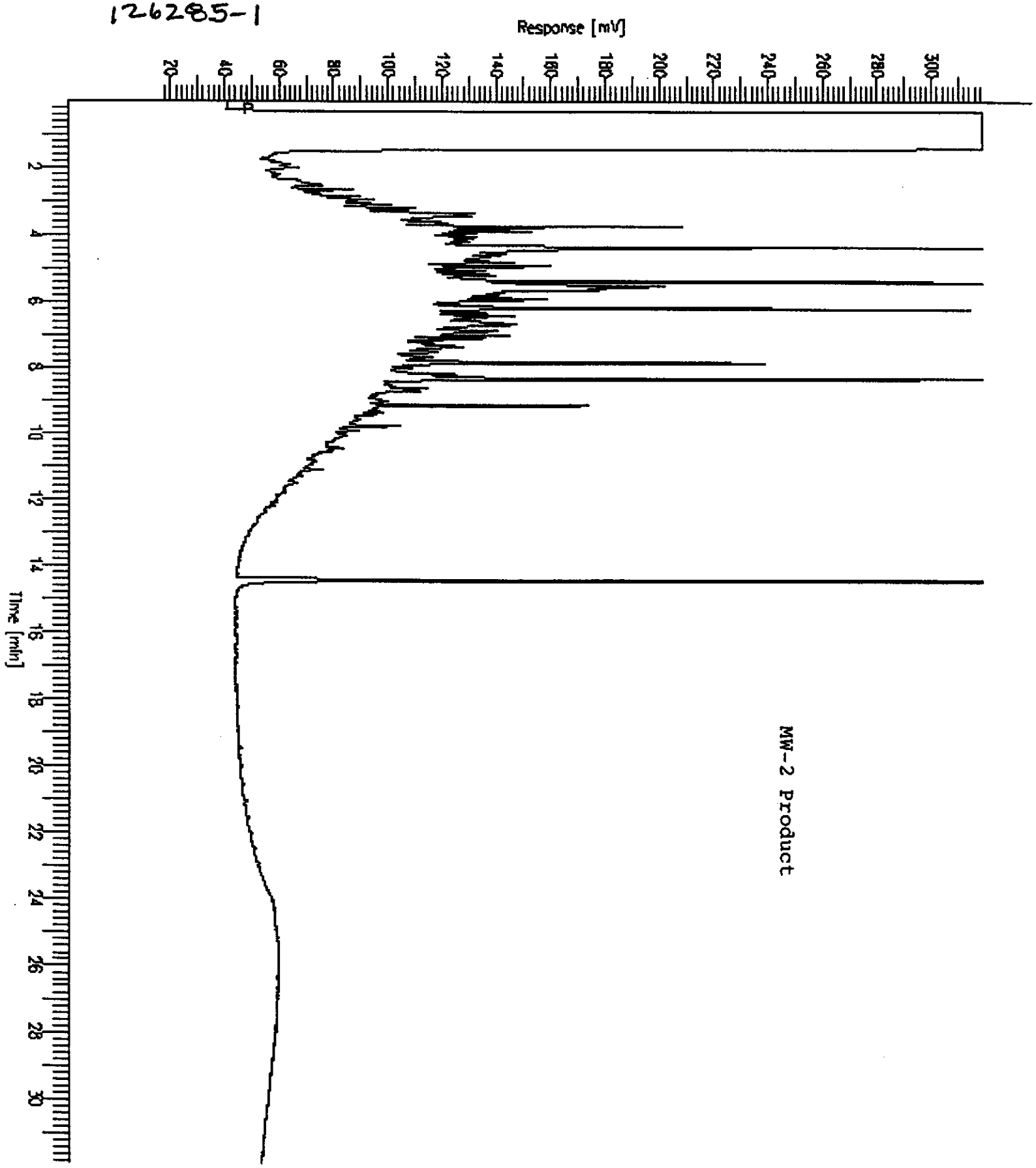


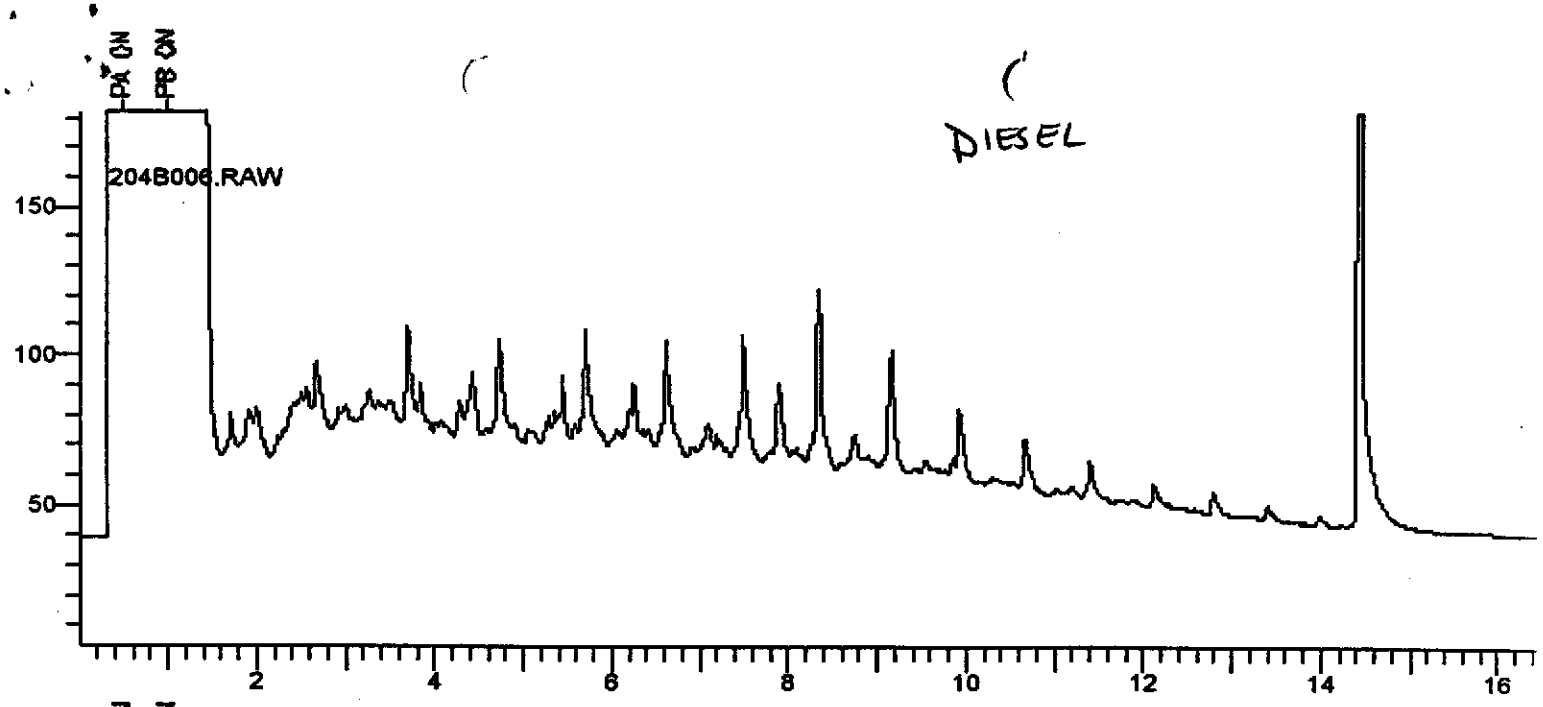
GC15 Channel A TEH

Sample Name : F,126285-001
FileName : C:\GC15\CHB\204B015.RAW
Method : BTEHJ.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 17 mV

Sample #: Page 1 of 1
Date : 7/24/96 01:32 PM
Time of Injection: 7/23/96 01:07 AM
Low Point : 16.50 mV High Point : 318.87 mV
Plot Scale: 302.4 mV

126285-1

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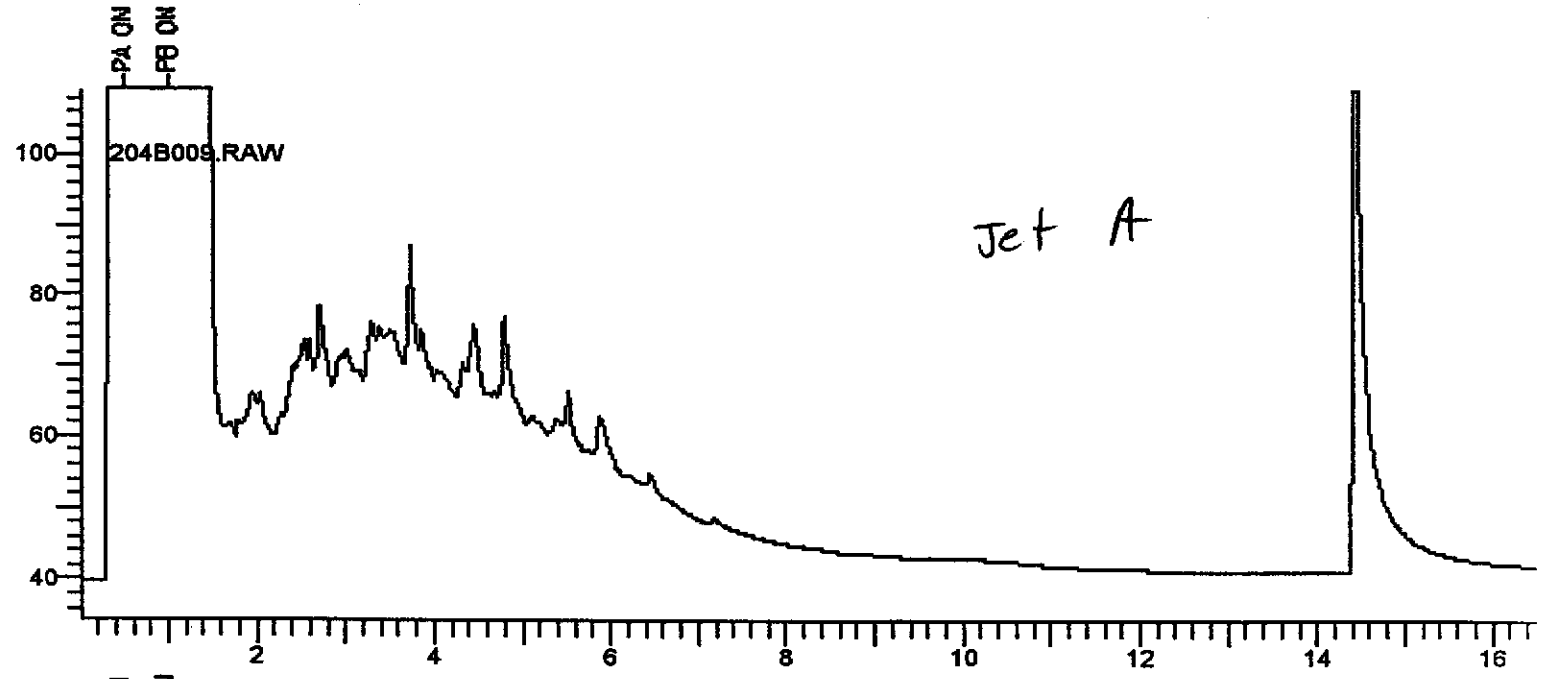
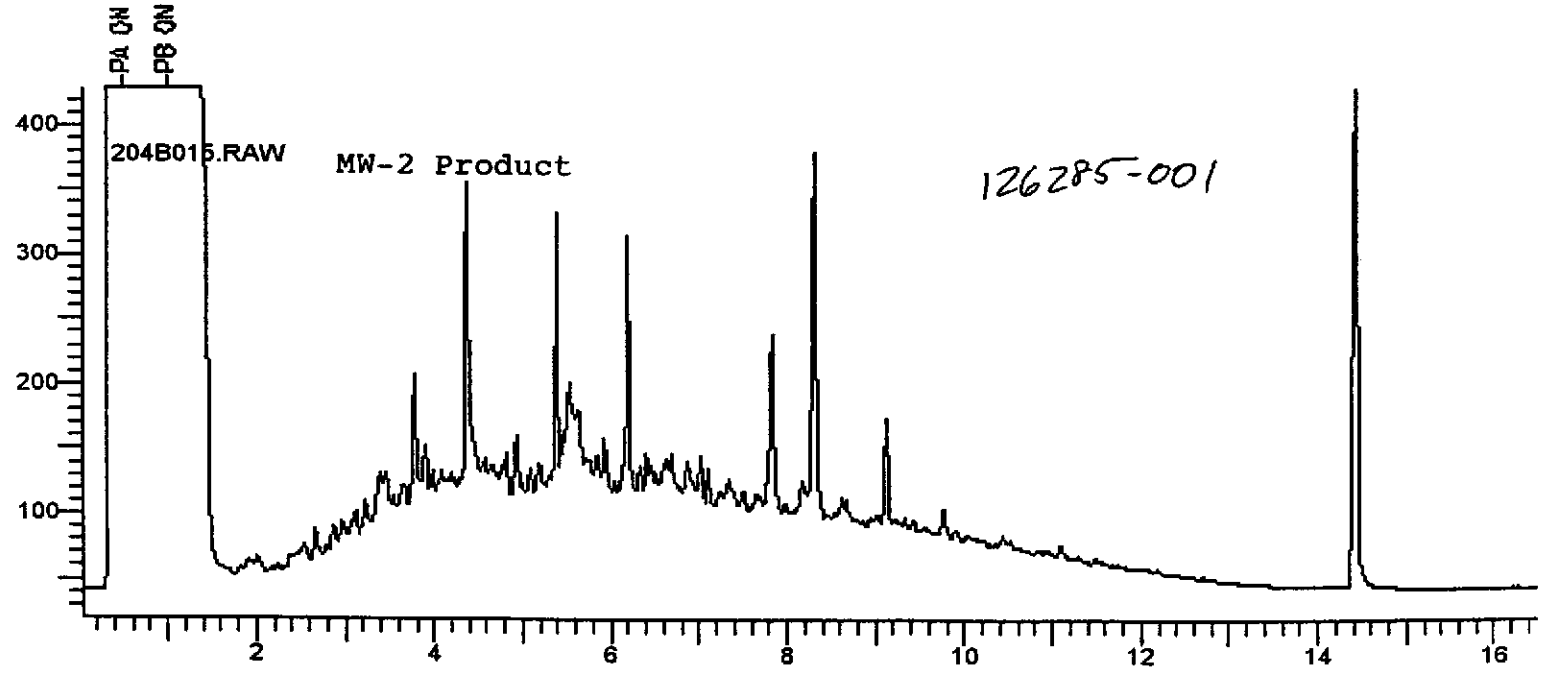
PB ON
204B006.RAW
DIESEL
150
100
50
2
4
6
8
10
12
14
16


PA ON
PB ON
204B009.RAW
Jet A
100
80
60
40
2
4
6
8
10
12
14
16


PA ON
PB ON
204B015.RAW
MW-2 Product
126285-001
400
300
200
100
2
4
6
8
10
12
14
16