GETTLER-RYAN INC.

August 14, 1997

Mr. Roger S. Gaither
Redwood Christian Schools
4200 James Avenue
Castro Valley, California 94546

Subject: **Soil Sampling at an 8 Acre Parcel and Adjacent 4 Acre Parcel East Castro Valley Boulevard, Castro Valley, California.**

Mr. Gaither:

At the request of Redwood Christian Schools, Gettler-Ryan Inc. (GR) conducted a soil investigation at the above referenced site. The purpose was to evaluate whether the soil at the upper and lower terraces of an eight acre parcel and an adjacent four acre parcel has been impacted by petroleum hydrocarbons. The scope of work included collecting and analyzing soil samples from the upper and lower terraces and adjacent parcel and preparing a report documenting the work.

SITE DESCRIPTION

The subject site (the eight acre parcel) is a vacant parcel located southwest of the intersection of East Castro Valley Boulevard and Eden Canyon Road (Figure 1). There are currently no existing structures present at the site. A concrete slab is present on the upper terrace, along with debris from a former wooden structure. A single-wall above-ground steel tank is located at the west end of the subject site. This tank appears to have been used to store water. The adjacent four acre parcel contains numerous abandoned wooden structures along the east property boundary. Pertinent site features are shown on Figure 2.

FIELD WORK

Soil sampling work was conducted by GR personnel. Soil samples collected during the initial phase of investigation were delivered under chain-of-custody to American Environmental Network (AEN) laboratories in Pleasant Hill, California (ELAP #1172). Soil samples collected during the second phase of investigation were delivered under chain-of-custody to Sequoia Analytical (Sequoia) laboratories in Redwood City, California (ELAP #1210). Analytical methods and results are summarized in Table 1. Copies of the laboratory analytical reports and chain-of-custody records are attached.

Soil Sampling

On July 25, 1997, eight soil samples (R-1 through R-8) were collected at the subject site. Four samples were collected from both the upper and lower terraces of the eight acre parcel (Figure 2). Samples were collected by removing the upper 2 inches of soil from each sample location, then driving a clean brass sample tube into the soil with a hand-driven sampling device fitted with a 2-inch diameter by 4-inch long clean brass tube. After removal from the sampling device, the sample tubes were covered on both ends

with teflon sheeting, capped, labeled, and placed in a cooler with ice for preservation. A chain-of-custody form was initiated in the field and accompanied the soil samples to AEN.

Each sample was analyzed for Total Petroleum Hydrocarbons calculated as gasoline (TPHg) according to EPA Method 5030/GC-FID and a fuel fingerprint for Extractable Total Petroleum Hydrocarbons calculated as diesel (TPHd) and oil (TPHo) according to EPA Method 3550/GC-FID.

TPHo was detected in samples R-1 through R-8 at concentrations ranging from 6 to 930 parts per million (ppm). TPHg and TPHd were not detected in any sample. Chemical analytical data are summarized in Table 1.

Upon receipt of the analytical data on August 8, 1997, additional soil samples were collected. Soil sample R-8A was collected immediately adjacent to the location of R-8 at a depth of 0.5 feet below ground surface(bgs). A shovel and pick were then used to excavate the area around R-8 and R-8A to a depth of approximately 1.75 feet bgs. Soil sample R-8-2 was then driven into the bottom of the excavation to a depth of 2 feet bgs. The soil near R-8 ranged from loose soil and roots (surface to 0.20 feet bgs), to a well-compacted silt and clay with varying amounts of gravel (0.20 to 0.75 feet bgs), to silt (0.75 to 2 feet bgs). A third sample, R-9, was collected at a depth of 0.5 feet bgs from a four acre parcel located immediately south of the eight acre parcel (Figure 2).

These three samples were collected and handled as mentioned above and transported to Sequoia Analytical for a Fuel Fingerprint analysis according to EPA Method 8015. Sample R-8A and R-8-2 contained 15 and 4.1 ppm of an unidentified hydrocarbon between C9 and C40, respectively. R-9 contained 19 ppm of an unidentified hydrocarbon between C9 and C40. Chemical analytical data are summarized in Table 1.

An extract of sample R-8 was transported from AEN to Sequoia Analytical on August 11, 1997, for Fuel Fingerprint analysis. Analysis of the extract by Sequoia detected 880 ppm of an unidentified hydrocarbon between C9 and C40. This concentration can be compared to the 930 ppm TPHo reported by AEN. Chemical analytical data are summarized in Table 1.

If you should have any questions please call us in Dublin at (510) 551-7555.

Sincerely,
Gettler-Ryan Inc.

Clyde J. Galantine
Project Geologist

Stephen J. Carter
Senior Geologist
R.G. 5577

Attachments: Table 1. Analytical Results
Figure 1. Vicinity Map
Figure 2. Site Plan/Sample Location Map
Laboratory Analytical Reports and Chain-of-Custody Records

Table 1 - Analytical Results of Soil Samples

Redwood Christian Schools
East Castro Valley Boulevard - 8 Acre Parcel
Castro Valley, California

Sample Location and ID	Date Collected	Sample Depth (feet)	TPHg (ppm)	TPHd (ppm)	TPHo (ppm)	Fuel Fingerprint (ppm)
Lower Terrace (8-acre parcel)						
R-1	7/25/97	0.5	<0.2	<5	660	--
R-2	7/25/97	0.5	<0.2	<1	7	--
R-3	7/25/97	0.5	<0.2	<1	44	--
R-4	7/25/97	0.5	<0.2	<1	10	--
						--
Upper Terrace (8-acre parcel)						--
R-5	7/25/97	0.5	<0.2	<1	6	--
R-6	7/25/97	0.5	<0.2	<5	440	--
R-7	7/25/97	0.5	<0.2	<1	260	--
R-8	7/25/97	0.5	<0.2	<5	930	880[1]
R-8A	8/8/97	0.5	--	--	--	15[1]
R-8-2	8/8/97	2	--	--	--	4.1[1]
Lower Parcel (4-acre parcel)						
R-9	8/8/97	0.5	--	--	--	19[1]

EXPLANATION:

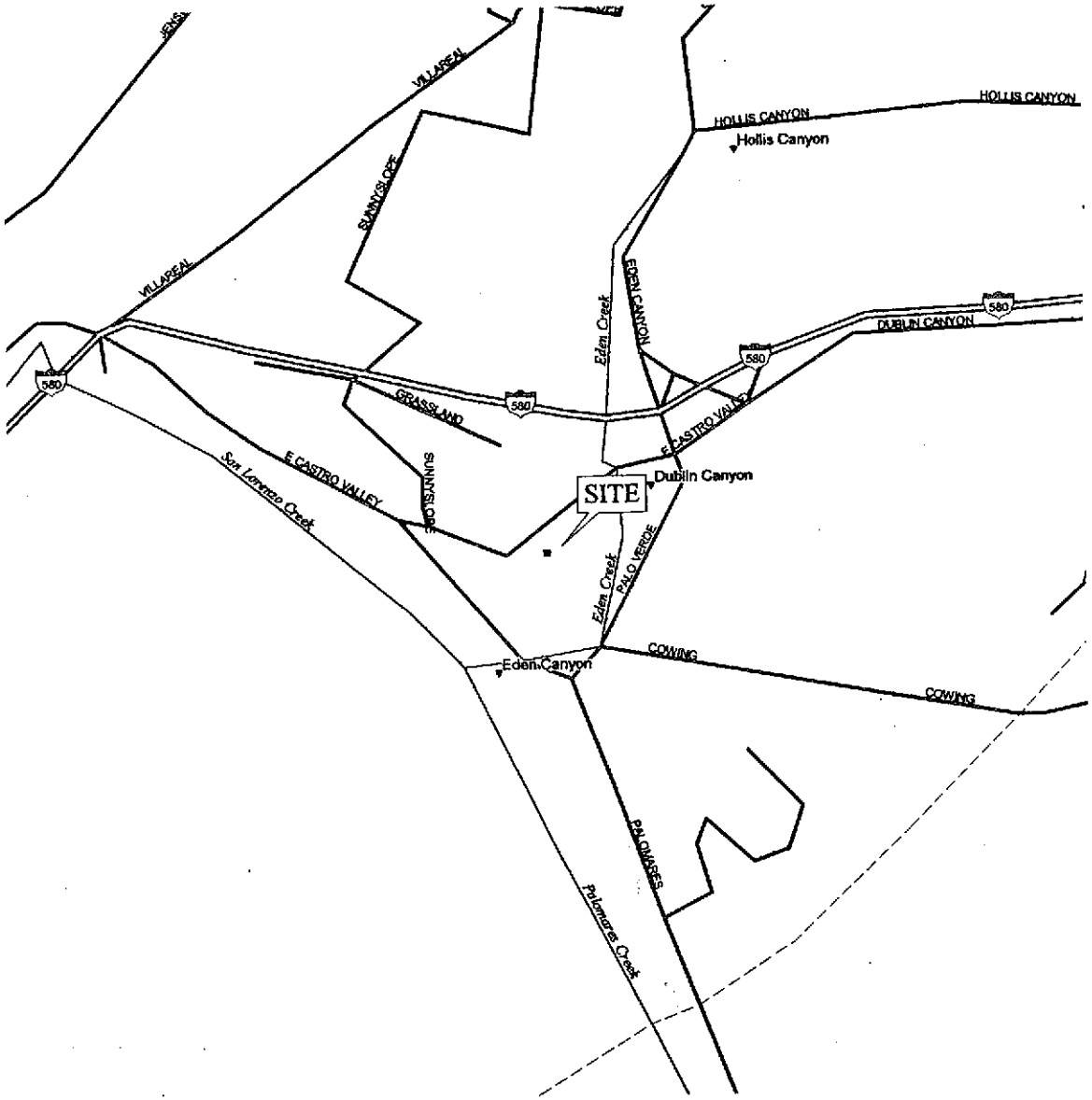
ppm = parts per million
-- = Not Analyzed
[1] = Unidentified Hydrocarbon C9-C40

ANALYTICAL LABORATORY:

American Environmental Network (ELAP #1172)
Sequoia Analytical (ELAP #1210)

ANALYTICAL METHODS:

TPHg = Total Petroleum Hydrocarbons calculated as gasoline according to EPA Method 5030/GC-FID (AEN)
TPHd = Extractable Total Petroleum Hydrocarbons calculated as diesel according to EPA Method 3350/GC-FID (AEN)
TPHo = Extractable Total Petroleum Hydrocarbons calculated as oil according to EPA Method 3350/GC-FID (AEN)
Fuel Fingerprint = Extractable Total Petroleum Hydrocarbons according to EPA Method 8015 Modified (Sequoia)



Source: Street Atlas USA, Delorme (1995).

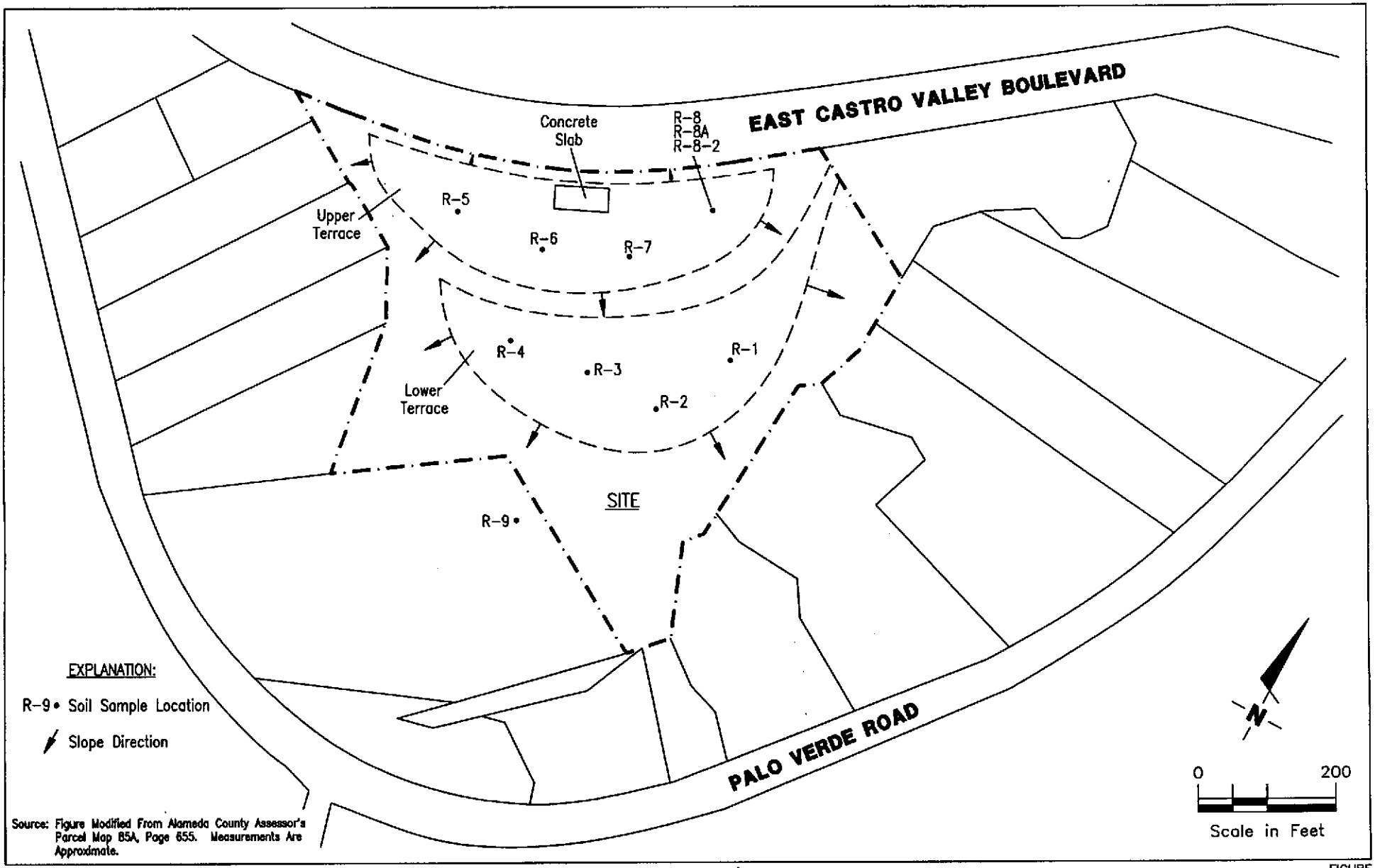
FIGURE 1

Gettler - Ryan Inc.

6747 Sierra Ct., Suite J (510) 551-7555
Dublin, CA 94568

VICINITY MAP
Redwood Christian Schools
East Castro Valley Boulevard – 8 Acre Parcel
Castro Valley, California

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
8148		07/97	



Source: Figure Modified From Alameda County Assessor's Parcel Map 85A, Page 655. Measurements Are Approximate.

Gettler - Ryan Inc.
6747 Sierra Ct., Suite J (510) 551-7555
Dublin, CA 94568

SITE PLAN/SAMPLE LOCATION MAP
Redwood Christian Schools
East Castro Valley Boulevard – 8 Acre Parcel
Castro Valley, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
8148		07/97	

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY RECORDS

GETTLER-RYAN, INC.

SAMPLE ID: R-1
AEN LAB NO: 9707332-01
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 8148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/25/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/30/97
#Extraction for TPH	EPA 3550	-		Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	5	mg/kg	07/30/97
TPH as Oil	GC-FID	660 *	20	mg/kg	07/30/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

GETTLER-RYAN. INC.

SAMPLE ID: R-2
AEN LAB NO: 9707332.02
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 8148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/25/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/30/97
#Extraction for TPH	EPA 3550	-		Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	1	mg/kg	07/29/97
TPH as Oil	GC-FID	7 *	5	mg/kg	07/29/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

GETTLER-RYAN, INC.

SAMPLE ID: R-3
AEN LAB NO: 9707332-03
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 8148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/26/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/31/97
#Extraction for TPH	EPA 3550	-		Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	1	mg/kg	07/30/97
TPH as Oil	GC-FID	44 *	5	mg/kg	07/30/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

GETTLER-RYAN, INC.

SAMPLE ID: R-4
AEN LAB NO: 9707332-04
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 8148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/25/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/30/97
#Extraction for TPH	EPA 3550	-		Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	1	mg/kg	07/29/97
TPH as Oil	GC-FID	10 *	5	mg/kg	07/29/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

GETTLER-RYAN, INC.

SAMPLE ID: R-5
AEN LAB NO: 9707332-05
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 8148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/25/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/30/97
#Extraction for TPH	EPA 3550	-	-----	Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	1	mg/kg	07/29/97
TPH as Oil	GC-FID	6 *	5	mg/kg	07/29/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

GETTLER-RYAN, INC.

SAMPLE ID: R-6
AEN LAB NO: 9707332-06
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 6148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/25/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/30/97
#Extraction for TPH	EPA 3550	-		Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	5	mg/kg	07/31/97
TPH as Oil	GC-FID	440 *	20	mg/kg	07/31/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

GETTLER-RYAN, INC.

SAMPLE ID: R-7
AEN LAB NO: 9707332-07
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 8148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/25/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/30/97
#Extraction for TPH	EPA 3550	-		Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	1	mg/kg	07/31/97
TPH as Oil	GC-FID	260 *	5	mg/kg	07/31/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

GETTLER-RYAN, INC.

SAMPLE ID: R 8
AEN LAB NO: 9707332-08
AEN WORK ORDER: 9707332
CLIENT PROJ. ID: 8148.01

DATE SAMPLED: 07/25/97
DATE RECEIVED: 07/25/97
REPORT DATE: 08/08/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030 GC-FID	ND	0.2	mg/kg	07/31/97
#Extraction for TPH	EPA 3550	-		Extrn Date	07/28/97
TPH as Diesel	GC-FID	ND	5	mg/kg	08/04/97
TPH as Oil	GC-FID	930 *	20	mg/kg	08/04/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

Geller - Ryan Inc. ENVIRONMENTAL DIVISION

6420 Chain of Custody

COMPANY Redwood Christian Schools JOB NO. 8148.01

JOB LOCATION E. Castro Valley Blvd near Eb. Canyon Rd.

CITY Castro Valley PHONE NO.

AUTHORIZED DATE 7/25/97 P.O. NO.

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
R-1	1	Soil	7/25/97	TPHg, BTEX (8015/8020)	01A
R-2	1				02A
R-3	1				03A
R-4	1				04A
R-5	1				05A
R-6	1				06A
R-7	1				07A
R-8	1				08A

See Change order request for changed analysis to gas, diesel, no ~~hydraulic oil~~ R. Bjas 8/28

RELINQUISHED BY: 7/25/97 12:10

RELINQUISHED BY:

RELINQUISHED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY LAB: 7/25/97 1010

DESIGNATED LABORATORY: DHS #:

REMARKS: 7 day TAT (normal)

DATE COMPLETED FOREMAN

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies
3164 Gold Camp Drive #240
Rancho Cordova, CA 95670

Attention: Greg Gurss

Client Proj. ID: 6148.01
Sample Descript: R-6A
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9708945-01

Sampled: 08/08/97
Received: 08/08/97
Extracted: 08/08/97
Analyzed: 08/08/97
Reported: 08/11/97

QC Batch Number: GC080897GHBPEXA
Instrument ID: GCHP4B

Fuel Fingerprint

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Extractable Hydrocarbons	1.0	15
Chromatogram Pattern:		
Unidentified HC		C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	82

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies
3164 Gold Camp Drive #240
Rancho Cordova, CA 95670

Attention: Greg Gurss

Client Proj. ID: 8148.01
Sample Descript: R-3-2
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9708345-02

Sampled: 08/08/97
Received: 08/08/97
Extracted: 08/08/97
Analyzed: 08/08/97
Reported: 08/11/97

QC Batch Number: GC080897070HBPEXA
Instrument ID: GCHP4B

Fuel Fingerprint

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Extractable Hydrocarbons	1.0	4.1
Chromatogram Pattern:		
Unidentified HC		C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	79

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies
3164 Gold Camp Drive #240
Rancho Cordova, CA 95670

Attention: Greg Gurss

Client Proj. ID: 6148.01
Sample Descript: R-9
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9708346-03

Sampled: 08/08/97
Received: 08/08/97
Extracted: 08/08/97
Analyzed: 08/08/97
Reported: 08/11/97

QC Batch Number: GC080897GHBPEXA
Instrument ID: GCHP4B

Fuel Fingerprint

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Extractable Hydrocarbons	1.0	19
Chromatogram Pattern:		
Unidentified HC		C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	94

Analytes reported as N.D. were not present above the stated limit of detection.

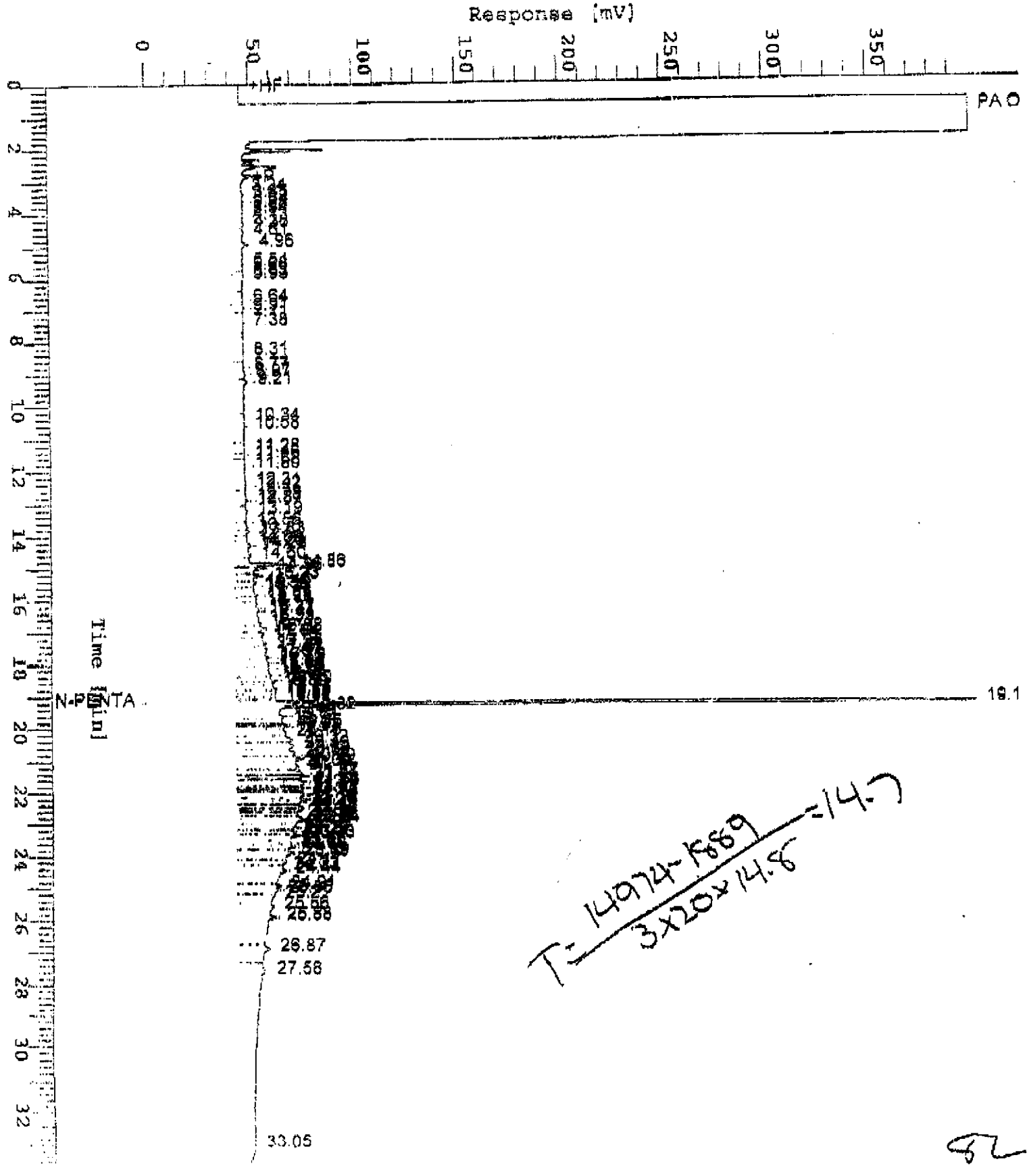
SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Chromatogram

Sample Name : DS970S145-1 (20:1)
FileName : S:\GKP_04\0810\8013008.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: R-1A Page 1 of 1
Date : 8/8/97 18:00
Time of Injection: 8/8/97 18:28
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV

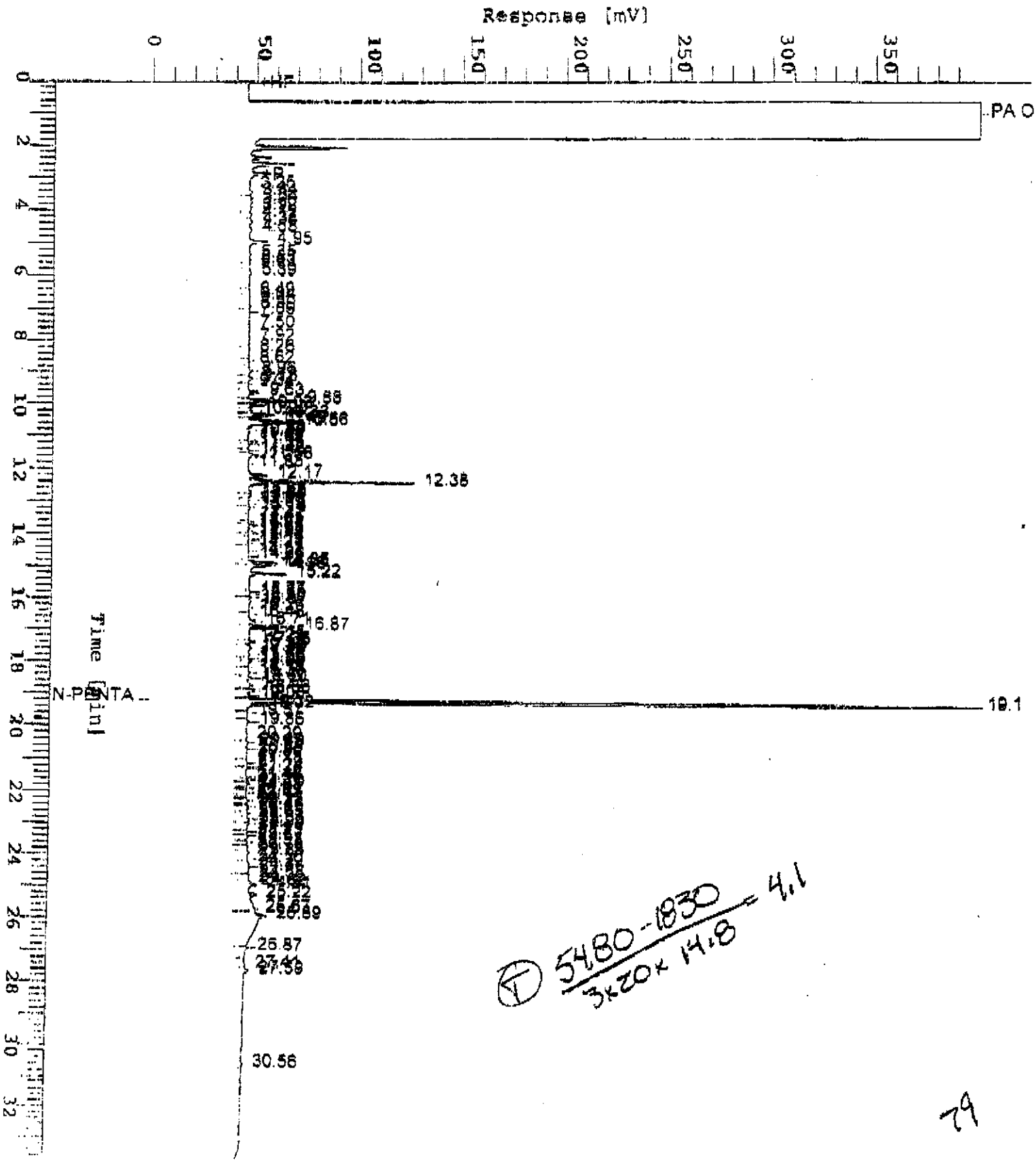


$T = \frac{14974 - 5689}{3 \times 20 \times 14.8} = 14.7$

Chromatogram

Sample Name : DS9708345-2 (20:1)
FileName : S:\GHP_04\0810\B0810012.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: R-9-2 Page 1 of 1
Date : 8/8/97 21:47
Time of Injection: 8/8/97 21:13
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



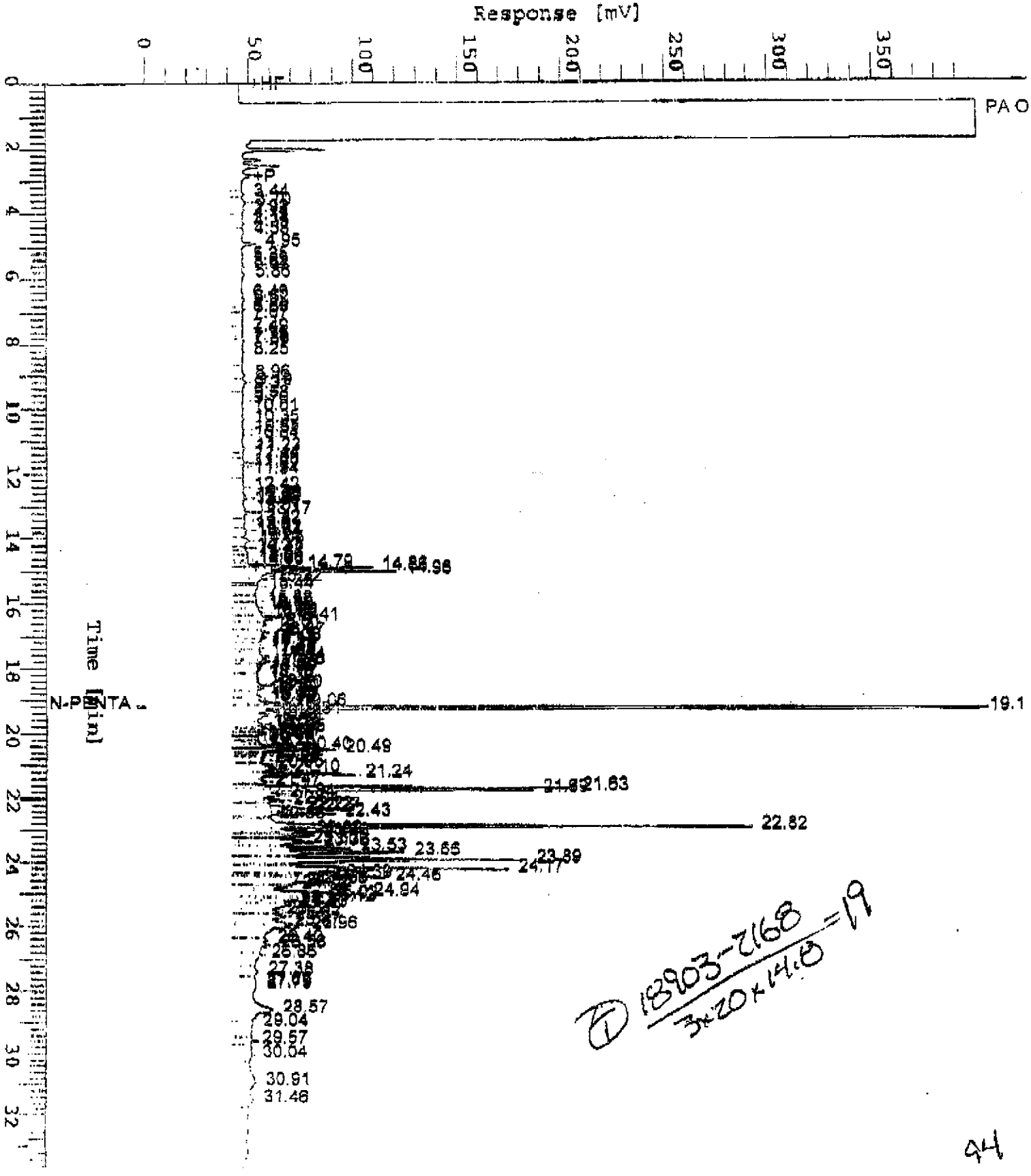
$\frac{5480-1830}{3 \times 20 \times 14.8} = 4.1$

79

Chromatogram

Sample Name : DA9708345-3 (20:1)
FileName : S:\GXP_04\0810\S0810013.RAW
Method : T9M04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: R-5
Date : 8/8/97 22:28
Time of Injection: 8/8/97 21:54
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



(1) 18903-2168 / 3×20×14.8 = 19

94

Gettler - Ryan Inc. 470834/5 ENVIRONMENTAL DIVISION **1870 Chain of Custody**

COMPANY Redwood Christian Schools JOB NO. 8148.01

JOB LOCATION E. Castro Valley Blvd. / Eden Canyon Rd.

CITY Castro Valley, CA PHONE NO. 916-631-1300 Fax 916-631-1317

AUTHORIZED Cly & Gettstone/GregGurss DATE 8/8/97 P.O. NO.

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
R-8A	1	Soil	8/8/97 7:30	Fuel Fingerprint	
R-8-2	1	↓	8:00	↓	
R-9	1	↓	8:30	↓	

RELINQUISHED BY: 9:40 8/8/97

RECEIVED BY:

RELINQUISHED BY:

RECEIVED BY:

RELINQUISHED BY:

RECEIVED BY LAB: 2-8-97 0940

DESIGNATED LABORATORY: Sequoia DHS #:

REMARKS: 1 Day TAT

DATE COMPLETED FOREMAN

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Redwood Christian Schools
Sample Descript: 9707332-8A
Matrix: EXTRACT
Analysis Method: EPA 8015 Mod
Lab Number: 9708475-01

Sampled: 07/25/97
Received: 08/11/97
Extracted: 08/11/97
Analyzed: 08/11/97
Reported: 08/12/97

QC Batch Number: SEE NARRATIVE
Instrument ID: GCHP4A

Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	600	880
Chromatogram Pattern: Unidentified HC		C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	60	150	Q

Analytes reported as N.D. were not present above the stated limit of detection.

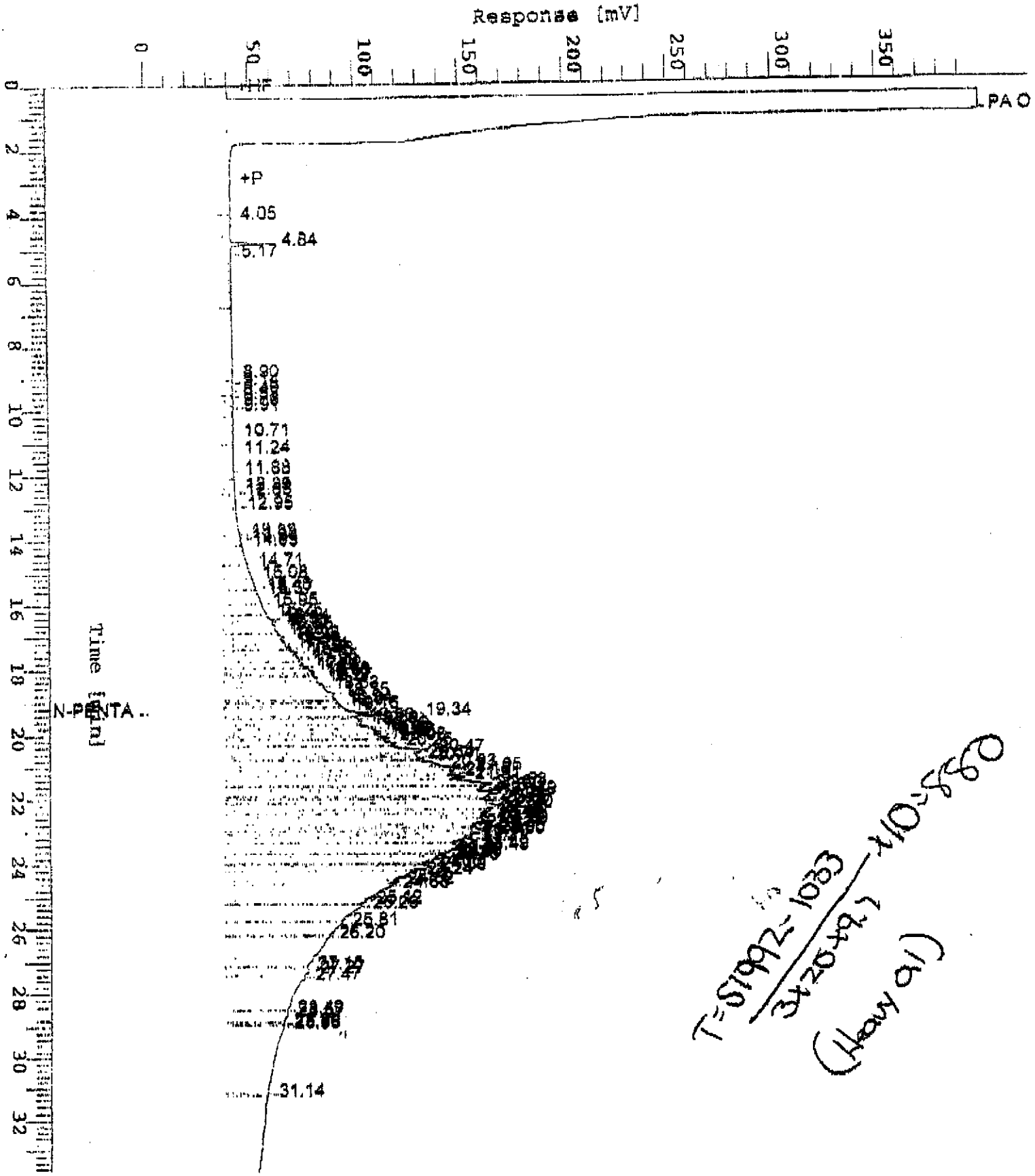
SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Chromatogram

Sample Name : DSP708475-1 (10X DIL)
FileName : S:\GHP_04\0817\S11A011.RAW
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: 9707332-8A
Date : 8/11/97 15:43
Time of Injection: 8/11/97 16:18
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



$T = \frac{81992 - 1033}{3 \times 20 \times 9.1} \times 10^{-880}$

(How 9/1)