Meeting on 64th & 65th Street properties
Emeryville at RWQCB, Oakland
8/1/95

Name	phone number	Organization
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TED ERLER	(415) 578-1172	ERLER & KACINOWSKI, INC
Tom Sullivan	415·394·9000	AMB
John Bruno	510. 922. 4445	Sybase
Susan Lowenberg	415-392-4500	Mission-Taylor/Lowenberg Corp.
BILL WICK	510·466·6842	Crosby, Heafey for Sybase
Michelle King	415 578-1172	EKI
Siun Arigala	510 286 0434	RWQCB.
Ravi Arulanantham	286-1331	RWQCB/ACDGA

8/1/95

Erler & Kalinowski, Inc.

AGENDA

Meeting with RWQCB and ACDEH Staff
1 August 1995

Sybase, Inc., Emeryville, California
(EKI 940018.03)

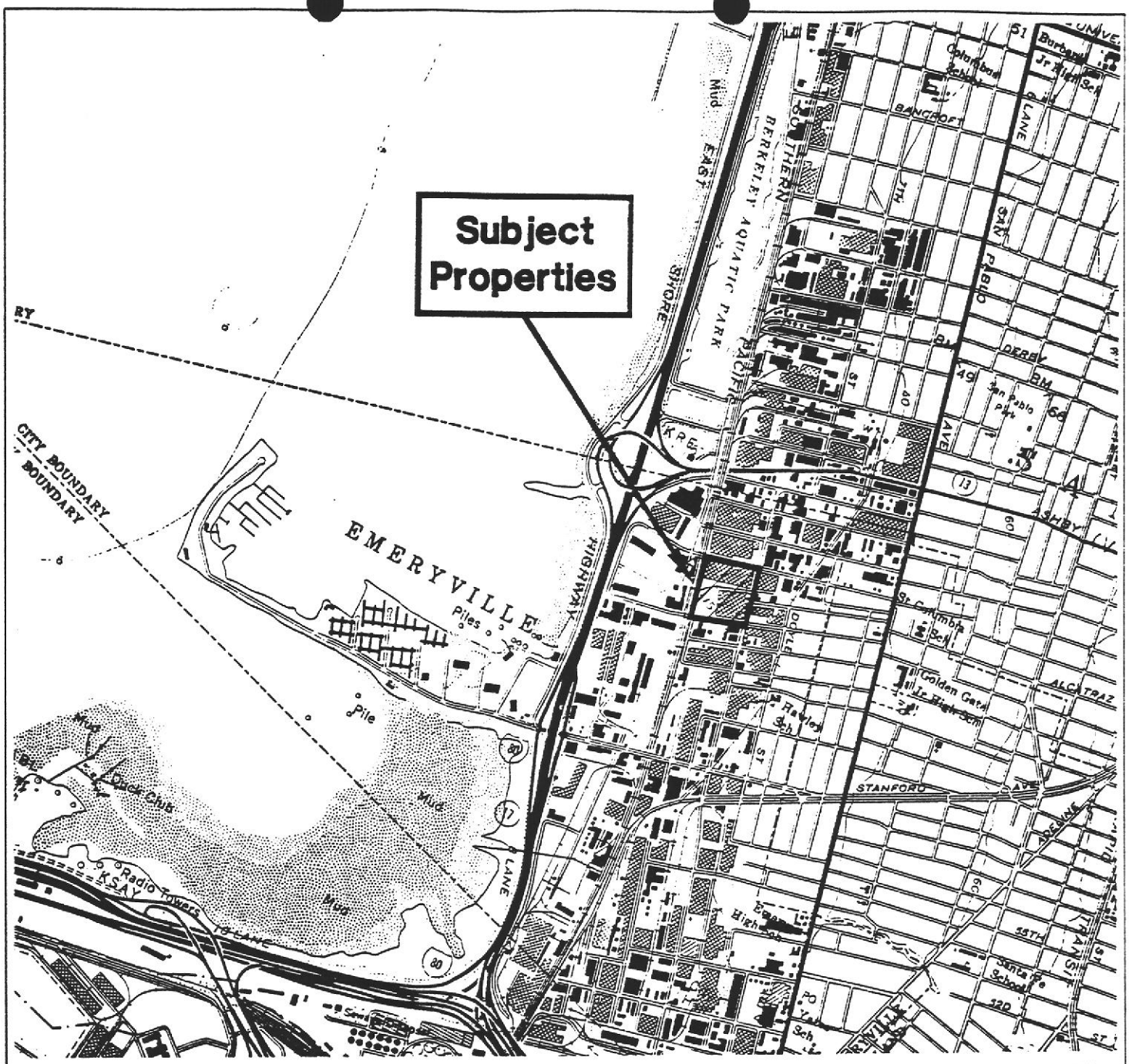
A. Topics Addressed in EKI's Investigations Pursuant to RWQCB and ACDEH Potential Concerns

- Soil concentrations of 13 Priority Metals are below EPA Preliminary Remediation Goals and background levels;
- Arsenic has not been detected in soil or in off-site downgradient groundwater samples, and the aerial extent of arsenic in groundwater exceeding its MCL of 50 ug/L is extremely limited;
- PAHs have not been detected in soil and groundwater, in particular, in petroleum hydrocarbon source areas;
- Areas of very high petroleum hydrocarbon concentrations in groundwater (i.e., greater than 10,000 ug/L) are discontinuous in former refinery area;
- Off-site, downgradient concentrations of petroleum hydrocarbons are low and extent of off-site migration, if any, is limited;
- Petroleum hydrocarbons at well RMW-3 do not appear to be associated with the former Ryerson tank;
- BTEX concentrations near the former Lowenberg tanks are stable or decreasing; and
- TCE, 1,1,1-TCA, and their breakdown products are migrating across the Site from upgradient, off-site sources.

B. Approval Letter for Sybase, Inc. Planned Development of the Site with the Following Requirements

- Site-Development Risk Management Plan
  Health and Safety Requirements – utility trenches, construction
  Soil Management Plan
  Protection of Deeper Aquifer → drive piles
- Closure of Site

HPA



Basemap Source: 1980 U.S.G.S Quad Map, Oakland West, California.

N

0 2000 4000

(Approximate Scale in Feet)

Erler & Kalinowski, Inc.

Site Location

64th & 65th Street Properties
Emeryville, CA
June 1995
EKI 940018.00

Figure 1

Notes:

1. All locations are approximate.

DRAFT

Table 1
Summary of Soil and Groundwater Sampling Depths and Analyses
Sybase, Inc.
64th and 65th Street Properties, Emeryville, California
(EKI 940018.08)

Sample ID	Sample Location	Sample Depth Interval (ft bgs) (a)	Date Sample Collected	TEPH (EPA 8015m)	VOCs (EPA 8240)	Arsenic (EPA 7060)	Priority Metals (b)	PAHs (EPA 8100)	Total Organic Carbon
Soil									
P-5-2.5	P-5	2.5	7/5/95		X		X		
P-6-2.5	P-6	2.5	7/5/95		X		X		
P-7-2.5	P-7	2.5	7/5/95	X	X				
P-7-11	P-7	11	7/5/95						X
P-8-5.5	P-8	5.5	7/7/95	X					
P-8-18	P-8	18	7/7/95						X
P-9-6	P-9	6	7/7/95	X					
P-9-12	P-9	12	7/7/95						X
P-10-2.5	P-10	2.5	7/7/95	X					
P-10-11	P-10	11	7/7/95						X
P-11-2	P-11	2	7/7/95	X	X			X	
Groundwater									
P-1	P-1	10.5-15.5	7/5/95		X	X			
P-2	P-2	17-22	7/6/95		X	X			
P-3	P-3	13-18	7/6/95		X	X			
P-4	P-4	9-14	7/6/95	X	X	X			
P-5	P-5	12.5-17.5	7/5/95	X	X		X		
P-6	P-6	13-18	7/5/95	X	X		X		
P-7	P-7	16-21	7/5/95	X	X	X			
P-8	P-8	14-19	7/7/95	X		X			
P-9	P-9	14-19	7/7/95	X		X			
P-10	P-10	14-19	7/7/95	X		X			
P-11	P-11	10-15	7/6/95	X	X	X		X	
P-Dup	P-11	10-15	7/6/95	X	X	X			

NOTES:

(a) For soil samples, the sample depth in feet below ground surface ("ft bgs") represents the bottom depth of a 0.5 foot sample. For groundwater samples, the sample depth represents the screen interval of the PVC casing.

(b) Priority Metals by EPA 6000/7000 Series include arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, tin, thallium, and zinc.

ABBREVIATIONS:

TEPH = Total Extractable Petroleum Hydrocarbons Quantified as Diesel
VOCs = Volatile Organic Compounds
PAHs = Polycyclic Aromatic Hydrocarbons

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Table 2
Results of Soil Sample Analyses
for Metals, Petroleum Hydrocarbons, VOCs, and PAHs
Sybase, Inc.
64th and 65th Street Properties, Emeryville, California
(EKI 940018.08)

Sample ID	Date Sample Collected	13 Priority Metals (a) EPA 6000/7000 Series							TEPH as Diesel EPA Method 8015m		VOCs EPA Method 8240 (mg/kg)	PAHs EPA Method 8100 (mg/kg)
		Arsenic (mg/kg)	Beryllium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)	Concentration (mg/kg)	Hydrocarbon Range (b)		
P-5-2.5	7/5/95	<5 (c)	**0.51 (d)**	**37**	**16**	**17**	**25**	**25**	NA (e)	-	ND (f)	NA
P-6-2.5	7/5/95	<5	<0.5	**28**	**13**	**9.6**	**23**	**32**	NA	-	ND	NA
P7-2.5	7/5/95	NA	NA	NA	NA	NA	NA	NA	**37** (g)	C9-C24	ND	NA
P-8-5.5	7/7/95	NA	NA	NA	NA	NA	NA	NA	**2.3**	C9-C24	NA	NA
P9-6	7/7/95	NA	NA	NA	NA	NA	NA	NA	**1**	C9-C24	NA	NA
P10-2.5	7/7/95	NA	NA	NA	NA	NA	NA	NA	**190**	C12-C24	NA	NA
P11-2	7/7/95	NA	NA	NA	NA	NA	NA	NA	**170**	C14-C24	ND	ND

NOTES:

(a) Priority metals include arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, tin, thallium, and zinc. Only arsenic and those metals detected in soil samples are included in table.
(b) Hydrocarbon range presents the range of carbon chain lengths quantified in the sample because the hydrocarbon did not match the diesel standard.
(c) Less than symbol ("<") denotes that compound was not present above the laboratory detection limit indicated.
(d) Concentrations indicated in bold were present at concentrations that exceeded respective laboratory detection limits.
(e) "NA" indicates that the sample was not analyzed by the method indicated.
(f) "ND" indicates that none of the compounds analyzed by the method listed were present above laboratory detection limits.
(g) The sample chromatogram shows that hydrocarbons with carbon chain lengths greater than C25 were present in this sample. Although the chromatogram does not match the motor oil standard (the hydrocarbons are heavier than motor oil), the laboratory re-quantified TEPH in this sample to 860 mg/kg against a motor oil standard (C16 to C36).

ABBREVIATIONS:

TEPH = Total Extractable Petroleum Hydrocarbons Quantified as Diesel
VOCs = Volatile Organic Compounds
PAHs = Polycyclic Aromatic Hydrocarbons

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Table 3
Results of Soil Sample Analysis for Total Organic Carbon
Sybase, Inc.
64th and 65th Street Properties, Emeryville, California
(EKI 940018.08)

Sample ID	Date Sample Collected	Total Organic Carbon Conc. (mg/kg)	Organic Carbon Fraction (-)
P-7-11	7/5/95	440	0.00044
P-8-18	7/7/95	86	0.000086
P-9-12	7/7/95	430	0.00043
P-10-11	7/7/95	170	0.00017

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Table 4
Summary of Well Construction Details and Water Levels
Sybase, Inc.
64th and 65th Street Properties, Emeryville, California
(EKI 940018.08)

Well ID	Date Well Installed	Depth of Well (ft bgs)	Screen Interval (ft bgs)	Sand Pack Interval (ft bgs)	Top of Casing Elevation (ft msl)	24 March 1995		7 July 1995	
						Depth to Water (ft bgs)	Groundwater Elevation (ft msl)	Depth to Water (ft bgs)	Groundwater Elevation (ft msl)
MW-1	3/6/95	20	5 - 20	4 - 20	18.24	2.97	15.27	3.81	14.43
MW-2	3/8/95	15.5	5.5 - 15.5	4 - 15.5	19.45	3.03	16.42	4.20	15.25
MW-3	3/7/95	19	4 - 19	3 - 19	15.24	2.72	12.52	6.22	9.02
MW-4	3/6/95	20	5 - 20	4 - 20	14.02	4.57	9.45	5.77	8.25
MW-5	3/7/95	15	5 - 15	4 - 15	12.99	5.75	7.24	6.06	6.93
MW-6	3/6/95	14	4 - 14	3 - 14	12.66	2.55	10.11	5.01	7.65
RMW-1	8/6/93	15.5	4.5 - 15.5	4 - 15.5	14.38	3.61	10.77	4.45	9.93
RMW-2	8/6/93	15.5	4.5 - 15.5	4 - 15.5	14.55	3.35	11.2	4.18	10.37
RMW-3	8/6/93	15.5	4.5 - 15.5	4 - 15.5	14.15	2.95	11.2	3.70 (a)	10.45
TMW-1	4/12/90	15	5 - 15	4 -15	16.31	2.59	13.72	3.27	13.04
TMW-2	4/12/90	15.5	5 - 15	4 -15	15.57	NM	-	NM	-
TMW-3	4/12/90	15.5	5 - 15	4 -15	15.15	1.65	13.5	2.28	12.87

NOTES:

(a) Free-phase hydrocarbons present at a thickness of less than 0.01 foot.

ABBREVIATIONS:

ft bgs = feet below ground surface
ft msl = feet relative to mean sea level
NM = not measured, well obstructed by dirt

Table 5
Results of Groundwater Sample Analyses for Metals, Petroleum Hydrocarbons, and PAHs
Sybase, Inc.
64th and 65th Street Properties, Emeryville, California
(EKI 940018.08)

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Sample ID	Date Sampled	Arsenic or 13 Priority Metals (a) EPA 6000/7000 Series			TEPH as Diesel EPA Method 8015m		BTEX EPA Method 8240				PAHs Method 8100 (ug/L)
		Arsenic (ug/L)	Nickel (ug/L)	Zinc (ug/L)	Concentration (ug/L)	Hydrocarbon Range (b)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	
P-1	7/5/95	<5 (c)	NA (d)	NA	NA	-	<2	<2	<2	<2	NA
P-2	7/6/95	**7.9 (e)**	NA	NA	NA	-	<2	<2	<2	<2	NA
P-3	7/6/95	<5	NA	NA	NA	-	<2	<2	<2	<2	NA
P-4	7/6/95	<5	NA	NA	**33,000**	C9-C24	<2	<2	<2	**17**	NA
P-5	7/5/95	<5	<5	**26**	**4,100**	C9-C24	<4	<4	<4	<4	NA
P-6	7/5/95	**24**	**6.9**	**39**	**7,300**	C9-C24	<2	<2	<2	<2	NA
P-7	7/5/95	**10**	NA	NA	**1,100**	C9-C24	<4	<4	<4	<4	NA
P-8	7/7/95	<5	NA	NA	**250**	C9-C24	NA	NA	NA	NA	NA
P-9	7/7/95	<5	NA	NA	**110**	C9-C24	NA	NA	NA	NA	NA
P-10	7/7/95	<5	NA	NA	**110**	C9-C24	NA	NA	NA	NA	NA
P-11	7/6/95	**14**	NA	NA	**46,000**	C9-C24	<5	<5	**17**	**41**	ND
P-Dup	7/6/95	**15**	NA	NA	**43,000**	C9-C24	<5	<5	**21**	**44**	NA

NOTES:

(a) Priority metals include arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, tin, thallium, and zinc. Only those metals detected in groundwater samples are included in this table.
(b) Hydrocarbon range presents the range of carbon chain lengths quantified in the sample because the hydrocarbon did not match the diesel standard.
(c) Less than symbol ("<") denotes that compound was not present above the detection limit indicated.
(d) "NA" indicates that the sample was not analyzed by the method indicated.
(e) Concentrations indicated in bold were present at levels that exceeded respective laboratory detection limits.

ABBREVIATIONS:

TEPH = Total Extractable Petroleum Hydrocarbons Quantified as Diesel
BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes.
PAHs = Polycyclic Aromatic Hydrocarbons

Table 6
Results of Groundwater Sample Analyses for Non-BTEX VOCs
Sybase, Inc.
64th and 65th Street Properties, Emeryville, California
(EKI 940018.08)

DRAFT

Sample ID	Date Sampled	Non-BTEX VOCs EPA Method 8240 (a)								
		acetone (ug/L)	chloro-ethane (ug/L)	1,1-DCA (ug/L)	1,1-DCE (ug/L)	cis-1,2-DCE (ug/L)	trans-1,2-DCE (ug/L)	TCA (ug/L)	TCE (ug/L)	vinyl chloride (ug/L)
P-1	7/5/95	<10 (b)	<2	<2	<2	**17 (c)**	**15**	<2	**16**	<2
P-2	7/6/95	**10**	<2	**4**	**42**	**2.8**	<2	**7.4**	**6.4**	<2
P-3	7/6/95	<10	<2	<2	<2	**11**	<2	<2	**68**	<2
P-4	7/6/95	<20	<4	<4	<4	<4	<4	<4	<4	<4
P-5	7/5/95	<20	<4	**44**	<4	<4	**12**	<4	<4	<4
P-6	7/5/95	<10	**34**	**5.6**	<2	**3.4**	**2**	<2	<2	**6.1**
P-7	7/5/95	**23**	<4	<4	<4	<4	<4	<4	<4	<4
P-8	7/7/95	NA (d)	NA	NA	NA	NA	NA	NA	NA	NA
P-9	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-10	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-11	7/6/95	<25	<5	<5	<5	<5	<5	<5	<5	<5
P-Dup	7/6/95	<25	<5	<5	<5	<5	<5	<5	<5	<5

NOTES:

(a) Only compounds detected in groundwater samples are included in table.
(b) Less than symbol ("<") denotes that compound was not present above the laboratory detection limit indicated.
(c) Concentrations indicated in bold were present at levels that exceeded its respective detection limit.
(d) "NA" indicates that the sample was not analyzed by EPA Method 8240.

ABBREVIATIONS:

VOCs	= Volatile Organic Compounds	trans-1,2-DCE	= trans-1,2-Dichloroethene
1,1-DCA	= 1,1-Dichloroethane	TCA	= 1,1,1-Trichloroethane
1,1-DCE	= 1,1-Dichloroethene	TCE	= Trichloroethene
cis-1,2-DCE	= cis-1,2-Dichloroethene		

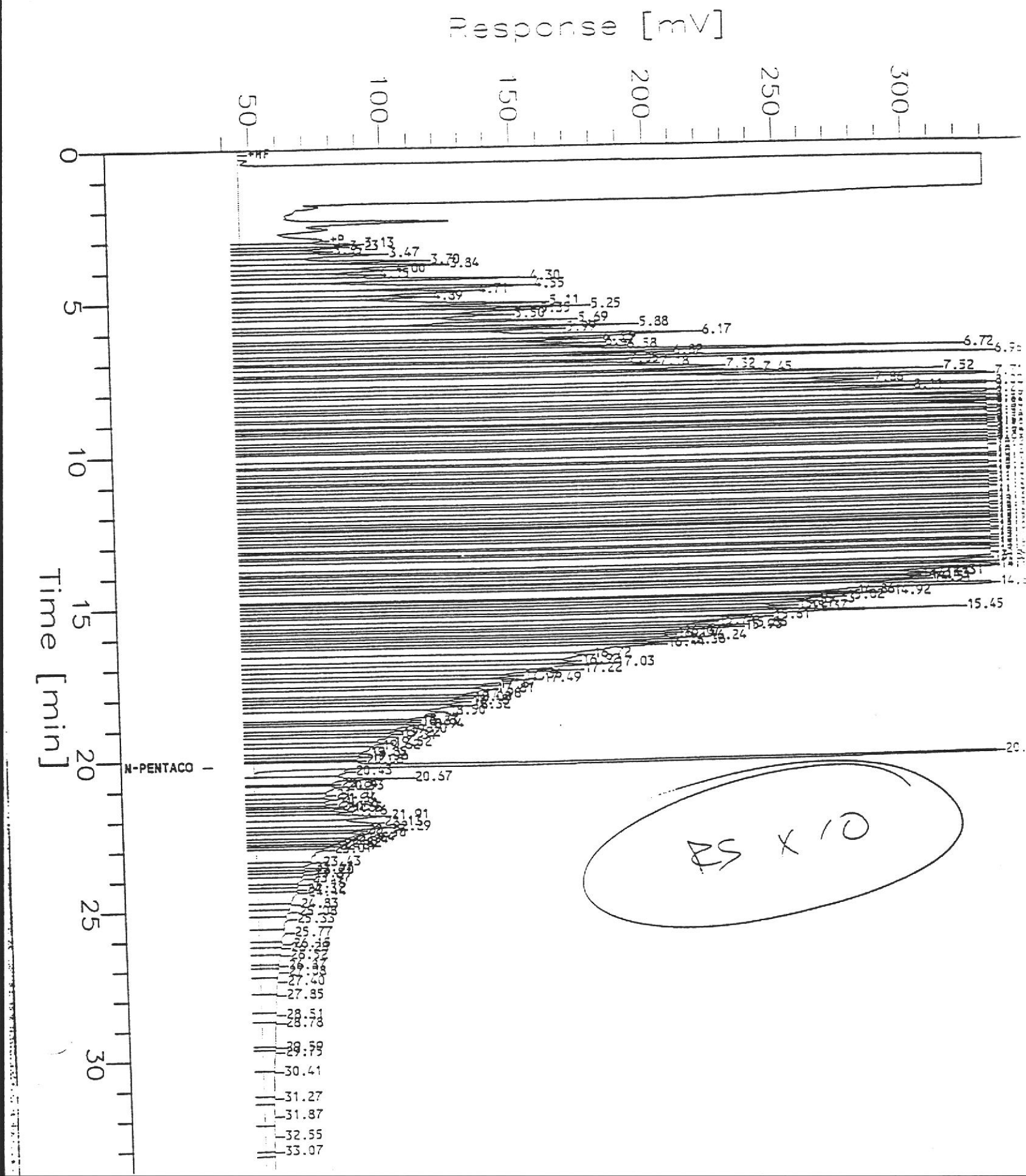
Chromatogram

Sample Name : D9503I76-4 (500:1)
FileName : s:\ghp_05\0402\331A037.raw
Method : ETPH05A.ins
Start Time : 0.00 min
Factor: -1.0

End Time : 33.67 min
Plot Offset: 31 mV

Sample #: MW-1
Date : 4/1/95 10:25
Time of Injection: 4/1/95 09:51
Low Point : 30.59 mV
Plot Scale: 300.0 mV

High Point : 330.59 mV



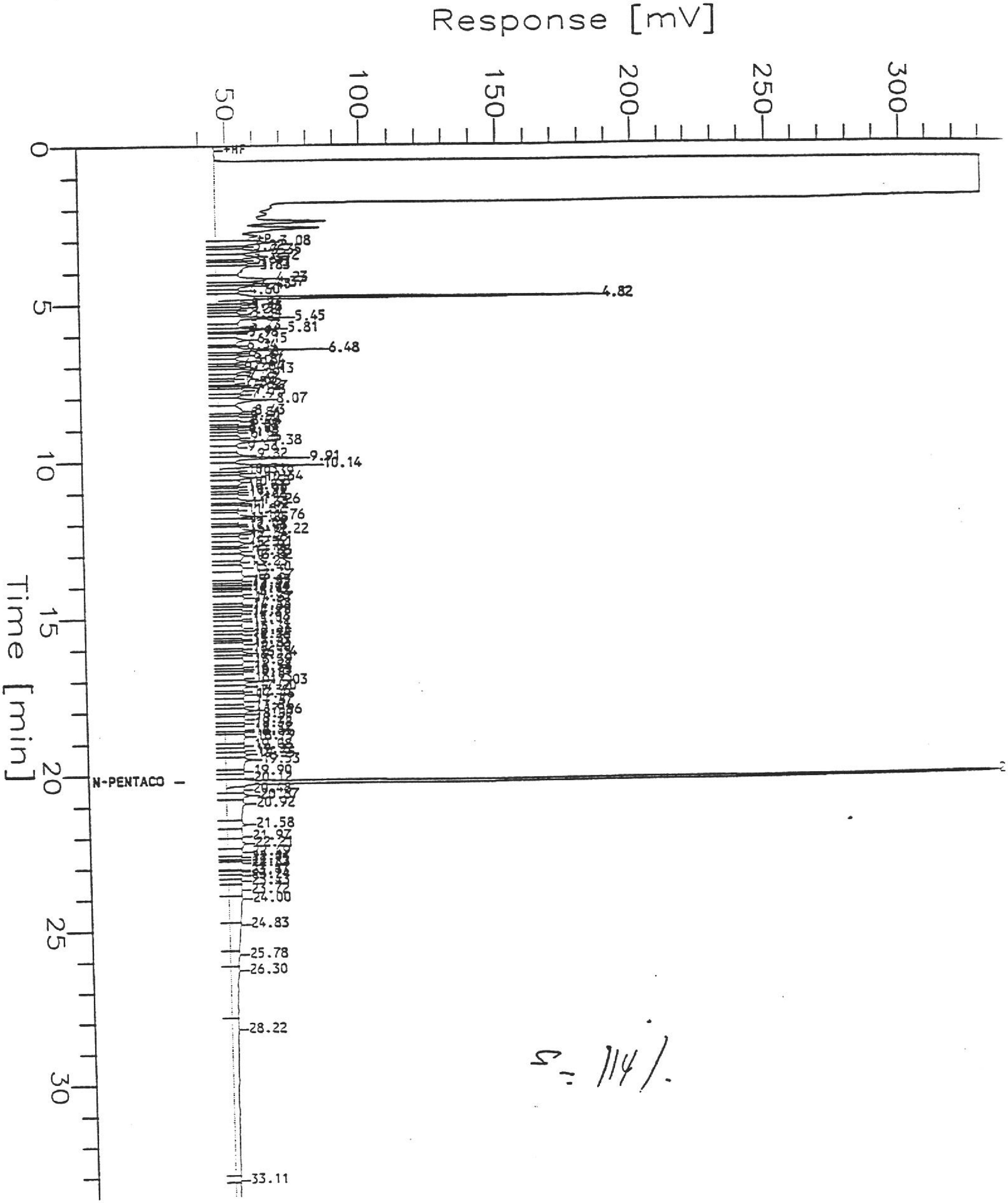
Chromatogram

Sample Name : 09503176-3 (500:1)
FileName : s:\ghp_05\0402\331A036.raw
Method : ETPH05A.ins
Start Time : 0.00 min
Scale Factor: -1.0

End Time : 33.67 min
Plot Offset: 31 mV

Sample #: MW-2
Date : 4/1/95 09:44
Time of Injection: 4/1/95 09:10
Low Point : 30.56 mV
Plot Scale: 300.0 mV

High Point : 330.56 mV

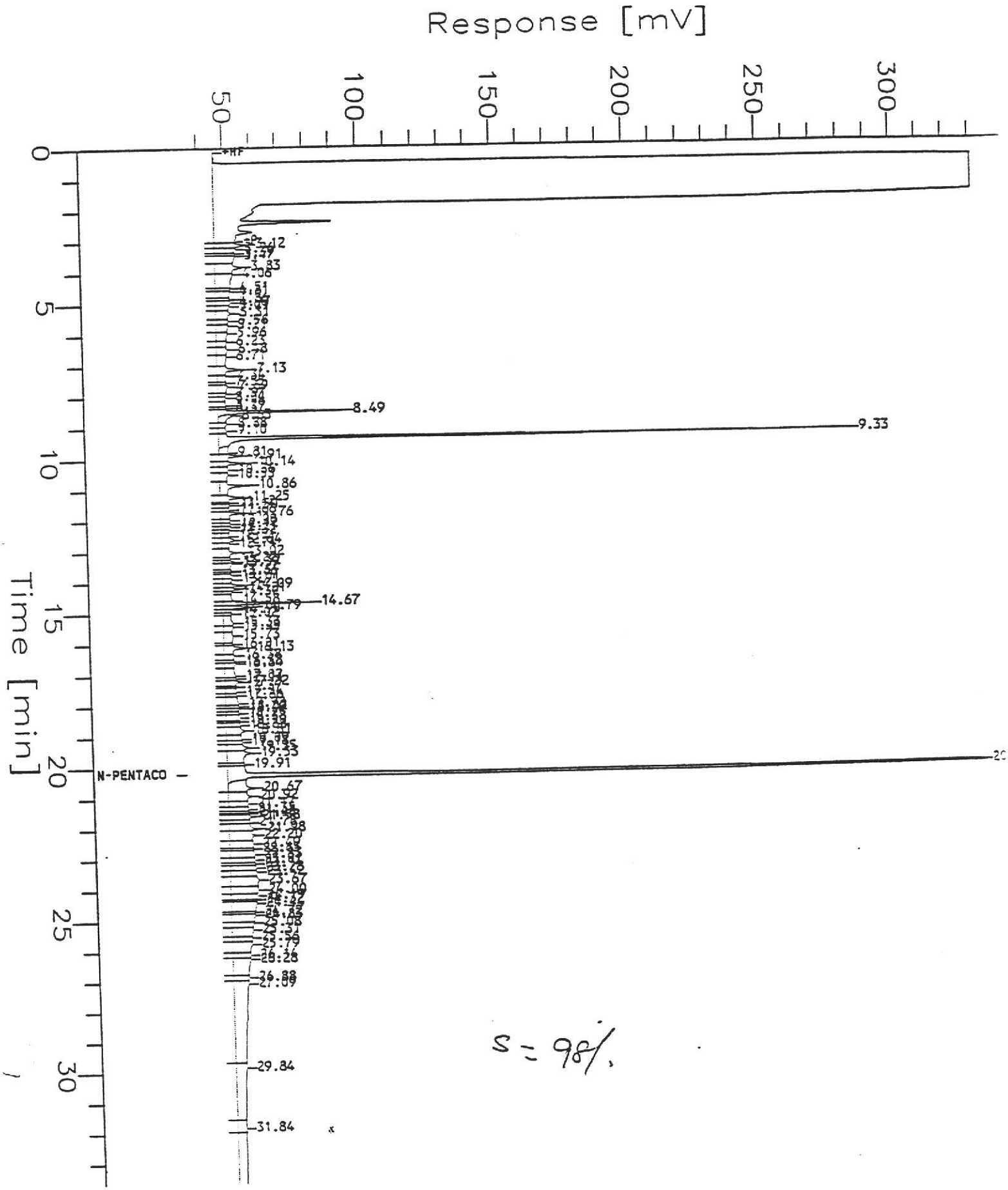


S = 114%

Chromatogram

Sample Name : D9503I76-2 (500:1)
FileName : s:\ghp_05\0402\331A035.raw
Method : ETPH05A.ins
Start Time : 0.00 min End Time : 33.67 min
'e Factor: -1.0 Plot Offset: 31 mV

Sample #: MW-3
Date : 4/1/95 09:03
Time of Injection: 4/1/95 08:29
Low Point : 30.94 mV High Point : 330.94 mV
Plot Scale: 300.0 mV



S = 98%

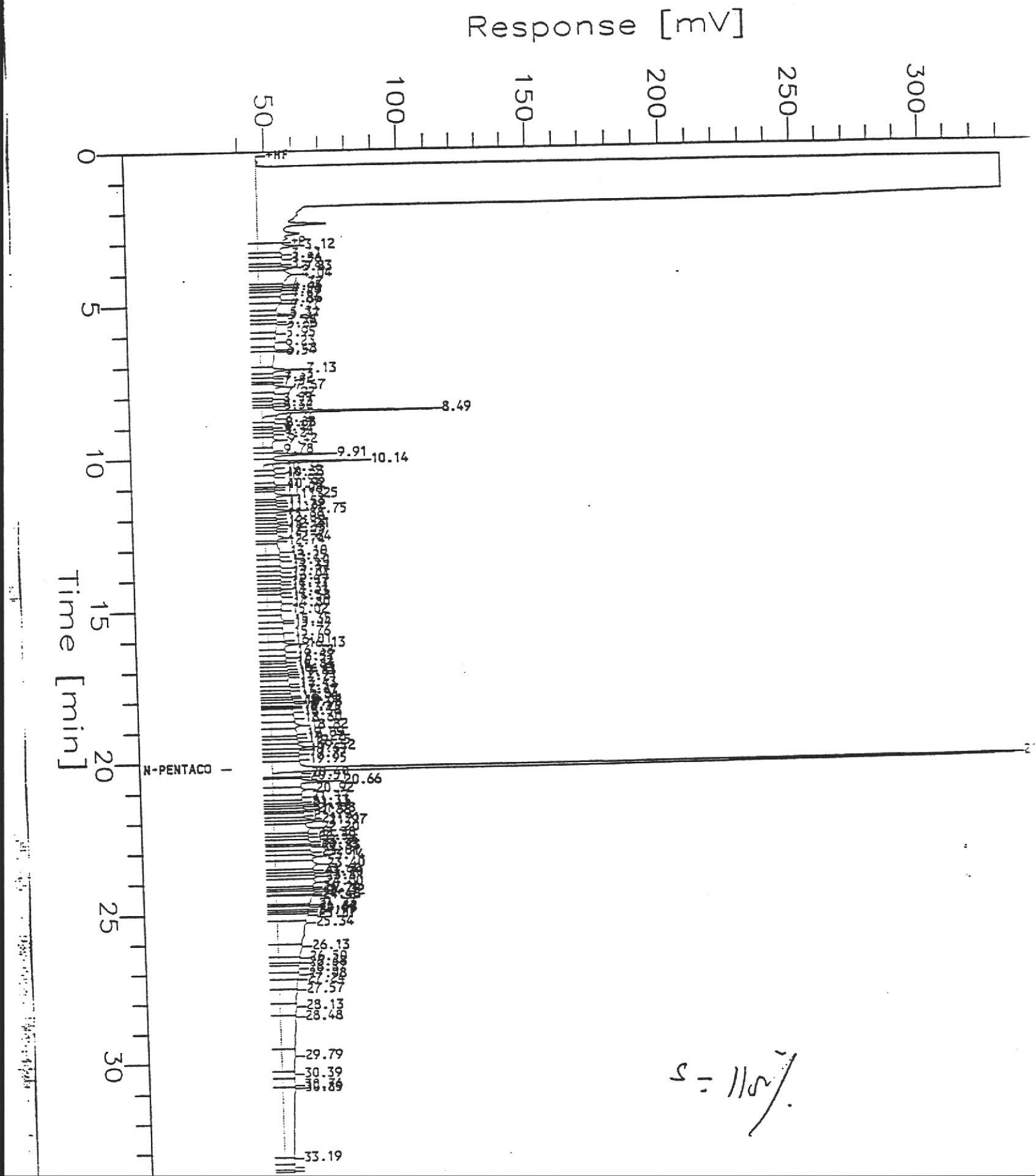
Chromatogram

Sample Name : D9503176-1 (500:1)
FileName : s:\ghp_05\0402\331A032.raw
Method : ETPHOSA.ins
Start Time : 0.00 min
Scale Factor: -1.0

End Time : 33.67 min
Plot Offset: 32 mV

Sample #: MW-4
Date : 4/1/95 07:00
Time of Injection: 4/1/95 06:26
Low Point : 31.53 mV
Plot Scale: 300.0 mV

High Point : 331.53 mV

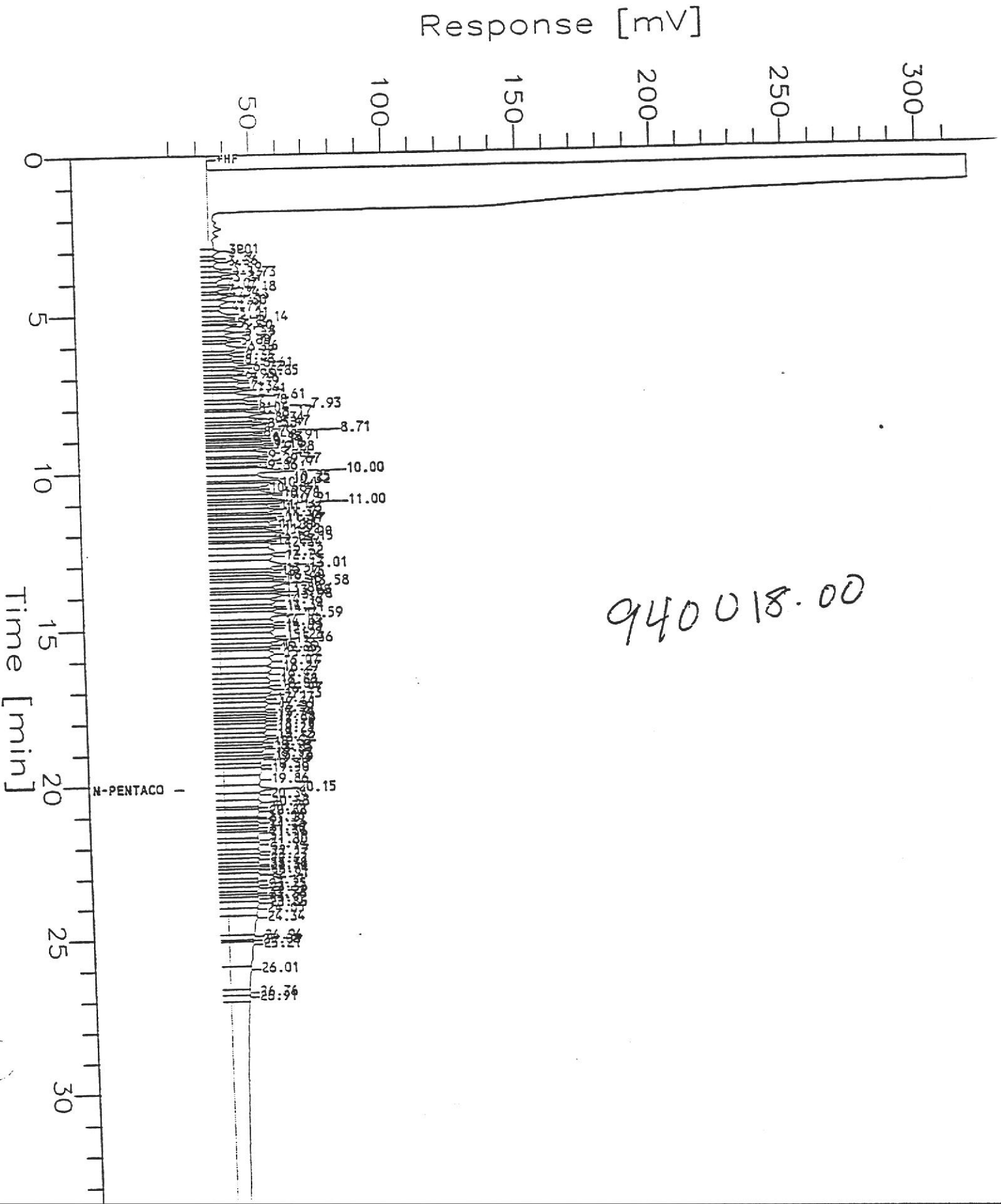


Chromatogram

COPY

Sample Name : D9503J63-4 (500:1*50)RE-SHOT
FileName : s:\ghp_05\0409\405A044.raw
Method : ETPH05A.ins
art Time : 0.00 min
ale Factor: -1.0
End Time : 33.67 min
Plot Offset: 19 mV

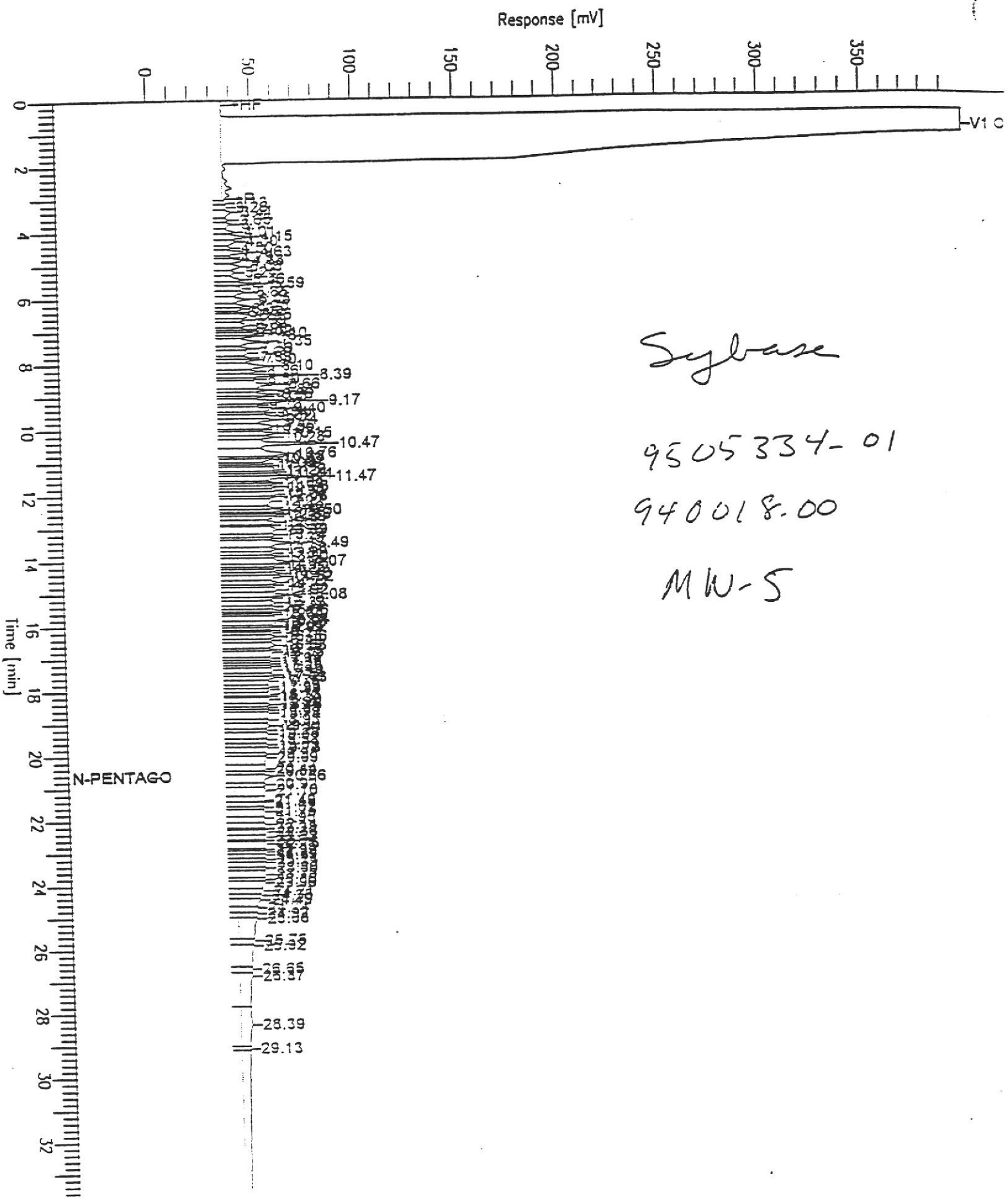
Sample #: MW-5
Date : 4/6/95 22:48
Time of Injection: 4/6/95 22:14
Low Point : 18.98 mV
High Point : 318.98 mV
Plot Scale: 300.0 mV



940018.00

Sample Name : D9505334-1 (500:1*200) RESHOT
FileName : S:\GHP_04\0514\509A013.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: MW-5
Date : 5/9/95 16:50
Time of Injection: 5/9/95 16:16
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



Sybase

9505334-01

940018.00

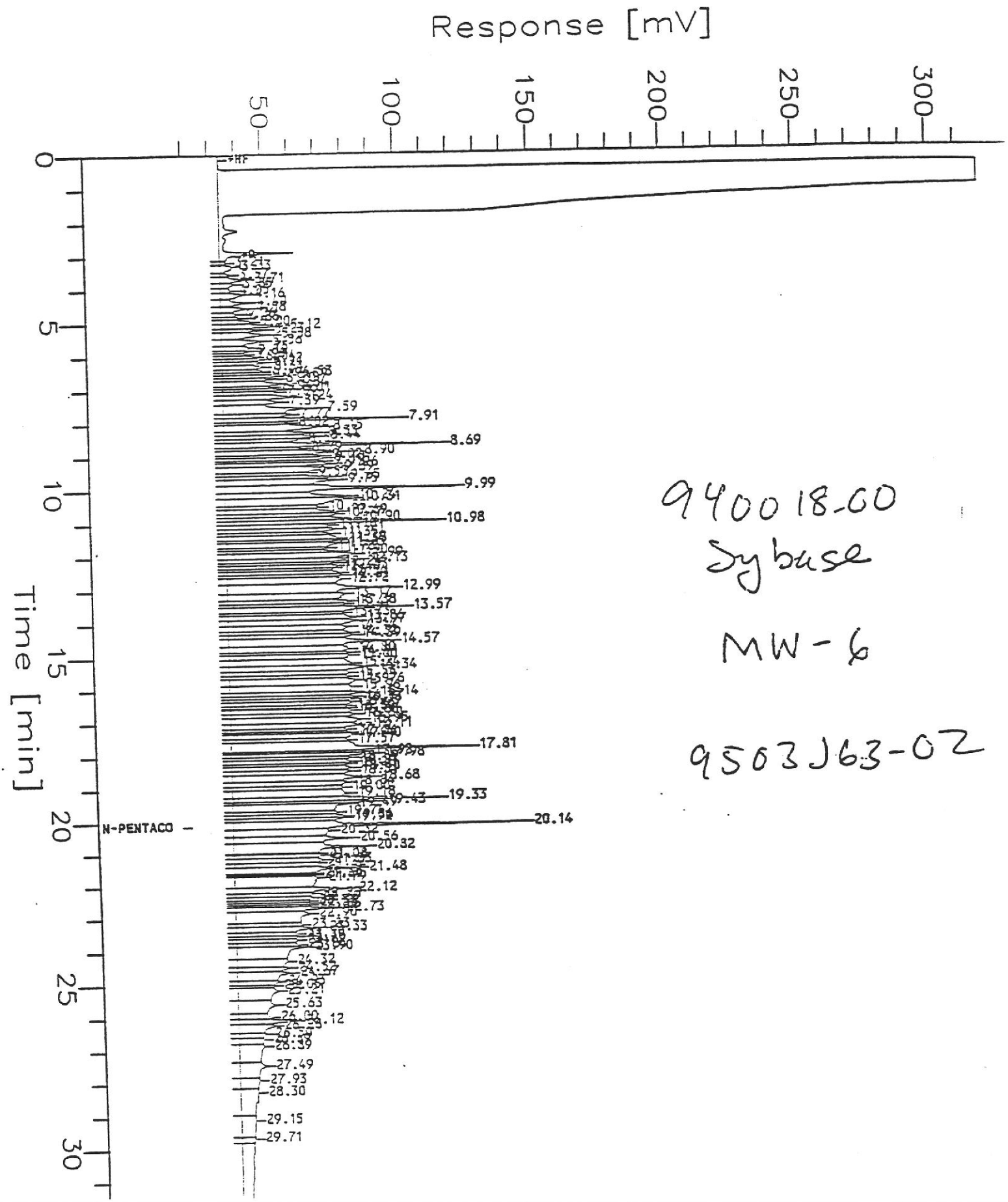
MW-5

Chromatogram

COPY

Sample Name : D9503J63-2 (500:1*10)RE-SHOT
FileName : s:\ghp_05\0409\405A042.raw
Method : ETPH05A.ins
Start Time : 0.00 min
End Time : 31.65 min
Scale Factor: -1.0
Plot Offset: 19 mV

Sample #: MW-6
Date : 4/6/95 20:04
Time of Injection: 4/6/95 19:31
Low Point : 18.81 mV
High Point : 318.81 mV
Plot Scale: 300.0 mV



9400 18.00
Sybase

MW-6

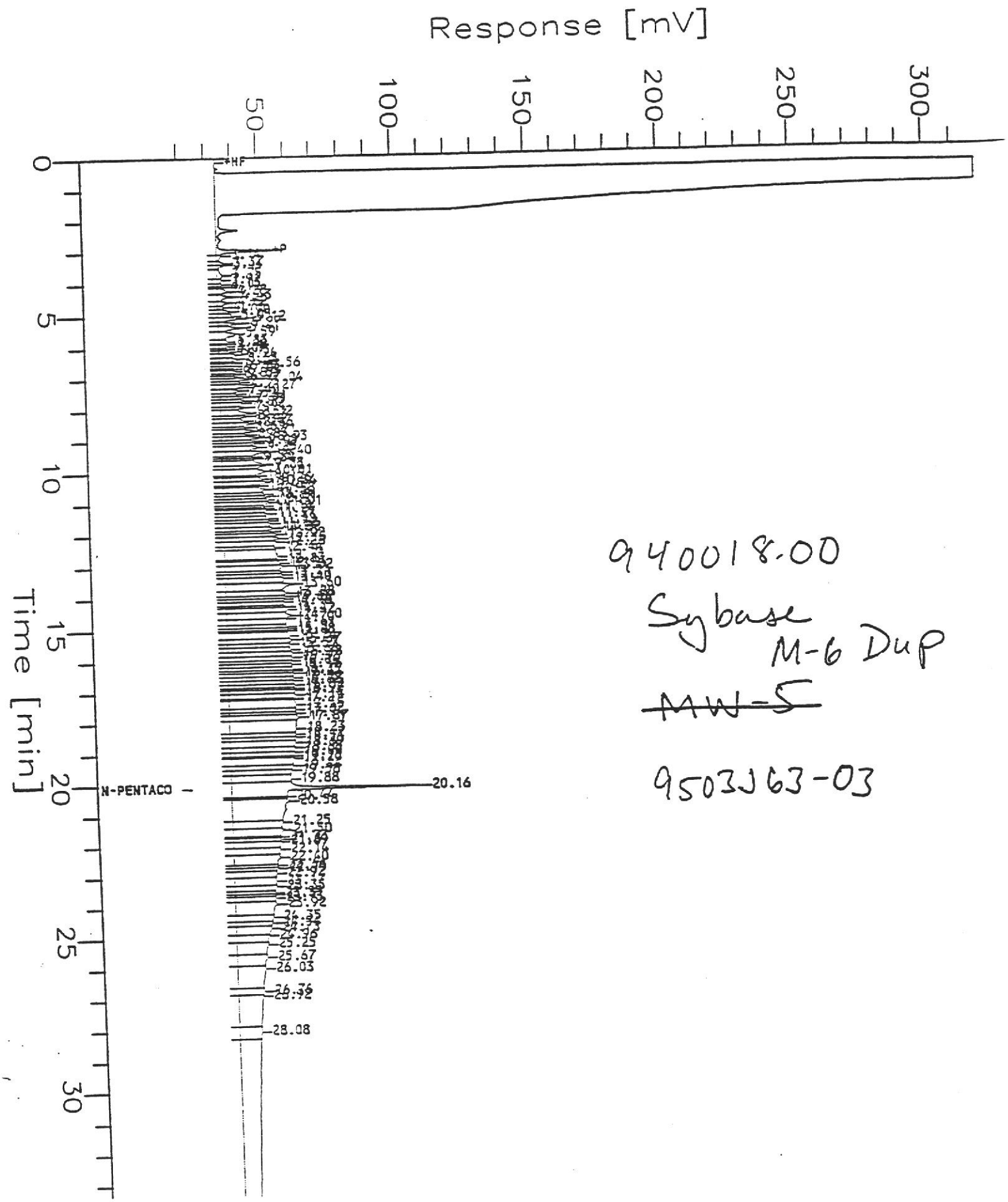
9503J63-02

Chromatogram

COPY

Sample Name : D9503J63-3 (500:1*10)RE-SHOT
FileName : s:\ghp_05\0409\405A043.raw
Method : ETPH05A.ins
Start Time : 0.00 min
Scale Factor: -1.0
End Time : 33.67 min
Plot Offset: 19 mV

Sample #: M-6 DUP
Date : 4/6/95 22:07
Time of Injection: 4/6/95 21:33
Low Point : 19.27 mV
Plot Scale: 300.0 mV
High Point : 319.27 mV

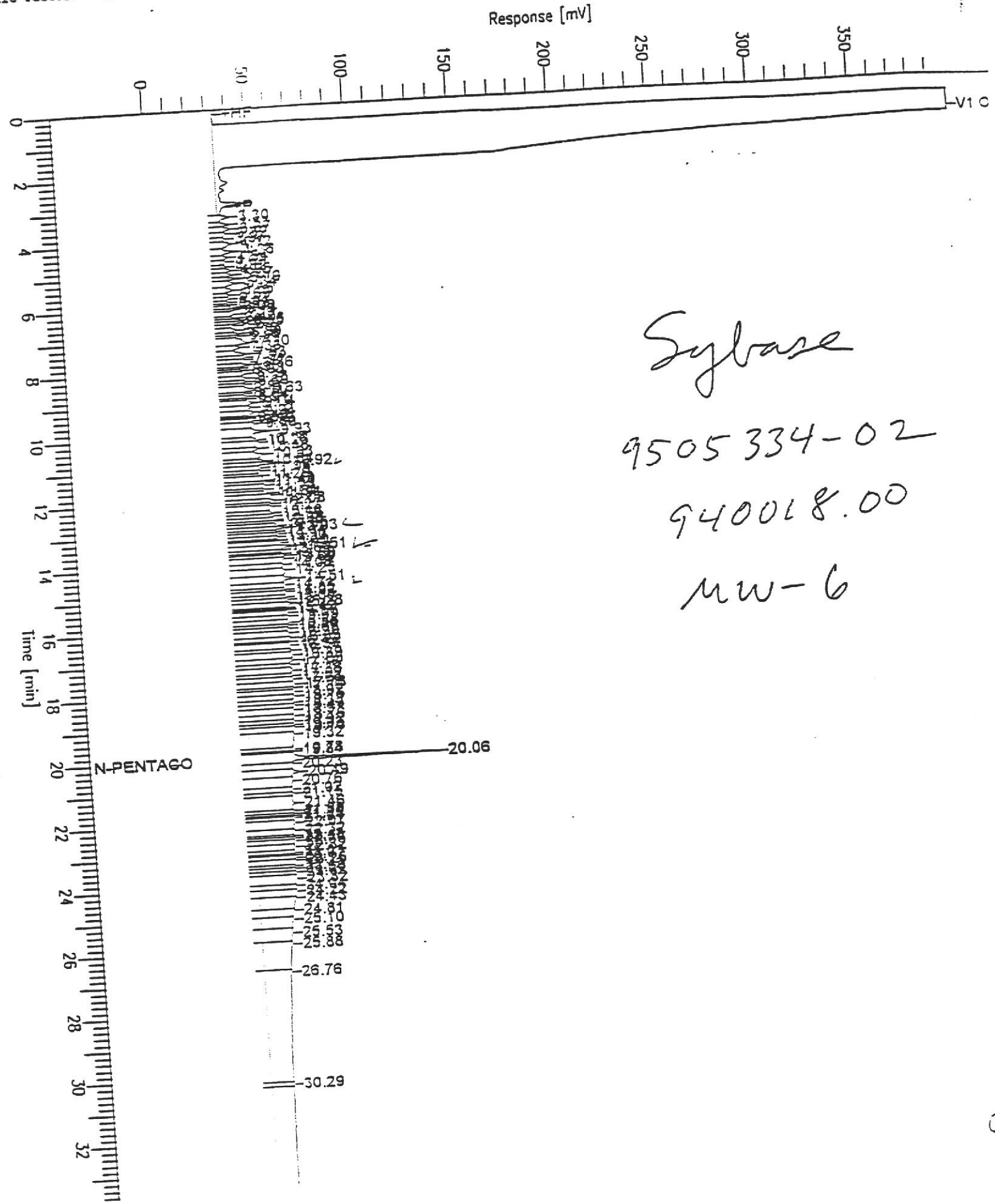


940018.00
Sybase
M-6 Dup
~~MW-5~~

9503J63-03

Sample Name : D9505334-2 (500:1*10)
FileName : S:\GHP_05\0514\508A023.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0
End Time : 33.65 min
Plot Offset: 0 mV

Sample #: MW-6
Date : 5/9/95 00:11
Time of Injection: 5/8 23:37
Low Point : 0.00 mV
High Point : 400.00 mV
Plot Scale: 400.0 mV



Sybase

9505334-02

940018.00

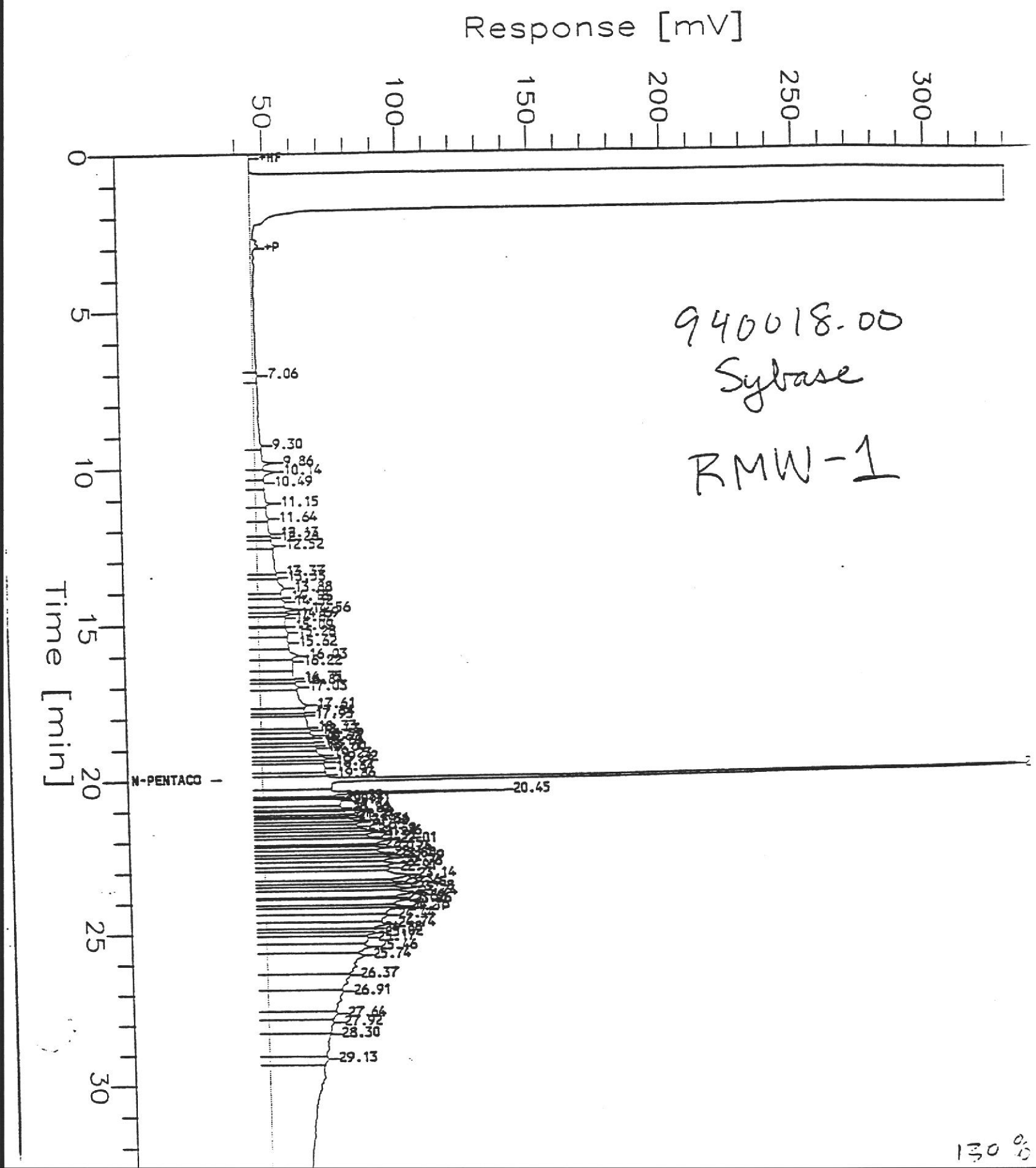
MW-6

Chromatogram

Sample Name : D9503177-1 (500:1) RESHOT
FileName : s:\ghp_04\0409\4048018.raw
Method : ETPH048.ins
t Time : 0.00 min
e Factor: -1.0

End Time : 33.67 min
Plot Offset: 30 mV

Sample #: RMW-1
Date : 4/4/95 21:50
Time of Injection: 4/4/95 21:16
Low Point : 30.23 mV
Plot Scale: 300.0 mV

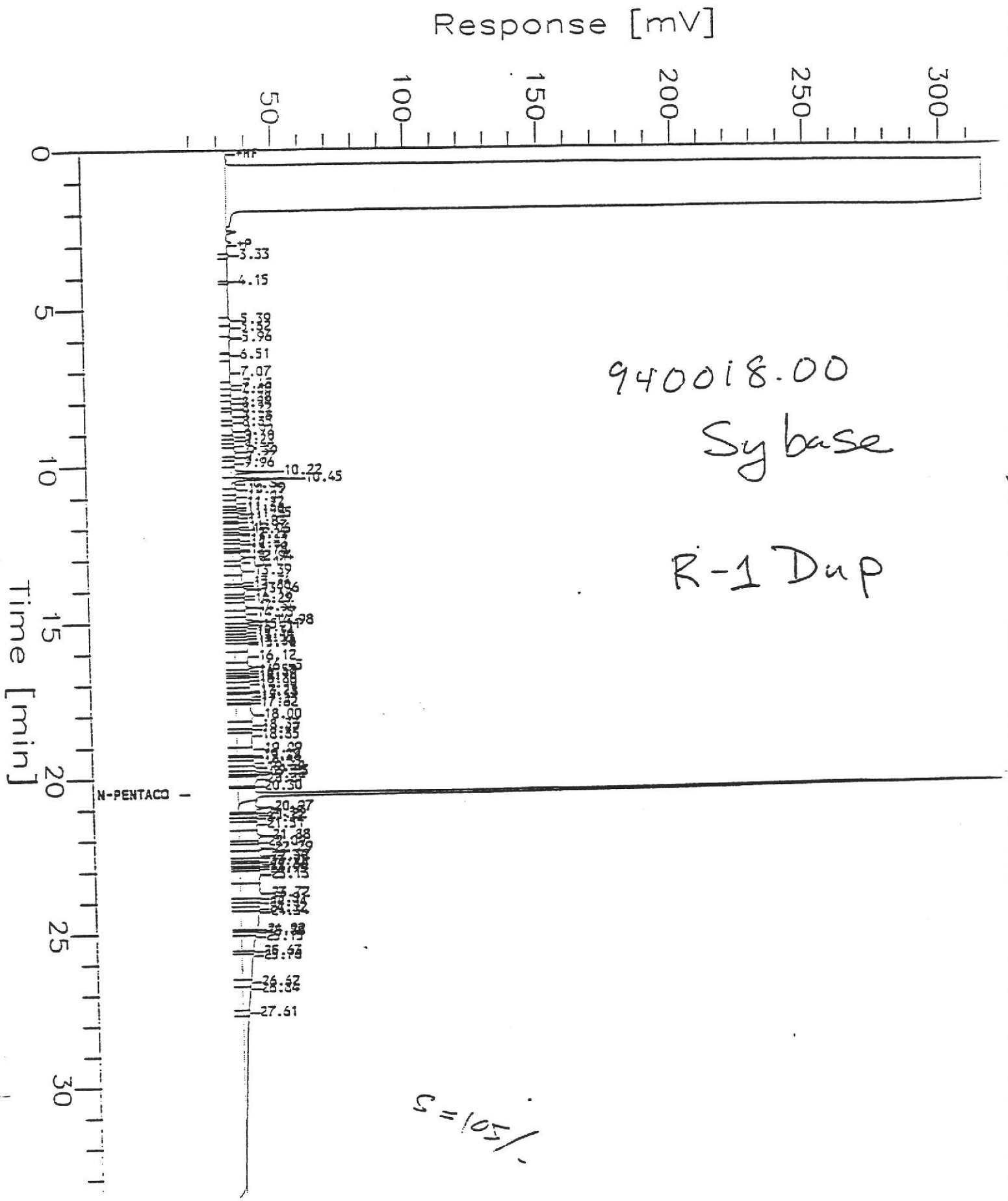


940018.00
Sybase
RMW-1

Chromatogram

Sample Name : D9503177-2 (500:1)
FileName : s:\ghp_05\0402\3318037.raw
Method : ETPH05A.ins
Start Time : 0.00 min End Time : 33.67 min
Scale Factor: -1.0 Plot Offset: 15 mV

Sample #: R-1 DUP
Date : 4/1/95 10:
Time of Injection: 4/1/95 09:51
Low Point : 15.44 mV High Point : 315.44 mV
Plot Scale: 300.0 mV



940018.00

Sybase

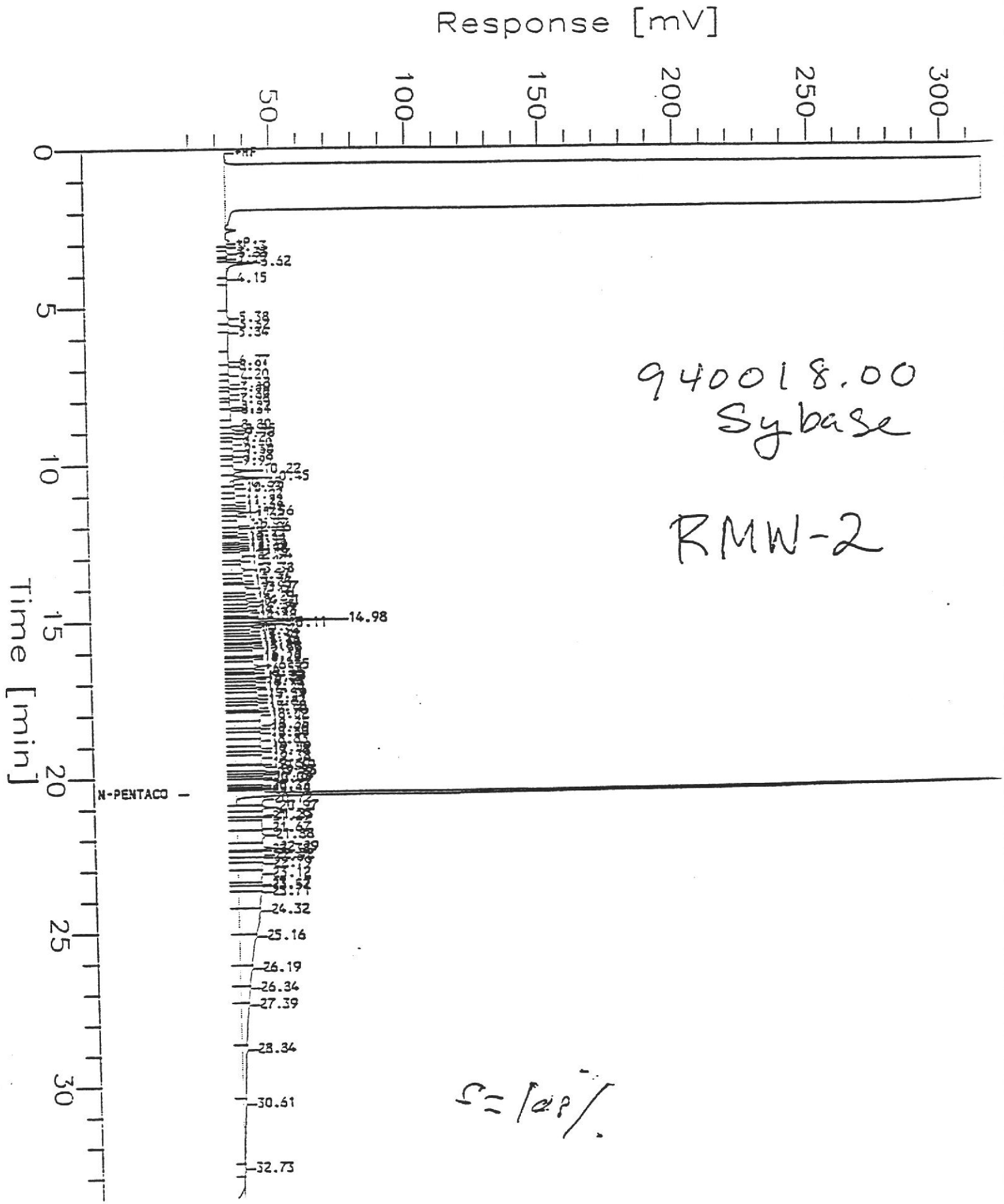
R-1 Dup

5 = 10%

Chromatogram

Sample Name : D9503177-3 (500:1)
FileName : s:\ghp_05\0402\3318038.raw
Method : ETPH05A.ins
Start Time : 0.00 min End Time : 33.67 min
Scale Factor: -1.0 Plot Offset: 16 mV

Sample #: RMW-2
Date : 4/1/95 11:06
Time of Injection: 4/1/95 10:32
Low Point : 15.69 mV High Point : 315.69 mV
Plot Scale: 300.0 mV



940018.00
Sybase

RMW-2

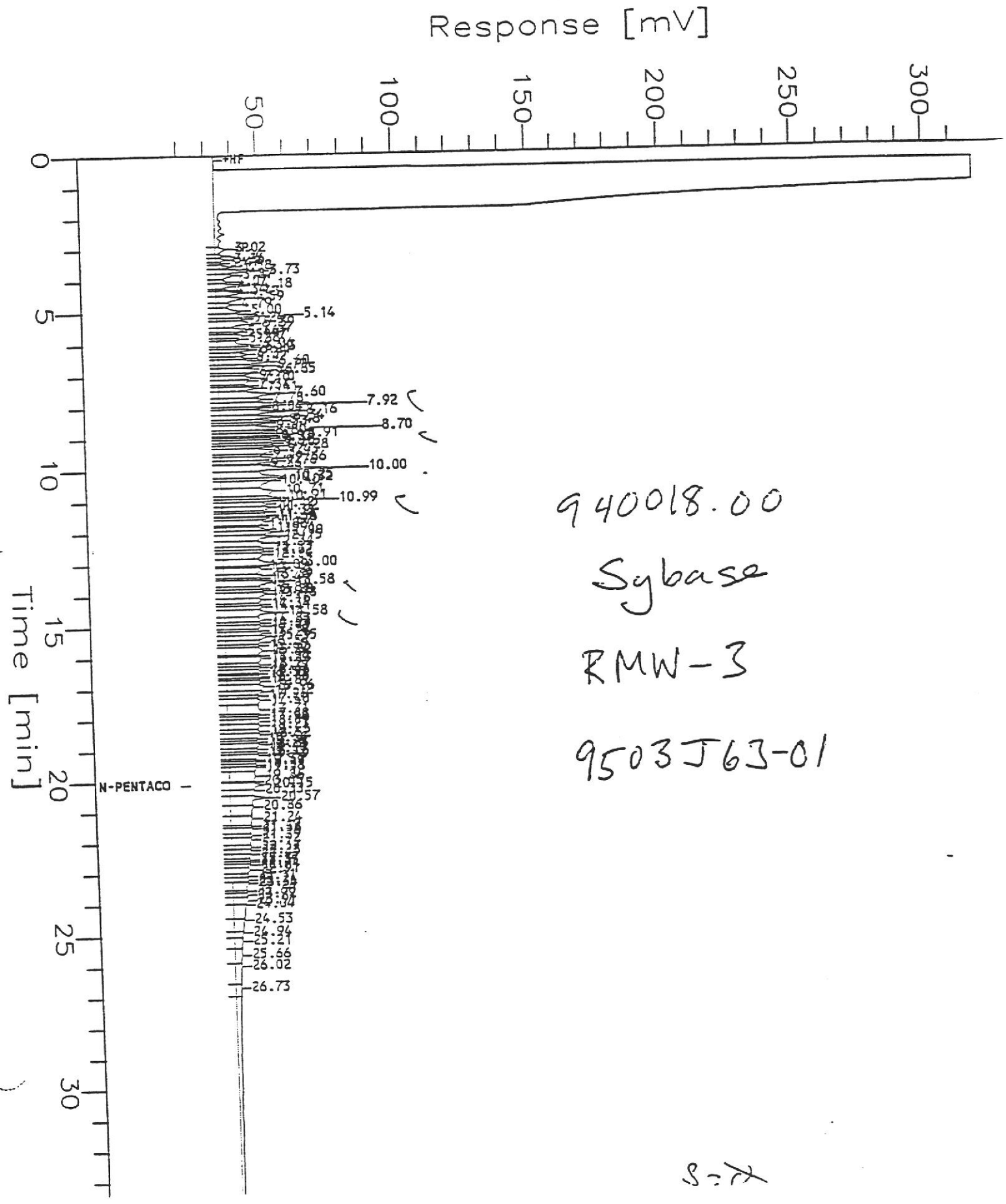
C = [illegible]

Chromatogram

COPY

Sample Name : D9503J63-1 (500:1*200)RE-SH
FileName : s:\ghp_05\0409\405A041.raw
Method : ETPH05A.ins
Start Time : 0.00 min End Time : 33.67 min
le Factor: -1.0 Plot Offset: 19 mV

Sample #: RMW03
Date : 4/6/95 19:24
Time of Injection: 4/6/95 18:50
Low Point : 18.79 mV High Point : 318.79 mV
Plot Scale: 300.0 mV



940018.00

Sybase

RMW-3

9503J63-01

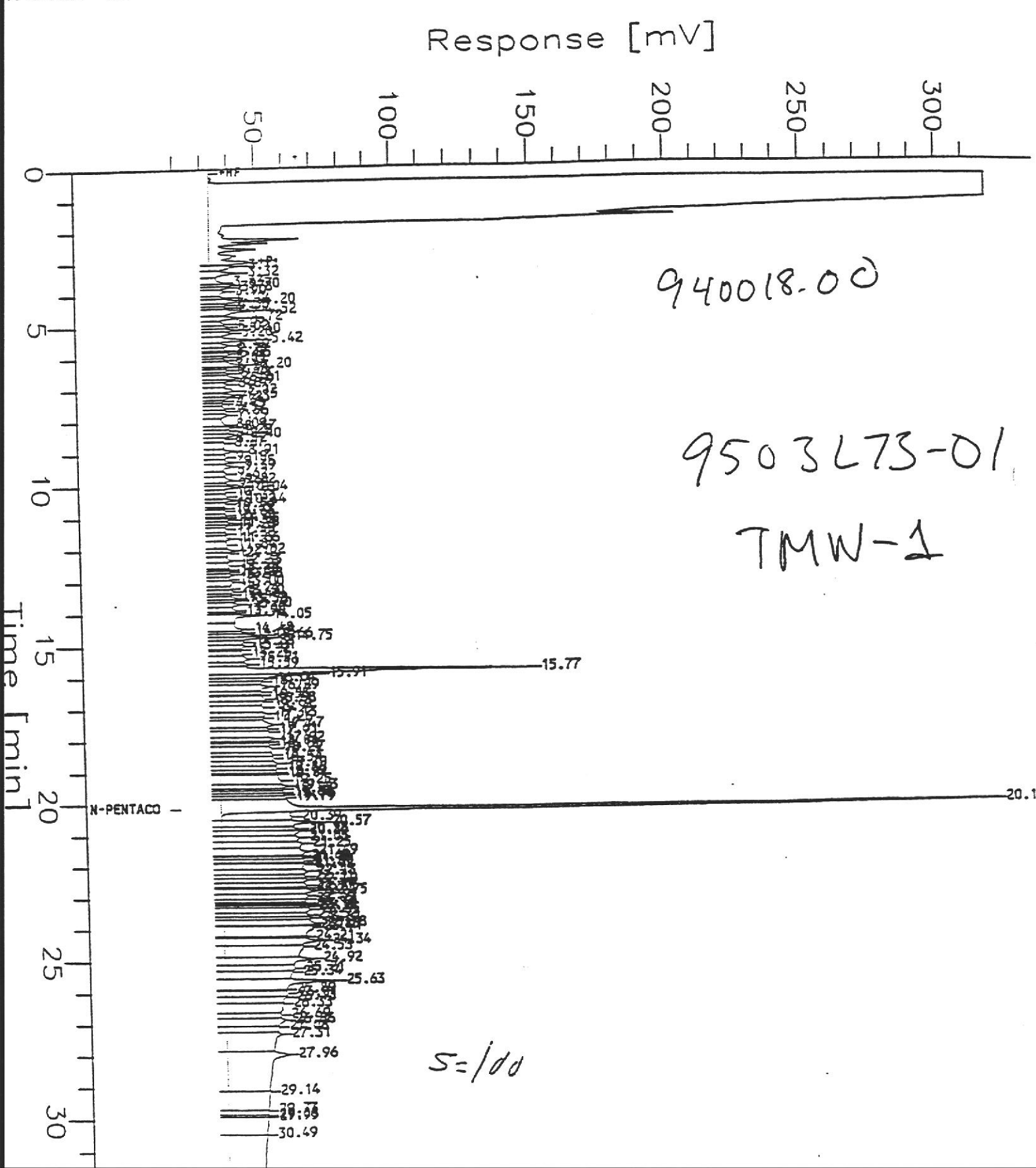
S-7

Chromatogram

COPY

ple Name : D9503L73-1 (500:1)
eName : s:\ghp_05\0409\407A032.raw
hod : ETPHOSA.ins
rt Time : 0.00 min End Time : 33.67 min
le Factor: -1.0 Plot Offset: 18 mV

Sample #: TMW-1
Date : 4/8/95 04:42
Time of Injection: 4/8/95 04:08
Low Point : 18.18 mV High Point : 318.18 mV
Plot Scale: 300.0 mV



940018.00

9503L73-01

TMW-1

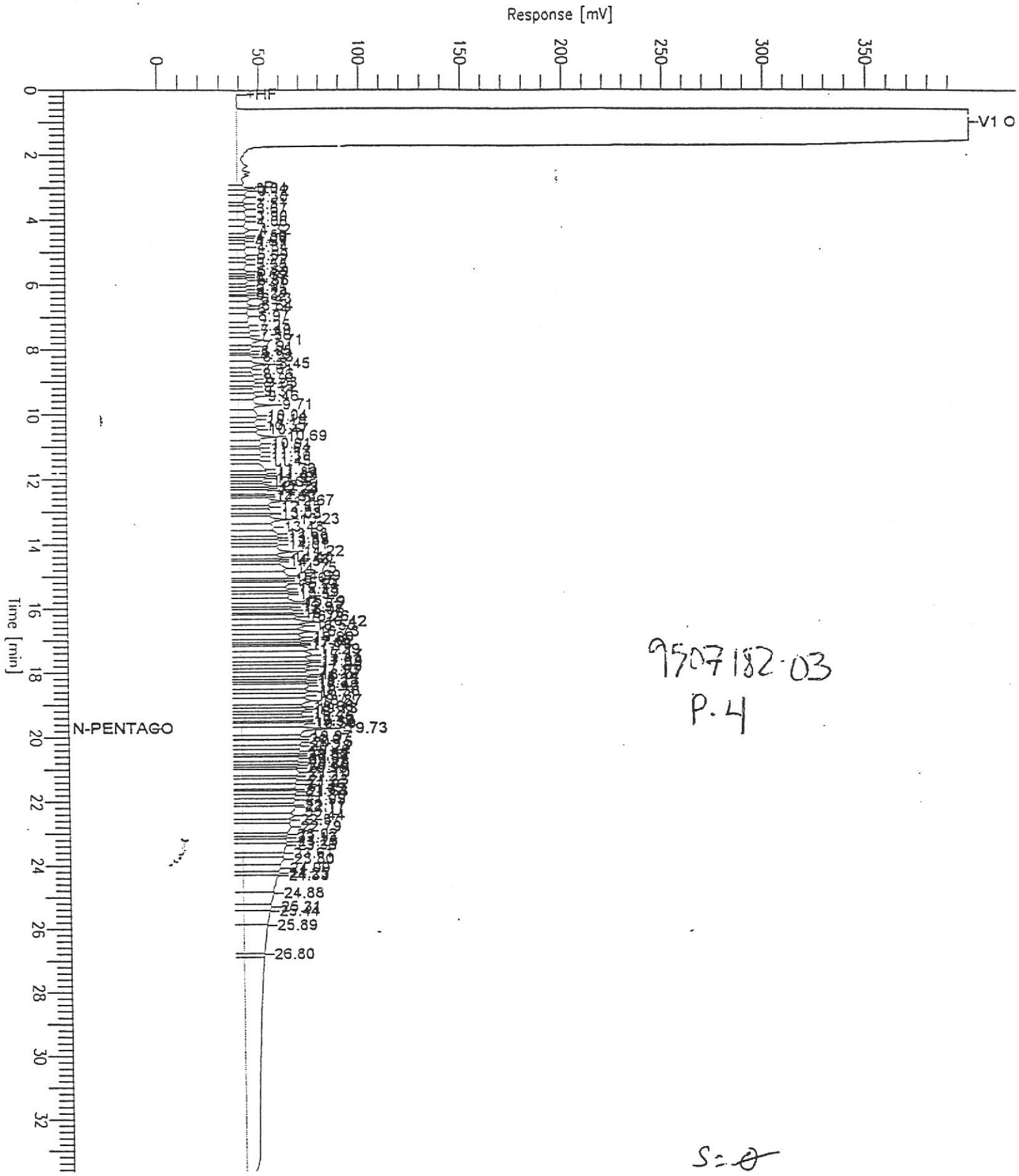
S=100

Chromatogram

COPY

Sample Name : D9507182-3 (200:1*20)
FileName : S:\GHP_04\0716\712B015.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P4
Date : 7/13/95 00:06
Time of Injection: 7/12/95 23:32
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



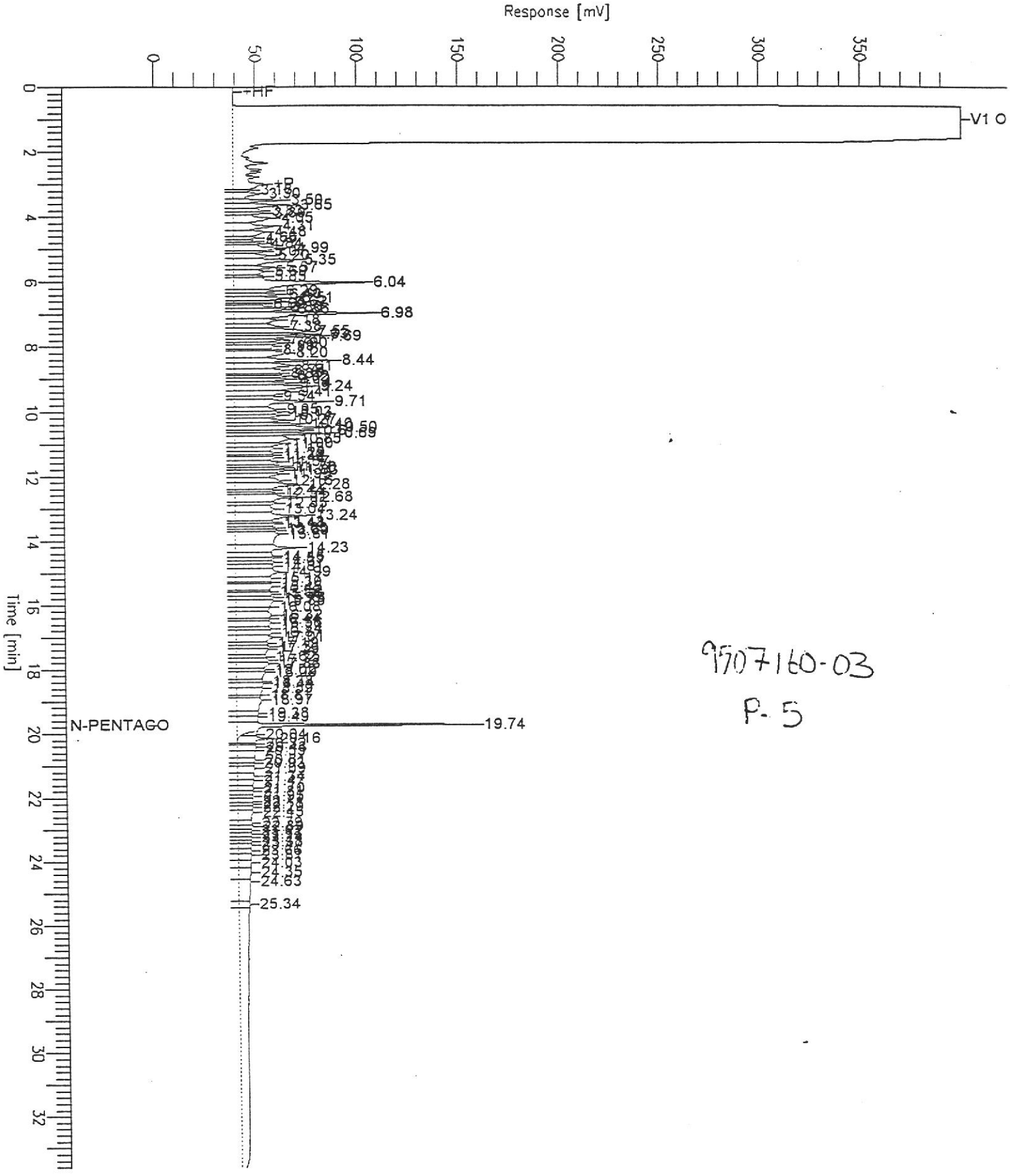
9507182-03
P.4

S=0

Chromatogram

Sample Name : D9507160-3 (500:1*5)RS
FileName : S:\GHP_04\0716\7128023.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P5 Page 1 of 1
Date : 7/13/95 11:52
Time of Injection: 7/13/95 04:58
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV

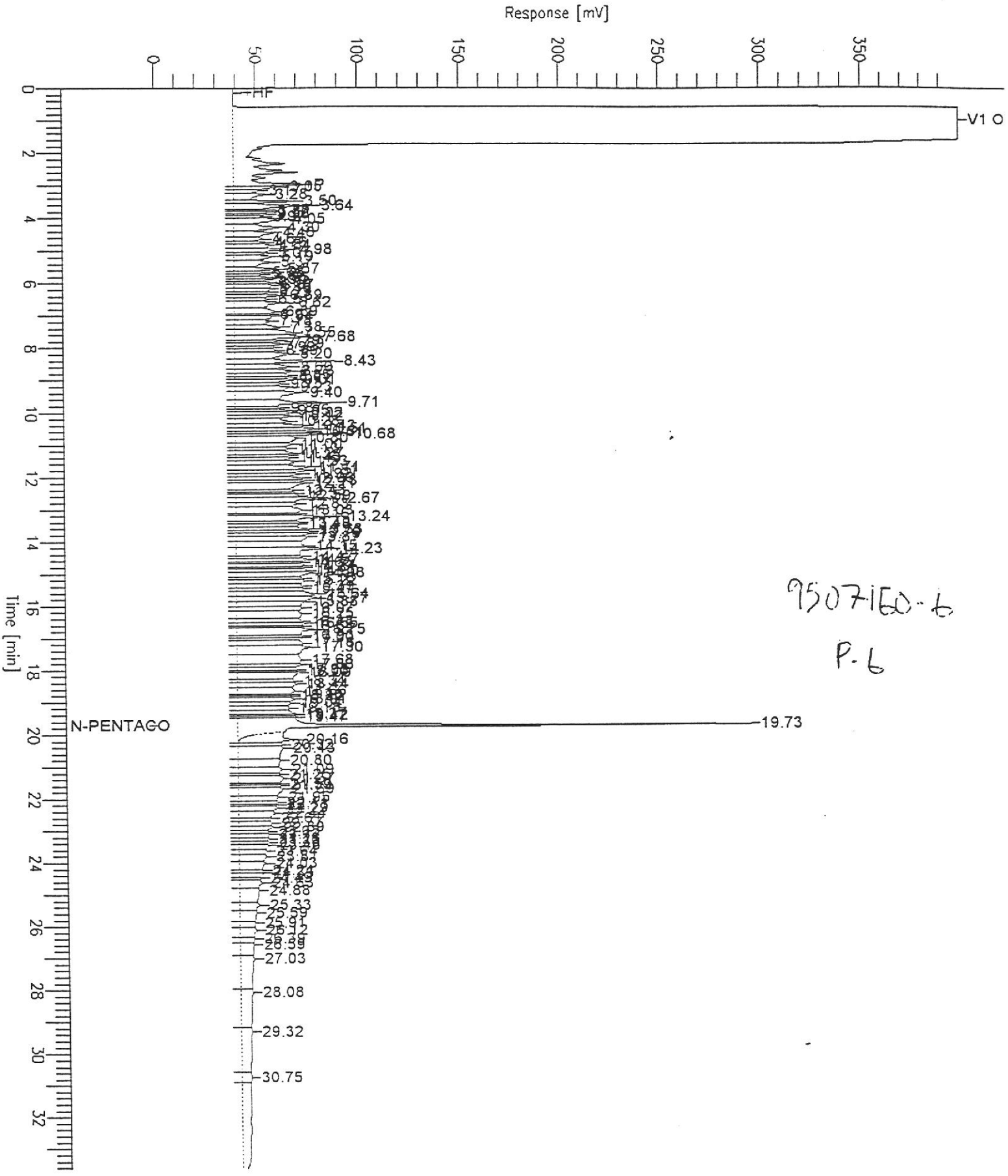


9507160-03
P-5

Chromatogram

Sample Name : D9507160-6 (500:1*2)RS
FileName : S:\GHP_04\0716\7123022.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P6 Page 1 of 1
Date : 7/13/95 11:52
Time of Injection: 7/13/95 04:17
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV

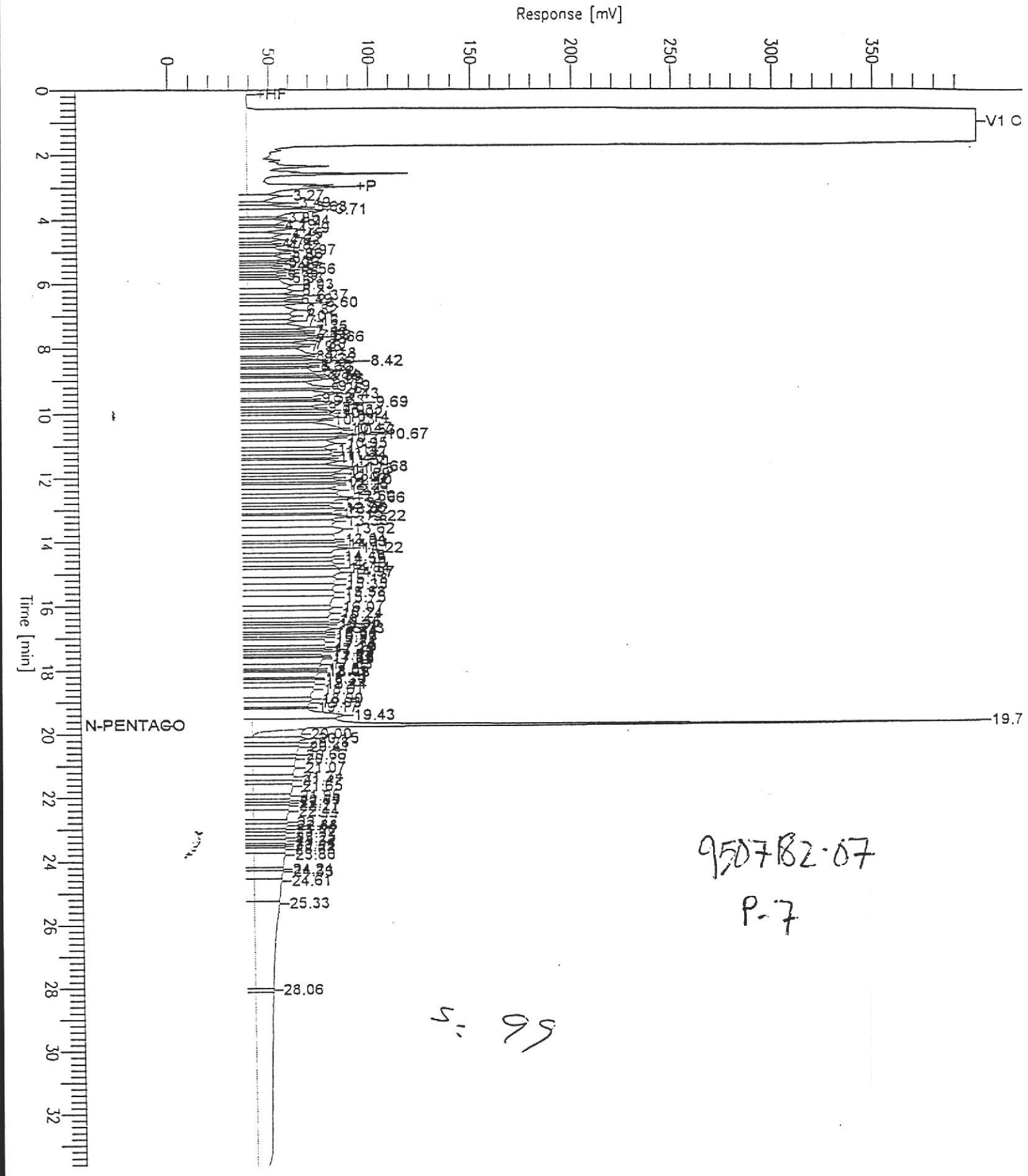


9507160-6
P-6

Chromatogram

Sample Name : D9507182-7 (100:1)
FileName : S:\GHP_04\0716\7128014.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P7 Page 1 of 1
Date : 7/12/95 23:26
Time of Injection: 7/12/95 22:51
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



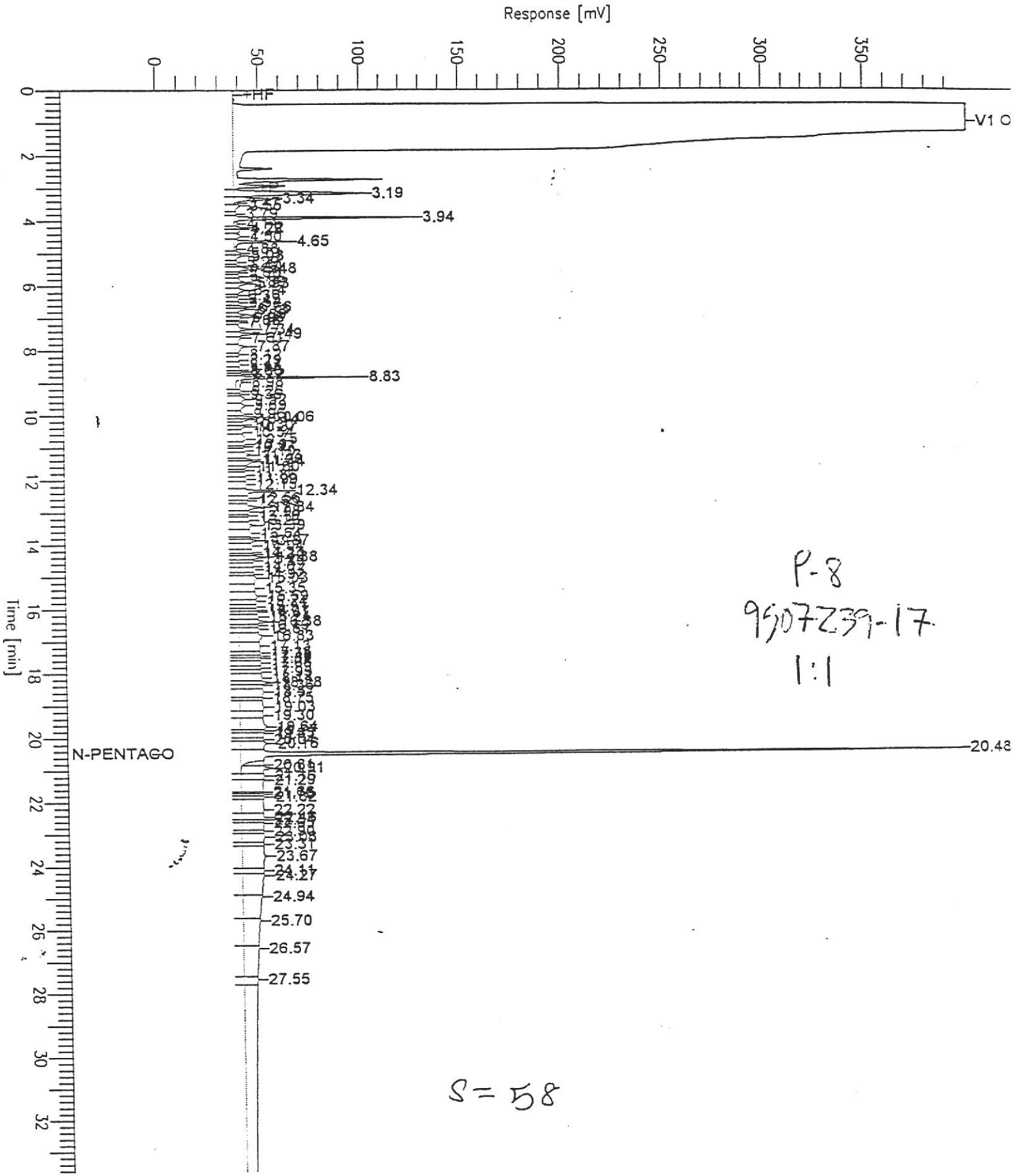
9507B2-07
P-7

5: 05

Chromatogram

Sample Name : D9507239-17 (500:1)
FileName : S:\GHP_04\0716\712A019.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P8 Page 1 of 1
Date : 7/13/95 02:49
Time of Injection: 7/13/95 02:15
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



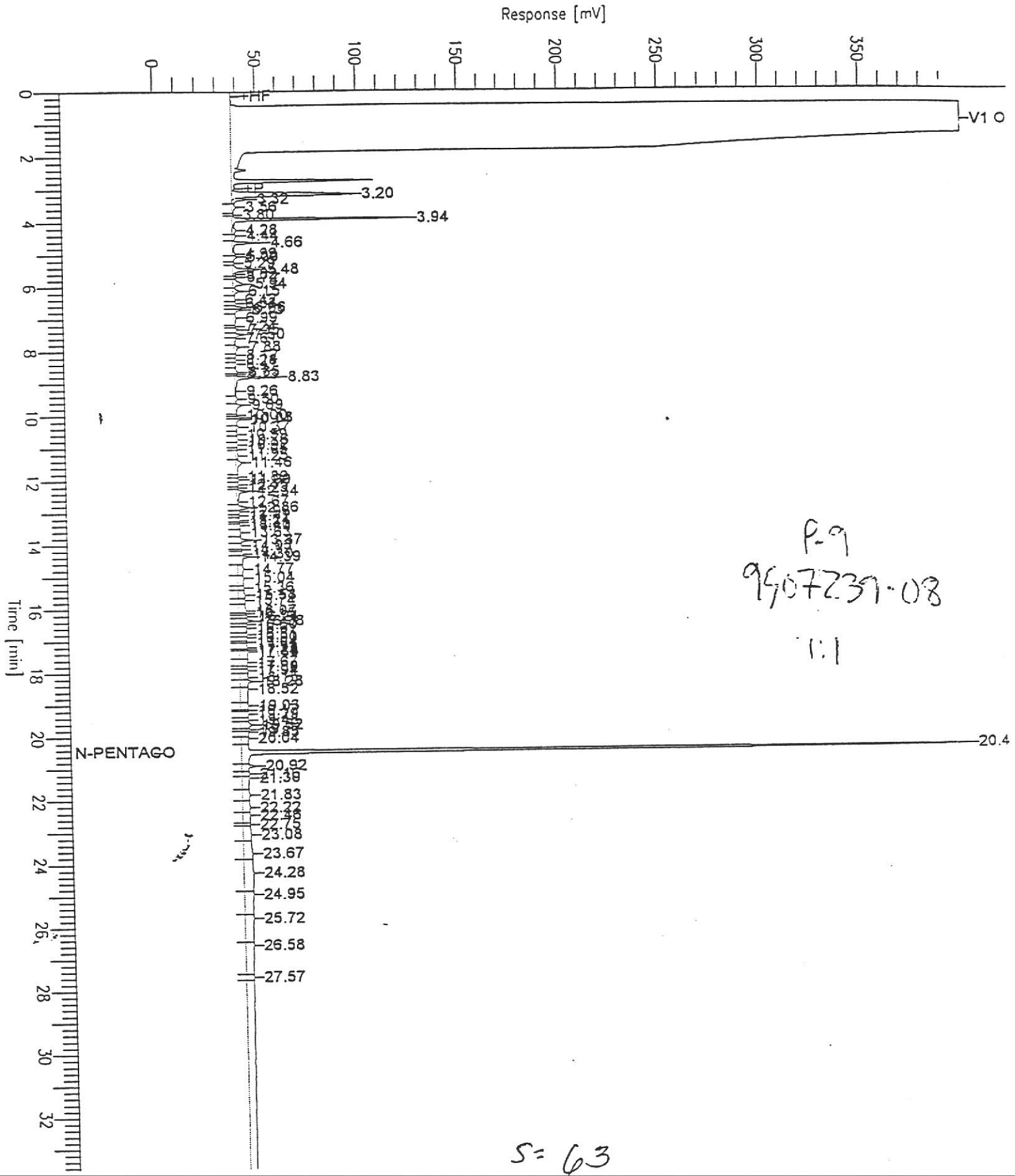
P-8
9507239-17
1:1

S = 58

Chromatogram

Sample Name : D9507239-8 (500:1)
FileName : S:\GHP_04\0716\712A018.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P9
Date : 7/13/95 02:08
Time of Injection: 7/13/95 01:34
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



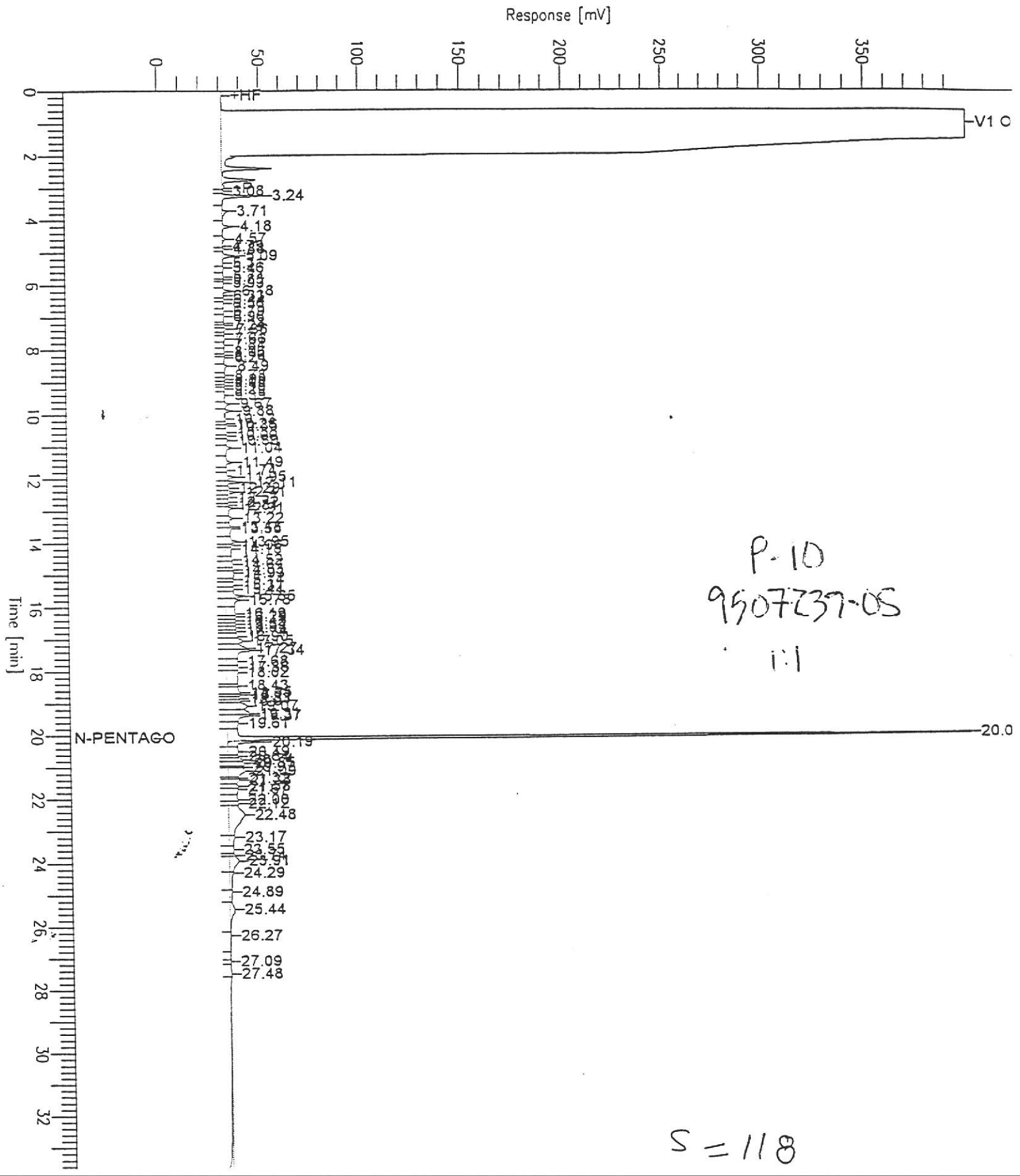
P-9
9507239-08
1:1

S= 63

Chromatogram

Sample Name : D9507239-5 (500:1)
FileName : S:\GHP_05\0716\7128039.raw
Method : TPH05A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P-10 Page 1 of 1
Date : 7/13/95 15:38
Time of Injection: 7/13/95 15:04
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



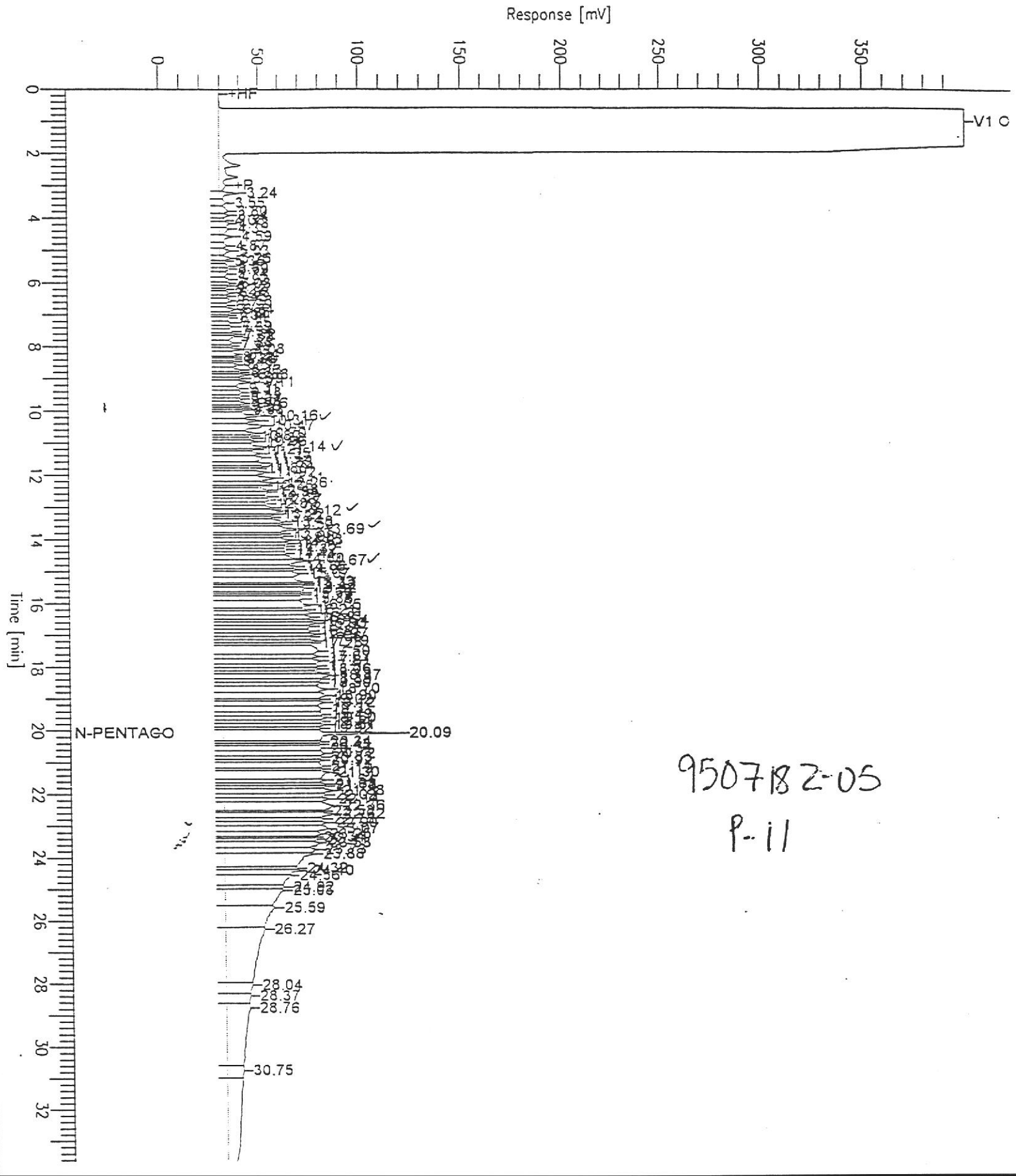
P-10
9507239-05
1:1

S = 118

Chromatogram

Sample Name : D9507182-5 (100:1*10) RESHOT
FileName : S:\GHP_05\0716\7128031.raw
Method : TPH05A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P11 Page 1 of 1
Date : 7/13/95 08:54
Time of Injection: 7/13/95 08:20
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV

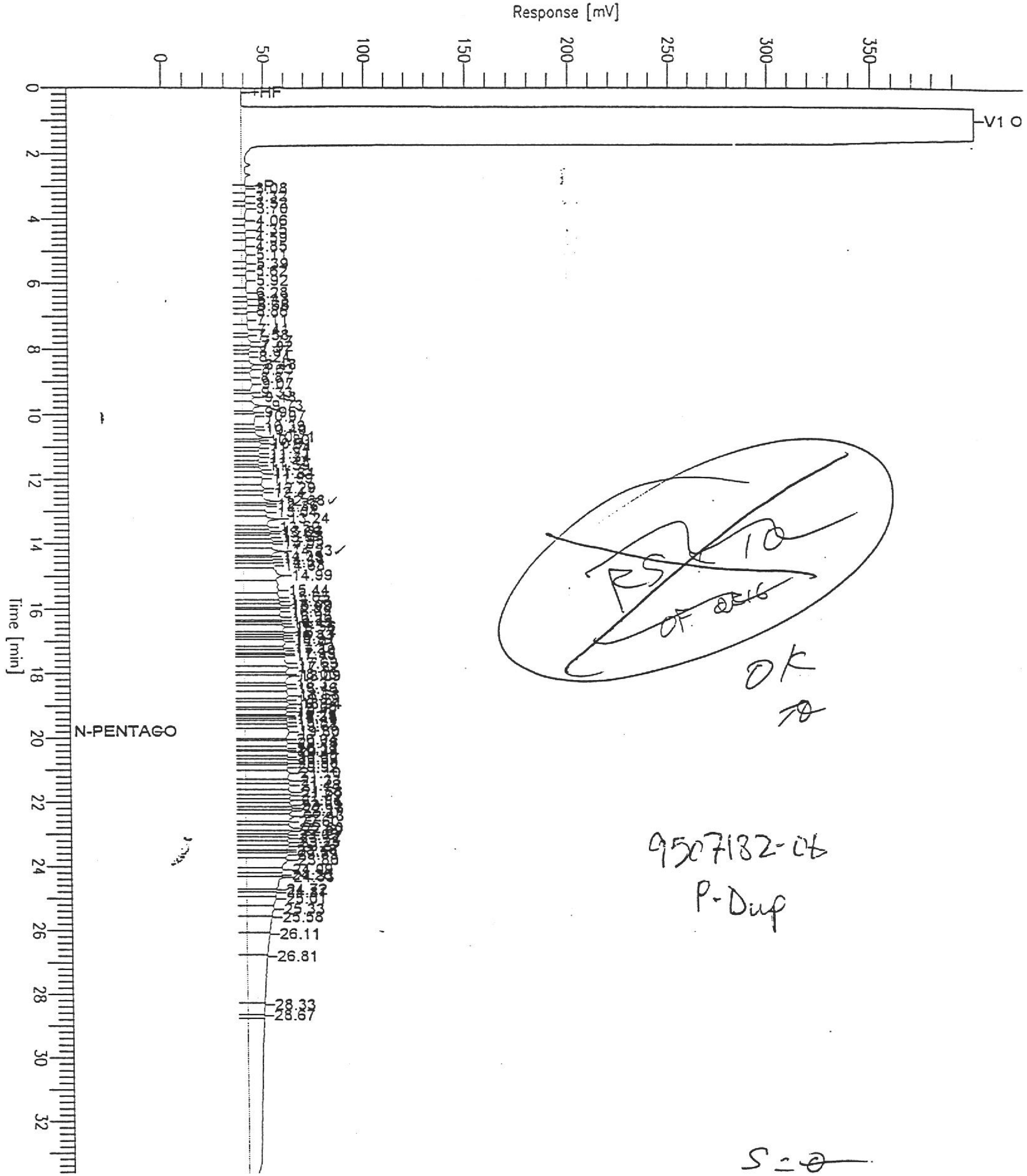


9507182-05
P-11

Chromatogram

Sample Name : D9507182-6 (100:1*20)
FileName : S:\GHP_04\0716\712B017.raw
Method : TPH04A
Start Time : 0.00 min   End Time : 33.65 min
Scale Factor: 0.0   Plot Offset: 0 mV

Sample #: P DUP
Date : 7/13/95 01:28
Time of Injection: 7/13/95 00:53
Low Point : 0.00 mV   High Point : 400.00 mV
Plot Scale: 400.0 mV



OK

9507182-06
P-Dup

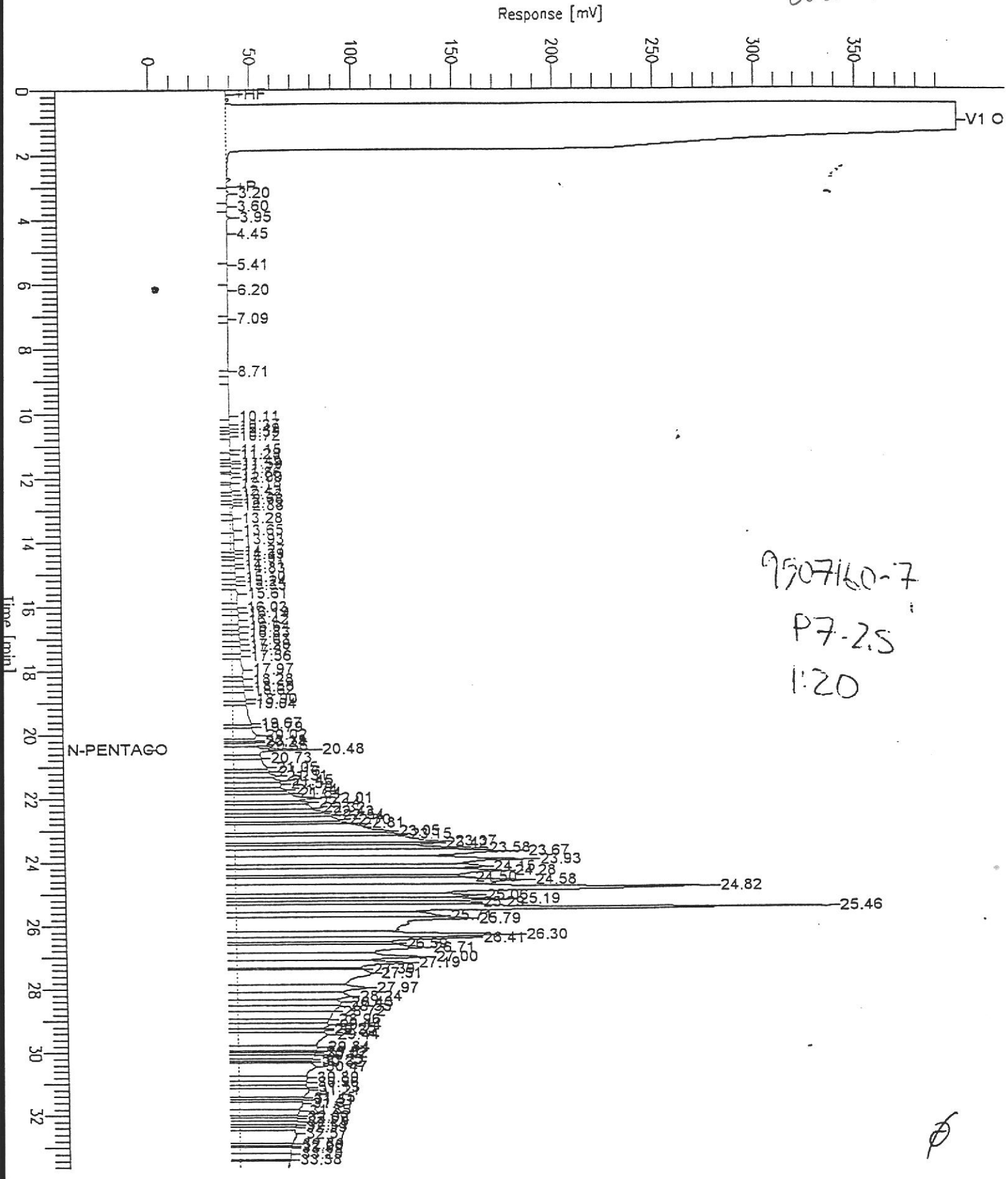
S=0

Chromatogram

mple Name : D9507160-7 (20:1*20) RESHOT
leName : S:\GHP_04\0716\711A033.raw
thod : TPH04A
art Time : 0.00 min End Time : 33.65 min
ale Factor: 0.0 Plot Offset: 0 mV

Sample #: P7-2.5
Date : 7/12/95 09:15
Time of Injection: 7/12/95 08:29
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV

Soil P7



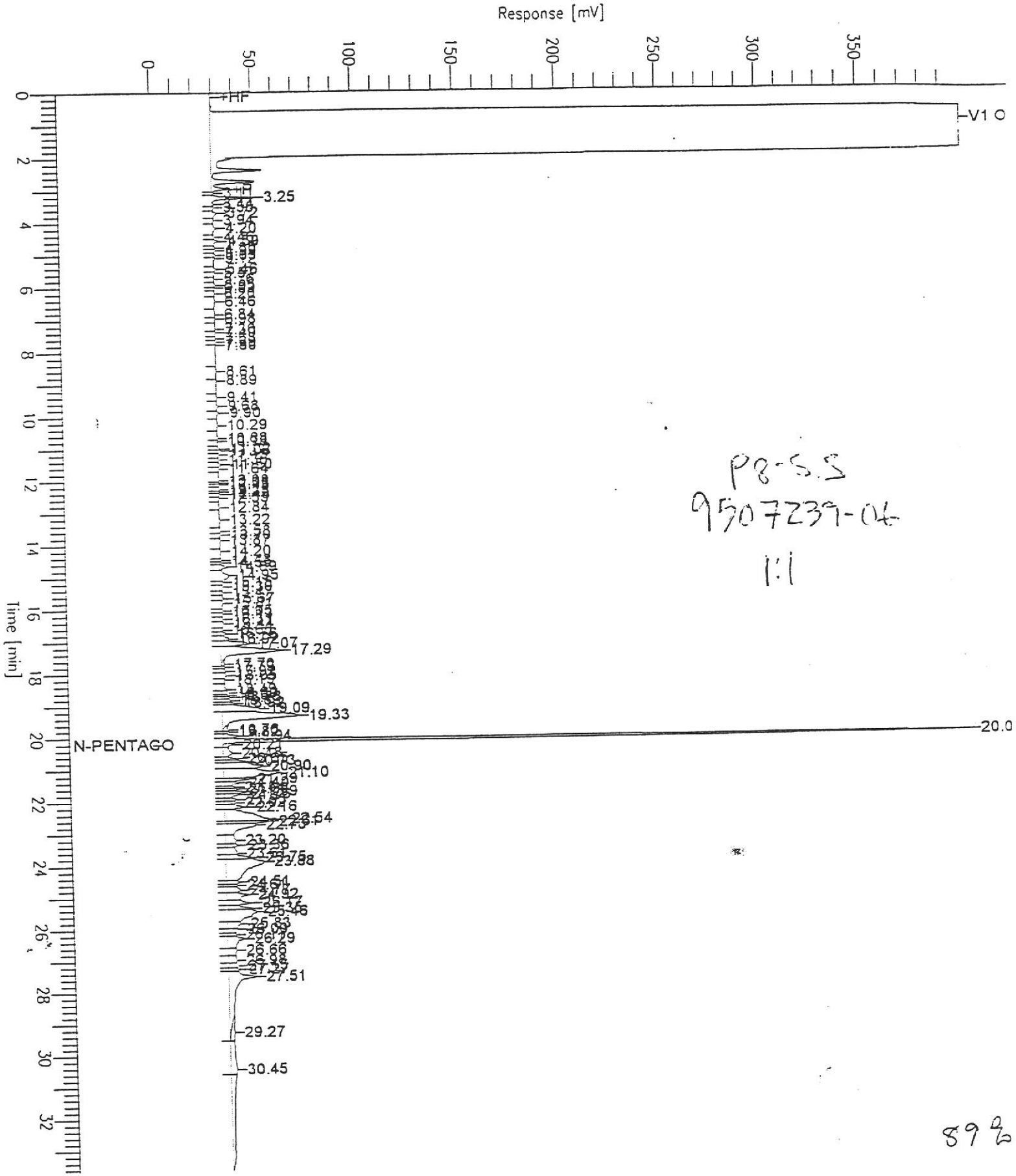
9507160-7
P7-2.5
1:20

Ø

Chromatogram

Sample Name : D9507239-6 (20:1)
FileName : S:\GHP_05\0716\7118023.raw
Method : TPH05A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P8-5.5
Date : 7/12/95 03:04
Time of Injection: 7/12/95 02:30
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV

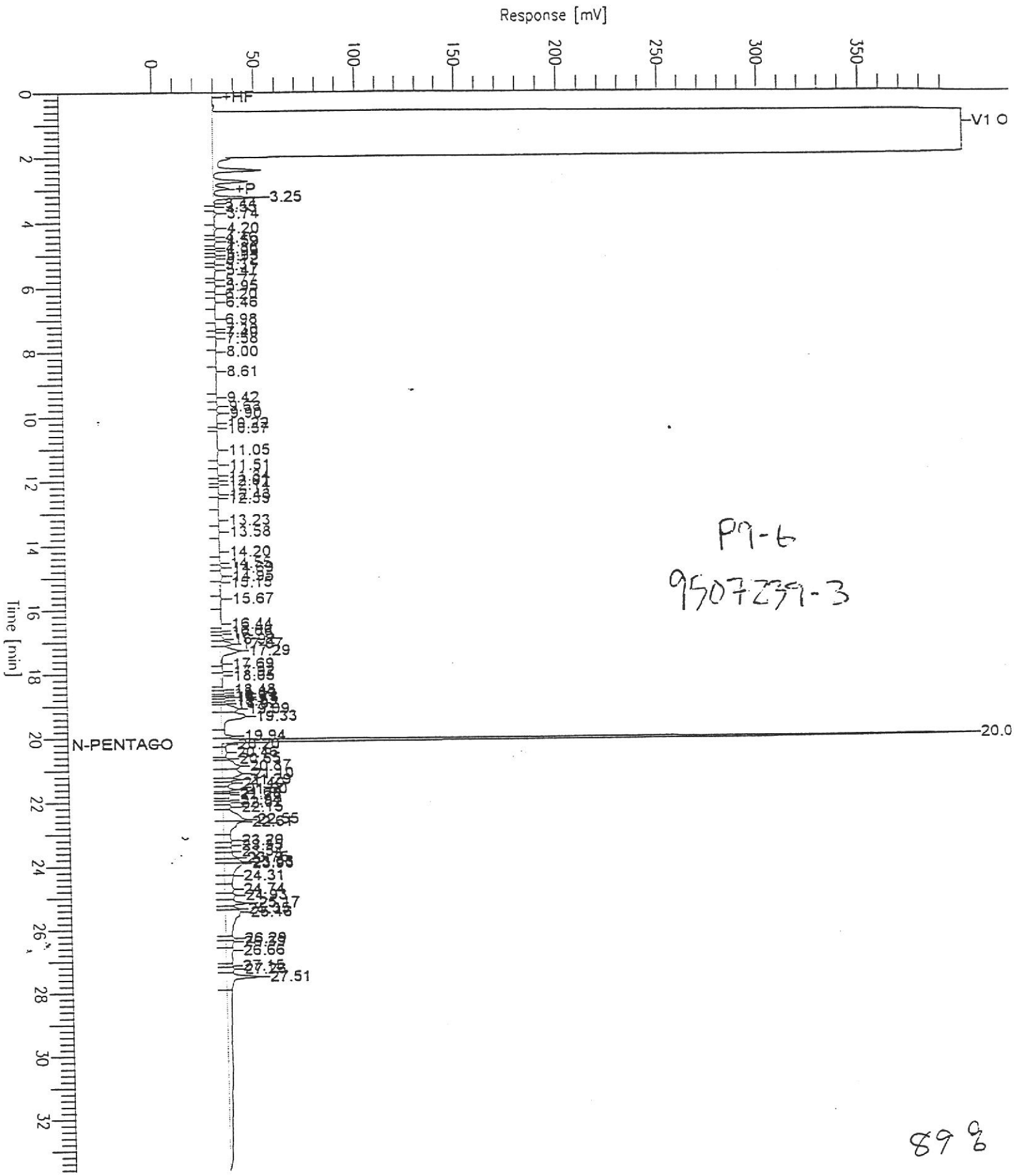


P8-5.5
9507239-04
1:1

Chromatogram

Sample Name : D9507239-3 (20:1)
FileName : S:\GHP_05\0716\7118022.raw
Method : TPH05A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

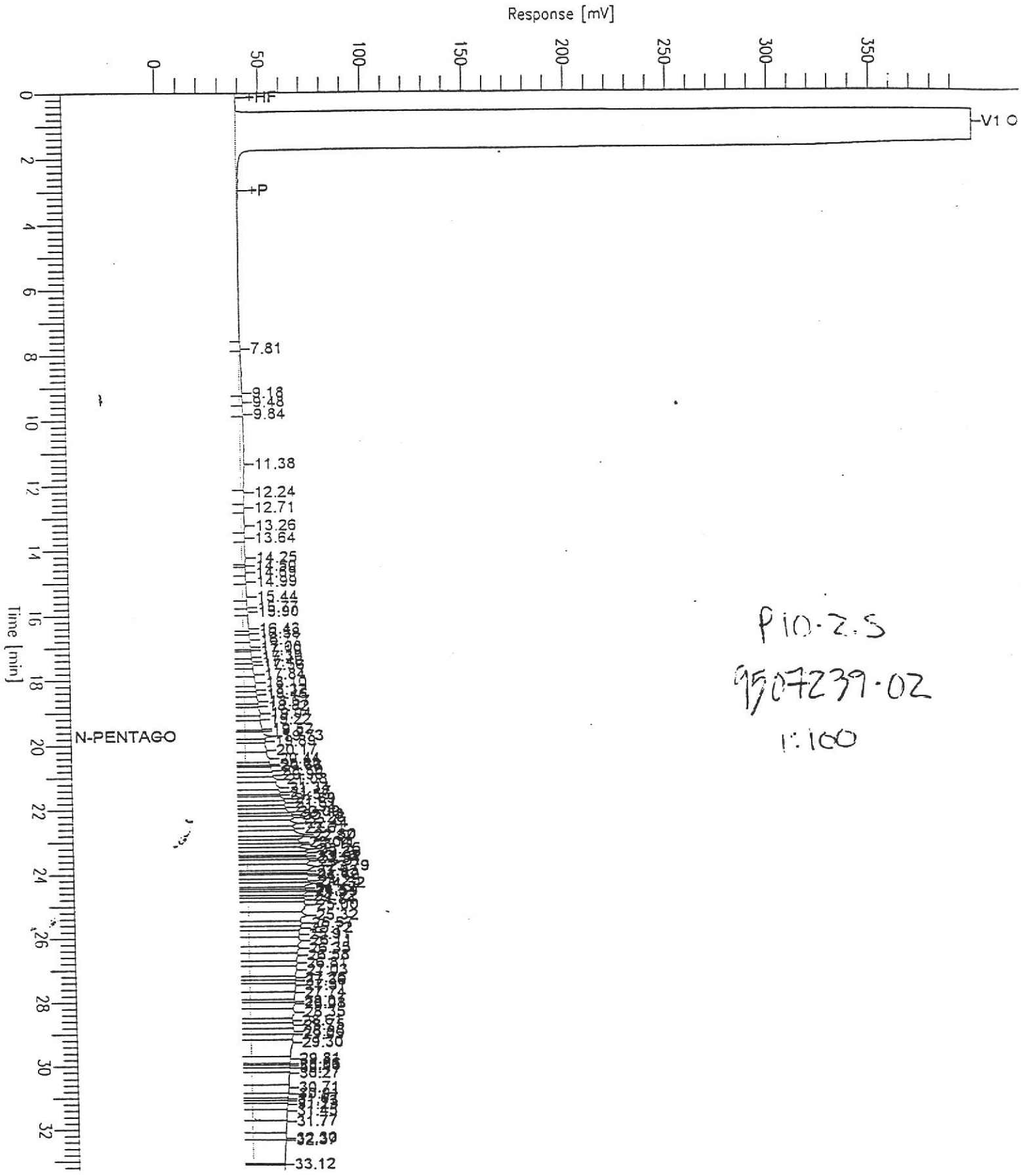
Sample #: P9-6 Page 1 of 1
Date : 7/12/95 02:23
Time of Injection: 7/12/95 01:49
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



Chromatogram

Sample Name : D9507239-2 (20:1*100) RESHOT
FileName : S:\GHP_04\0716\7118035.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P10-2.5 Page 1 of 1
Date : 7/12/95 10:26
Time of Injection: 7/12/95 09:51
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV

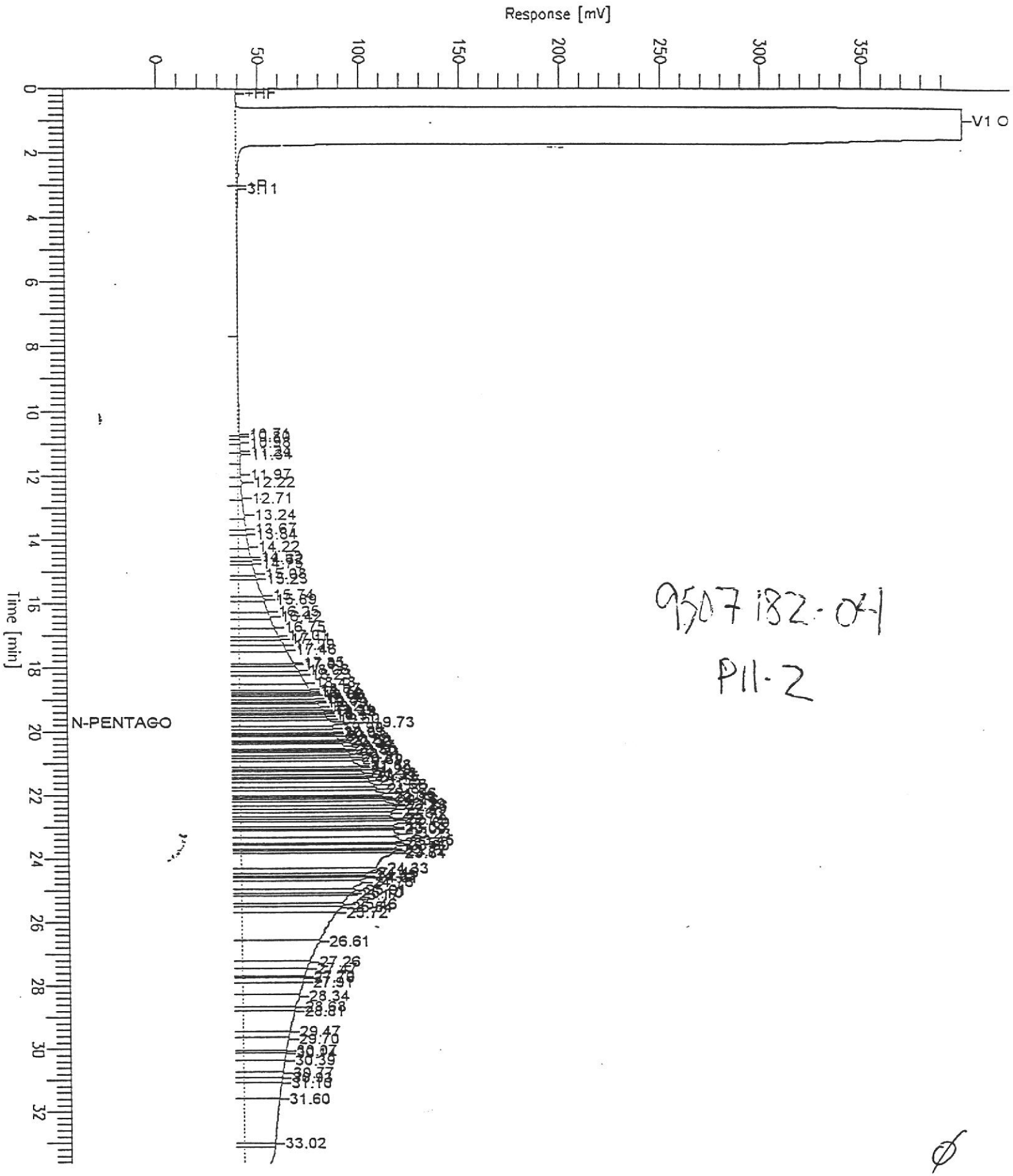


P10-2.5
9507239-02
1:100

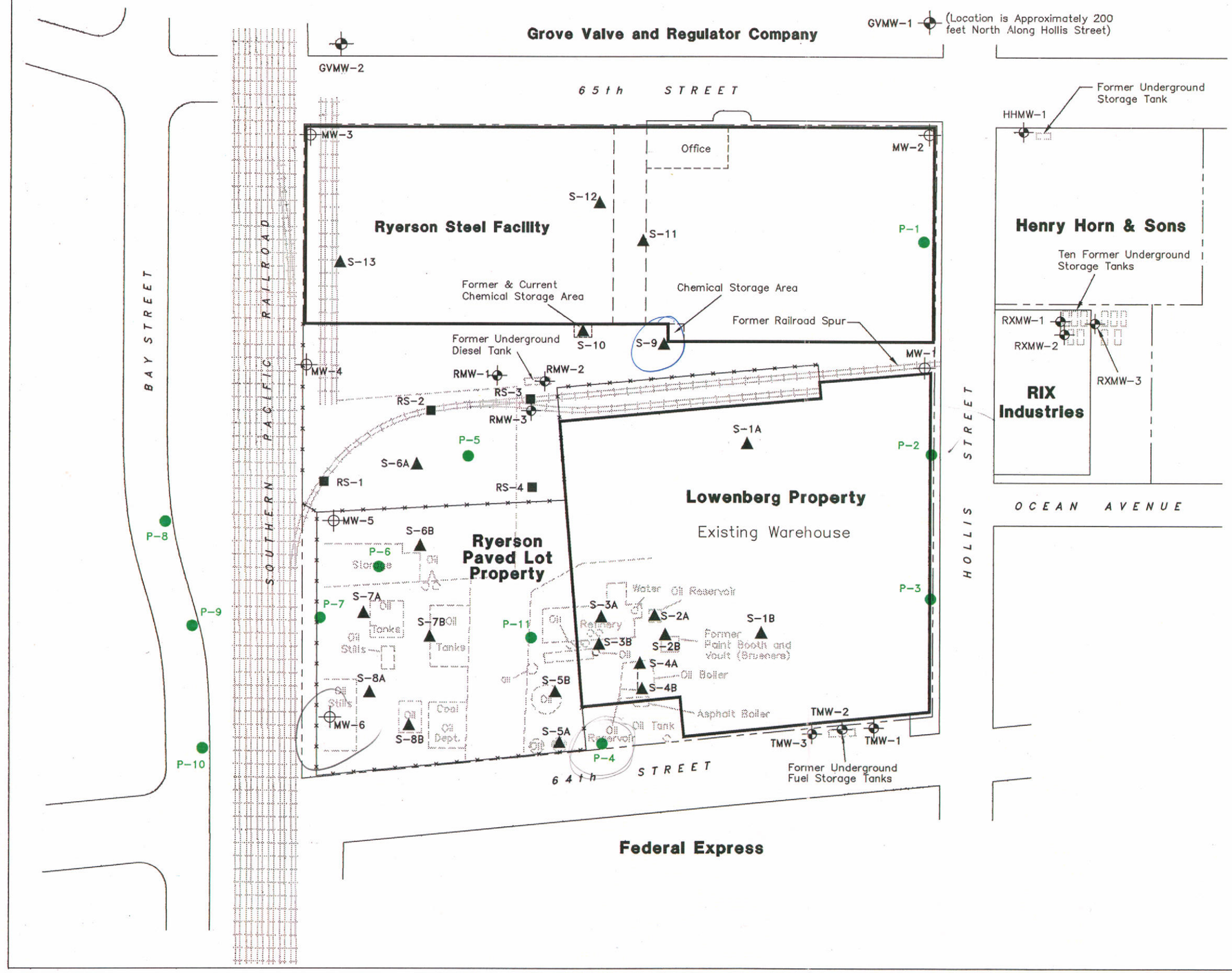
Chromatogram

Sample Name : D9507182-4 (20:1*20) RESHOT
FileName : S:\GHP_04\0716\711B033.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: P11-2 Page 1 of 1
Date : 7/12/95 09:15
Time of Injection: 7/12/95 08:29
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



9507182-04
P11-2



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Shallow Soil Boring Installed by EKI
- Monitoring Well Installed by Others
- Soil and Grab Groundwater Sampling Location Collected by Others
- Grab Groundwater Sampling Location Collected by EKI, July 1995

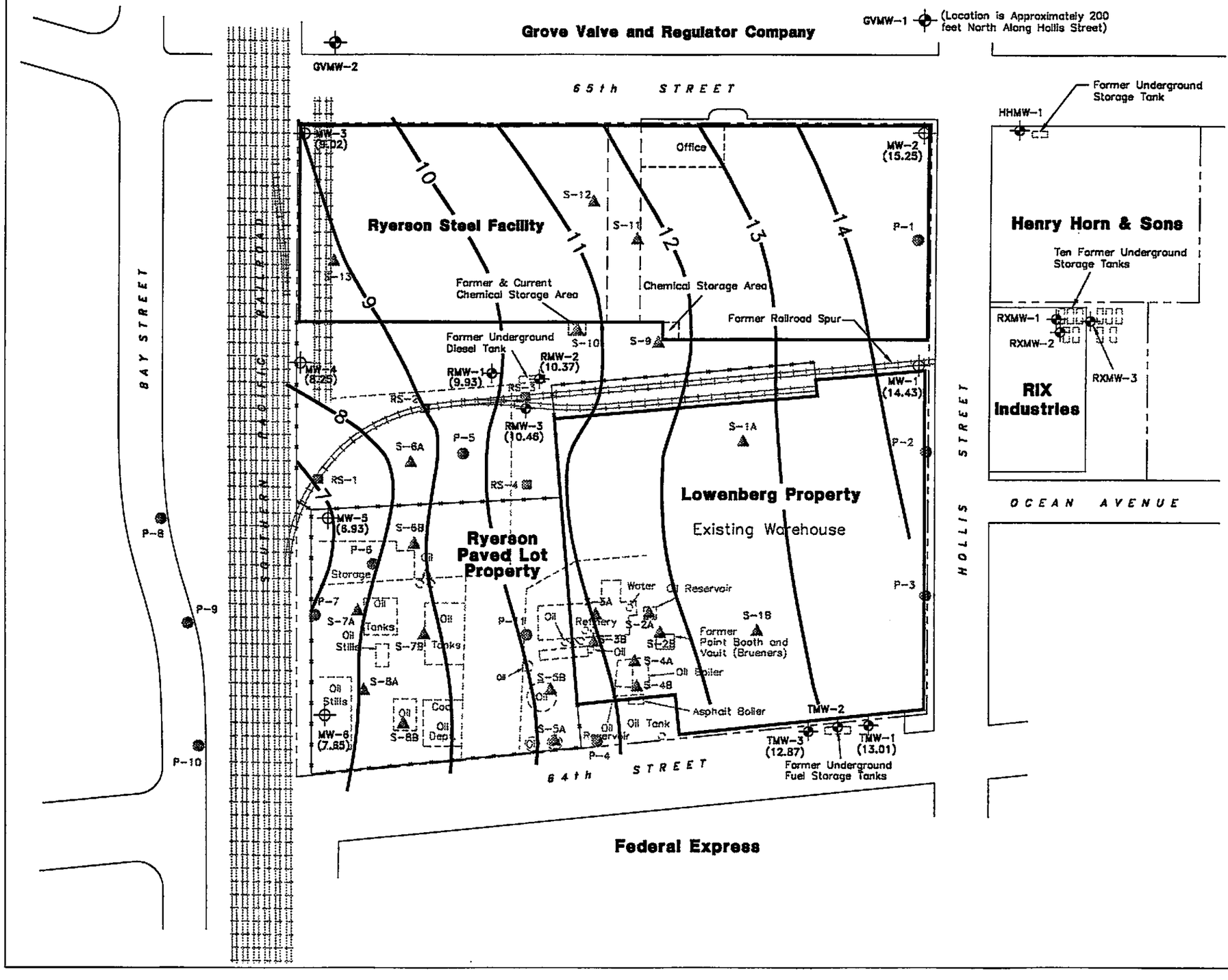
Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.

Erler & Kalinowski, Inc.

Site Plan

64th & 65th Street Properties
Emeryville, CA
August 1995
EKI 940018.08
Figure 2



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Shallow Soil Boring Installed by EKI
- Monitoring Well Installed by Others
- Soil and Grab Groundwater Sampling Location Collected by Others
- Grab Groundwater Sampling Location Collected by EKI, July 1995
- —14— Groundwater Elevation Contours

Notes:

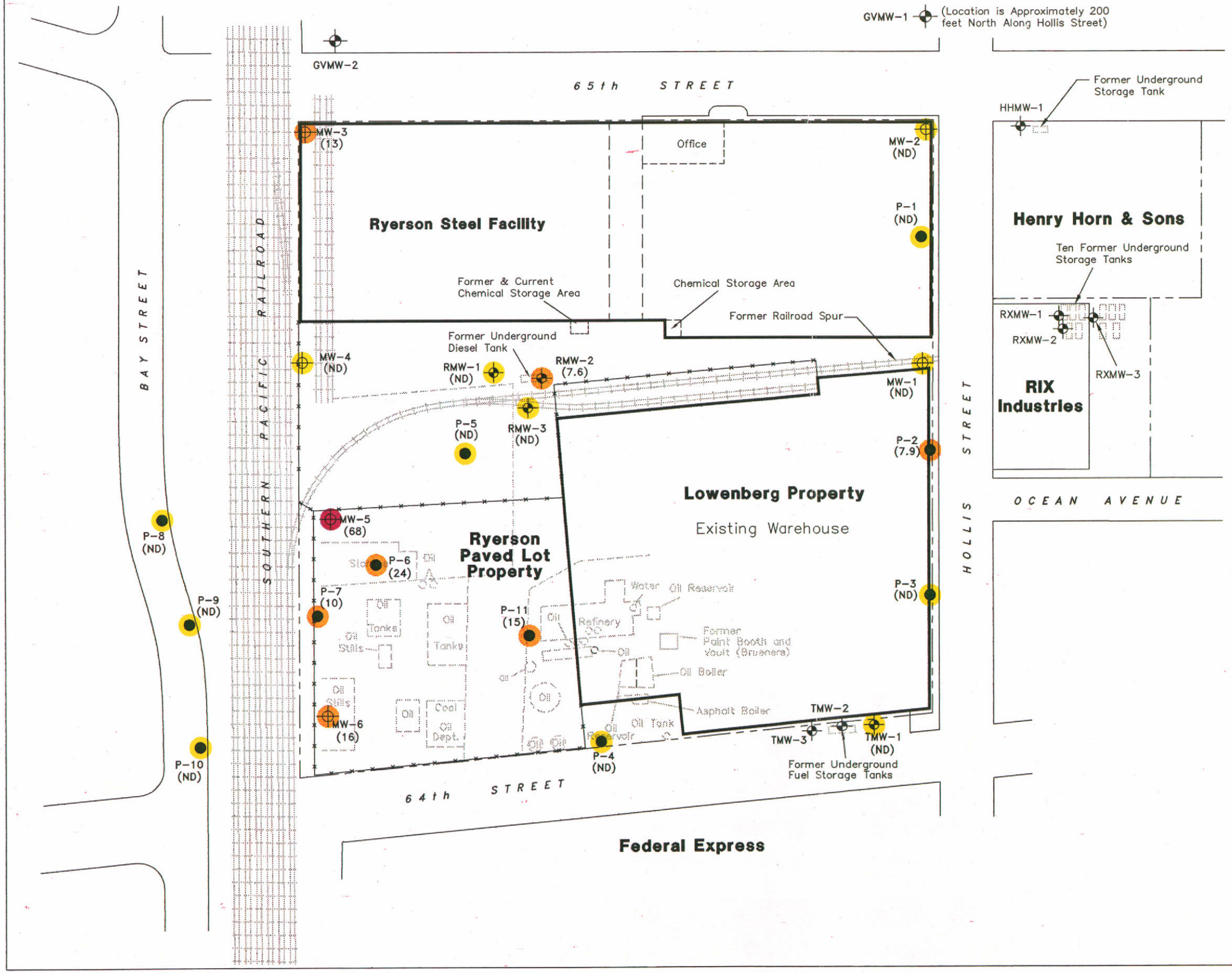
1. All locations are approximate.
2. Groundwater elevations measured on 7 July 1995. Elevations are in units of feet above mean sea level.

Erler & Kalinowski, Inc.

Groundwater Elevation Contours

64th & 65th Street Properties
Emeryville, CA
August 1995
EKI 940018.08
Figure 3

Grove Valve and Regulator Company



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Monitoring Well Installed by Others
- Grab Groundwater Sampling Location Collected by EKI, July 1995

Arsenic Concentration (ug/L)

- Not Detected (ND)
- >ND to <50 ug/L
- ≥50 ug/L

Notes:

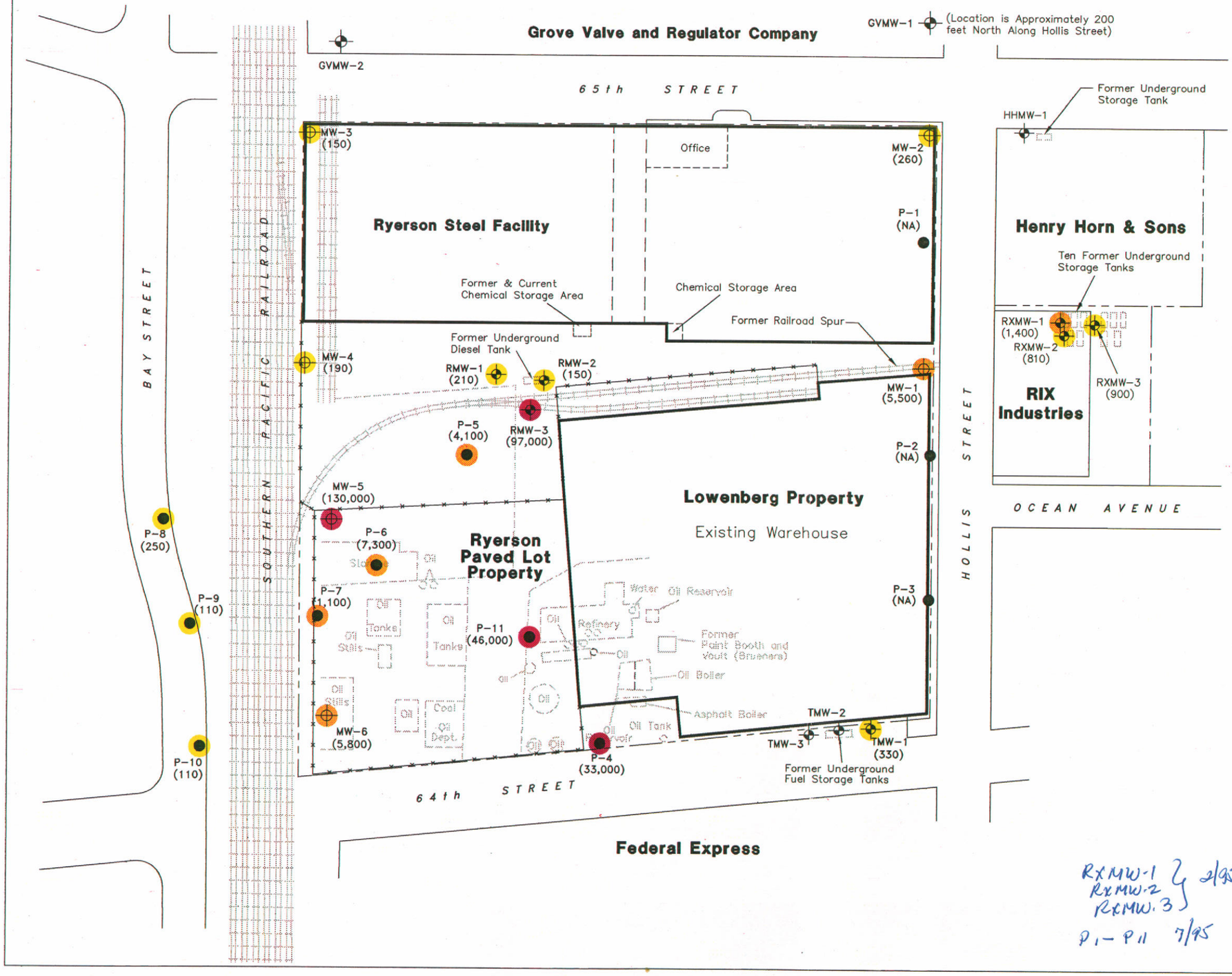
1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Groundwater samples collected from March to July 1995.

Erler & Kalinowski, Inc.

Concentrations of Arsenic in Groundwater

64th & 65th Street Properties
Emeryville, CA
August 1995
EKI 940018.08

Figure 4



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Monitoring Well Installed by Others
- Grab Groundwater Sampling Location Collected by EKI, July 1995

TEPH Concentration (ug/L)

- ≥100 to <1,000 ug/L
- ≥1,000 to <10,000 ug/L
- ≥10,000 ug/L

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Data are from groundwater samples collected between February and July 1995.
4. NA indicates not analyzed.

RXMW-1, RXMW-2, RXMW-3 2/95

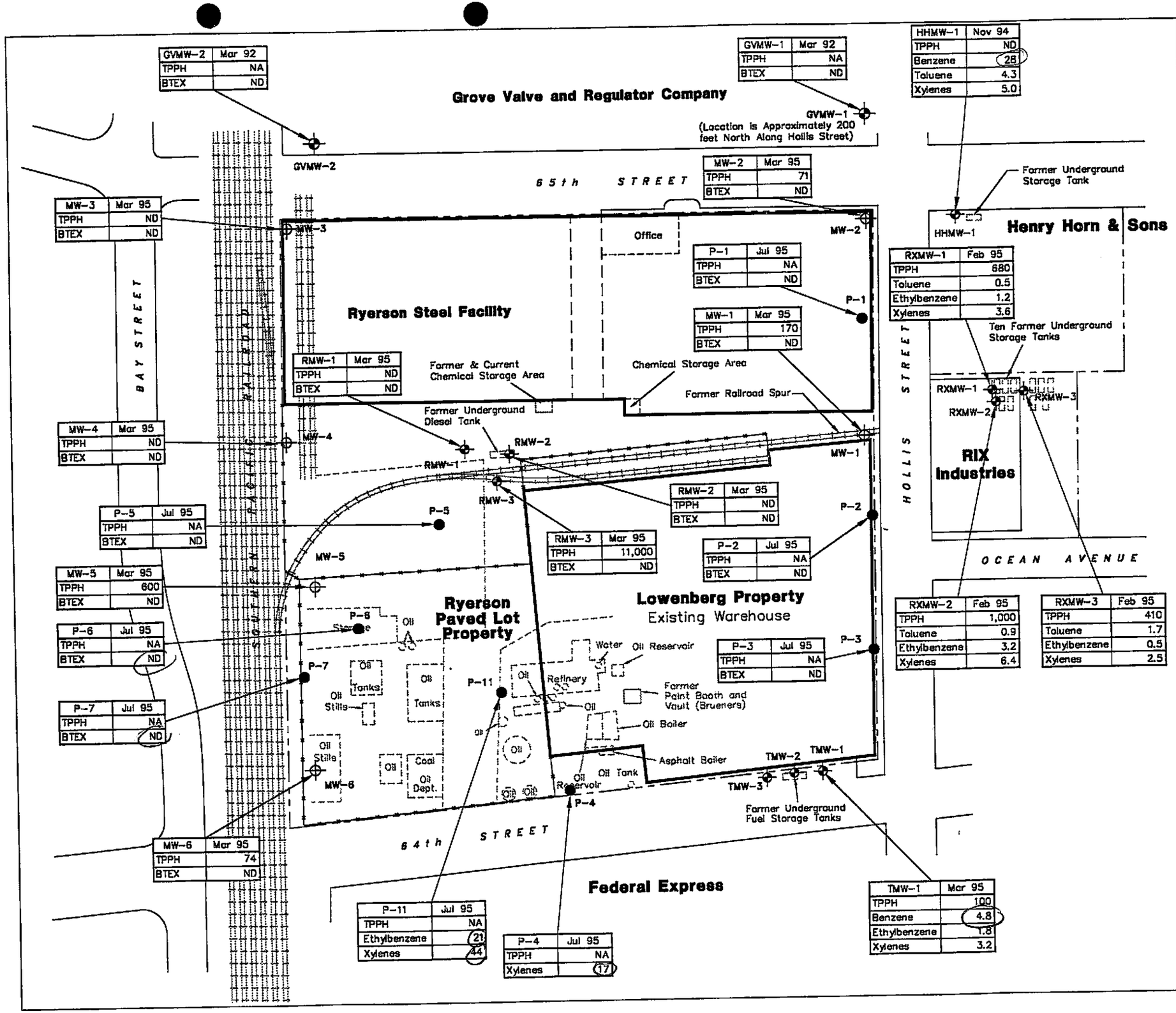
P-1 – P-11 7/95

Erler & Kalinowski, Inc.

Concentrations of Total Extractable Petroleum Hydrocarbons (TEPH) in Groundwater

64th & 65th Street Properties
Emeryville, CA
August 1995
EKI 940018.08

Figure 5



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Monitoring Well Installed by Others
- Grab Groundwater Sampling Location Collected by EKI, July 1995
- BTEX — Benzene, Toluene, Ethylbenzene, and Xylenes
- ND — Not Detected
- NA — Not Analyzed

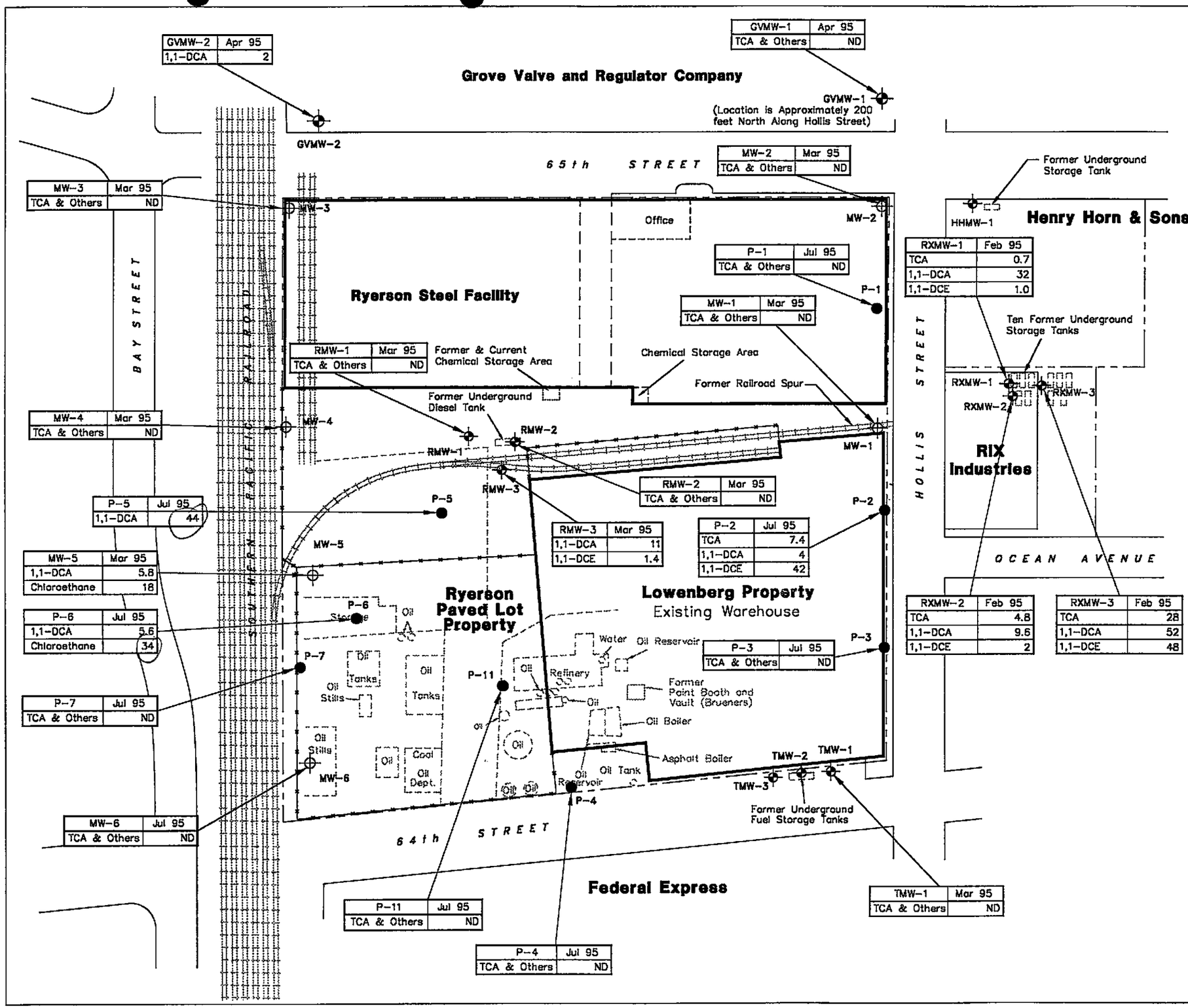
Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Concentrations are in units of ug/L.

Erler & Kalinowski, Inc.

Concentrations of Total Purgeable Petroleum Hydrocarbons (TPPH) and BTEX Detected in Groundwater
64th & 65th Street Properties
Emeryville, CA
August 1995
EKI 940018.08

Figure 6



N

0 120 240

(Approximate Scale In Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Monitoring Well Installed by Others
- Grab Groundwater Sampling Location Collected by EKI, July 1995

TCA & Others Includes TCA, 1,1-DCA, 1,1-DCE, and Chloroethane

TCA	1,1,1-Trichloroethane
1,1-DCA	1,1-Dichloroethane
1,1-DCE	1,1-Dichloroethene
ND	Not Detected

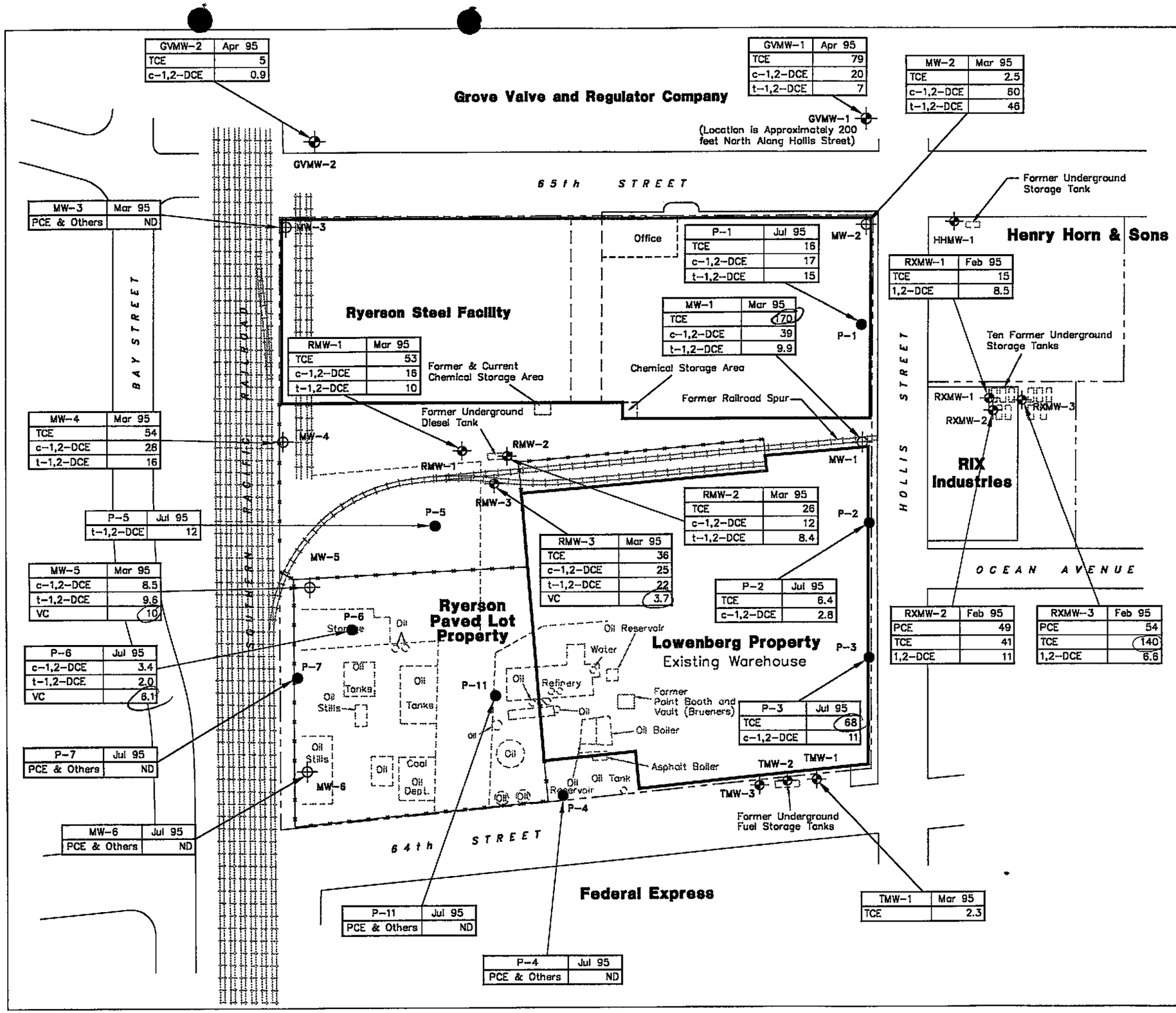
Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Concentrations are in units of ug/L.

Erler & Kalinowski, Inc.

Concentrations of TCA and its Breakdown Products Detected in Groundwater
64th & 65th Street Properties
Emeryville, CA
August 1995
EKI 940018.08

Figure 7



LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Monitoring Well Installed by Others
- Grab Groundwater Sampling Location Collected by EKI, July 1995

PCE & Others	Includes PCE, TCE, c-1,2-DCE t-1,2-DCE, and VC
PCE	Tetrachloroethene
TCE	Trichloroethene
c-1,2-DCE	cis-1,2-Dichloroethene
t-1,2-DCE	trans-1,2-Dichloroethene
1,2-DCE	Total 1,2-Dichloroethene
VC	Vinyl Chloride
ND	Not Detected

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Concentrations are in units of ug/L.

Erler & Kalinowski, Inc.

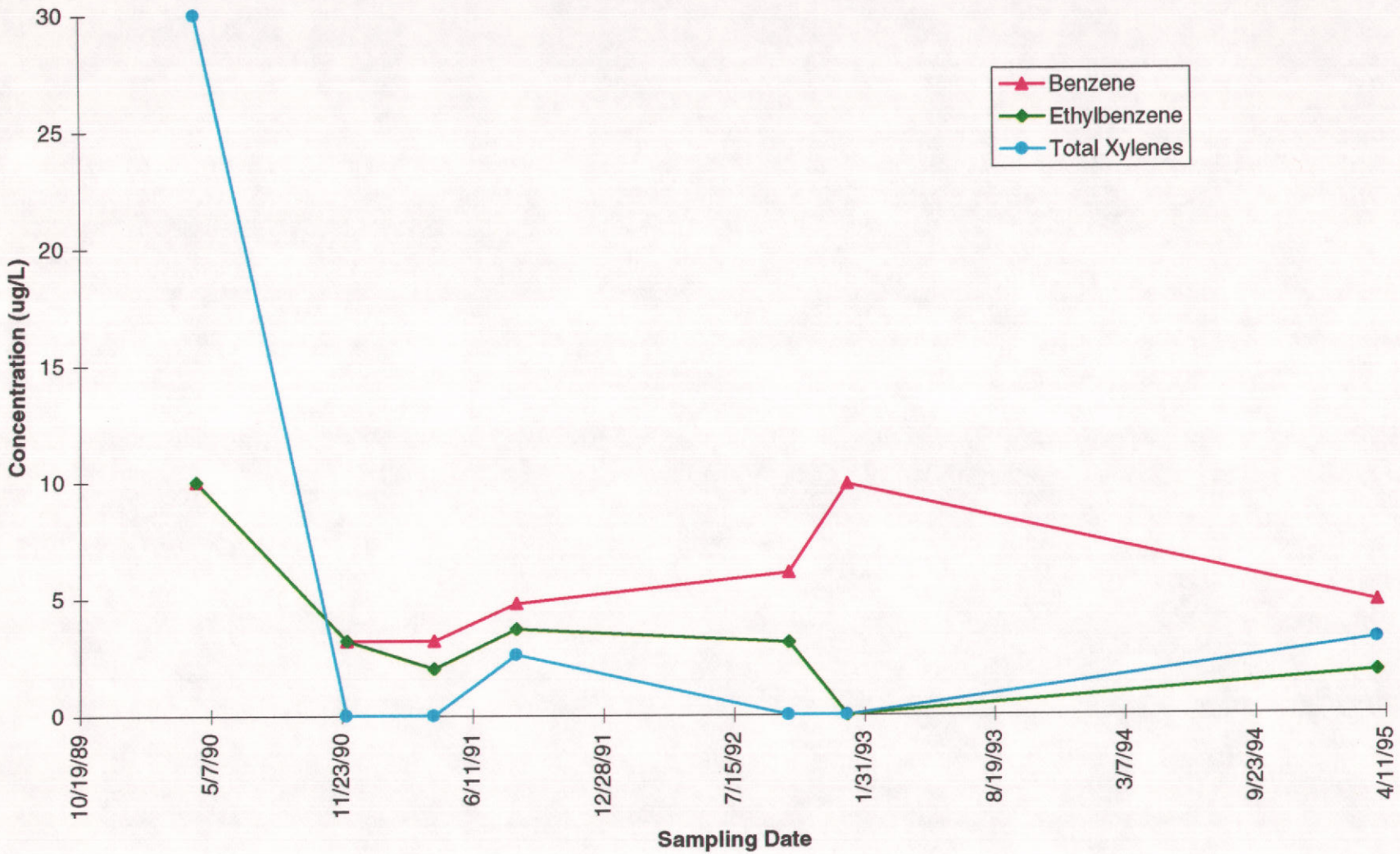
Concentrations of PCE, TCE and their Breakdown Products Detected in Groundwater
64th & 65th Street Properties
Emeryville, CA
August 1995
EKI 940018.08

Figure 8

DRAFT

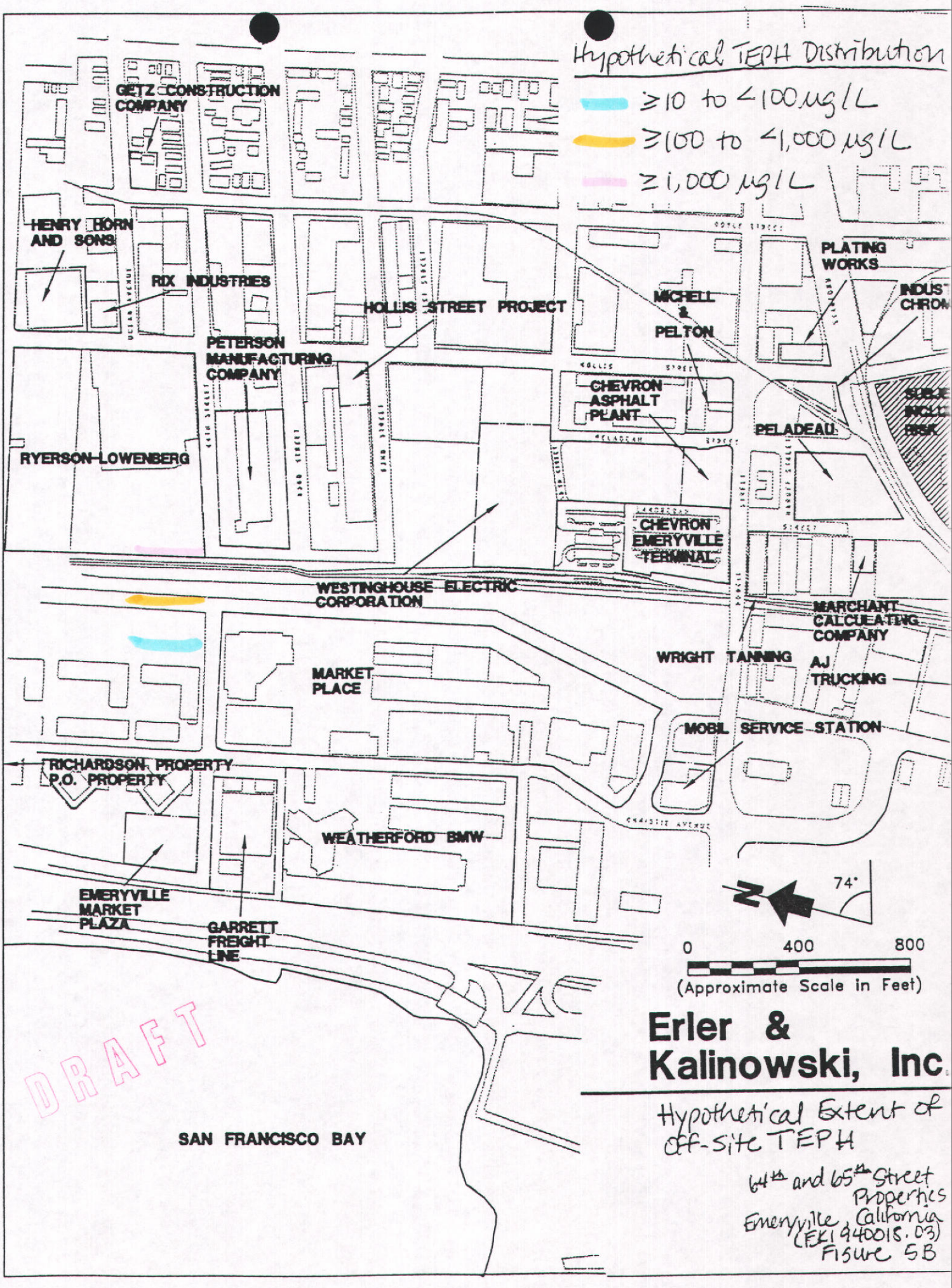
Figure 6B

Benzene, Ethylbenzene, and Xylenes Concentration Trends in Well TMW-1
64th and 65th Street Properties, Emeryville, California
(EKI 940018.03)



TMWBTEX.XLS

7/31/95


Hypothetical TEPH Distribution
≥10 to <100 µg/L
≥100 to <1,000 µg/L
≥1,000 µg/L
GETZ CONSTRUCTION COMPANY
HENRY HORN AND SONS
RIX INDUSTRIES
HOLLIS STREET PROJECT
PETERSON MANUFACTURING COMPANY
RYERSON-LOWENBERG
MICHELL & PELTON
PLATING WORKS
CHEVRON ASPHALT PLANT
PELADEAU
CHEVRON EMERYVILLE TERMINAL
WESTINGHOUSE ELECTRIC CORPORATION
MARCHANT CALCULATING COMPANY
WRIGHT TANNING
AJ TRUCKING
MARKET PLACE
MOBIL SERVICE STATION
RICHARDSON PROPERTY
P.O. PROPERTY
WEATHERFORD BMW
EMERYVILLE MARKET PLAZA
GARRETT FREIGHT LINE
SAN FRANCISCO BAY
DRAFT
74°
0
400
800
(Approximate Scale in Feet)
Erler & Kalinowski, Inc.
Hypothetical Extent of Off-Site TEPH
64th and 65th Street Properties
Emeryville, California
(EKI 940018.03)
Figure 5B