



ENVIRONMENTAL ENGINEERING, INC
6620 Owens Drive, Suite A • Pleasanton, CA 94588-3334
TEL (925) 734-6400 • FAX (925) 734-6401

July 25, 2005

Mr. Jerry Wickham
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Project: 2842

Subject: Site Located at 5565 Tesla Road, Livermore, California

Dear Mr. Wickham:

Enclosed for your review is a copy of SOMA's "Phase 1: Soil and Groundwater Investigation" conducted at the subject site.

Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have any questions or comments.

Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

Enclosure

cc: Mr. Aris Krimetz



Alameda County
JUL 27 2005
Environmental Health

RD 2585



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PHASE I: SOIL AND GROUNDWATER INVESTIGATION

**WENTE WINERY
5565 Tesla Road
Livermore, California**

July 25, 2005

Project 2842

Prepared for

**Wente Brothers Winery
5565 Tesla Road
Livermore, California**

Prepared by

**SOMA Environmental Engineering, Inc.
6620 Owens Drive Suite A
Pleasanton, California**

CERTIFICATION

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Wente Brothers, the property owners of Wente Winery, located at 5565 Tesla Road, Livermore, California. This report complies with a workplan approved by the Alameda County Health Care Services (ACHCS), in a letter dated April 4, 2005.



Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist



Alameda County
JUL 27 2005
Environmental Health

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1.0 INTRODUCTION

On behalf of Wente Brothers, SOMA Environmental Engineering, Inc. (SOMA) has prepared this report for the property located at 5565 Tesla Road, Livermore, California, hereafter referred to as "the Site." As shown in Figure 1, the Site is located between South Vasco Road and Mines Road in Livermore, California. The subject property operates as a winery with three aboveground fuel storage tanks, with a total capacity of 4,000 gallons.

Based on SOMA's workplan dated January 31, 2005 and Alameda County Health Care Services' (ACHCS) approval letter dated April 4, 2005, this report includes the results of a Phase I soil and groundwater investigation conducted at the Site. The purpose of this investigation was to provide preliminary site-specific data on the groundwater flow direction and degree of petroleum hydrocarbon impact on the soil and groundwater in close proximity of the former underground storage tanks (USTs). The USTs were excavated in 1987.

1.1 Previous Activities

In 1987, two fuel USTs were removed from the Site without regulatory agency oversight. Without available records of the tank removal, there is no information regarding the condition of the tank or evidence of possible leakage.

In 1990, the ACHCS issued a notice of violation (NOV) for discharging waste sludge into an open ditch adjacent to a former steam-cleaning bay, which is located at the south end of the steel storage and welding shed. The NOV required sampling of the ditch area and around a stained drum, along with remediation of the contaminated areas. No available records reportedly exist to document the implementation of the required tasks.

1.2 Previous Investigations

In accordance with Comerica Bank guidelines, the Clayton Group (Clayton) performed an ASTM D standard Phase I investigation to identify recognized environmental concerns (RECs). The Phase I study revealed the existence of the former USTs, former waste discharge area, and a number of agricultural storage areas. Agricultural chemicals and equipment are currently stored in the Agricultural Storeroom. However, documents indicate that these items were also previously stored in Building S and in a detached garage, as shown in Figure 2. Clayton concluded that the identified areas constituted RECs and recommended sampling of these areas for relevant constituents of concern.

In 2003, Clayton performed a subsurface investigation at the Site to implement the recommendations of the Phase I report. Soil samples were analyzed for pesticides, herbicides, petroleum hydrocarbons, volatile organic compounds (VOCs), and heavy metals. Groundwater samples collected from beneath the former USTs and near the former steam cleaning areas were analyzed for petroleum hydrocarbons, VOCs, pesticides and herbicides. Clayton concluded that a fuel release in the former UST area impacted the groundwater at concentrations that significantly exceeded Risk Based Screening Levels (RBSLs). In the former steam-cleaning bay, located south/southwest of, and presumably upgradient from the former UST pit, no total petroleum hydrocarbon (TPH) or VOCs were detected in the soil. However, gasoline and motor oil-range petroleum hydrocarbons were detected in the groundwater at concentrations that were slightly above RBSLs. Other borehole samples contained constituents of concern below the RBSLs. The locations of the boreholes are shown in Figure 2.

Clayton recommended an additional site characterization to further characterize the Site before installing monitoring wells. Wente Brothers retained SOMA to review the Clayton report and provide an alternate workplan. Upon reviewing Clayton's report, SOMA proposed the installation of three groundwater monitoring

wells to evaluate the groundwater contaminant plume and determine the groundwater flow direction. ACHCS reviewed SOMA's workplan and requested a revised workplan that would present a vicinity well survey, a regional hydrogeologic study, and proposed additional site characterization.

Based on the ACHCS' request, SOMA prepared a workplan that included a two-phased approach for a thorough subsurface site investigation. The phase I investigation included 1) sampling on-site and two off-site water supply wells, 2) preparation of health and safety plan, permit acquisition, and utility clearance, 3) installation and sampling of three piezometers, 4) developing and surveying piezometers, 5) laboratory analysis, and 6) preliminary evaluation of groundwater flow and chemical contaminant plume. Phase II investigation included 1) site characterization using Cone Penetrometer Test/Membrane Interface Probe (CPT/MIP), 2) groundwater sampling, 3) laboratory analysis 4) installation of additional groundwater monitoring wells.

In addition, as part of Phase I study, SOMA drilled two confirmatory soil borings in close proximity of B-1 (B-9) and B-4 (B-10) and collected soil and groundwater samples to evaluate the current status of soil and groundwater contamination beneath the Site. This report includes the results of Phase I investigation as described above.

1.3 Regional Hydrogeologic Study

For conducting the regional hydrogeologic study, SOMA contacted the following agencies to obtain reports, documents and maps for this regional hydrogeologic study:

1. California Department of Water Resources (DWR),
2. California Division of Mines and Geology (CDMG),
3. Regional Water Quality Control Board – San Francisco Region (SFRWQCB),

4. Alameda County Health Care Services – Environmental Health Services (ACHCS-EHS), and
5. Zone 7 Water Agency (Zone 7).

The results of this study are presented below.

1.3.1 Regional Hydrogeologic Features

The subject site is located in the Livermore Valley Groundwater Basin (LVGB). With a surface area of 109 square miles, the LVGB extends from the Pleasanton Ridge approximately 14 miles east to the Altamont Hills and from the Livermore Upland approximately 3 miles north to the Orinda Upland.

Water-Bearing Formations

The LVGB basin consists of a structural trough that is an important source of irrigation water for the Livermore Valley. The LVGB comprises water-bearing formations derived from alluvial fans, outwash plains and lakes that belong to the valley-fill, Livermore and Tassajara Formations. The valley-fill and Livermore Formations provide adequate and large quantities of good to excellent water to the Livermore Valley.

Valley-Fill: The shallowest water-bearing formation is the Holocene age (less than 10,000 years old) valley-fill that ranges in thickness from several tens of feet to almost 400 feet. The valley-fill consists of unconsolidated sediments deposited as alluvium, stream-channel, alluvial fan, and terrace deposits. In the western part of the basin, up to 40 feet of clay, caps these water-bearing sediments. In the vicinity of the subject site, DWR maps the valley-fill with a thickness of approximately 20 to 30 feet and describes this water-bearing zone as a permeable unit consisting of sand and gravel in a clayey sand matrix. The DWR delineated the potentiometric surface of valley-fill groundwater near the Site at approximately 20 to 30 feet below ground surface (bgs).

Livermore Formation: The next youngest water-bearing zone is the Plio-Pleistocene (approximately 10,000 to 5 million years old) Livermore Formation with a thickness of up to 4,000 feet. The Livermore Formation usually occurs at approximately 400 feet bgs. In the eastern half of the LVGB, deep wells produce adequate volumes of groundwater for irrigation, industrial, or municipal purposes. In the vicinity of the subject site, the DWR delineated the potentiometric groundwater surface at approximately 150 feet bgs within the Livermore Formation. The DWR describes this water-bearing unit as massive beds of rounded gravel cemented by an iron-rich sandy clay matrix.

Tassajara Formation: The oldest water-bearing zone is the Pliocene-age (approximately 2 to 5 million years old) Tassajara Formation that occurs in the uplands north of the Livermore Valley at approximately 250 to 750 feet bgs. This formation consists of more consolidated deposits of sandstone, siltstone, shale, conglomerate and limestone. The Tassajara Formation only provides enough groundwater for domestic and livestock purposes. This unit has little hydrogeologic continuity with the Livermore Formation.

Subbasins of the Livermore Valley Groundwater Basin

The LVGB consists of twelve subbasins bounded by faults and non-water-bearing marine rocks: Bishop, Dublin, Castle, Bernal, Camp, Amador, Cayetano, May, Spring, Vasco, Altamont and the Mocho Subbasin. The subject site is located on the west side of the Mocho Subbasin, which is one of the three most important water-producing subbasins of the Livermore Valley.

The Mocho Subbasin is bounded on the east by the Tesla Fault, on the west by the central zone of the Livermore Fault, on the north by bedrocks of the Tassajara Formation, and on the south by non-water-bearing marine rocks. The DWR

described groundwater flow within the Mocho Subbasin to the north or northwest with a gradient of 20 feet per mile (equivalent to 0.004 foot per foot).

This subbasin has been divided into the Mocho I (eastern) and Mocho II (western) subbasins. Separated by a nearly buried ridge of the underlying Livermore Formation, these subunits are described below.

Mocho I Subbasin: In the shallow water-bearing valley-fill, there is an apparent lack of hydrogeologic continuity with the Mocho II Subbasin. The Arroyo Seco watercourse drains the Mocho I Subbasin.

Mocho II Subbasin: The shallow valley-fill deposits of Mocho II occur along the watercourse of Arroyo Mocho that merge with gravelly fan deposits near Tesla Road. The DWR described these Arroyo Mocho deposits as no more than 30 feet thick. In the vicinity of the Site, the DWR mapped approximately 20 to 30 feet of the valley-fill unit overlying the Livermore Formation. Within the Livermore Formation, there is apparently little discontinuity with the Mocho I Subbasin or across the Mocho Fault. Sediments of the Livermore Formation have been down-warped into a structural trough – or syncline – and the Site is situated on the south limb of the syncline. Beds underlying the Site incline gently to the north at approximately 5 to 10 degrees.

1.4 Well Survey

SOMA contacted Zone 7 and the DWR to obtain well data for this survey. As shown in the well location map presented in Appendix A, there is one on-site well (3S/2E 23C1) and five wells in the properties immediately west of and presumably downgradient from the Site: 3S/2E 23C2, 3S/2E 23D1, 3S/2E 23D2, 3S/2E 23D3, and 3S/2E 23D4. North/northeast of and presumably up/cross gradient from the subject site there are seven wells within 2,000 feet of the investigation area: 3S/2E 14P2, 3S/2E 14Q1, 3S/2E 14Q2, 3S/2E 14Q3, 3S/2E 14Q5, 3S/2E 14Q6, and

3S/2E 14Q7. Approximately 1,800 feet south of the Site there is another water supply well, 3S/2E F1.

1.4.1 Well Construction Findings

On-Site

The Wentz Brothers' well (23C1) is 102 feet deep with a casing diameter of 10 inches. The State DWR Water Well Drillers Report indicates this well is screened from 11 to 66 feet and at 77 to 93 feet bgs.

Off-Site

With the exception of 3S/2E 23C2, the five wells west of and adjacent to the Site have similar well depths ranging from 108 to 140 feet bgs. Well 23D3 is located at 5143 Tesla Road and has a relatively shallow depth of 29 feet with a casing diameter of 9 inches. Zone 7 records indicate that this well is used for domestic purposes and that well 23C2 is used as a drinking water well. Well 23C2 is located on the property immediately adjacent to the Site at 5443 Tesla Road. In response to SOMA's request for a well search within 2,000 feet of the Site, the DWR provided no Water Well Drillers Reports for three of these five wells located west of and adjacent to the Site.

Available records indicate that seven wells are located north/northeast of and within 2,000 feet of the Site. Zone 7 records indicate that these wells are 80 to 308 feet deep with casing diameters ranging from 6.6 to 10 inches. Wells 3S/2E P2, 3S/2E Q1, 3S/2E Q2, 3S/2E Q3, 3S/2E Q5, and 3S/2E Q6 are reportedly used as drinking water wells. State DWR Reports indicate that well Q6 is perforated from 80 to 140 feet bgs and that well Q7 is perforated from 100 to 210 feet bgs. The DWR provided no Water Well Drillers Reports for the other five wells and construction details for most of these wells are unknown.

Based on data received from Zone 7, well 3S/2E 23F1 is located almost 2,000 feet south and presumably up/cross gradient from the Site. Because the DWR provided no Water Well Drillers Report for this well, the construction details for well 23F1 are unknown.

2.0 FIELD INVESTIGATION

Based on the ACHCS' approval of SOMA's workplan, the scope of this investigation included conducting a soil and groundwater investigation to provide a more thorough understanding of the extent of contamination in the soil and groundwater. To implement the approved workplan and comply with the ACHCS' directive, SOMA performed the following tasks.

1. Permit Acquisition, Health and Safety Plan Preparation, and Utility Clearance,
2. Hollow-Stem Auger Drilling, Soil Sample Collection, and Monitoring Well Installation,
3. Monitoring Well Development, Monitoring Well Survey, and Groundwater Sample Collection (Monitoring Wells, Onsite Irrigation Well, and Offsite Irrigation Well),
4. Soil and Groundwater Sample Collection in Boreholes 9 and 10, and
5. Laboratory Analysis.

The following is a description of the above-mentioned tasks.

2.1 Permit Acquisition, Health and Safety Plan Preparation, and Utility Clearance

Prior to initiating field activities, SOMA obtained the required drilling permits from ACHCS Zone 7 Water Agency. The permits are attached as Appendix A.

A site-specific health and safety plan (HASP) was prepared by SOMA. The HASP was designed to address safety provisions during field activities and protect the field crew from physical and chemical hazards resulting from drilling and sampling. The HASP established personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures and emergency action plans.

SOMA contacted Underground Service Alert (USA) to clear the drilling areas of underground utilities. Following USA clearance, a private utility locator surveyed the proposed drilling areas and located additional subsurface conduits.

2.2 Hollow-Stem Auger Drilling, Soil Sample Collection, and Monitoring Well Installation

On May 5, 2005, SOMA oversaw Woodward Drilling Co. (Woodward) install three monitoring wells, MW-1 through MW-3, as shown in Figure 2. Hollow stem auger (HSA) drilling technology was implemented to drill the well boreholes to the designated depth of 15 feet bgs. To determine the water-bearing zones, continuous sampling with an unlined split-spoon sampler was implemented throughout the drilling of each well borehole. SOMA's field geologist continuously logged the sediment cores and collected relatively undisturbed soil samples for laboratory analysis. Soil samples were taken from the vadose zone located directly above first encountered groundwater.

Under the direction of SOMA's field geologist, the monitoring wells were screened to span only the saturated zone observed in the soil cores to minimize screen lengths. Using factory-slotted schedule 40 PVC screen with 0.01" slots, the drilling crew used 5-foot screen intervals for each well. The monitoring well boreholes were cased with threaded, blank and slotted schedule 40 PVC pipe. The drilling crew fitted PVC capping to the bottom of the casings without adhesives or tape, and the top of the casings were fitted with a locking well plug.

After the casings were set into the boreholes, the monitoring well filter packs were emplaced outside the casing by slowly pouring 2/12 kiln-dried sand material into the annular space from the bottom of the boreholes to approximately a foot above the screened interval. To prevent grout from infiltrating down into the filter material, a one-foot thick bentonite plug was placed above this filter material. Approximately one to two gallons of distilled water was then added to hydrate the bentonite pellets. After thoroughly hydrating the bentonite seal, the wells were sealed from the top of the bentonite layer to about one-foot bgs with neat cement containing approximately 5% bentonite. Monitoring well borehole logs and monitoring well construction details are attached as Appendix B.

2.3 Developing, Surveying, and Groundwater Sampling (Monitoring Wells, On-site Irrigation Well, and Off-site Irrigation Well)

On May 20, 2005, Woodward developed the newly installed wells. The field crew used a steel bailer to remove sediment-laden water from the wells until the sediment load had substantially decreased. The wells were then purged until the groundwater clarity was clear and groundwater quality parameters stabilized. Appendix C presents the well development logs.

After development was complete a water sample was taken from each well. The field crew collected groundwater samples with a ½-inch diameter stainless steel bailer and decanted the groundwater samples into four 40-milliliter (mL) VOA vials, pre-preserved with hydrochloric acid and an unpreserved 1L amber bottle. SOMA's field geologist verified the 40-mL vials were sealed properly to prevent the inclusion of air bubbles. The samples were stored in a cooler, with ice, and delivered that day to Pacific Analytical Laboratory (PAL), a California state-certified analytical laboratory. Appendix D includes the laboratory reports and the COC for the groundwater samples.

On May 20, 2005, SOMA measured depths to groundwater inside the newly installed groundwater monitoring wells. Using the well survey data by Harrington Surveys Inc., groundwater elevations at the monitoring well locations were calculated. Well Survey data is included in Appendix E. Figure 3 shows the groundwater elevation contour from May 20, 2005. As Figure 3 illustrates, the groundwater gradient flow is to the northwest.

2.4 Soil and Groundwater Sample Collection in Boreholes 9/10.

On June 24, 2005, SOMA oversaw Woodward drill two confirmatory boreholes (B-9 and B-10). The purpose of this investigation was to confirm the presence of petroleum hydrocarbons in the soil and groundwater next to the former USTs and to evaluate the current soil and groundwater conditions next to B-4 (drilled by Clayton), which is in close proximity of the former steam cleaning area. The locations of the two boreholes are shown in Figure 2. Boreholes B-9 and B-10 were drilled to 14 feet and 20 feet, respectively. Both boreholes were continuously sampled to determine lithology and locate the water bearing zones.

The soil sample collected from B-9 was taken from 12.5 feet to 13 feet bgs, at the vadose zone located directly above the groundwater. This zone also had the highest Photo-Ionization Detector (PID) readings as seen in the geologic logs in Appendix B. Groundwater samples collected from the boreholes were sampled with the same method as the monitoring wells.

2.5 Laboratory Analysis

Soil samples collected from wells MW-1 to MW-3 were submitted to PAL on May 5, 2005. A soil sample from temporary borehole B-9 was submitted to PAL on June 27, 2005. The soil and groundwater samples collected from MW-1 through MW-3 and B-9 were analyzed for the following constituents:

- Total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), and total petroleum hydrocarbons as motor oil (TPH-mo) using EPA Method 8015B,
- Benzene, toluene, ethylbenzene, total xylenes (BTEX) and Methyl tertiary Butyl Ether (MtBE) using EPA Method 8260B.

The groundwater sample collected from B-10 was analyzed for:

- TPH-g, BTEX, and MTBE using EPA Method 8260B,
- TPH-d and TPH-mo using EPA Method 8015B,
- Organochlorine pesticides using EPA Method 8081A, and
- Heavy metals (Cadmium, Chromium, Lead, Nickel, Zinc), using EPA Method 6010B.

PAL subcontracted Curtis & Tompkins, Ltd., Analytical Laboratories (C&T) to administer the TPH-d, TPH-Mo, heavy metals, and organochlorine pesticides analysis. Table 1 presents the soil and groundwater analytical results. Appendix D includes the laboratory reports and the COC forms.

3.0 RESULTS

The following sections describe the results of the current field investigation activities.

3.1 Soil Analytical Results

Soil samples collected from wells MW-1 to MW-3 were below the laboratory reporting limits for all analytes with exception of MW-2, which contained TPH-d at 2.7 mg/Kg, and TPH-mo at 7.1 mg/Kg.

The soil sample collected from 12.3-13 feet bgs from B-9 had detections of TPH-g at 232,000 ug/Kg, TPH-d at 98,000 ug/Kg, TPH-mo at 6,600 ug/Kg, ethylbenzene at 2,600 ug/Kg, total xylenes at 7,170 ug/Kg and MtBE at 28 ug/Kg. Soil analytical results can be found in Table 2.

3.2 Groundwater Analytical Results

Chemical concentrations in the groundwater samples collected from wells MW-1 to MW-3 were below laboratory reporting limits for TPH-g, benzene, ethylbenzene, total xylenes, and MtBE. However, toluene and TPH-d were detected at 1.58 ug/L and 680 ug/L in MW-3. Toluene was also detected in the on-site irrigation well at 0.85 ug/L. MW-1 had a TPH-mo concentration of 320 µg/L. The groundwater sample collected from an irrigation well located at 5443 Tesla Road contained toluene and benzene 1.08 and 0.77 µg/L, respectively.

A groundwater sample collected from B-9 contained elevated levels of petroleum hydrocarbons. The results of the laboratory analyses showed TPH-g at 1,850,000 ug/L, TPH-d at 540,000 ug/L, benzene at 3,820 ug/L, ethylbenzene at 40,400 ug/L, total xylenes at 177,700 ug/L, and toluene at 114,000 ug/L. The results of the laboratory analyses on the groundwater samples collected from B-10 showed ethylbenzene at 1.10 ug/L and total xylenes at 4.03 ug/L. No TPH-g, TPH-d, TPH-mo, or organochlorine pesticides were detected in the groundwater sample collected from borehole B-10. The results of the laboratory analyses on the groundwater samples showed cadmium at 12 ug/L, total chromium at 930 ug/L, lead at 82 ug/L, Nickel at 3,600 ug/L and zinc at 800 ug/L. Table 3 shows the results of the heavy metal laboratory analysis.

4.0 CONCLUSIONS AND RECOMENDATIONS

The results of this investigation revealed that the first water-bearing zone beneath the Site is flowing toward the northwest. The results of the laboratory analysis on the groundwater samples collected from MW-1, MW-2, MW-3 and B-9 indicated that the groundwater chemical plume is primarily located around the former USTs. As such, no chemicals were detected in the groundwater samples collected from MW-1, MW-2, and MW-3. However, elevated levels of petroleum hydrocarbons, including TPH-g and BTEX, were detected in a groundwater sample collected from

B-9. Figure 2 shows the locations of the groundwater monitoring wells and groundwater boreholes, B-9 and B-10. Although the horizontal extent of the petroleum hydrocarbons around the USTs is limited, the vertical extent of high levels of petroleum hydrocarbons in close proximity of the former USTs is not known.

The results of the laboratory analysis on the groundwater samples collected from B-10 did not indicate the presence of TPH-g, TPH-d, TPH-mo, or organochlorine pesticides. However, as the analytical results indicated, elevated levels of cadmium, chromium, lead nickel, and zinc were detected in the groundwater sample collected from B-10. Since these chemicals are naturally occurring chemicals in soil and sediments, and an unfiltered groundwater sample from B-10 was submitted to the laboratory, the high levels of heavy metals detected may not be a true representation of the dissolved phase concentrations in the groundwater.

In light of the above-mentioned conclusions, we recommend the following:

- 1) As part of the Phase II investigation, we recommend a limited CPT/MIP investigation around the former USTs and the former steam clean area in order to evaluate the hydrogeologic conditions and screening levels of contaminants at different depths. The actual depths of the CPT/MIP boreholes will be decided in the field based on the MIP results. We anticipate that the maximum depths of the CPT/MIP boreholes will be about 50 to 60 feet. The locations of the proposed CPT/MIPs are shown in Figure 4. The results of the CPT study will be used to construct geologic cross-sections in order to define the site conceptual model.
- 2) Based on the results of the CPT study, we will collect groundwater samples at different depths in order to define the vertical extent of the petroleum hydrocarbons in the groundwater. The groundwater boreholes will be installed next to CPT/MIP boreholes; after which a SP-15 groundwater sampler will be

used to collect samples. The groundwater samples collected next to the steam clean area will be filtered and analyzed for heavy metals. The other groundwater samples will be analyzed for TPH-g, TPH-d, TPH-mo, and BTEX.

- 3) Groundwater monitoring events should be conducted on a quarterly basis to evaluate the rate of plume migration and plume stability.

5.0 REFERENCES

Department of Water Resources, June 1974. "Evaluation of Ground Water Resources: Livermore and Sunol Valleys," Bulletin 118-2.

Department of Water Resources, October 1, 2003. "San Francisco Hydrologic Region Livermore Valley Groundwater Basin," Update to Bulletin 118-2.

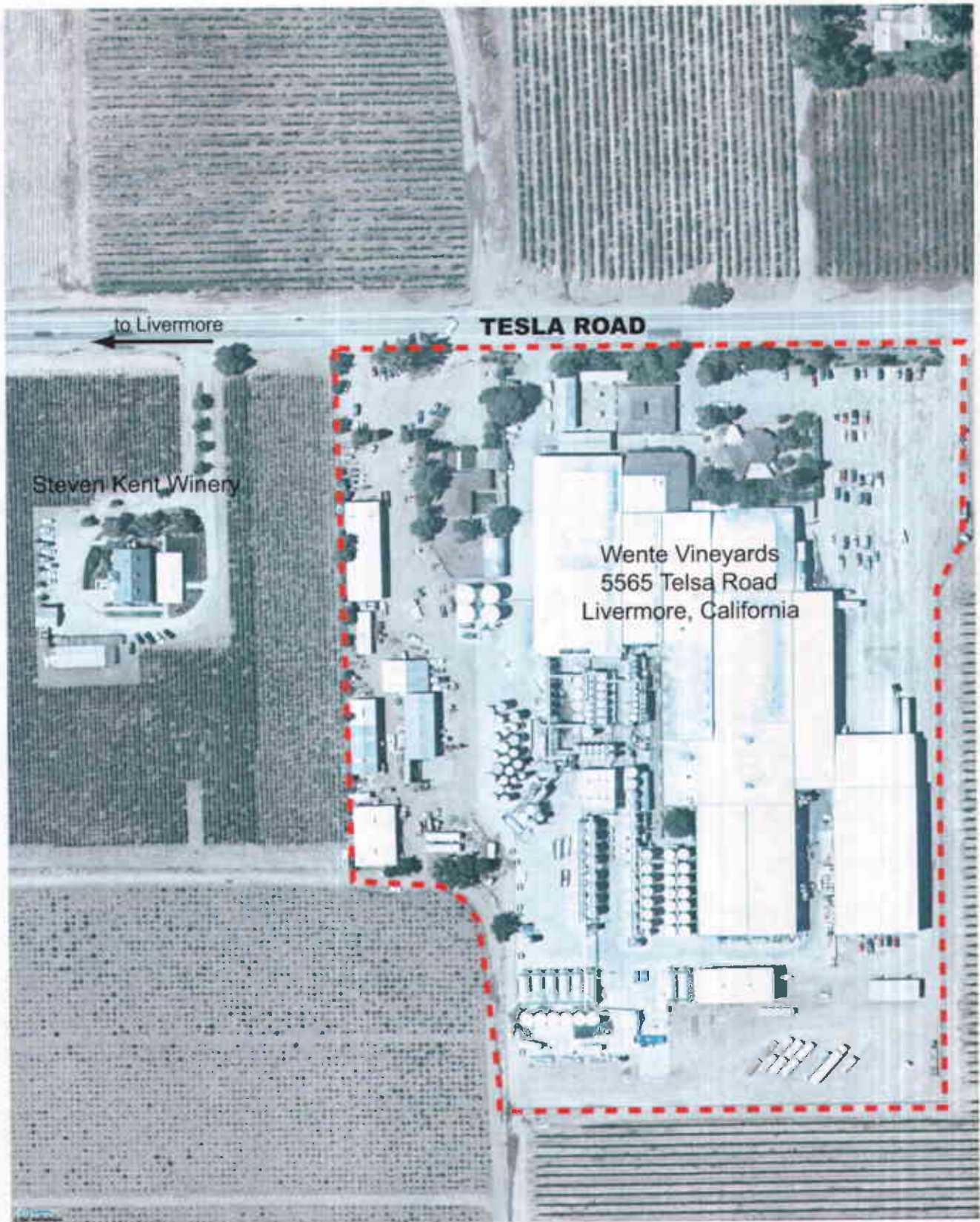
Lawrence Livermore National Laboratory, 1995. "Environmental Report of 1995."

Zone 7 Water Agency, August 3, 2004. "Well Location Map – 5565 Tesla Road" and Table of Well Owners.

Clayton Group Services, June 23, 2003. "Preliminary Subsurface Investigation."

Clayton Group Services, November 8, 2002. "Phase I Environmental Site Assessment."

FIGURES



to Livermore

TESLA ROAD

Steven Kent Winery

Wente Vineyards
5565 Telsa Road
Livermore, California



approximate scale in feet



Figure 1: Site vicinity map.

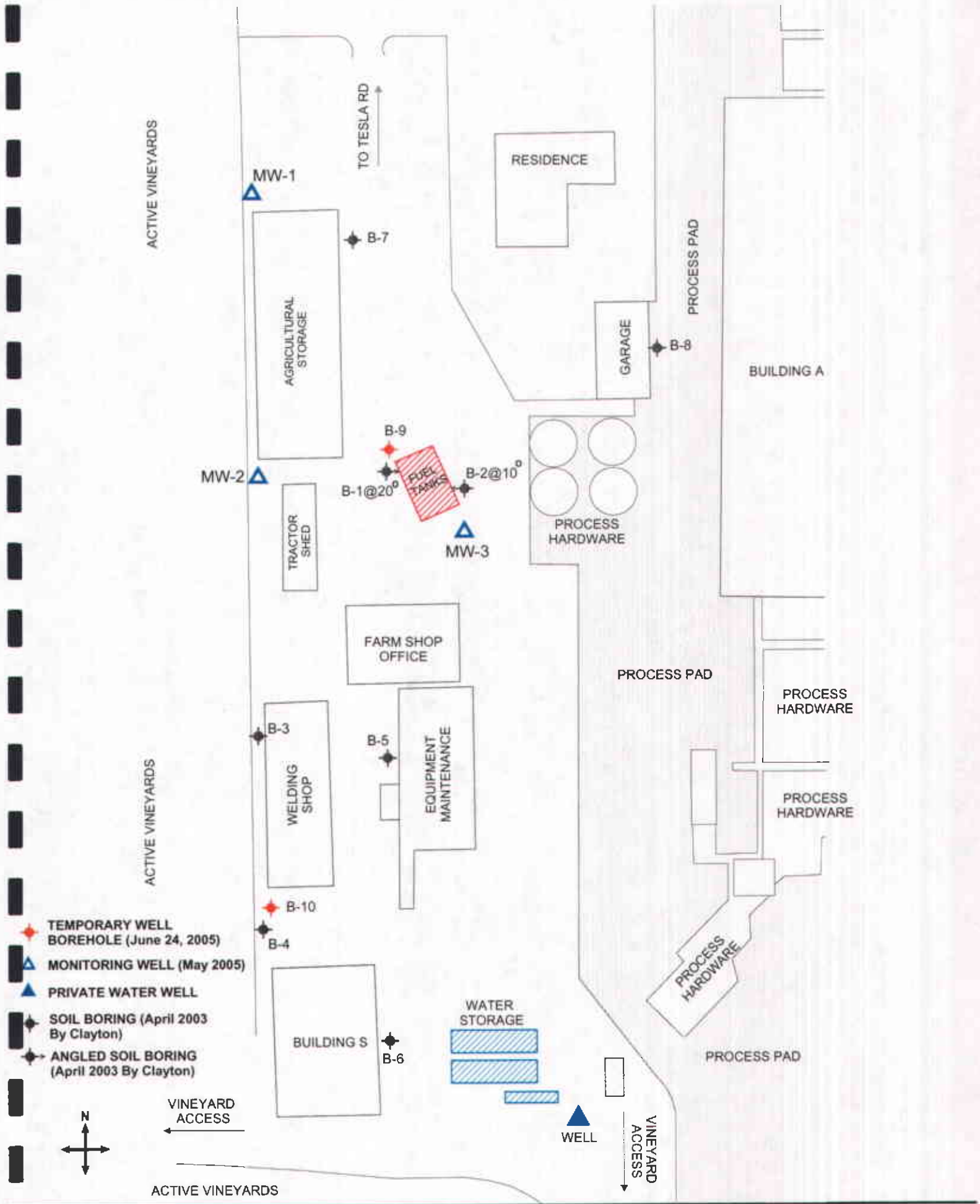


Figure 2: Map showing locations of newly installed monitoring wells, temporary well boreholes, and previous soil borings installed by Clayton Group Services.

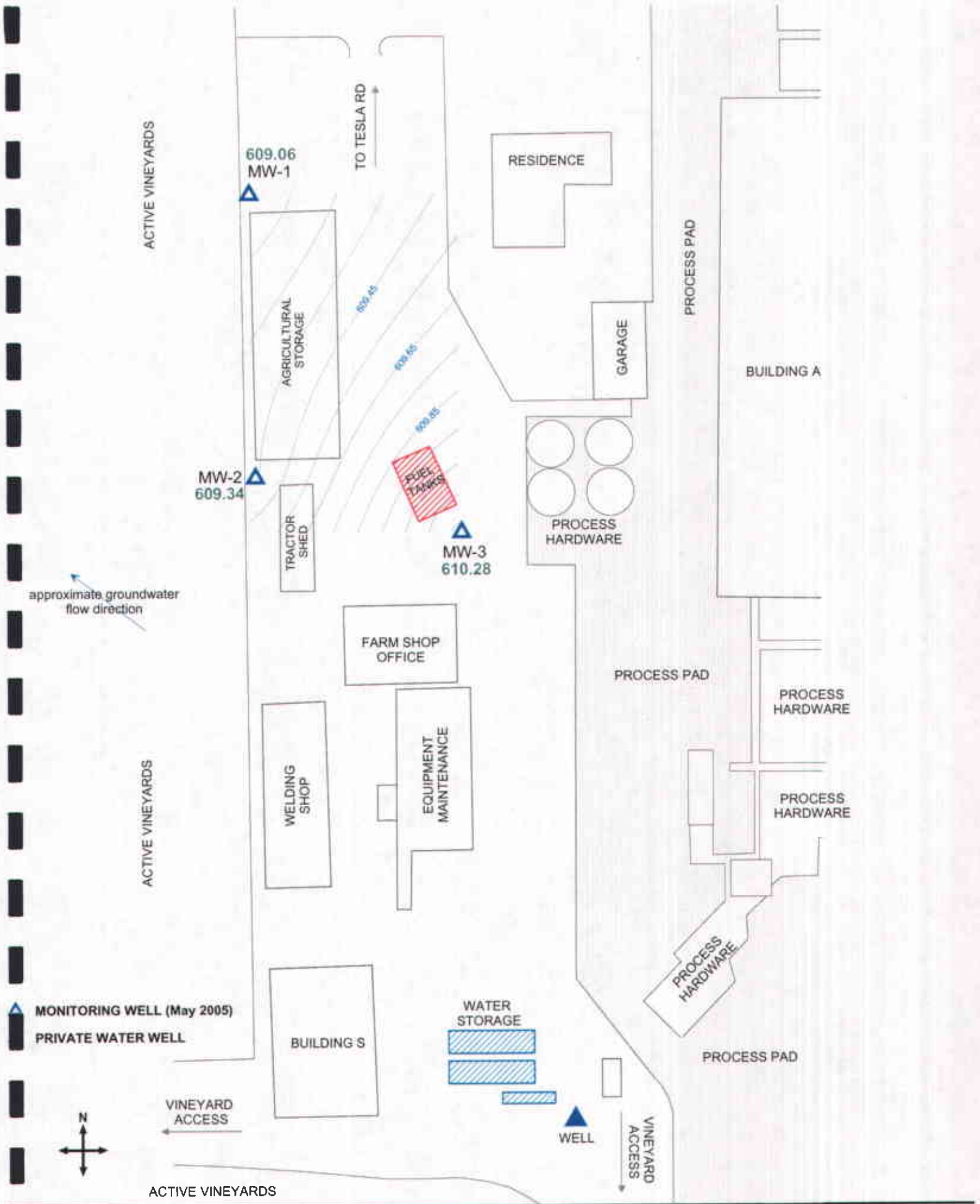
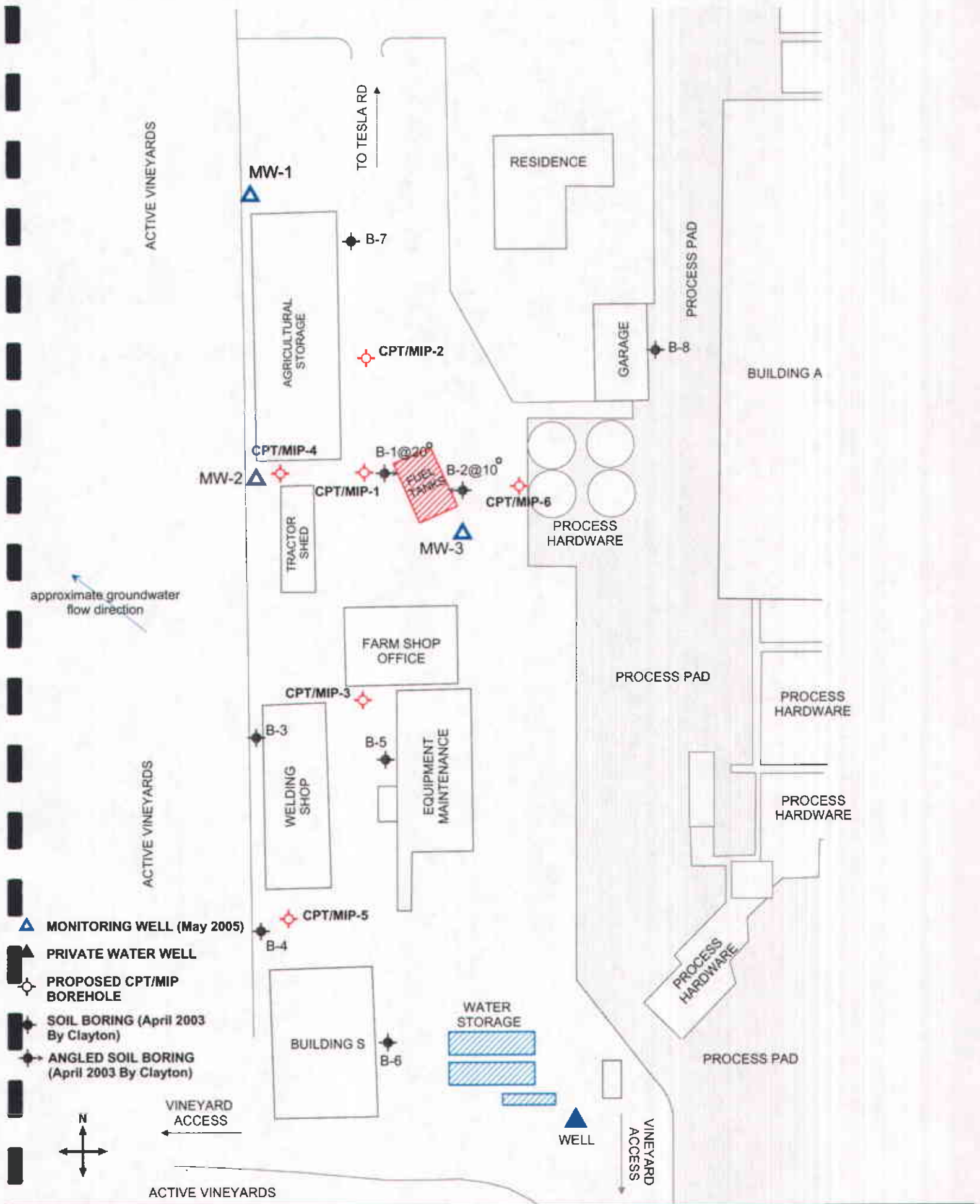


Figure 3: Groundwater elevation contour map in feet.



- MONITORING WELL (May 2005)
- PRIVATE WATER WELL
- PROPOSED CPT/MIP BOREHOLE
- SOIL BORING (April 2003 By Clayton)
- ANGLED SOIL BORING (April 2003 By Clayton)

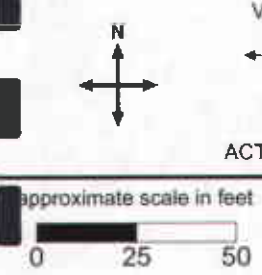


Figure 4: Map showing proposed CPT/MIP boreholes, newly installed monitoring wells, and existing soil borings installed by Clayton Group Services.

TABLES

Table 1
Groundwater Analytical Results
 5565 Tesla Rd, Livermore CA

Sample Location	MW-1	MW-2	MW-3	Onsite Well	5443 Tesla	B-9	B-10
Date	May 20, 2005	May 20, 2005	May 20, 2005	May 20, 2005	May 20, 2005	June 24, 2005	June 24, 2005
TPH-g (µg/L)	<200	<200	<200	<200	<200	1,850,000	<200
TPH-d (µg/L)	<50	<50	660	<50	<50	540,000 ^{LY}	<50
TPH-mo (µg/L)	320 ^{YZ}	<300	<300	<300	<300	<24,000	<300
Benzene (µg/L)	<0.5	<0.5	<0.5	<0.5	0.770	3,820	<0.5
Toluene (µg/L)	<0.5	<0.5	1.58	0.850	1.08	114,000	4.23
Ethyl- benzene (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	40,400	1.10
Total Xylenes (µg/L)	<1.0	<1.0	<1.0	<1.0	<1.0	177,700	4.03
MIBE (µg/L) EPA 8260B	<0.5	<0.5	<0.5	<0.5	<0.5	<462	<0.5
Cadmium (µg/L) EPA 6010B	NA	NA	NA	NA	NA	NA	12
Chromium (µg/L) EPA 6010B	NA	NA	NA	NA	NA	NA	930
Lead (µg/L) EPA 6010B	NA	NA	NA	NA	NA	NA	82
Nickel (µg/L) EPA 6010B	NA	NA	NA	NA	NA	NA	3,600
Zinc (µg/L) EPA 6010B	NA	NA	NA	NA	NA	NA	800

Notes:

< : Not detected above laboratory reporting limit.

H = Heavier hydrocarbons contributed to the quantitation.

Y = Sample exhibits chromatographic pattern which does not resemble standard.

Z = Sample exhibits unknown single peak or peaks.

L = Lighter hydrocarbons contributed to the quantitation.

Table 2
Soil Analytical Results
5565 Tesla Rd, Livermore CA

Sample Location	Date	TPH-g (µg/Kg)	TPH-d (mg/Kg)	TPH-mo (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl- benzene (µg/Kg)	Total Xylenes (µg/Kg)	MIBE (µg/Kg) EPA 8260B
MW-1 (8.5'-9')	May 5, 2005	<224	<0.99	<5.0	<0.560	<0.560	<0.560	<1.12	<0.560
MW-2 (7.5'-8')	May 5, 2005	<222	2.7 ^{H Y}	7.1	<0.555	<0.555	<0.555	<1.11	<0.555
MW-3 (6.5'-7')	May 5, 2005	<222	<0.99	<5.0	<0.555	<0.555	<0.555	<1.11	<0.555
B-9 (12.5'-13')	June 24, 2005	232,000	98 ^Y	6.6 ^Y	<21.5	<86.0	2,600	8170	28.0

Notes:

< : Not detected above laboratory reporting limit.

H = Heavier hydrocarbons contributed to the quantitation.

Y = Sample exhibits chromatographic pattern which does not resemble standard.

Z = Sample exhibits unknown single peak or peaks.

L =Lighter hydrocarbons contributed to the quantitation.

Table 3
Groundwater Analytical Results
Heavy Metals EPA Method 6010B
5565 Tesla Rd, Livermore CA

Compound	B-10 (ug/L)	RBSL (ug/L)
Cadmium	12	2.2
Chromium	930	180
Lead	82	2.5
Nickel	3,600	8.2
Zinc	800	81

RBSL=Risk Based Screening Levels for Commercial/Industrial Land Use

Appendix A

Drilling Permit



ZONE 7 WATER AGENCY

100 N. Canyons Pkwy, Livermore 94551
5897 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94566-5127 VOICE (925) 454-5056 FAX (925) 454-5728

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 5565 Tesla Rd
Livermore, CA 94550

PERMIT NUMBER 25050
WELL NUMBER 3S/2E-23C3 to 23C5 (MW-1 to MW-3)
APN 99A-2340-004-01

California Coordinates Source _____ Accuracy _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

CLIENT
Name Aris Krinetz - Wente Bros.
Address 5565 Tesla Rd Phone 925 456-2300
City Livermore Zip 94550

- A. GENERAL**
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.

APPLICANT
Name SOMA Environmental
John Lohman Fax 925 244-6601
Address 2680 Bishop Dr #203 Phone 925 244-6600
City San Ramon Zip 94583

- B. WATER SUPPLY WELLS**
1. Minimum surface seal diameter is four inches greater than the well casing diameter.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
 3. Grout placed by tremie.
 4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
 5. A sample port is required on the discharge pipe near the wellhead.

TYPE OF PROJECT:
Well Construction Geotechnical Investigation
Well Destruction Contamination Investigation
Cathodic Protection Other _____

- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
 3. Grout placed by tremie.

PROPOSED WELL USE:
Domestic Irrigation
Municipal Remediation
Industrial Groundwater Monitoring
Dewatering Other _____

- D. GEOTECHNICAL.** Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
- E. CATHODIC.** Fill hole above anode zone with concrete placed by tremie.
- F. WELL DESTRUCTION.** See attached.
- G. SPECIAL CONDITIONS.** Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.

DRILLING METHOD:
Mud Rotary Air Rotary Hollow Stem Auger
Cable Tool Direct Push Other _____

DRILLING COMPANY Woodward Drilling Co
DRILLER'S LICENSE NO. 710079 exp 7/05

WELL SPECIFICATIONS:
Drill Hole Diameter _____ in. Maximum _____
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth _____ ft. Number MW-1
to MW-3

SOIL BORINGS:
Number of Borings _____ Maximum _____
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 4/5/05 5/5/05
ESTIMATED COMPLETION DATE 4/5/05 5/5/05

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

Approved Wyman Hong Date 4/19/05
Wyman Hong

APPLICANT'S SIGNATURE _____ Date 4/18/05

ATTACH SITE PLAN OR SKETCH



ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5056 FAX (925) 454-5728

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 5565 Tesla Rd
Livermore, CA

PERMIT NUMBER 25093

WELL NUMBER _____

APN _____

California Coordinates Source _____ Accuracy _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

CLIENT
Name Acis Krimecz-Wente Bros
Address 5565 Tesla Rd Phone 925 454-2300
City Livermore Zip 94550

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

APPLICANT
Name SOMA Environmental
JOHN LOHMAN Fax 925 244 6601
Address 2680 Bishop Dr #203 Phone 925 244 6600
City San Ramon Zip 94583

B. WATER SUPPLY WELLS

1. Minimum surface seal diameter is four inches greater than the well casing diameter.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. Grout placed by tremie.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A sample port is required on the discharge pipe near the wellhead.

TYPE OF PROJECT:

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Well Destruction	<input type="checkbox"/>	Contamination Investigation	<input checked="" type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
3. Grout placed by tremie.

PROPOSED WELL USE:

Domestic	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Remediation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Groundwater Monitoring	<input checked="" type="checkbox"/>
Dewatering	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Hollow Stem Auger	<input type="checkbox"/>
Cable Tool	<input type="checkbox"/>	Direct Push	<input checked="" type="checkbox"/>	Other _____	<input type="checkbox"/>

E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

DRILLING COMPANY Woodward Drilling
DRILLER'S LICENSE NO. 710079

F. WELL DESTRUCTION. See attached. G. SPECIAL CONDITIONS: Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.

WELL SPECIFICATIONS:

Drill Hole Diameter _____ in.	Maximum _____
Casing Diameter _____ in.	Depth _____ ft.
Surface Seal Depth _____ ft.	Number _____

SOIL BORINGS:

Number of Borings <u>2</u>	Maximum _____
Hole Diameter <u>2</u> in.	Depth <u>20</u> ft.

ESTIMATED STARTING DATE _____
ESTIMATED COMPLETION DATE _____

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68

APPLICANT'S SIGNATURE [Signature] Date 6/8/05

Approved [Signature] Date 6/14/05
Wyman Hong

ATTACH SITE PLAN OR SKETCH

Appendix B

Geologic Borehole Logs
Well Construction Diagrams



PROJECT: 2842

DATE DRILLED: May 05, 2005.

SITE LOCATION: 5565 Tesla Rd.,
Livermore CA

CASING ELEVATION: NA

DRILLER: Woodward Drilling

DEPTH TO GW: 9' bgs

DRILLING METHOD: HSA

T.O.C. TO SCREEN: 10'

BORING DIAMETER: 8"

SCREEN LENGTH: 5'

LOGGED BY: J Lohman

APPROVED BY: M Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLING		GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
					SPLIT SPOON	CORE			
				Hand Auger top 5'					
	5		ML	SANDY SILT w/ Gravel: olive green, low plasticity, low firmness, moist; 20% gravel up to 2" (pebbles) less gravel w/ depth (fining downwards), 30% sand, 50% silt; Medium estimated permeability (MEK). No Petroleum Hydrocarbon (PHC) odor.				10	<p>Well Diagram details: - 2" Schedule 40 PVC Casing - Cement/Bentonite Grout - Bentonite Plug - Sand Pack 2712 - 0.01 Slotted Screen</p>
	4		ML	SANDY SILT w/ Gravel: olive green, 30% gravel up to 2", saturated; High estimated permeability (HEK). No PHC odor.				11	
	8		ML/CL	SILTY CLAY w/ Sand: olive mottled brown, firm high plasticity, moist, 45% clay, 40% silt, 15% sand; MEK. No PHC odor.				8	
	10							8	
	15							10	
	20							15	
	25								

COMMENTS: Sampled 8.5-9'; Well TD@15', Well Ø 2"



PROJECT: 2842

DATE DRILLED: May 05, 2005.

SITE LOCATION: 5565 Tesla Rd.,
Livermore CA

CASING ELEVATION: NA

DRILLER: Woodward Drilling

DEPTH TO GW: 8.5' bgs

DRILLING METHOD: HSA

T.O.C. TO SCREEN: 10'

BORING DIAMETER: 8"

SCREEN LENGTH: 5'

LOGGED BY: J Lohman

APPROVED BY: M Sepehr

DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON		GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
				—	SAMPLED CORE			
0-5			Hand Auger top 5'					
5-7	[Vertical Line Pattern]	ML	SANDY SILT w/ Gravel: olive green, low plasticity, low firmness, damp; 20% gravel, 30% sand, 50% silt; Medium estimated permeability (MEK). No Petroleum Hydrocarbon (PHC) odor.				29	<p>2" Schedule 40 PVC Casing Cement/Bentonite Grout Bentonite Plug 0.01 Slotted Screen</p>
7-10	[Vertical Line Pattern]	ML	SANDY SILT w/ gravel: 60% silt, 25% sand (medium to small), 15% <=2" gravel, saturated. HEK. No PHC odor.			25		
10-13	[Vertical Line Pattern]	ML	SANDY SILT Stringer: olive mottled orange stringer w/o gravel, highly plastic, very firm, damp; LEK.			50		
13-15	[Vertical Line Pattern]	SM	SILTY SAND w/ Gravel: coarse sand 50% sand, 30% silt, 20% gravel, saturated; HEK. No PHC odor.			35		
15-25							10	
							11	
							6	
							4	
							4	
							8	
							10	
							12	
							15	

COMMENTS: Sampled 7.5-8'; Well TD@15', Well Ø 2"



PROJECT: 2842

DATE DRILLED: May 05, 2005.

SITE LOCATION: 5565 Tesla Rd.,
Livermore CA

CASING ELEVATION: NA

DRILLER: Woodward Drilling

DEPTH TO GW: 7.5' bgs

DRILLING METHOD: HSA

T.O.C. TO SCREEN: 8'

BORING DIAMETER: 8"

SCREEN LENGTH: 5'

LOGGED BY: J Lohman

APPROVED BY: M Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
				Hand Auger top 2'				
	5		ML	SANDY SILT: brown, low plasticity, low firmness, saturated, 80% silt, 20% sand, 40% silt; Medium estimated permeability (MEK). No Petroleum Hydrocarbon (PHC) odor.				
	7							
	10		SM	SILTY SAND: brown, low plasticity, low firmness, saturated, 60% sand, 40% silt; HEK.				
	8							
	20		SM	SANDY SILT w/ Gravel: dark gray, 50% gravel, saturated; No PHC odor.				
	5		CL	SILTY CLAY: damp highly plastic, firm damp, orange brown mottled green; LEK. Slight PHC odor.				
11	15							
	20							
	25							

COMMENTS: Sampled 6.5-7'; Well TD@13', Well Ø 2"



PROJECT: 2842

DATE DRILLED: 6/24/05

SITE LOCATION: 5565 Tesla Road,
Livermore, CA

CASING ELEVATION: NA

DRILLER: Woodward Drilling

DEPTH TO GW: 13.5'

DRILLING METHOD: HSA

T.O.C. TO SCREEN: NA

BORING DIAMETER: 8"

SCREEN LENGTH: NA

LOGGED BY: J Lohman

APPROVED BY: Sepehr M, Ph.D., PE

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM NA
				Hand Auger top 5'				
62	5		CL	5-7' No recovery SILTY CLAY WITH GRAVEL (20%): Tan, low plasticity, damp; Medium Estimated Permeability (MEK). Medium Petroleum Hydrocarbon (PHC) odor.	NR		35 50 23 27 32 12	
584	10		CL	SILTY CLAY: Orange mottled olive/black, low plasticity, moist; Low Estimated Permeability (LEK). Strong PHC odor.			4 6 10 12 6 7 9 17	
688			CL	SILTY CLAY WITH GRAVEL (20%) & SAND (10%): Tan, saturated, gravel up to 1", poorly sorted; HEK. Strong PHC odor.		▽	20 20 10 6	
786	15							
	20							
	25							

COMMENTS: TD@14ft, GW@ 13.5, Soil Sample @ 12.5'-13'; Strong PHC odor.



PROJECT: 2842

DATE DRILLED: 6/24/05

SITE LOCATION: 5565 Tesla Road,
Livermore, CA

CASING ELEVATION: NA

DRILLER: Woodward Drilling

DEPTH TO GW: 19ft

DRILLING METHOD: HSA

T.O.C. TO SCREEN: NA

BORING DIAMETER: 8"

SCREEN LENGTH: NA

LOGGED BY: J Lohman

APPROVED BY: Sepehr M, Ph.D., PE

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM NA
				Hand Auger top 5'					
	5		SM	SILTY SAND: Tan, fine grained, fining downwards; High Estimated Permeability (HEK). No Petroleum Hydrocarbon (PHC) odor.				7 9 11 12	
	6		CL	SILTY CLAY: Brown mottled gray, medium plasticity, firm; Medium Estimated Permeability (MEK). No PHC odor.				6 7 10 10	
	10			Higher plasticity and firmness w/ depth- increasing dampness w/ depth				7 10 11 12	
	15							6 6 10 10	
	20							11 13 18 23	
								7 8 10 10	
								7 11 17 22	
	25								

COMMENTS: TD @ 20ft; GW @ 19' ; No PHC odor.

Appendix C

Well Development Logs



Well No.: MW-1
 Casing Diameter: 2 inches
 Depth of Well: 15 feet
 Top of Casing Elevation: 615.16 feet
 Depth to Groundwater: 6.2/6.1 feet pre/post
 Groundwater Elevation: 609.06 feet
 Water Column Height: 8.9 feet
 Purged Volume: 55 gallons

Project No.: 2831
 Address: 5565 Tesla Rd
 Livermore, CA
 Date: May 20, 2005
 Sampler: John Lohman

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: _____
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
9:35 AM	3	7.35	15.8	1720
9:37 AM	6	7.46	15.2	1750
9:39 AM	9	7.64	14.6	1720
9:41 AM	12	7.61	14.5	1730
9:43 AM	15	7.54	14.5	1730
9:45 AM	18	7.54	14.4	1730
10:03 AM	55	7.56	14.5	1720

10:05 AM SAMPLES



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-2
 Casing Diameter: 2 inches
 Depth of Well: 15 feet
 Top of Casing Elevation: 616.03 feet
 Depth to Groundwater: 6.7/6.69 feet pre/post
 Groundwater Elevation: 609.34 feet
 Water Column Height: 8.31 feet
 Purged Volume: 26 gallons

Project No.: 2831
 Address: 5565 Tesla Rd
 Livermore, CA
 Date: May 20, 2005
 Sampler: John Lohman

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: _____

Sheen: No Yes Describe: _____

Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:45 AM	START PURGE			
10:49 AM	4	7.58	17.0	1750
10:53 AM	8	7.44	16.5	1730
10:57 AM	12	7.48	16.1	1730
11:01 AM	16	7.52	16.1	1730
11:05 AM	20	7.49	16.2	1720
11:10 AM	26	7.53	15.8	1720

11:15 AM SAMPLES



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-3
Casing Diameter: 2 inches
Depth of Well: 13 feet
Top of Casing Elevation: 617.32 feet
Depth to Groundwater: 7.02/7.04 feet *pre/post*
Groundwater Elevation: 610.28 feet
Water Column Height: 5.96 feet
Purged Volume: 25 gallons

Project No.: 2831
Address: 5565 Tesla Rd
Livermore, CA
Date: May 20, 2005
Sampler: John Lohman

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: _____

Sheen: No Yes Describe: _____

Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:40 AM	START PURGE			
11:44 AM	4	7.51	21.2	1780
11:48 AM	8	7.56	18.6	1760
11:55 AM	15	7.61	17.8	1740
11:58 AM	20	7.59	18.0	1740
12:00 PM	25	7.62	18.1	1760
12:05 PM	SAMPLES			

Appendix D

Lab Data and COC

PAL Pacific Analytical Laboratory

851 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

13 July 2005

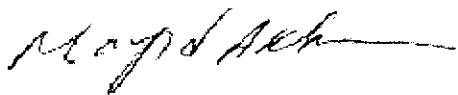
Mansour Sepehr
SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon, CA 94583

RE: 5565 Tesla Rd, Livermore

Work Order Number: 5060021

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



Maiid Akhavan
Laboratory Director

SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Mansour Sepehr	Reported: 13-Jul-05 13:22
--	--	------------------------------

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-9 12.5'-13.0'	5060021-01	Soil	24-Jun-05 13:30	27-Jun-05 16:52

SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Mansour Sepehr	Reported: 13-Jul-05 13:22
--	--	------------------------------

Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-9 12.5'-13.0' (5060021-01) Soil Sampled: 24-Jun-05 13:30 Received: 27-Jun-05 16:52									
Gasoline (C6-C12)	232000	8600	ug/kg	43	BG51301	27-Jun-05	13-Jul-05	EPA 8260B	
Benzene	ND	43.0	"	"	"	"	"	"	
Ethylbenzene	2600	21.5	"	"	"	"	"	"	
m&p-Xylene	6750	43.0	"	"	"	"	"	"	
o-xylene	1420	21.5	"	"	"	"	"	"	
Toluene	ND	108	"	"	"	"	"	"	
MTBE	28.0	21.5	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %		70-130	"	"	"	"	
Surrogate: Dibromofluoromethane		76.2 %		70-130	"	"	"	"	
Surrogate: Perdeuterotoluene		94.8 %		70-130	"	"	"	"	

SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Mansour Sepehr	Reported: 13-Jul-05 13:22
--	--	------------------------------

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch BG51301 - EPA 5030 Soil MS

Blank (BG51301-BLK1)

Prepared & Analyzed: 13-Jul-05

Surrogate: 4-Bromofluorobenzene	40.0		ug/kg	50.0		80.0	70-130			
Surrogate: Dibromofluoromethane	45.7		"	50.0		91.4	70-130			
Surrogate: Perdeuterotoluene	44.8		"	50.0		89.6	70-130			
Gasoline (C6-C12)	ND	200	"							
Benzene	ND	1.00	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	1.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.50	"							
MTBE	ND	0.500	"							

LCS (BG51301-BS1)

Prepared & Analyzed: 13-Jul-05

Surrogate: 4-Bromofluorobenzene	47.2		ug/kg	50.0		94.4	70-130			
Surrogate: Dibromofluoromethane	44.7		"	50.0		89.4	70-130			
Surrogate: Perdeuterotoluene	46.2		"	50.0		92.4	70-130			
Gasoline (C6-C12)	1870	200	"	2000		93.5	70-130			
Benzene	101	1.00	"	100		101	70-130			
Ethylbenzene	116	0.500	"	100		116	70-130			
m&p-Xylene	117	1.00	"	100		117	70-130			
o-xylene	117	0.500	"	100		117	70-130			
Toluene	89.6	2.50	"	100		89.6	70-130			
MTBE	82.8	0.500	"	100		82.8	70-130			

LCS Dup (BG51301-BSD1)

Prepared & Analyzed: 13-Jul-05

Surrogate: 4-Bromofluorobenzene	43.9		ug/kg	50.0		87.8	70-130			
Surrogate: Dibromofluoromethane	43.3		"	50.0		86.6	70-130			
Surrogate: Perdeuterotoluene	47.2		"	50.0		94.4	70-130			
Gasoline (C6-C12)	1940	200	"	2000		97.0	70-130	3.67	20	
Benzene	112	1.00	"	100		112	70-130	10.3	20	
Ethylbenzene	121	0.500	"	100		121	70-130	4.22	20	
m&p-Xylene	123	1.00	"	100		123	70-130	5.00	20	
o-xylene	120	0.500	"	100		120	70-130	2.53	20	
Toluene	100	2.50	"	100		100	70-130	11.0	20	
MTBE	91.1	0.500	"	100		91.1	70-130	9.55	20	

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

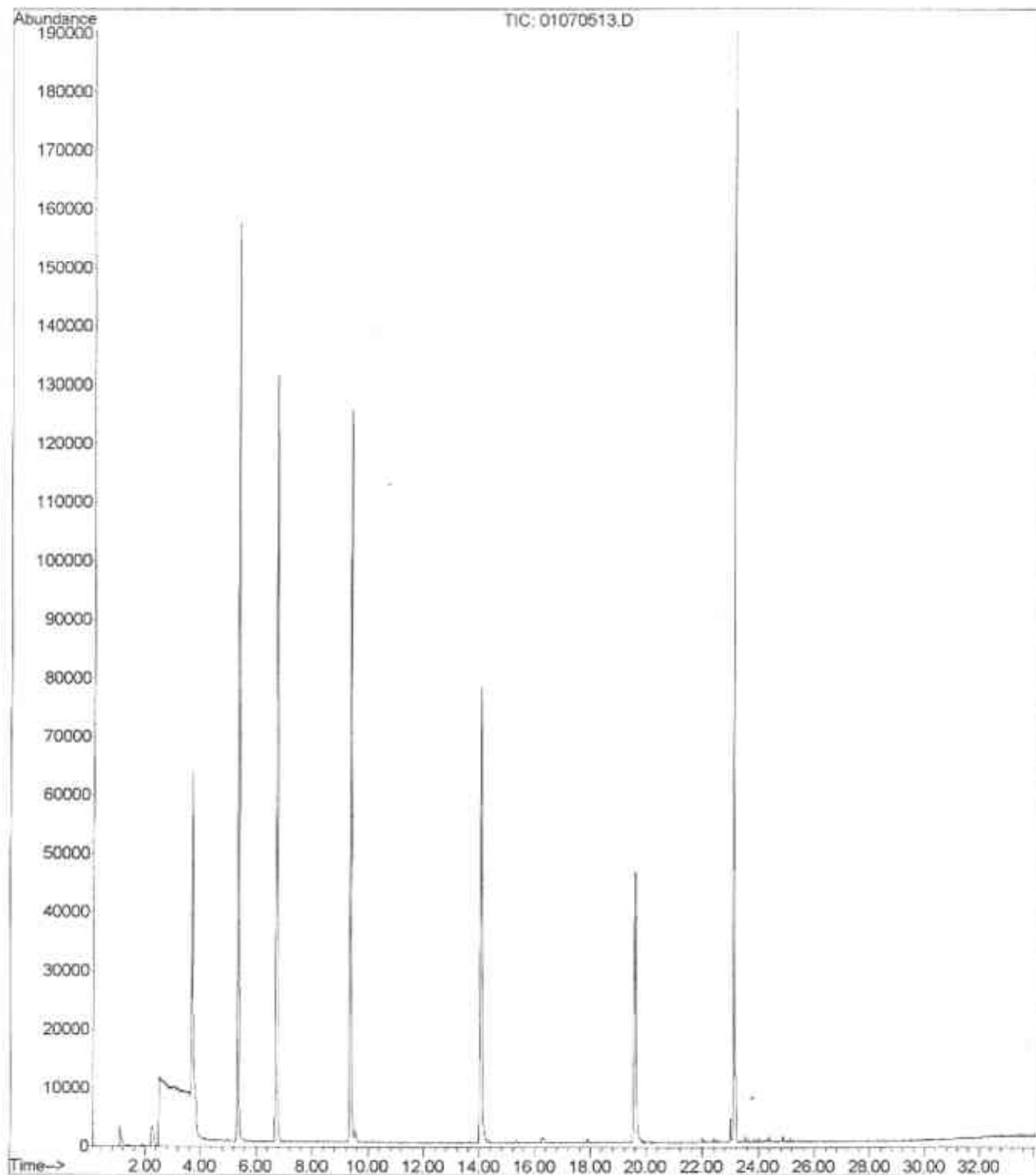
Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Mansour Sepehr

Reported:
13-Jul-05 13:22

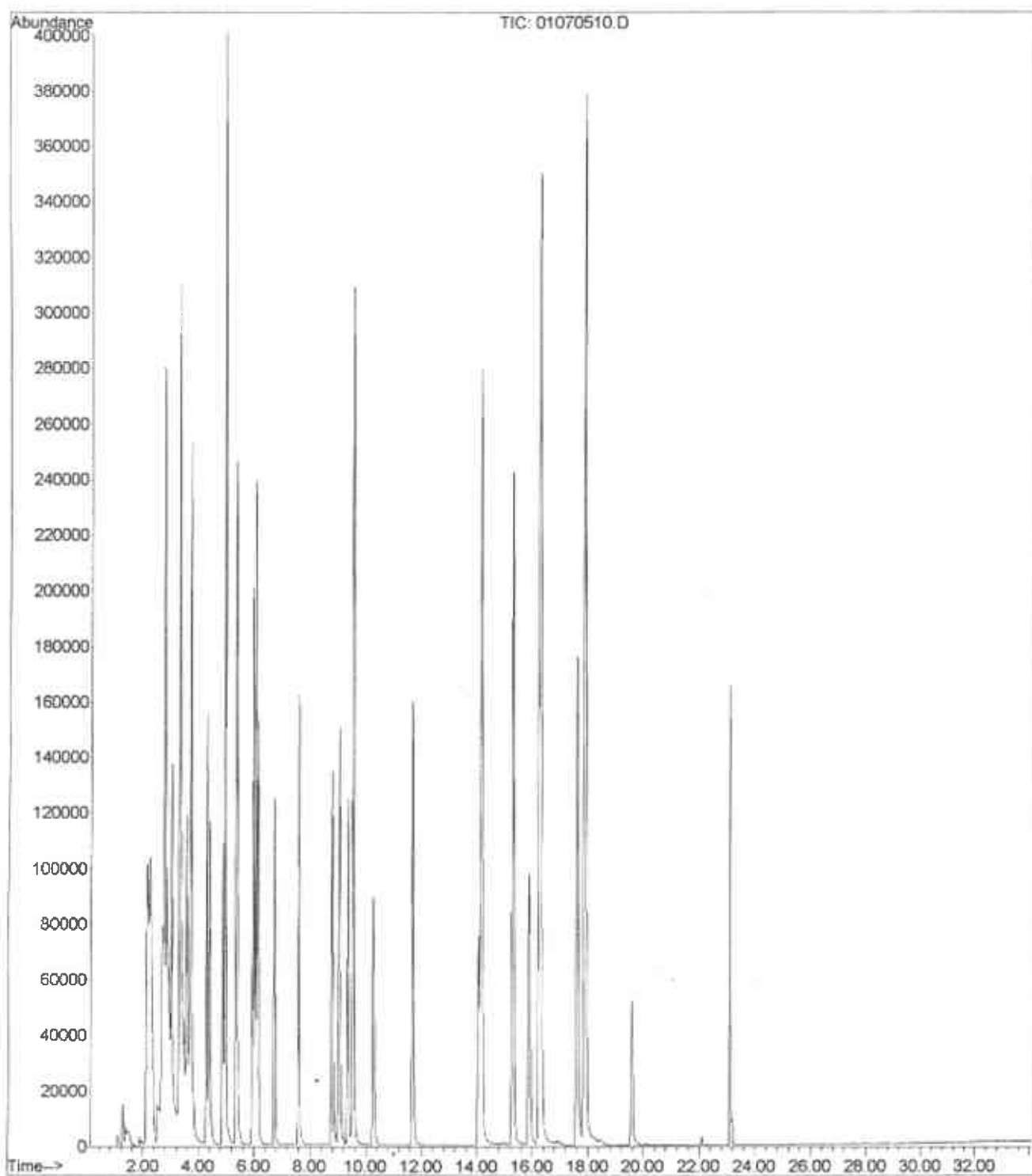
Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

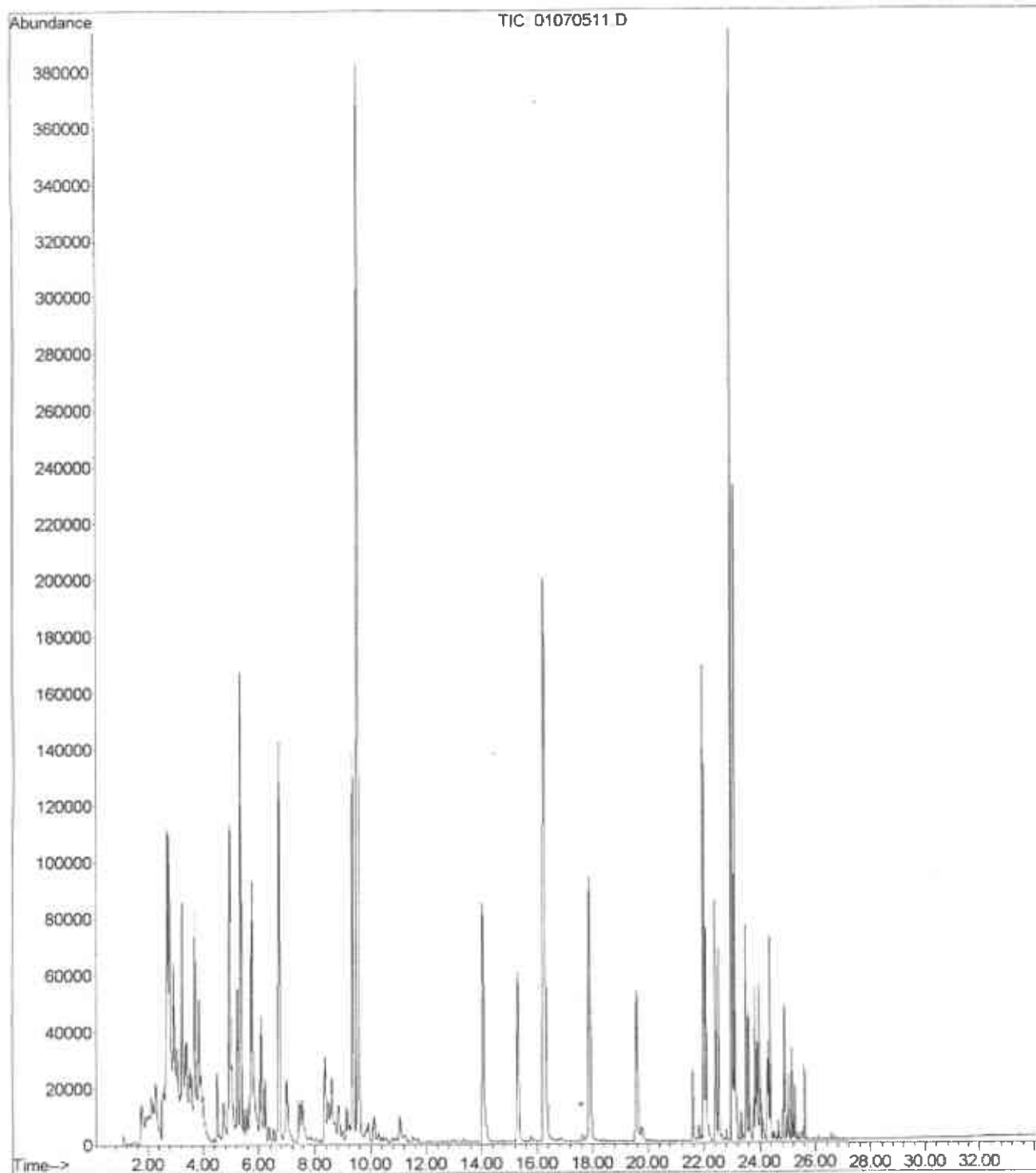
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Operator :
Acquired : 5 Jul 2005 8:04 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BG51301-BLK1
Misc Info :
Vial Number: 13



File :C:\MSDCHEM\1\DATA\2005-Jul-01-1604.b\01070510.D
Operator :
Acquired : 5 Jul 2005 5:52 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BG51301-BS1@voc
Misc Info :
Vial Number: 10



File :C:\MSDCHEM\1\DATA\2005-Jul-01-1604.b\01070511.D
Operator :
Acquired : 5 Jul 2005 6:36 pm using AcqMethod VOXY.M
Instrument : PAL GCMS
Sample Name: BG51301-BS1@gas
Misc Info :
Vial Number: 11





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

ANALYTICAL REPORT


Prepared for:

Pacific Analytical Laboratory
851 West Midway Ave
Suite 201B
Alameda, CA 94501

Date: 13-JUL-05
Lab Job Number: 180265
Project ID: STANDARD
Location: 5565 Tesla Rd. Livermore

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: 
Project Manager

Reviewed by: 
Operations Manager

This package may be reproduced only in its entirety.

CHAIN OF CUSTODY

Analyses

Pacific Analytical Laboratory

851 West Midway Ave., Suite 201B
 Alameda, CA 94501
 510-864-0364 phone
 510-864-0365 fax

180265

C&T LOGIN # 5060021

Project No: 2842

Sampler: John Lohman

Project Name: 5565 Tesla Rd Livermore

Report To: Joyce Bobek

Turnaround Time: Standard

Company: SOMA Environmental

Telephone: 925-244-6600

Fax: 925-244-6601

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
1	B-9 12.5'-13.0'	6/24/05 1:30 PM	X			1				X

* X	X																				

PH-151-BTEX-WAS-02508
 TPH-d 8015M

Notes: Silica Gel Cleanup Method

Received <input checked="" type="checkbox"/> On site <input type="checkbox"/> Cold <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Intact

RELINQUISHED BY:	RECEIVED BY:
<i>[Signature]</i> 4:00pm DATE/TIME: 6/27/05	<i>[Signature]</i> 6/27/05 DATE/TIME:
<i>[Signature]</i> 9:50am DATE/TIME: 6/28/05	<i>[Signature]</i> 9:50pm DATE/TIME: 6/28/05
DATE/TIME	DATE/TIME

CASE NARRATIVE

Laboratory number: 180265
Client: Pacific Analytical Laboratory
Location: 5565 Tesla Rd. Livermore
Request Date: 06/28/05
Samples Received: 06/28/05

This hardcopy data package contains sample and QC results for one soil sample, requested for the above referenced project on 06/28/05. The sample was received on ice and intact.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.



Total Extractable Hydrocarbons

Lab #:	180265	Location:	5565 Tesla Rd. Livermore
Client:	Pacific Analytical Laboratory	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	B-9 12.5'-13.0'	Batch#:	103389
Matrix:	Soil	Sampled:	06/24/05
Units:	mg/Kg	Received:	06/28/05
Basis:	as received	Prepared:	06/29/05
Diln Fac:	1.000	Analyzed:	06/29/05

Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 180265-001

Analyte	Result	RL
Diesel C10-C24	98 L Y	1.0
Motor Oil C24-C36	6.6 Y	5.0

Surrogate	%REC	Limits
Hexacosane	97	51-136

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC299175

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	89	51-136

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

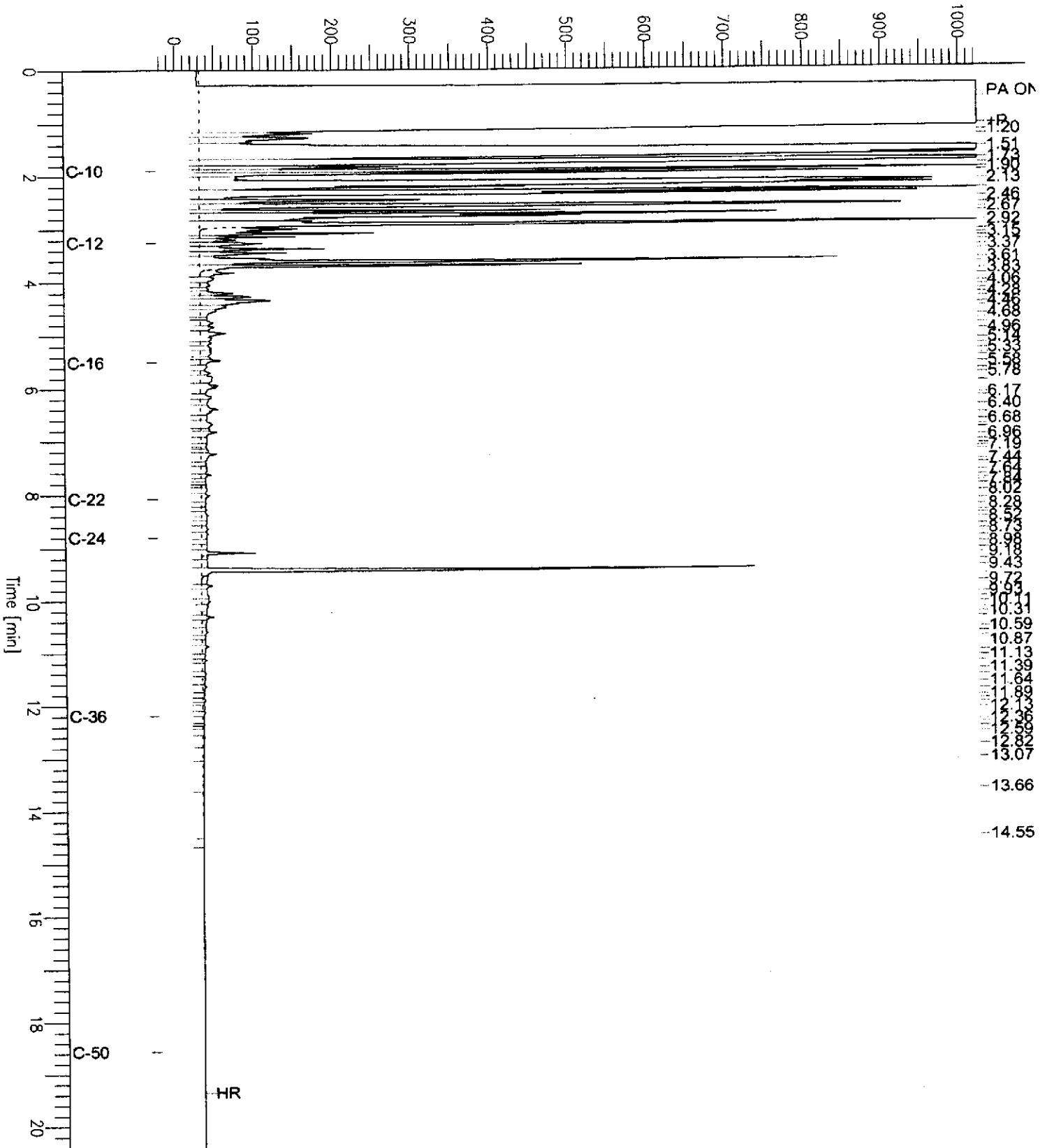
Chromatogram

Sample Name : 180265-001sg,103389
FileName : G:\GC11\CHA\180A016.RAW
Method : ATEH156S.MTH
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: 103389
Date : 6/30/05 08:29 AM
Time of Injection: 6/29/05 06:50 PM
Low Point : -24.05 mV
Plot Scale: 1048.1 mV

Page 1 of 1

Response [mV]

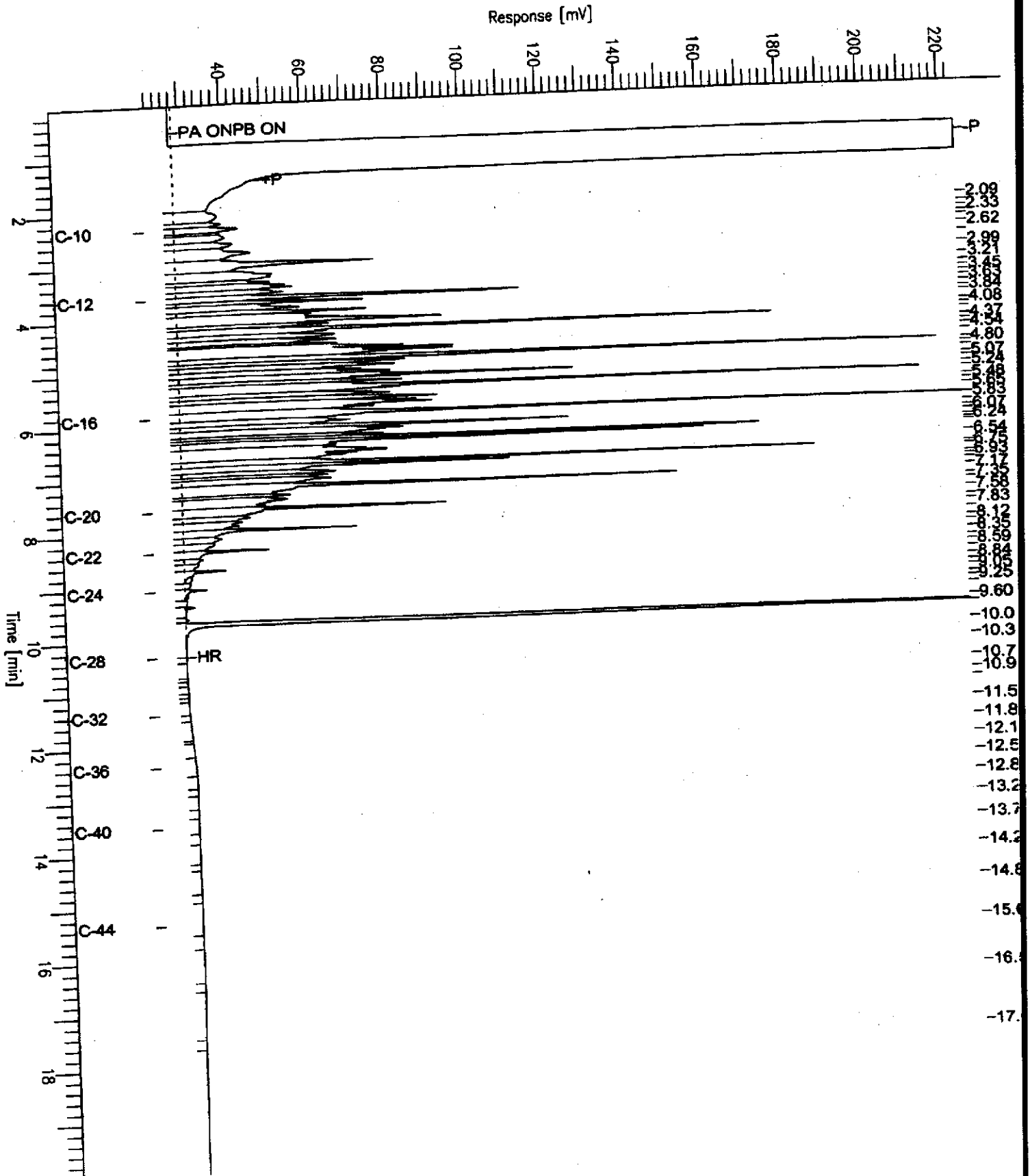


Chromatogram

Sample Name : ccv,S778,dsl
FileName : G:\GC13\CHB\180B003.RAW
Method : BTEH1615.MTH
Start Time : 0.01 min
Scale Factor : 0.0

End Time : 19.99 min
Plot Offset: 21 mv

Sample #: 500mg/L
Date : 6/29/05 12:02 PM
Time of Injection: 6/29/05 11:33 AM
Low Point : 21.01 mV
High Point : 223.74 mV
Plot Scale: 202.7 mV



Chromatogram

Sample Name : ccv,S653.mo
FileName : G:\GC11\CHB\180B004.RAW
Method : BTEH161S.MTH
Start Time : 0.01 min
Scale Factor : 0.0

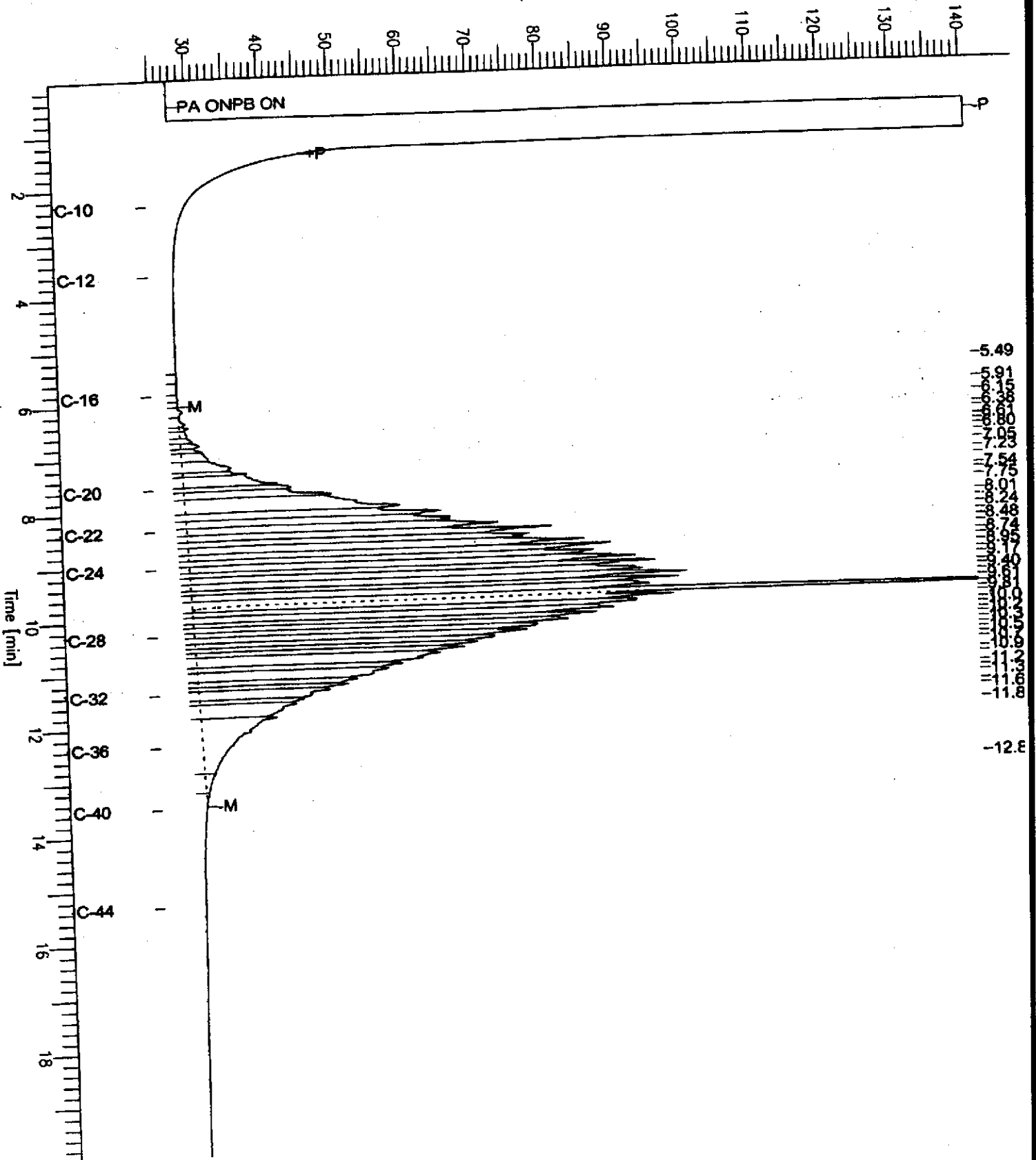
End Time : 19.99 min
Plot Offset : 24 mV

Sample #: 500mg/L
Date : 6/29/05 12:33 PM
Time of Injection: 6/29/05 12:01 PM
Low Point : 24.46 mV
Plot Scale: 116.0 mV

Page 1 of 1

High Point : 140.49 mV

Response [mV]



-12.E

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	180265	Location:	5565 Tesla Rd. Livermore
Client:	Pacific Analytical Laboratory	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC299176	Batch#:	103389
Matrix:	Soil	Prepared:	06/29/05
Units:	mg/Kg	Analyzed:	06/29/05
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	UREC	Limits
Diesel C10-C24	50.19	45.04	90	52-137
Surrogate	UREC	Limits		
Hexacosane	87	51-136		



Batch QC Report

Total Extractable Hydrocarbons

Lab #:	180265	Location:	5565 Tesla Rd. Livermore
Client:	Pacific Analytical Laboratory	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	180291-010	Batch#:	103389
Matrix:	Soil	Sampled:	06/28/05
Units:	mg/Kg	Received:	06/28/05
Basis:	as received	Prepared:	06/29/05

Type: MS Analyzed: 06/29/05
 Lab ID: QC299177 Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	6.223	50.42	43.62	74	11-169

Surrogate	%REC	Limits
Hexacosane	74	51-136

Type: MSD Analyzed: 06/30/05
 Lab ID: QC299178 Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.18	47.94	83	11-169	10	49

Surrogate	%REC	Limits
Hexacosane	79	51-136

RPD= Relative Percent Difference

PAL Pacific Analytical Laboratory

851 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

06 July 2005

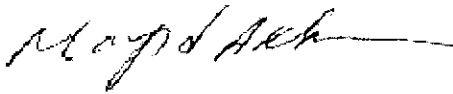
Mansour Sepehr
SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon, CA 94583

RE: 5565 Tesla Rd, Livermore

Work Order Number: 5060020

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



Maiid Akhavan
Laboratory Director

CHAIN OF CUSTODY

Pacific Analytical Laboratory
 851 West Midway Ave., Suite 201B
 Alameda, CA 94501
 510-864-0364 phone
 510-864-0365 fax

PAL
 G&T LOGIN # ~~500~~ 5060020

Analyses

Project No: 2842
 Project Name: 5565 Tesla Rd Livermore
 Turnaround Time: Standard

Sampler: John Lohman
 Report To: Joyce Bobek
 Company: SOMA Environmental
 Telephone: 925-244-6600
 Fax: 925-244-6601

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative					TPHg, BTEX, MIBE 8260B	TPH-d TPH-Mo 8015M	Organo Chlorine Pesticides (8081)	LUFT-5 Metals 60008
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE	NONE				
	B-9	6/24/2005 1:45 PM		X		5 VOAs	X				X				
	B-9	6/24/2005 1:45 PM		X		1 Amber Liter					X	X			
	B-10	6/24/2005 4:10 PM		X		5 VOAS	X				X				
	B-10	6/24/2005 4:10 PM		X		2 Amber Liters					X	X			
	B-10	6/24/2005 4:10 PM		X		500 ML Poly				X	X		X		

Notes: Silica Gel Cleanup Method

RELINQUISHED BY:	RECEIVED BY:
<i>[Signature]</i> 4:00 PM 6/27/05 DATE/TIME	James Zivny 6/27/05 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Mansour Sephr	Reported: 06-Jul-05 16:51
--	---	------------------------------

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-9	5060020-01	Water	24-Jun-05 13:45	27-Jun-05 16:35
B-10	5060020-02	Water	24-Jun-05 16:10	27-Jun-05 16:35

SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Mansour Sepehr

Reported:
06-Jul-05 16:51

Volatile Organic Compounds by EPA Method 8260B Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-9 (5060020-01RE3) Water Sampled: 24-Jun-05 13:45 Received: 27-Jun-05 16:35									
Gasoline (C6-C12)	185000	185000	ug/l	924.5	BG50601	27-Jun-05	06-Jul-05	EPA 8260B	
Benzene	3820	462	"	"	"	"	"	"	
Ethylbenzene	40400	462	"	"	"	"	"	"	
m&p-Xylene	104000	924	"	"	"	"	"	"	
o-xylene	73700	462	"	"	"	"	"	"	
Toluene	114000	1850	"	"	"	"	"	"	
MTBE	ND	462	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.2 %	70-130						
Surrogate: Dibromofluoromethane		87.6 %	70-130						
Surrogate: Perdeuterotoluene		91.8 %	70-130						
B-10 (5060020-02RE1) Water Sampled: 24-Jun-05 16:10 Received: 27-Jun-05 16:35									
Gasoline (C6-C12)	ND	200	ug/l	1	BG50601	27-Jun-05	06-Jul-05	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	1.10	0.500	"	"	"	"	"	"	
m&p-Xylene	2.60	1.00	"	"	"	"	"	"	
o-xylene	1.43	0.500	"	"	"	"	"	"	
Toluene	4.23	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		74.6 %	70-130						
Surrogate: Dibromofluoromethane		93.6 %	70-130						
Surrogate: Perdeuterotoluene		89.2 %	70-130						

SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Mansour Sepehr	Reported: 06-Jul-05 16:51
--	--	------------------------------

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch BG50601 - EPA 5030 Water MS

Blank (BG50601-BLK1)

Prepared & Analyzed: 06-Jul-05

Surrogate: 4-Bromofluorobenzene	40.0		ug/l	50.0		80.0	70-130			
Surrogate: Dibromofluoromethane	45.7		"	50.0		91.4	70-130			
Surrogate: Perdeuterotoluene	44.8		"	50.0		89.6	70-130			
Gasoline (C6-C12)	ND	200	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	1.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.00	"							
MTBE	ND	0.500	"							

LCS (BG50601-BS1)

Prepared & Analyzed: 06-Jul-05

Surrogate: 4-Bromofluorobenzene	47.2		ug/l	50.0		94.4	70-130			
Surrogate: Dibromofluoromethane	44.7		"	50.0		89.4	70-130			
Surrogate: Perdeuterotoluene	46.2		"	50.0		92.4	70-130			
Gasoline (C6-C12)	1870	200	"	2000		93.5	70-130			
Benzene	101	0.500	"	100		101	70-130			
Ethylbenzene	116	0.500	"	100		116	70-130			
m&p-Xylene	117	1.00	"	100		117	70-130			
o-xylene	117	0.500	"	100		117	70-130			
Toluene	89.6	2.00	"	100		89.6	70-130			
MTBE	82.8	0.500	"	100		82.8	70-130			

LCS Dup (BG50601-BSD1)

Prepared & Analyzed: 06-Jul-05

Surrogate: 4-Bromofluorobenzene	43.9		ug/l	50.0		87.8	70-130			
Surrogate: Dibromofluoromethane	43.3		"	50.0		86.6	70-130			
Surrogate: Perdeuterotoluene	47.2		"	50.0		94.4	70-130			
Gasoline (C6-C12)	1940	200	"	2000		97.0	70-130	3.67	20	
Benzene	112	0.500	"	100		112	70-130	10.3	20	
Ethylbenzene	121	0.500	"	100		121	70-130	4.22	20	
m&p-Xylene	123	1.00	"	100		123	70-130	5.00	20	
o-xylene	120	0.500	"	100		120	70-130	2.53	20	
Toluene	100	2.00	"	100		100	70-130	11.0	20	
MTBE	91.1	0.500	"	100		91.1	70-130	9.55	20	

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

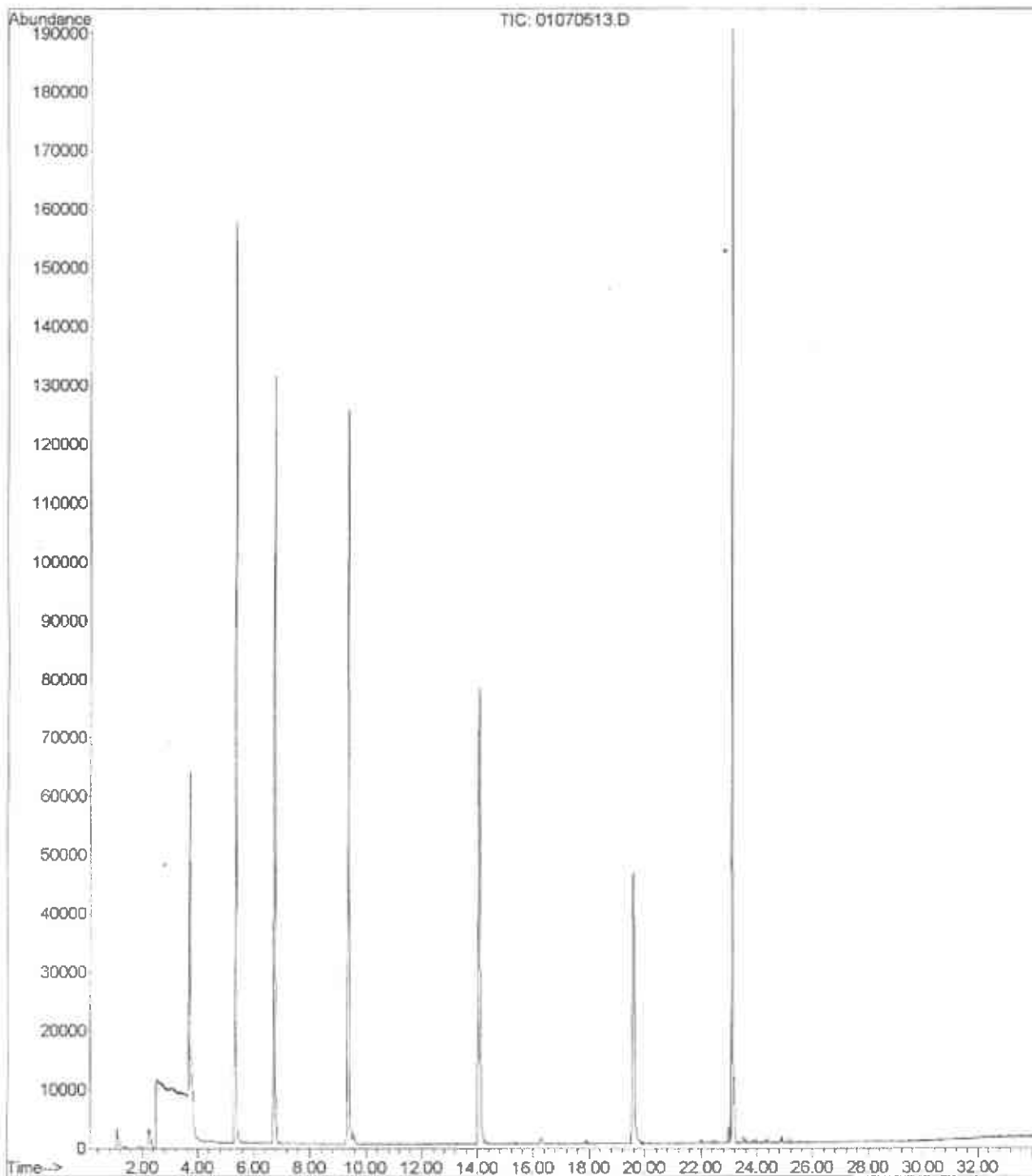
Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Mansour Sepehr

Reported:
06-Jul-05 16:51

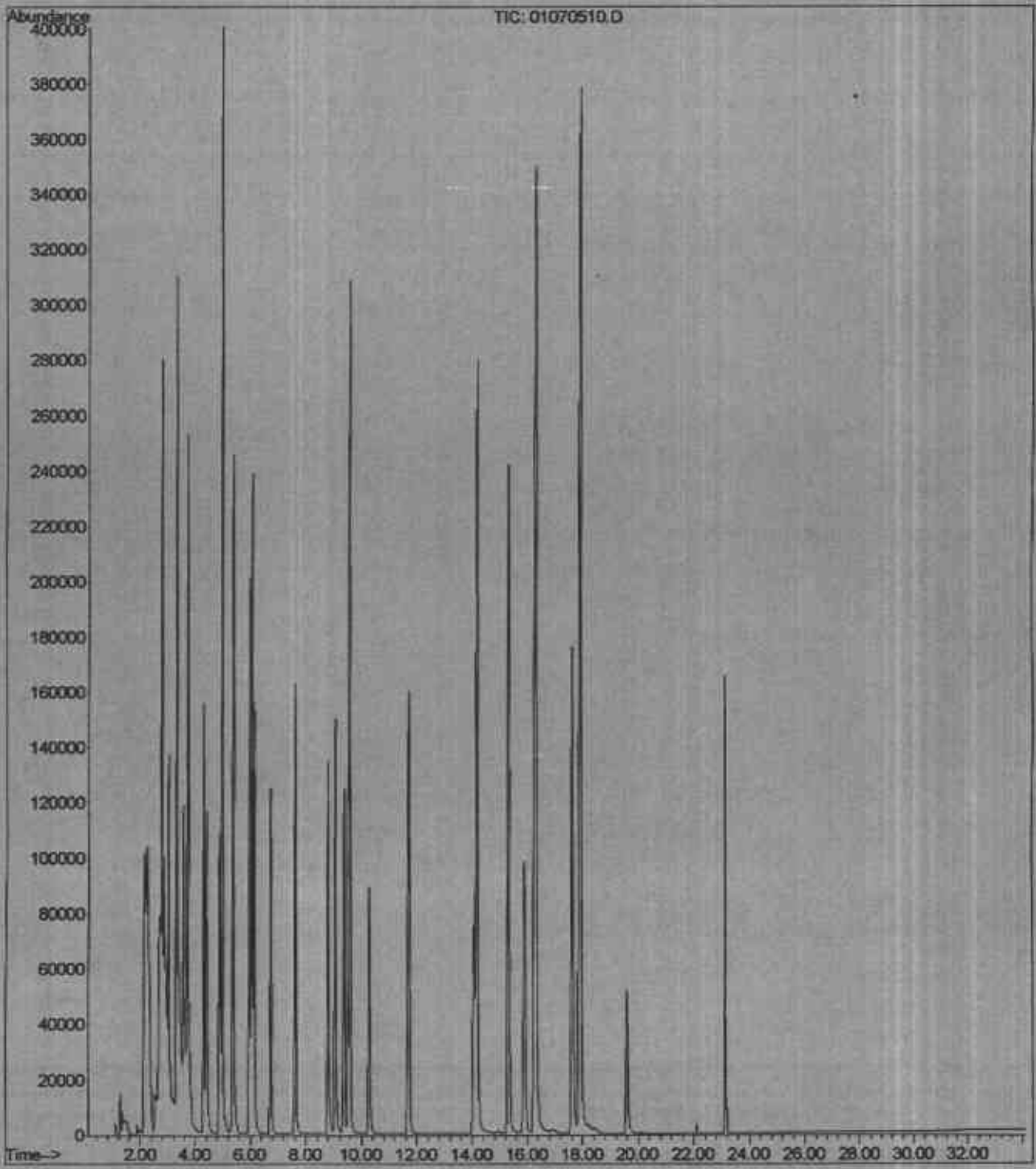
Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

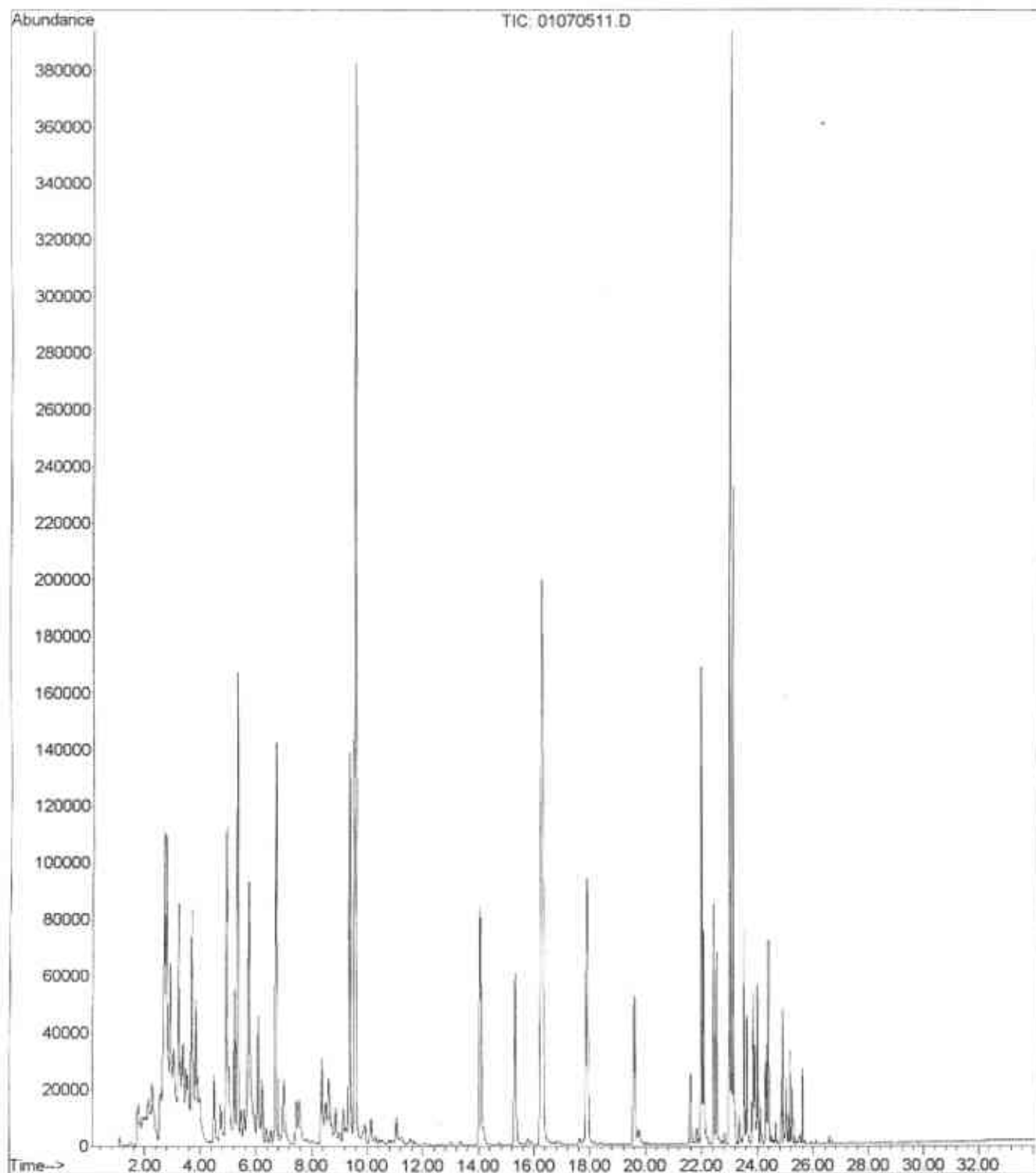
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Operator :
Acquired : 5 Jul 2005 8:04 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BG50601-BLK1
Misc Info :
Vial Number: 13



File : C:\MSDCHEM\1\DATA\2005-JUL-01-1604.D\01070510.D
Operator :
Acquired : 5 Jul 2005 5:52 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BG50601-BS1@voc
Misc Info :
Vial Number: 10



File :C:\MSDCHEM\1\DATA\2005-Jul-01-1604.b\01070511.D
Operator :
Acquired : 5 Jul 2005 6:36 pm using AcqMethod VOXY.M
Instrument : PAL GCMS
Sample Name: BG50601-BS1@gas
Misc Info :
Vial Number: 11





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Pacific Analytical Laboratory
851 West Midway Ave
Suite 201B
Alameda, CA 94501

Date: 13-JUL-05
Lab Job Number: 180264
Project ID: STANDARD
Location: 5565 Tesla Rd. Livermore

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

This package may be reproduced only in its entirety.

CASE NARRATIVE

Laboratory number: 180264
Client: Pacific Analytical Laboratory
Location: 5565 Tesla Rd. Livermore
Request Date: 06/28/05
Samples Received: 06/28/05

This hardcopy data package contains sample and QC results for two water samples, requested for the above referenced project on 06/28/05. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Pesticides (EPA 8081A):

High surrogate recovery was observed for decachlorobiphenyl in B-10 (lab # 180264-002); the corresponding TCMX surrogate recovery was within limits, and no target analytes were detected in the sample. No other analytical problems were encountered.

Metals (EPA 6010B):

No analytical problems were encountered.



Total Extractable Hydrocarbons

Lab #:	180264	Location:	5565 Tesla Rd. Livermore
Client:	Pacific Analytical Laboratory	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/24/05
Units:	ug/L	Received:	06/28/05
Batch#:	103370	Prepared:	06/28/05

Field ID:	B-9	Diln Fac:	40.00
Type:	SAMPLE	Analyzed:	06/30/05
Lab ID:	180264-001	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	540,000 L Y	4,000
Motor Oil C24-C36	ND	24,000

Surrogate	%REC	Limits
Hexacosane	DO	55-143

Field ID:	B-10	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	06/29/05
Lab ID:	180264-002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	118	55-143

Type:	BLANK	Analyzed:	06/29/05
Lab ID:	QC299111	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	130	55-143

L= Lighter hydrocarbons contributed to the quantitation
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Chromatogram

Sample Name : 180264-001sg.103370

Sample #: 103370

Page 1 of 1

FileName : G:\GC17\CHA\180A039.RAW

Date : 7/15/05 12:25 PM

Method : ATEH196.MTH

Time of Injection: 6/30/05 11:10 AM

Start Time : 0.00 min

End Time : 19.99 min

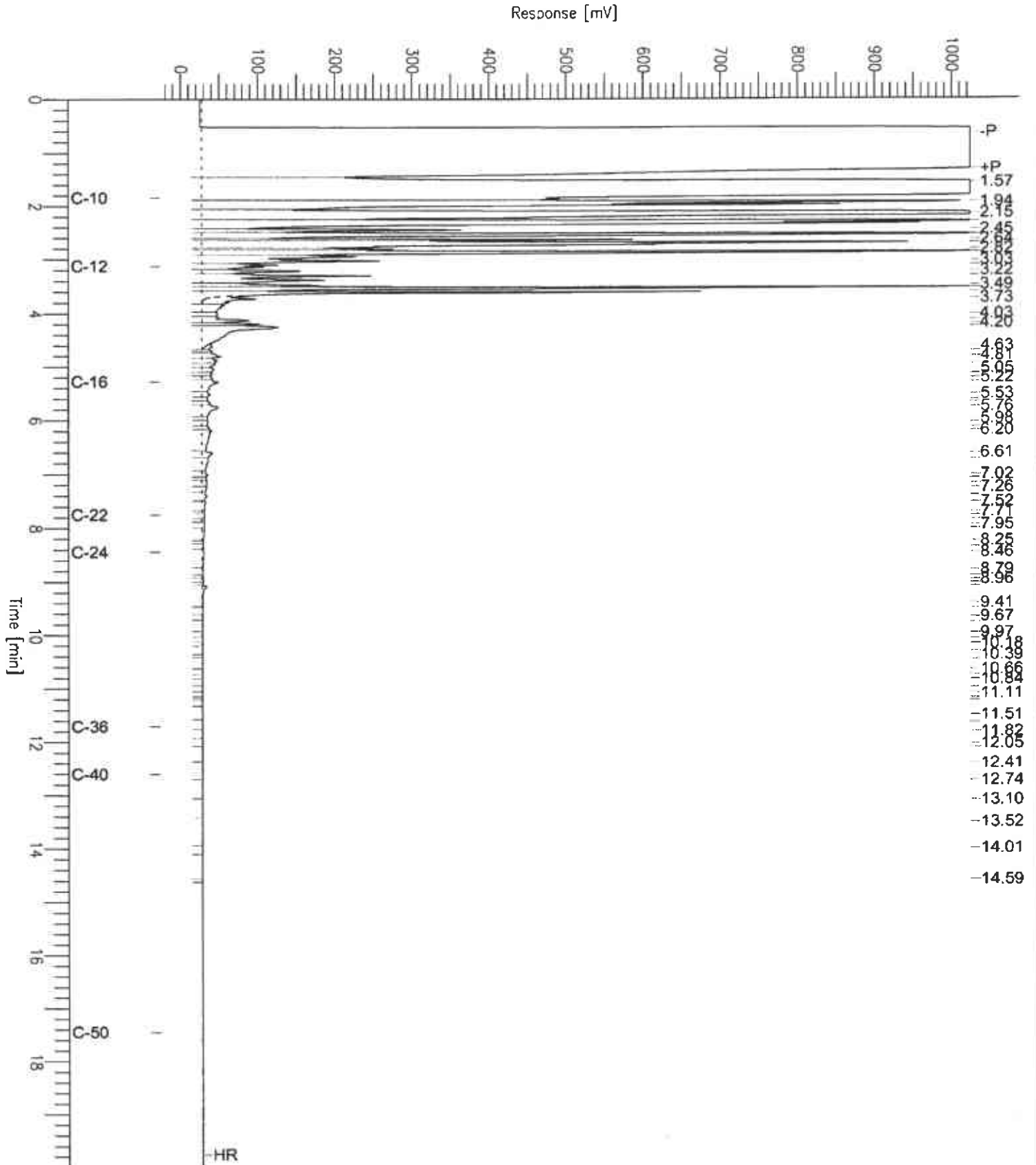
Low Point : -27.08 mV

High Point : 1024.00 mV

Scale Factor: 0.0

Plot Offset: -27 mV

Plot Scale: 1051.1 mV



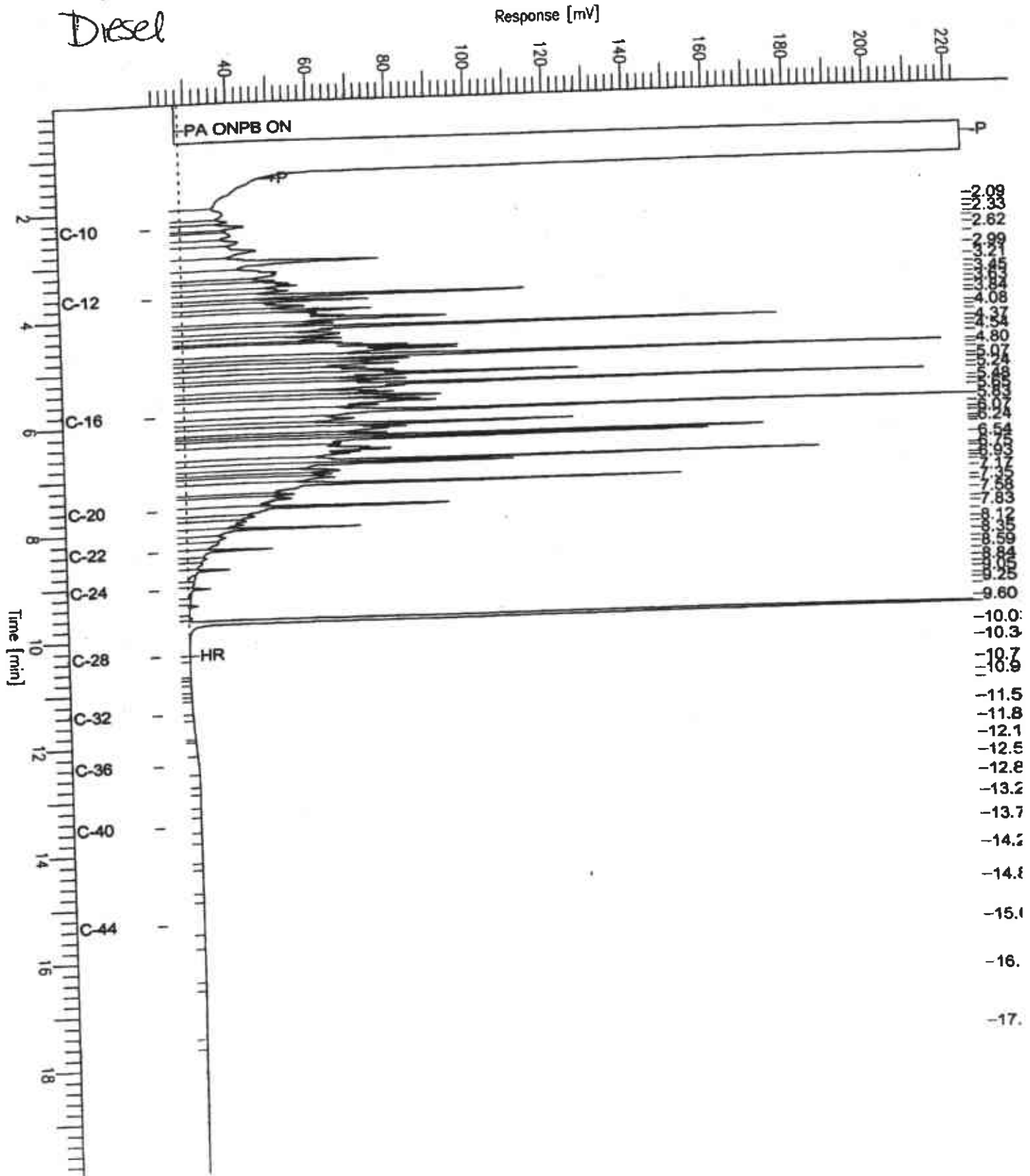
Chromatogram

Sample Name : ccv,S778,dsl
FileName : G:\GC13\CHB\180B003.RAW
Method : BTEH161S.MTH
Start Time : 0.01 min
Scale Factor : 0.0

End Time : 19.99 min
Plot Offset : 21 mV

Sample #: 500mg/L
Date : 6/29/05 12:02 PM
Time of Injection: 6/29/05 11:33 AM
Low Point : 21.01 mV
High Point : 223.74 mV
Plot Scale: 202.7 mV

Diesel



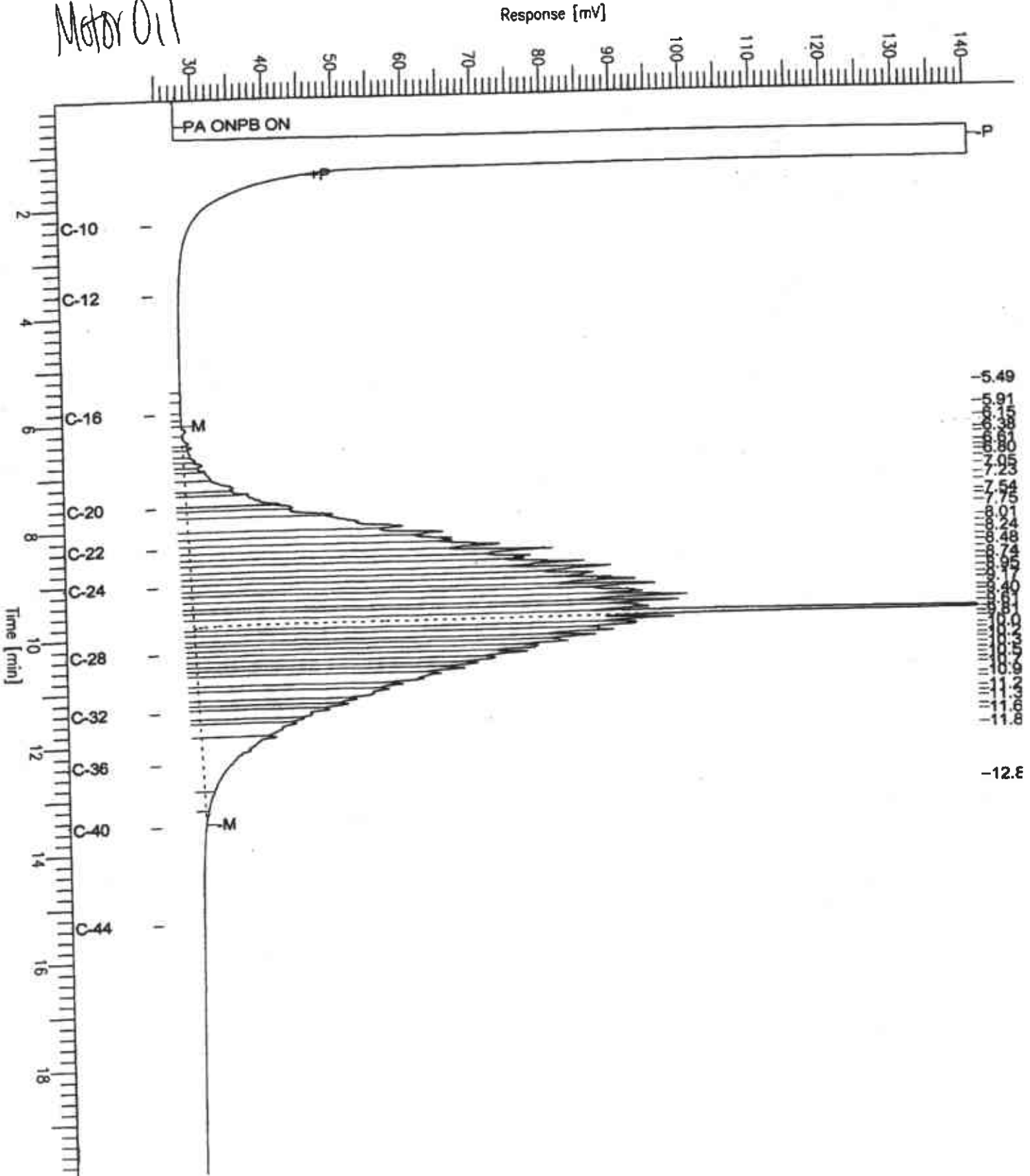
Chromatogram

Sample Name : ccv,S653.mo
FileName : G:\GC13\CHB\160B004.RAW
Method : BTEH161S.MTH
Start Time : 0.01 min
Scale Factor : 0.0

End Time : 19.99 min
Plot Offset : 24 mV

Sample #: 500mg/L
Date : 6/29/05 12:33 PM
Time of Injection: 6/29/05 12:01 PM
Low Point : 24.46 mV
High Point : 140.49 mV
Plot Scale: 116.0 mV

Motor Oil



ERROR: ioerror
OFFENDING COMMAND: image



STACK:

Batch 00 Report

0.0

-savelevel-

()

Total Extractable Hydrocarbons

()

()

PAL
PAL Pacific Analytical Laboratory

851 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

10 June 2005

Mansour Sepehr
SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon, CA 94583

RE: 5565 Tesla Rd, Livermore

Work Order Number: 5060008

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



Maiid Akhavan
Laboratory Director

CHAIN OF CUSTODY

Pacific Analytical Laboratory

851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 phone
510-864-0365 fax

Analyses

PAL
C&T-LOGIN # 5060008

Sampler: John Lohman

Project No: 2842

Report To: Joyce Bobek

Project Name: 5565 Tesla Rd Livermore

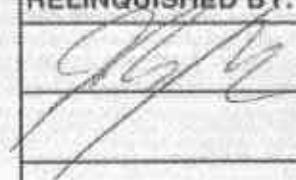
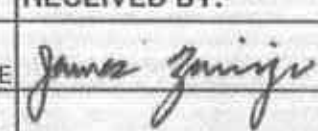
Company: SOMA Environmental

Turnaround Time: Standard

Telephone: 925-244-6600

Fax: 925-244-6601

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				TPHg, BTEX, MTBE 8260B, Total Lead
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE	
	Soil Comp 1	6/6/2005 2:20pm	X			1				X	

Notes:	RELINQUISHED BY:	RECEIVED BY:
	 6/6/05 John Lohman DATE/TIME	 6/6/05 James Zamirju 4:10pm DATE/TIME
	DATE/TIME	DATE/TIME
	DATE/TIME	DATE/TIME



SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Mansour Sefehri

Reported:
10-Jun-05 11:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Soil Comp 1	5060008-01	Soil	06-Jun-05 14:20	06-Jun-05 16:18



SOMA Environmental Engineering Inc.
 2680 Bishop Dr., Suite 203
 San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
 Project Number: 2842
 Project Manager: Mansour Sepehr

Reported:
 10-Jun-05 11:12

Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Soil Comp 1 (5060008-01) Soil Sampled: 06-Jun-05 14:20 Received: 06-Jun-05 16:18										
Gasoline (C6-C12)	ND	220		ug/kg	1.1	BF50901	06-Jun-05	08-Jun-05	EPA 8260B	
Benzene	ND	1.10		"	"	"	"	"	"	
Ethylbenzene	ND	0.550		"	"	"	"	"	"	
m&p-Xylene	ND	1.10		"	"	"	"	"	"	
o-xylene	ND	0.550		"	"	"	"	"	"	
Toluene	3.13	2.75		"	"	"	"	"	"	
MTBE	ND	0.550		"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>74.6 %</i>		<i>70-130</i>						
<i>Surrogate: Dibromofluoromethane</i>		<i>128 %</i>		<i>70-130</i>						
<i>Surrogate: Perdeuterotoluene</i>		<i>91.8 %</i>		<i>70-130</i>						



SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Mansour Sepehr

Reported:
10-Jun-05 11:12

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch BF50901 - EPA 5030 Soil MS

Blank (BF50901-BLK1)

Prepared & Analyzed: 09-Jun-05

Surrogate: 4-Bromofluorobenzene	38.6		ug/kg	50.0		77.2	70-130			
Surrogate: Dibromofluoromethane	59.8		"	50.0		120	70-130			
Surrogate: Perdeuterotoluene	45.5		"	50.0		91.0	70-130			
Gasoline (C6-C12)	ND	200	"							
Benzene	ND	1.00	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	1.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.50	"							
MTBE	ND	0.500	"							

LCS (BF50901-BS1)

Prepared & Analyzed: 09-Jun-05

Surrogate: 4-Bromofluorobenzene	45.8		ug/kg	50.0		91.6	70-130			
Surrogate: Dibromofluoromethane	56.0		"	50.0		112	70-130			
Surrogate: Perdeuterotoluene	48.0		"	50.0		96.0	70-130			
Gasoline (C6-C12)	2060	200	"	2000		103	70-130			
Benzene	74.5	1.00	"	100		74.5	70-130			
Ethylbenzene	78.4	0.500	"	100		78.4	70-130			
m&p-Xylene	88.0	1.00	"	100		88.0	70-130			
o-xylene	87.5	0.500	"	100		87.5	70-130			
Toluene	74.6	2.50	"	100		74.6	70-130			
MTBE	77.7	0.500	"	100		77.7	70-130			

Matrix Spike (BF50901-MS1)

Source: 5060008-01

Prepared & Analyzed: 09-Jun-05

Surrogate: 4-Bromofluorobenzene	42.3		ug/kg	50.0		84.6	70-130			
Surrogate: Dibromofluoromethane	61.2		"	50.0		122	70-130			
Surrogate: Perdeuterotoluene	46.4		"	50.0		92.8	70-130			
Gasoline (C6-C12)	822	200	"	2000	80.0	37.1	70-130			QM-05
Benzene	62.3	1.00	"	100	0.770	61.5	70-130			QM-05
Ethylbenzene	38.2	0.500	"	100	ND	38.2	70-130			QM-05
m&p-Xylene	45.9	1.00	"	100	0.370	45.5	70-130			QM-05
o-xylene	50.1	0.500	"	100	ND	50.1	70-130			QM-05
Toluene	56.5	2.50	"	100	3.13	53.4	70-130			QM-05
MTBE	87.9	0.500	"	100	ND	87.9	70-130			

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Mansour Sepehr

Reported:
10-Jun-05 11:12

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BF50901 - EPA 5030 Soil MS

Matrix Spike Dup (BF50901-MSD1)

Source: 5060008-01

Prepared & Analyzed: 09-Jun-05

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	47.3		ug/kg	50.0		94.6	70-130			
Surrogate: Dibromofluoromethane	55.3		*	50.0		111	70-130			
Surrogate: Perdeuterotoluene	47.8		*	50.0		95.6	70-130			
Gasoline (C6-C12)	1360	200	"	2000	80.0	64.0	70-130	49.3	20	QM-05
Benzene	99.4	1.00	"	100	0.770	98.6	70-130	45.9	20	QM-05
Ethylbenzene	104	0.500	"	100	ND	104	70-130	92.5	20	QM-05
m&p-Xylene	106	1.00	"	100	0.370	106	70-130	79.1	20	QM-05
o-xylene	106	0.500	"	100	ND	106	70-130	71.6	20	QM-05
Toluene	92.4	2.50	"	100	3.13	89.3	70-130	48.2	20	QM-05
MTBE	104	0.500	"	100	ND	104	70-130	16.8	20	



SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

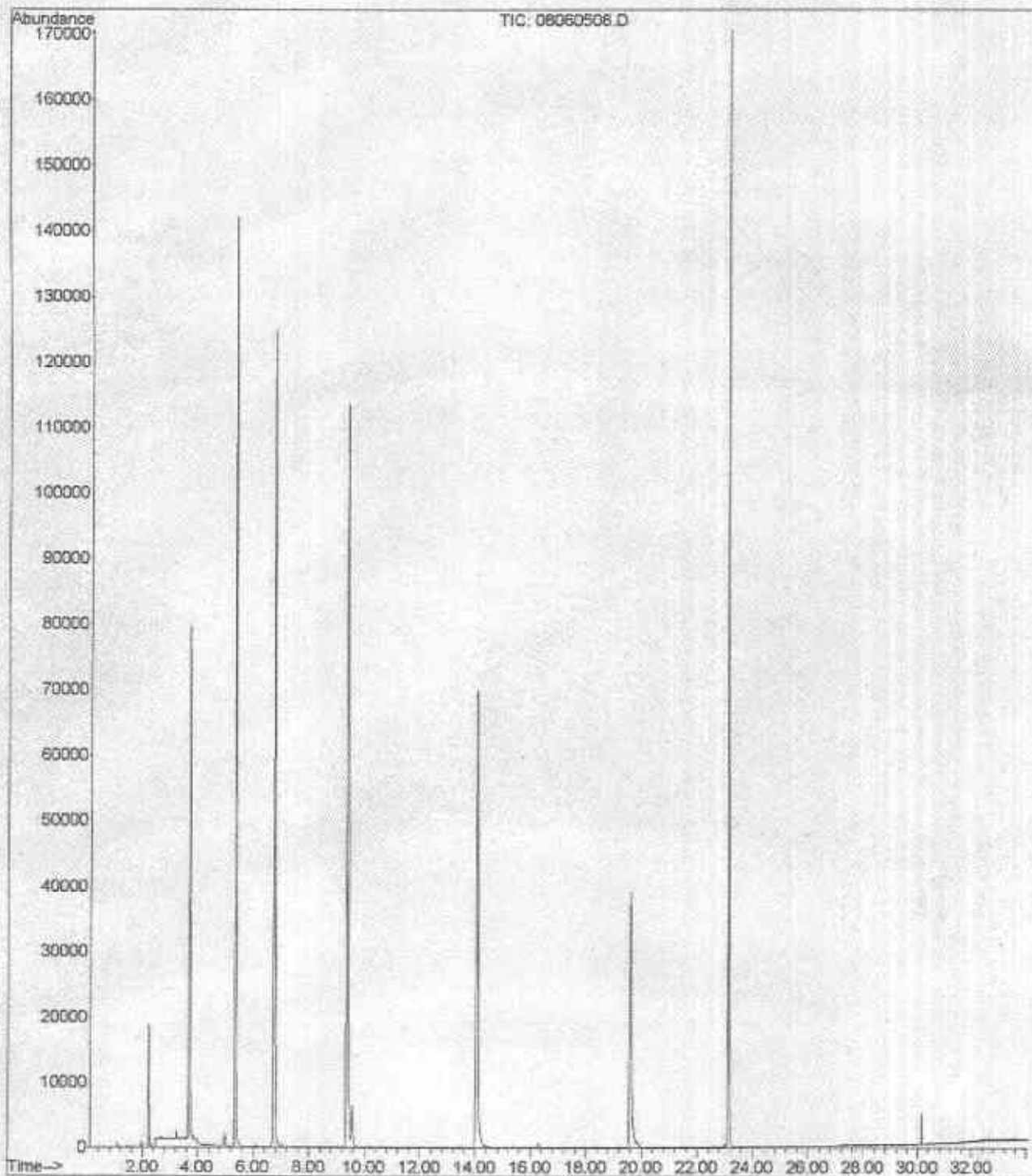
Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Mansour Sepchr

Reported:
10-Jun-05 11:12

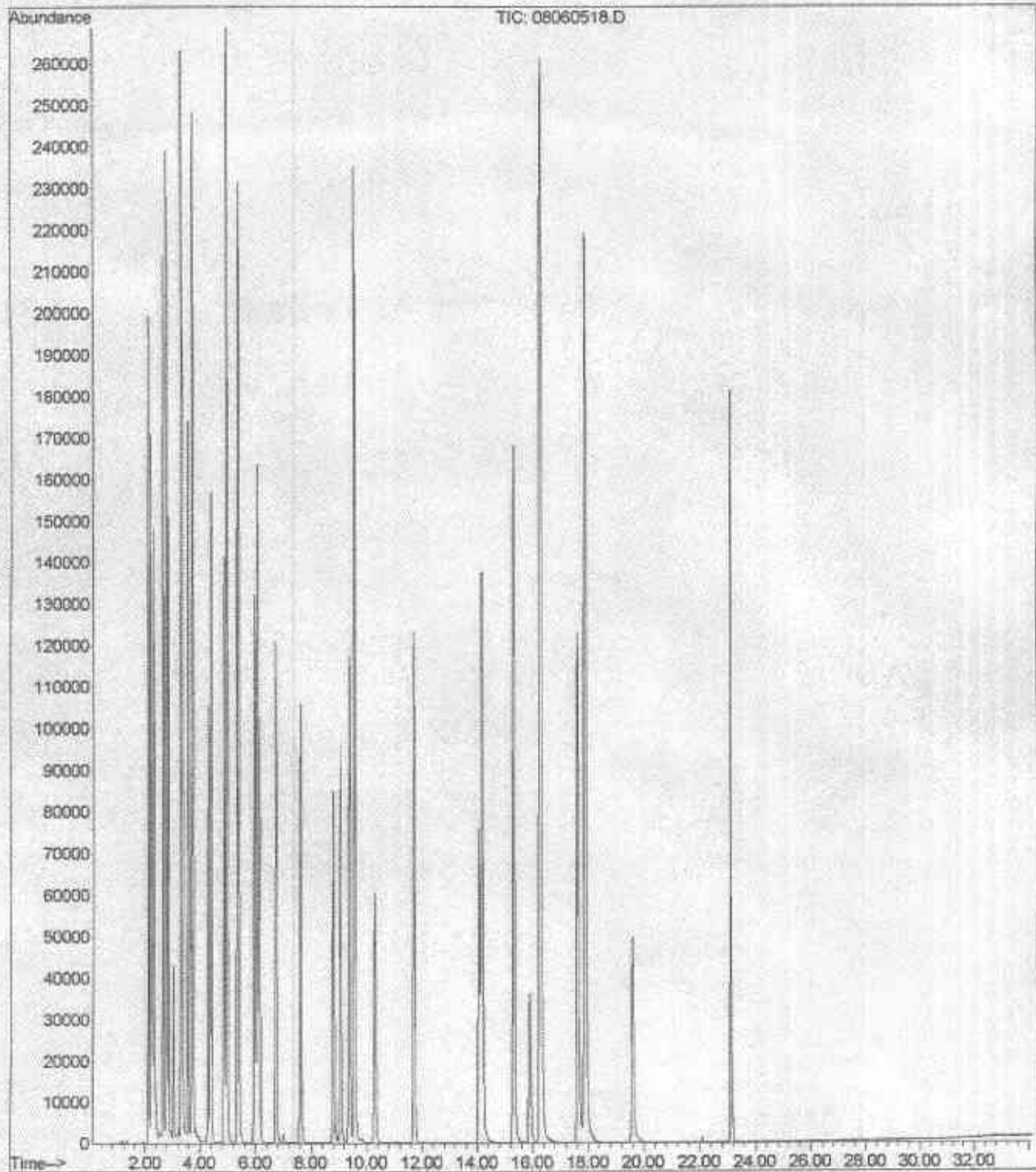
Notes and Definitions

- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

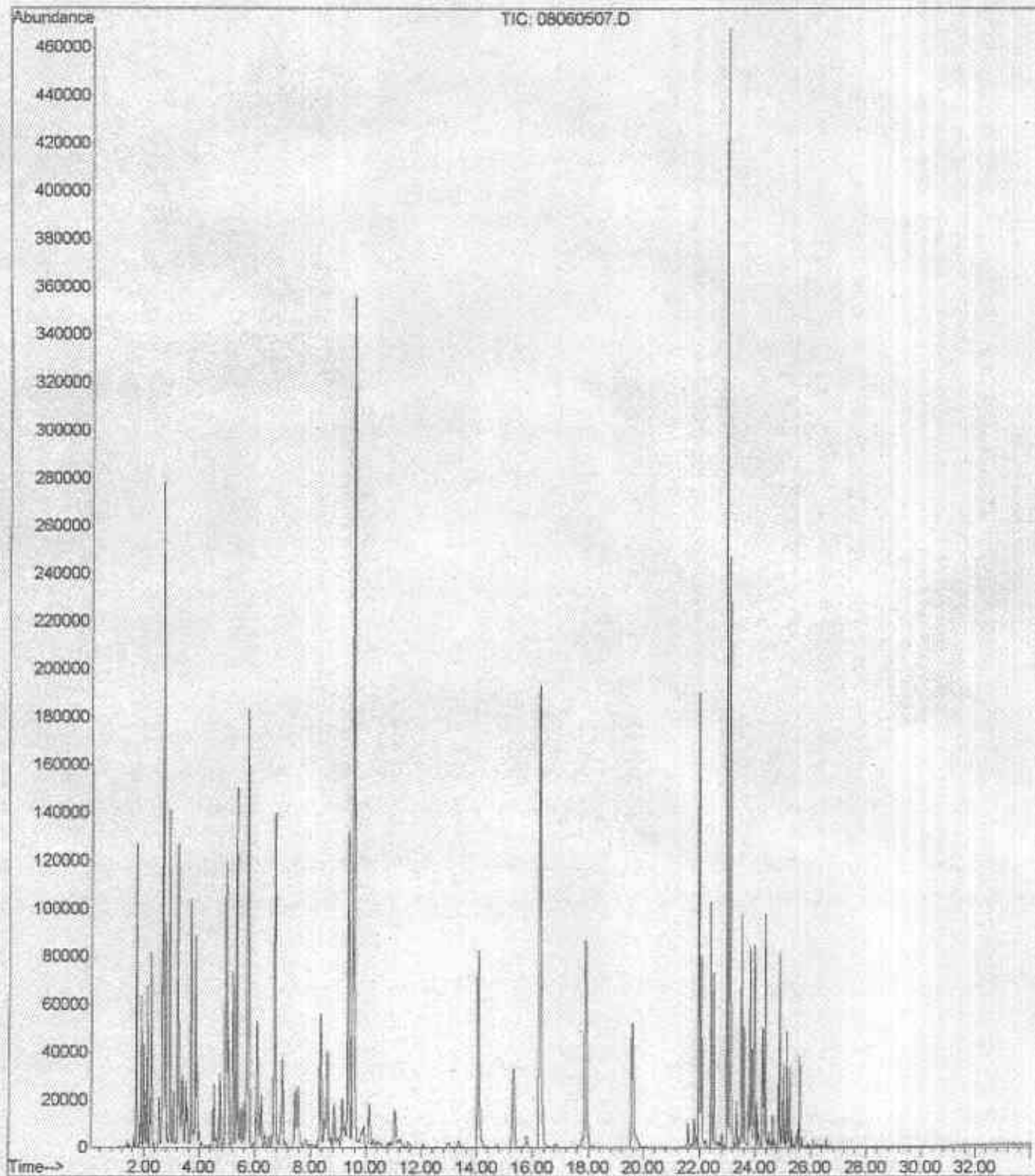
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Operator :
Acquired : 8 Jun 2005 4:01 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BF50901-BLK1
Misc Info :
Vial Number: 8



File :C:\MSDCHEM\1\DATA\2005-Jun-08-0935.b\08060518.D
Operator :
Acquired : 9 Jun 2005 11:21 am using AcqMethod VOXY.M
Instrument : PAL GCMS
Sample Name: BF50901-BS1
Misc Info :
Vial Number: 18



File :C:\MSDCHEM\1\DATA\2005-Jun-08-0935.b\08060507.D
Operator :
Acquired : 8 Jun 2005 3:16 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BF50901-BS1@gas
Misc Info :
Vial Number: 7





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Pacific Analytical Laboratory
851 West Midway Ave
Suite 201B
Alameda, CA 94501

Date: 21-JUN-05
Lab Job Number: 179865
Project ID: STANDARD
Location: 2842/Telsa Rd

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: 
Project Manager

Reviewed by: 
Operations Manager

This package may be reproduced only in its entirety.



CASE NARRATIVE

Laboratory number: 179865
Client: Pacific Analytical Laboratory
Location: 2842/Telsa Rd
Request Date: 06/07/05
Samples Received: 06/07/05

This hardcopy data package contains sample and QC results for one soil sample, requested for the above referenced project on 06/07/05. The sample was received cold and intact.

Metals (EPA 6010B):

No analytical problems were encountered.

179865

CHAIN OF CUSTODY

Pacific Analytical Laboratory

851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 phone
510-864-0365 fax

Analyses

PAL
E&T-LOGIN # 5060008

Sampler: John Lohman

Report To: Joyce Bobek

Company: SOMA Environmental

Telephone: 925-244-6600

Fax: 925-244-6601

Project No: 2842

Project Name: 5565 Tesla Rd Livermore

Turnaround Time: Standard

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
-1	Soil Comp 1	6/6/2005 2:20pm	X			1				X

FRIG, BTEX, MDE-22008, Total Lead																				
X																				

Notes:

Received
 On ice
 Cold
 Ambient
 Intact

RELINQUISHED BY:

[Signature] 6/6/05
 4:00pm DATE/TIME

[Signature] 6/7/05
 11:00am DATE/TIME

DATE/TIME

RECEIVED BY:

[Signature] 6/6/05
 4:10pm DATE/TIME

[Signature] 6/7/05
 DATE/TIME

DATE/TIME

11:00



Lead

Lab #:	179865	Location:	2842/Telsa Rd
Client:	Pacific Analytical Laboratory	Prep:	EPA 3050B
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	102742
Field ID:	SOIL COMP 1	Sampled:	06/06/05
Matrix:	Soil	Received:	06/07/05
Units:	mg/Kg	Prepared:	06/08/05
Basis:	as received	Analyzed:	06/08/05
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	179865-001	23	0.12
BLANK	QC296637	ND	0.15



Batch QC Report

Lead			
Lab #:	179865	Location:	2842/Telsa Rd
Client:	Pacific Analytical Laboratory	Prep:	EPA 3050B
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	102742
MSS Lab ID:	179879-001	Sampled:	06/07/05
Matrix:	Soil	Received:	06/07/05
Units:	mg/Kg	Prepared:	06/08/05
Basis:	as received	Analyzed:	06/08/05

Type	Lab ID	MSS Result	Spiked	Result	*REC	Limits	RPD	Lim
BS	QC296638		100.0	99.00	99	80-120		
BSD	QC296639		100.0	98.50	99	80-120	1	20
MS	QC296640	24.62	86.96	97.83	84	55-128		
MSD	QC296641		103.1	111.9	85	55-128	0	24

PAL Pacific Analytical Laboratory

851 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

25 May 2005

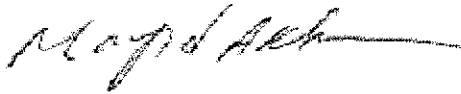
Joyce Bobek
SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon, CA 94583

RE: 5565 Tesla Rd, Livermore

Work Order Number: 5050017

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



Majid Akhavan
Laboratory Director

SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Joyce Bobek

Reported:
25-May-05 10:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	5050017-01	Water	20-May-05 10:05	20-May-05 16:22
MW-2	5050017-02	Water	20-May-05 11:15	20-May-05 16:22
MW-3	5050017-03	Water	20-May-05 12:05	20-May-05 16:22
Onsite Well	5050017-04	Water	20-May-05 12:20	20-May-05 16:22
5443 Tesla	5050017-05	Water	20-May-05 13:45	20-May-05 16:22

SOMA Environmental Engineering Inc.
 2680 Bishop Dr., Suite 203
 San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
 Project Number: 2842
 Project Manager: Joyce Bobek

Reported:
 25-May-05 10:35

Volatile Organic Compounds by EPA Method 8260B Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (5050017-01) Water Sampled: 20-May-05 10:05 Received: 20-May-05 16:22									
Gasoline (C6-C12)	ND	200	ug/l	1	BE52301	20-May-05	23-May-05	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		103 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		99.6 %		70-130	"	"	"	"	
MW-2 (5050017-02) Water Sampled: 20-May-05 11:15 Received: 20-May-05 16:22									
Gasoline (C6-C12)	ND	200	ug/l	1	BE52301	20-May-05	23-May-05	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.6 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		110 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		99.4 %		70-130	"	"	"	"	
MW-3 (5050017-03) Water Sampled: 20-May-05 12:05 Received: 20-May-05 16:22									
Gasoline (C6-C12)	ND	200	ug/l	1	BE52301	20-May-05	24-May-05	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	1.58	0.500	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		113 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		101 %		70-130	"	"	"	"	

Pacific Analytical Laboratory

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SOMA Environmental Engineering Inc.
 2680 Bishop Dr., Suite 203
 San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
 Project Number: 2842
 Project Manager: Joyce Bobek

Reported:
 25-May-05 10:35

Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Onsite Well (5050017-04) Water Sampled: 20-May-05 12:20 Received: 20-May-05 16:22

Gasoline (C6-C12)	ND	200	ug/l	1	BE52301	20-May-05	24-May-05	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	0.850	0.500	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		91.4 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		120 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		100 %		70-130	"	"	"	"	

5443 Tesla (5050017-05) Water Sampled: 20-May-05 13:45 Received: 20-May-05 16:22

Gasoline (C6-C12)	ND	200	ug/l	1	BE52301	20-May-05	24-May-05	EPA 8260B	
Benzene	0.770	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	1.08	0.500	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		88.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		121 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		98.6 %		70-130	"	"	"	"	



SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Joyce Bobek	Reported: 25-May-05 10:35
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Volatile Organic Compounds by EPA Method 8260B - Quality Control
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
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Batch BE52301 - EPA 5030 Water MS

Prepared & Analyzed: 23-May-05										
Blank (BE52301-BLK1)										
Surrogate: 4-Bromofluorobenzene	45.9		ug/l	50.0		91.8	70-130			
Surrogate: Dibromofluoromethane	53.6		"	50.0		107	70-130			
Surrogate: Perdeuterotoluene	49.6		"	50.0		99.2	70-130			
Gasoline (C6-C12)	ND	200	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	1.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	0.500	"							
MTBE	ND	0.500	"							

Prepared & Analyzed: 23-May-05										
LCS (BE52301-BS1)										
Surrogate: 4-Bromofluorobenzene	49.5		ug/l	50.0		99.0	70-130			
Surrogate: Dibromofluoromethane	52.7		"	50.0		105	70-130			
Surrogate: Perdeuterotoluene	51.6		"	50.0		103	70-130			
Gasoline (C6-C12)	2030	200	"	2000		102	70-130			
Benzene	104	0.500	"	104		100	70-130			
Ethylbenzene	109	0.500	"	104		105	70-130			
m&p-Xylene	109	1.00	"	104		105	70-130			
o-xylene	108	0.500	"	104		104	70-130			
Toluene	102	0.500	"	104		98.1	70-130			
MTBE	117	0.500	"	104		112	70-130			

Prepared: 23-May-05 Analyzed: 25-May-05										
LCS Dup (BE52301-BSD1)										
Surrogate: 4-Bromofluorobenzene	50.3		ug/l	50.0		101	70-130			
Surrogate: Dibromofluoromethane	54.7		"	50.0		109	70-130			
Surrogate: Perdeuterotoluene	50.7		"	50.0		101	70-130			
Gasoline (C6-C12)	1840	200	"	2000		92.0	70-130	9.82	20	
Benzene	105	0.500	"	104		101	70-130	0.957	20	
Ethylbenzene	111	0.500	"	104		107	70-130	1.82	20	
m&p-Xylene	114	1.00	"	104		110	70-130	4.48	20	
o-xylene	115	0.500	"	104		111	70-130	6.28	20	
Toluene	104	0.500	"	104		100	70-130	1.94	20	
MTBE	133	0.500	"	104		128	70-130	12.8	20	

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

PAL

SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

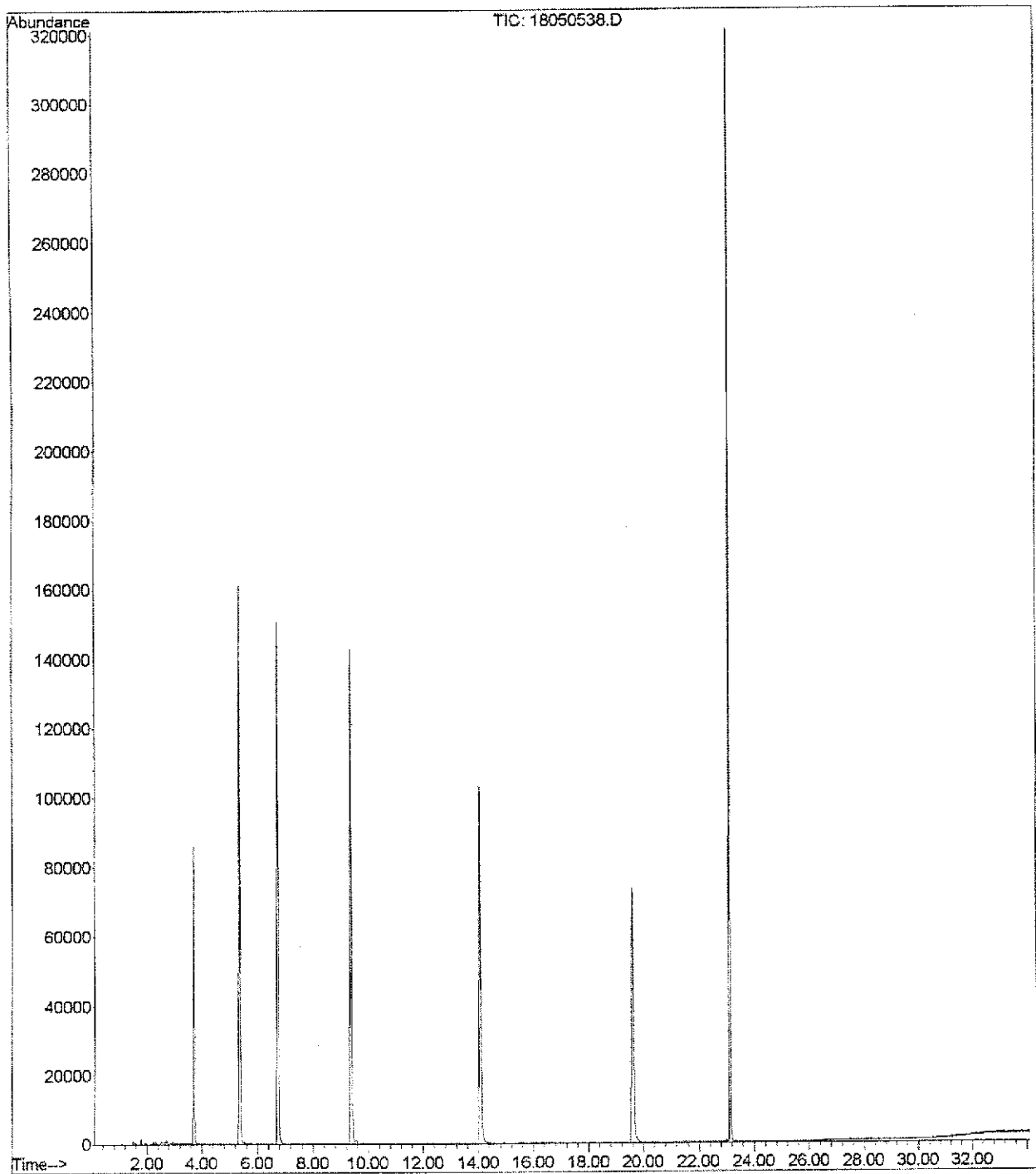
Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Joyce Bobek

Reported:
25-May-05 10:35

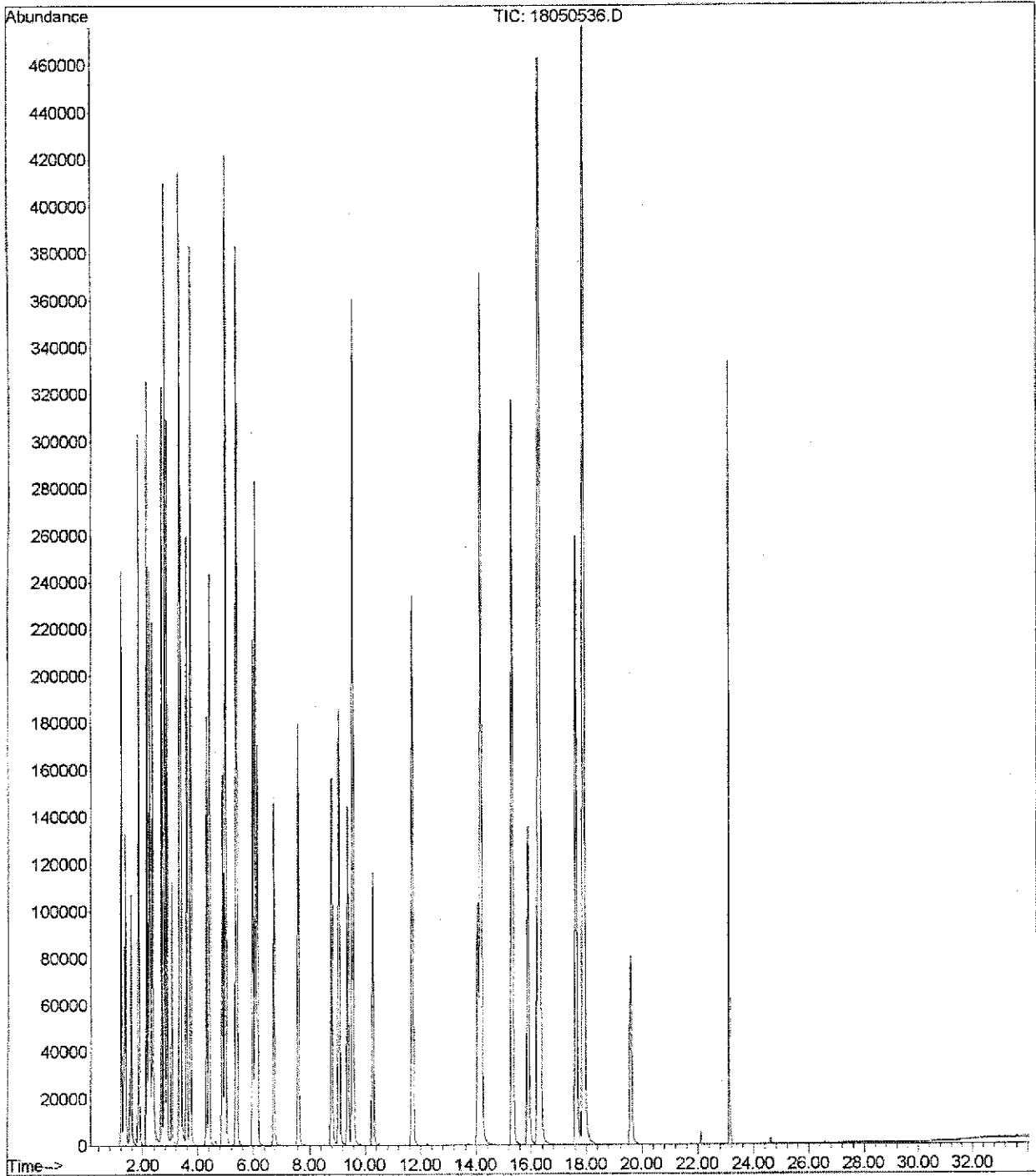
Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

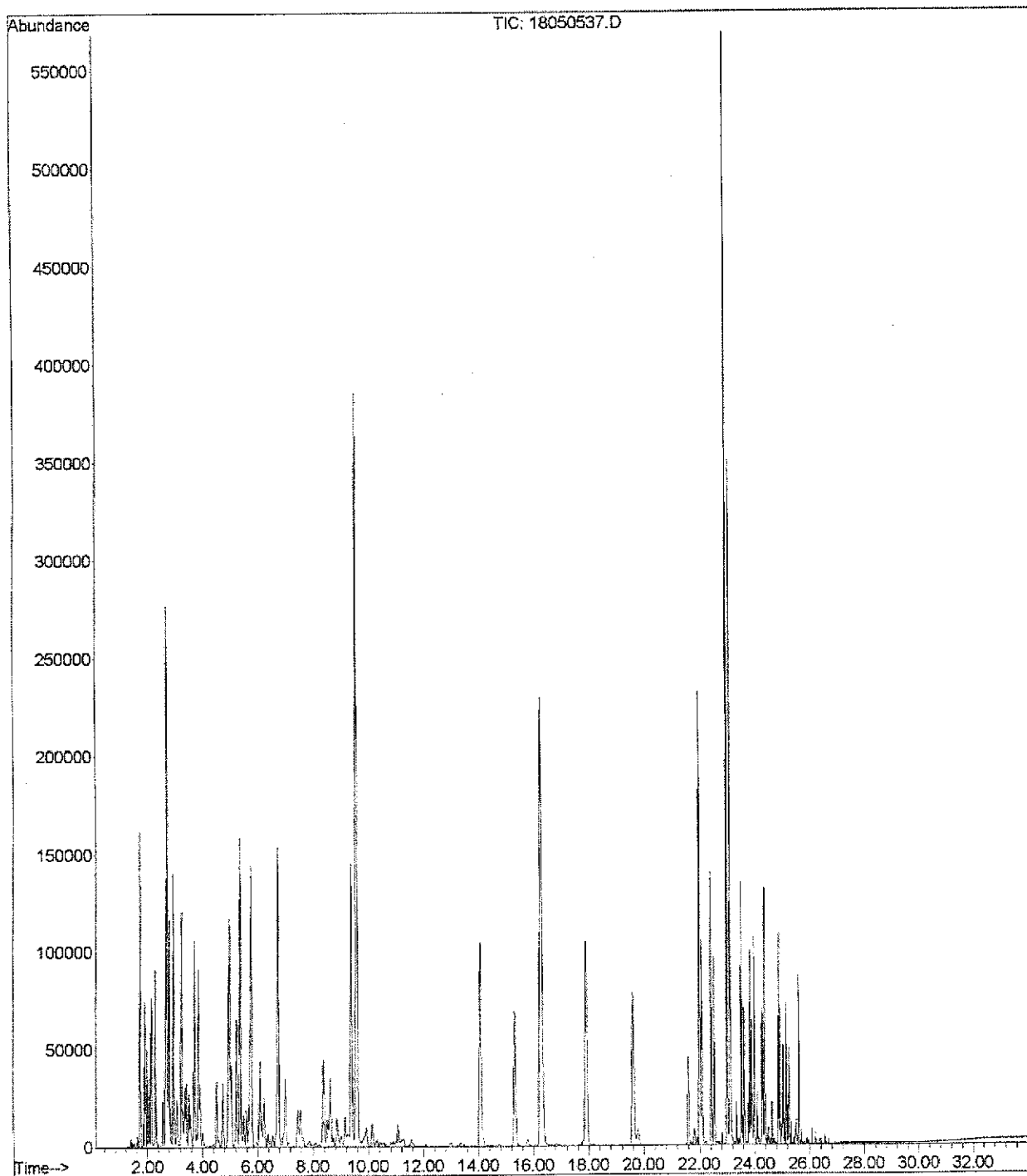
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Operator :
Acquired : 23 May 2005 2:30 pm using AcqMethod VOXY.M
Instrument : PAL GCMS
Sample Name: BE52301-BLK1
Misc Info :
Vial Number: 38



File : C:\MSDCHEM\1\DATA\2005-May-18-1510.b\18050536.D
Operator :
Acquired : 23 May 2005 12:50 pm using AcqMethod VOXY.M
Instrument : PAL GCMS
Sample Name: BE52301-BS1@voc
Misc Info :
Vial Number: 36



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Operator :
Acquired : 23 May 2005 1:34 pm using AcqMethod VOCCOXY.M
Instrument : PAL GCMS
Sample Name: BE52301-BS1@gas
Misc Info :
Vial Number: 37





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Pacific Analytical Laboratory
851 West Midway Ave
Suite 201B
Alameda, CA 94501

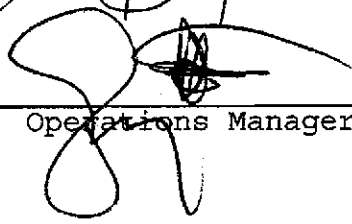
Date: 31-MAY-05
Lab Job Number: 179580
Project ID: STANDARD
Location: 5565 Tesla Rd Livermore

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

This package may be reproduced only in its entirety.

CASE NARRATIVE

Laboratory number: 179580
Client: Pacific Analytical Laboratory
Location: 5565 Tesla Rd Livermore
Request Date: 05/20/05
Samples Received: 05/20/05

This hardcopy data package contains sample and QC results for five water samples, requested for the above referenced project on 05/20/05. The samples were received on ice and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Total Extractable Hydrocarbons

Lab #: 179580	Location: 5565 Tesla Rd Livermore
Client: Pacific Analytical Laboratory	Prep: EPA 3520C
Project#: STANDARD	Analysis: EPA 8015B
Matrix: Water	Sampled: 05/20/05
Units: ug/L	Received: 05/20/05
Diln Fac: 1.000	Prepared: 05/23/05
Batch#: 102298	

Field ID: MW-1	Analyzed: 05/24/05
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 179580-001	

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	320 Y Z	300

Surrogate	%REC	Limits
Hexacosane	104	55-143

Field ID: MW-2	Analyzed: 05/24/05
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 179580-002	

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	55-143

Field ID: MW-3	Analyzed: 05/24/05
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 179580-003	

Analyte	Result	RL
Diesel C10-C24	680	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	111	55-143

Field ID: ONSITE WELL	Analyzed: 05/24/05
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 179580-004	

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	55-143

Y= Sample exhibits chromatographic pattern which does not resemble standard
 Z= Sample exhibits unknown single peak or peaks
 ND= Not Detected
 RL= Reporting Limit



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	179580	Location:	5565 Tesla Rd Livermore
Client:	Pacific Analytical Laboratory	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/20/05
Units:	ug/L	Received:	05/20/05
Diln Fac:	1.000	Prepared:	05/23/05
Batch#:	102298		

Field ID:	5443 TESLA	Analyzed:	05/25/05
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	179580-005		

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	94	55-143

Type:	BLANK	Analyzed:	05/24/05
Lab ID:	QC294804	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	137	55-143

Y= Sample exhibits chromatographic pattern which does not resemble standard
 Z= Sample exhibits unknown single peak or peaks
 ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2



Batch QC Report

Total Extractable Hydrocarbons

Lab #:	179580	Location:	5565 Tesla Rd Livermore
Client:	Pacific Analytical Laboratory	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	102298
Units:	ug/L	Prepared:	05/23/05
Diln Fac:	1.000	Analyzed:	05/24/05

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC294805

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,075	83	50-133

Surrogate	%REC	Limits
Hexacosane	102	55-143

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC294806

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,154	86	50-133	4	40

Surrogate	%REC	Limits
Hexacosane	108	55-143

RPD= Relative Percent Difference

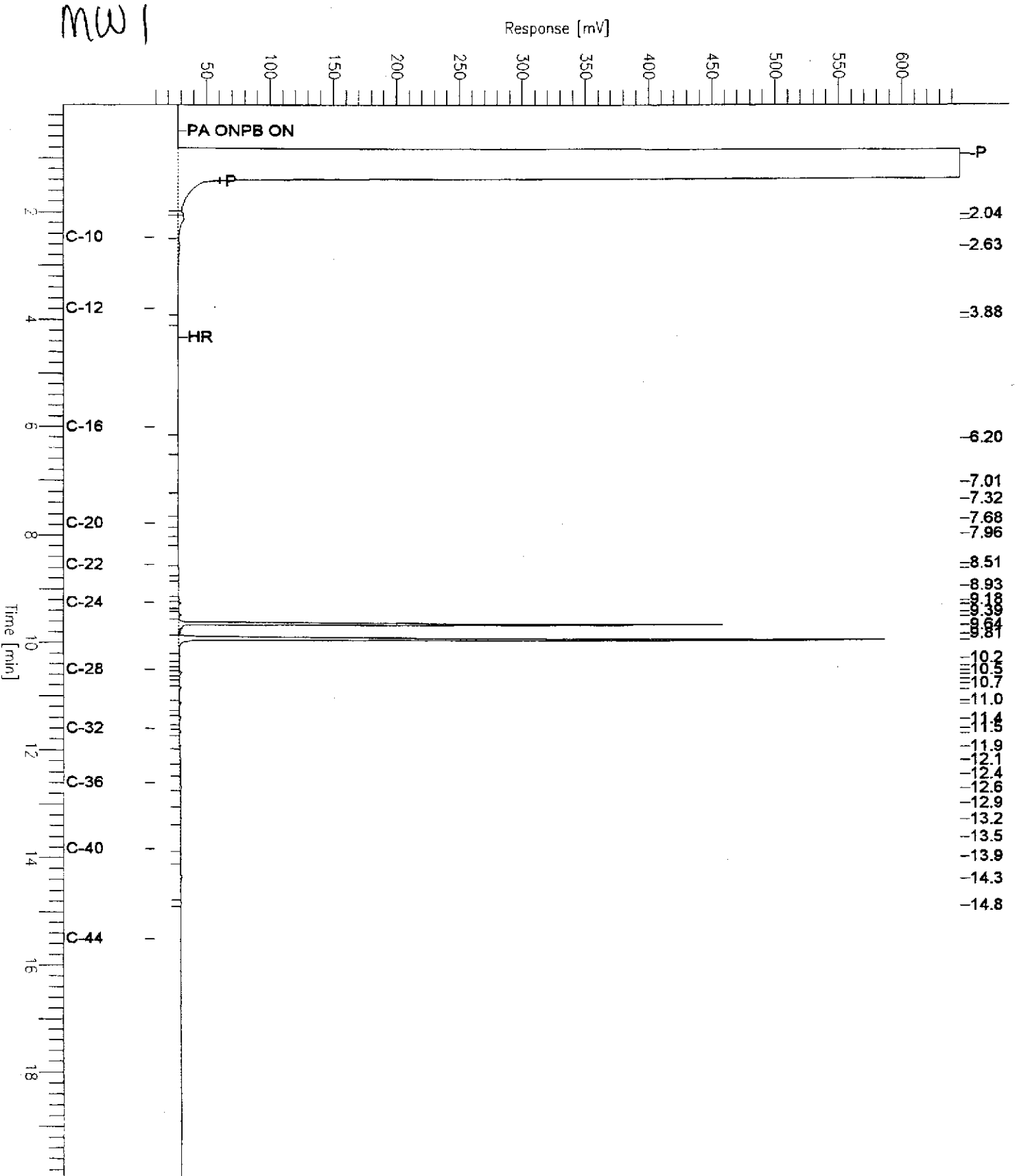
Chromatogram

Sample Name : 179580-001sg,102298
FileName : G:\GC13\CHB\144B018.RAW
Method : BTEH138S.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 19.99 min
Plot Offset: 9 mV

Sample #: 102298
Date : 5/25/05 08:03 AM
Time of Injection: 5/24/05 08:50 PM
Low Point : 8.81 mV
High Point : 646.53 mV
Plot Scale: 637.7 mV

Page 1 of 1

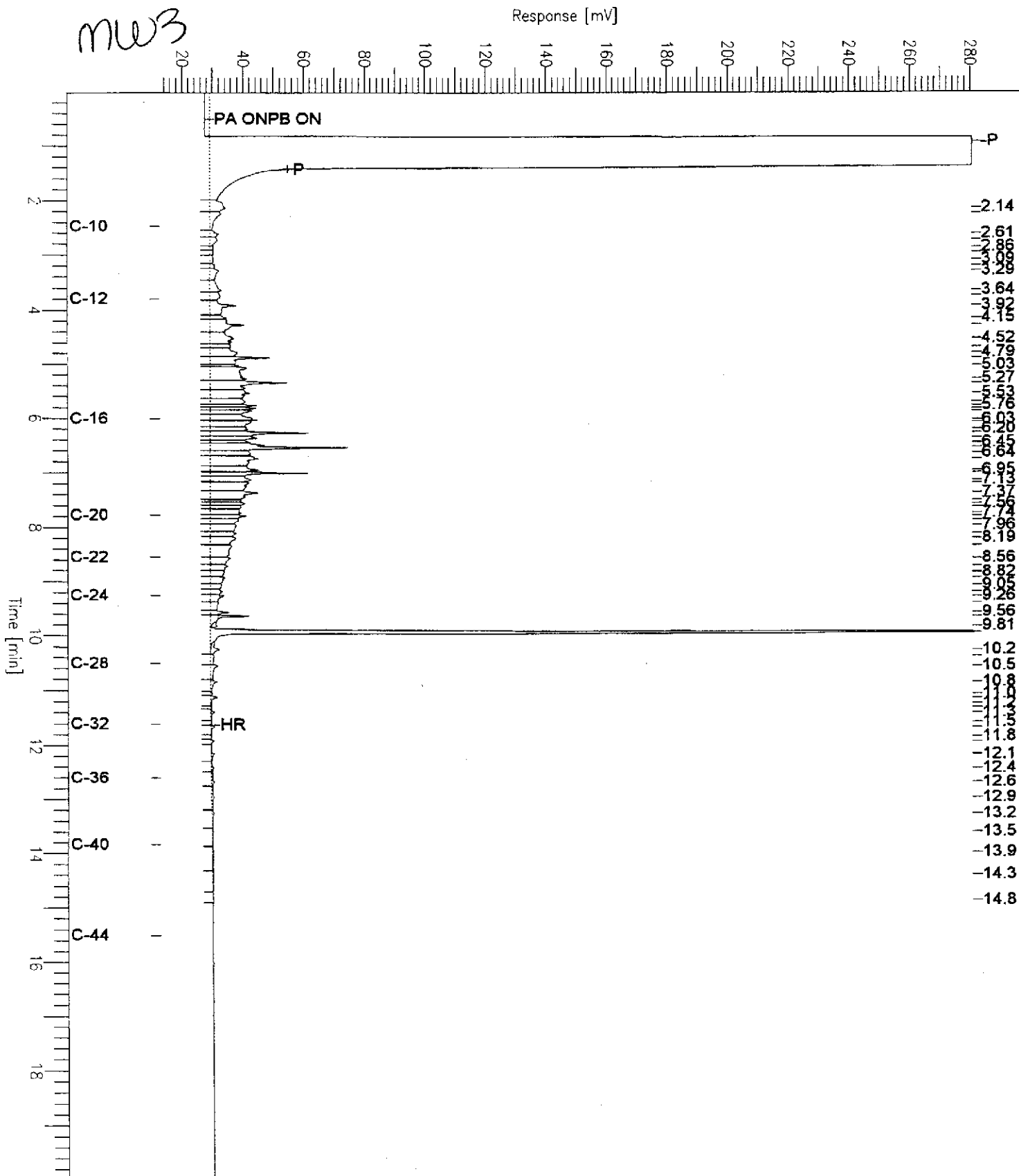


Chromatogram

Sample Name : 179580-003sg,102298
 FileName : G:\GC13\CHB\144B020.RAW
 Method : BTEH138S.MTH
 Start Time : 0.01 min
 Scale Factor: 0.0

End Time : 19.99 min
 Plot Offset: 13 mV

Sample #: 102298
 Date : 5/25/05 08:05 AM
 Time of Injection: 5/24/05 09:47 PM
 Low Point : 12.60 mV
 Plot Scale: 267.9 mV
 High Point : 280.51 mV
 Page 1 of 1

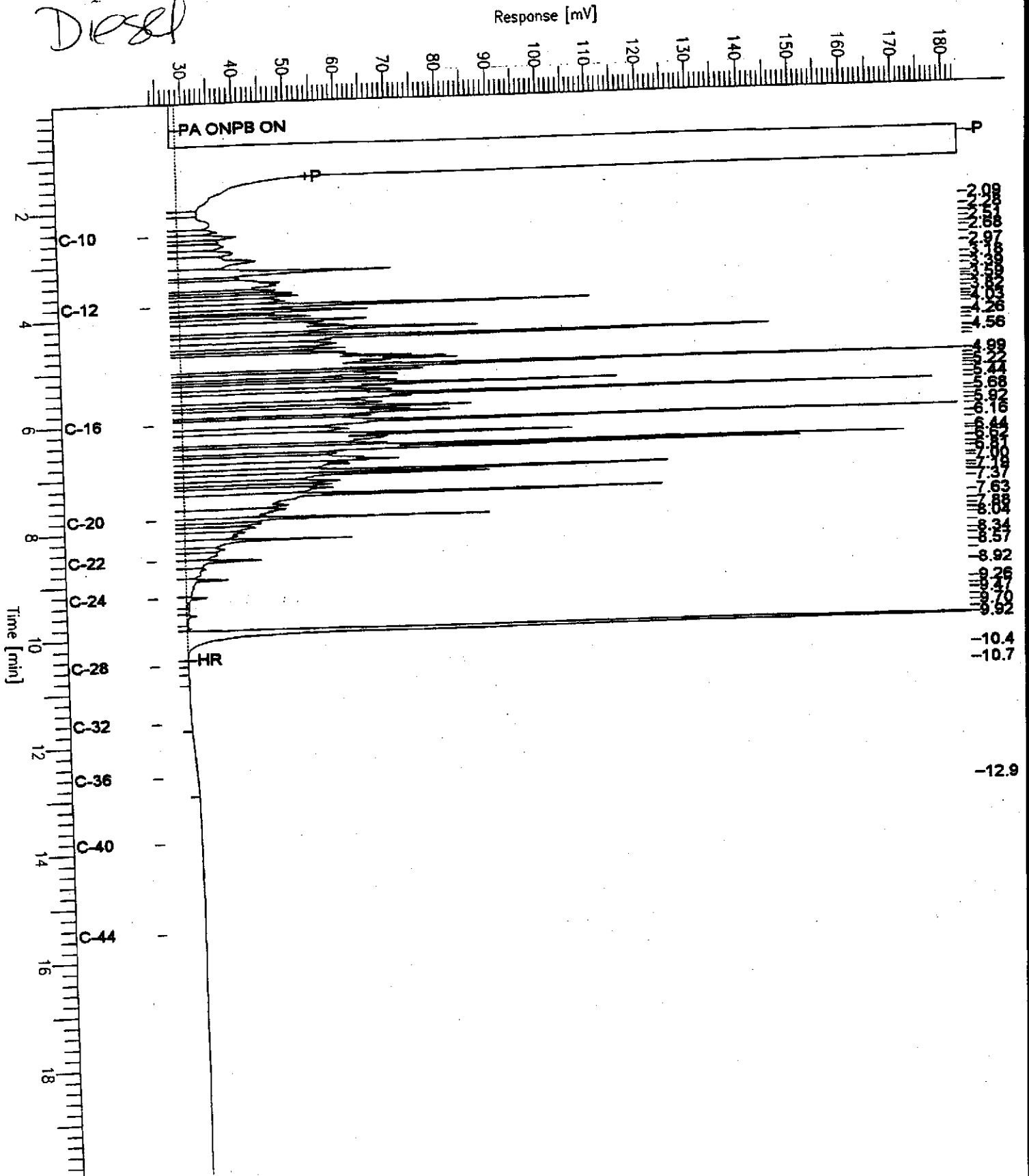


Chromatogram

Sample Name : ccv, S467, dsl
FileName : G:\GC13\CHB\144B003.RAW
Method : BTEH138S.MTH
Start Time : 0.01 min
Scale Factor : 0.0
End Time : 19.99 min
Plot Offset : 23 mV

Sample #: 500mg/L
Date : 5/24/05 10:33 AM
Time of Injection: 5/24/05 09:37 AM
Low Point : 23.07 mV
Plot Scale: 159.5 mV
High Point : 182.60 mV

Diesel



Chromatogram

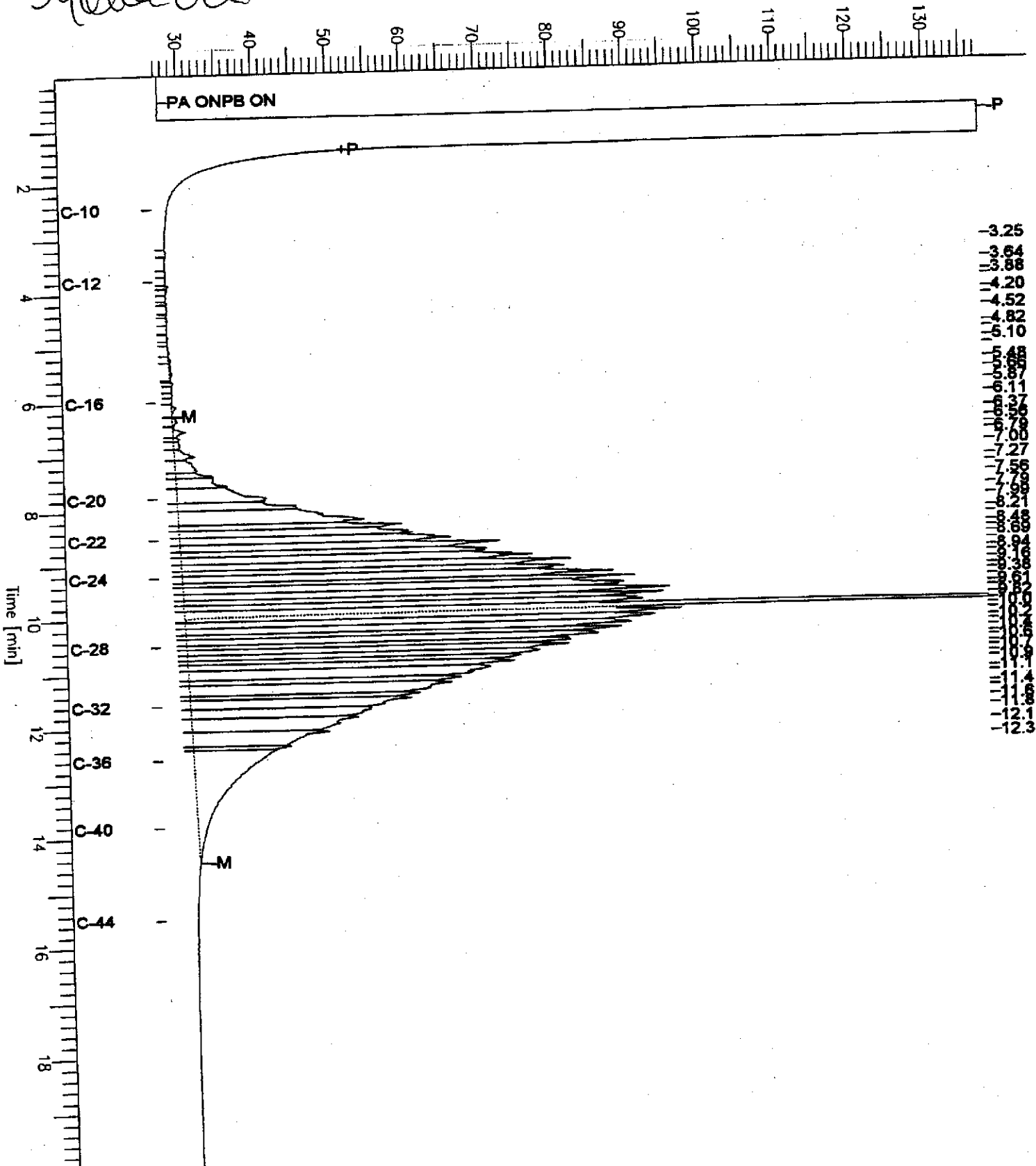
Sample Name : ccv,S653,mo
FileName : G:\GC13\CHB\144B004.RAW
Method : BTEH138S.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 19.99 min
Plot Offset: 26 mV

Sample #: 500mg/L
Date : 5/24/05 10:34 AM
Time of Injection: 5/24/05 10:05 AM
Low Point : 26.44 mV
Plot Scale: 110.9 mV
High Point : 137.35 mV

Motor Oil

Response [mV]



PAL

Pacific Analytical Laboratory

251 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

18 May 2005

Joyce Bobek
SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon, CA 94583

RE: 5565 Tesla Rd, Livermore

Work Order Number: 5050004

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



Maiid Akhavan
Laboratory Director

CHAIN OF CUSTODY FORM

Page 1 of 1

PAL Pacific Analytical Laboratory
 851 West Midway Ave., Suite 201B
 Alameda, CA 94501
 510-864-0364 Telephone
 510-864-0365 Fax

PAL
 Login# 5050004

Project No: 2842				Sampler: John Lohman				Analyses/Method					
Project Name: 5565 Tesla Rd, Livermore				Report To: Joyce Bobek				TPH 2 TPH 9 TPH MO BTEX, MIBE 504B 8015M					
Project P.O.: ---				Company: SOMA Environmental Engineering, Inc.									
Turnaround Time: Standard				Tel: 925-244-6600 Fax: 925-244-6601									
		Sampling Date/Time		Matrix		# of Containers			Preservatives				
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE	Field Notes	
	MW-1	5/5/05	10:00 AM	X			1				X		
	MW-2	5/5/05	11:40 AM	X			1				X		
	MW-3	5/5/05	1:15 PM	X			1				X		
Sampler Remarks:				Relinquished by:				Date/Time:		Received by:		Date/Time:	
				<i>[Signature]</i>				5/5/05 3:45 PM		<i>[Signature]</i>		5/5/05 3:45 PM	



SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Joyce Bobek

Reported:
18-May-05 10:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	5050004-01	Soil	05-May-05 10:00	05-May-05 15:54
MW-2	5050004-02	Soil	04-May-05 11:40	05-May-05 15:54
MW-3	5050004-03	Soil	04-May-05 13:15	05-May-05 15:54



SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Joyce Bobek	Reported: 18-May-05 10:45
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Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (5050004-01RE1) Soil Sampled: 05-May-05 10:00 Received: 05-May-05 15:54									
Gasoline (C6-C12)	ND	224	ug/kg	1.12	BE51201	05-May-05	16-May-05	EPA 8260B	
Benzene	ND	0.560	"	"	"	"	"	"	
Ethylbenzene	ND	0.560	"	"	"	"	"	"	
m&p-Xylene	ND	1.12	"	"	"	"	"	"	
o-xylene	ND	0.560	"	"	"	"	"	"	
Toluene	ND	0.560	"	"	"	"	"	"	
MTBE	ND	0.560	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		76.2 %		70-130	"	"	"	"	
Surrogate: Dibromofluoromethane		129 %		70-130	"	"	"	"	
Surrogate: Perdeuterotoluene		95.4 %		70-130	"	"	"	"	
MW-2 (5050004-02RE1) Soil Sampled: 04-May-05 11:40 Received: 05-May-05 15:54									
Gasoline (C6-C12)	ND	222	ug/kg	1.11	BE51201	05-May-05	16-May-05	EPA 8260B	
Benzene	ND	0.555	"	"	"	"	"	"	
Ethylbenzene	ND	0.555	"	"	"	"	"	"	
m&p-Xylene	ND	1.11	"	"	"	"	"	"	
o-xylene	ND	0.555	"	"	"	"	"	"	
Toluene	ND	0.555	"	"	"	"	"	"	
MTBE	ND	0.555	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		65.8 %		70-130	"	"	"	"	S-GC
Surrogate: Dibromofluoromethane		165 %		70-130	"	"	"	"	S-GC
Surrogate: Perdeuterotoluene		86.2 %		70-130	"	"	"	"	
MW-3 (5050004-03RE1) Soil Sampled: 04-May-05 13:15 Received: 05-May-05 15:54									
Gasoline (C6-C12)	ND	222	ug/kg	1.11	BE51201	05-May-05	16-May-05	EPA 8260B	
Benzene	ND	0.555	"	"	"	"	"	"	
Ethylbenzene	ND	0.555	"	"	"	"	"	"	
m&p-Xylene	ND	1.11	"	"	"	"	"	"	
o-xylene	ND	0.555	"	"	"	"	"	"	
Toluene	ND	0.555	"	"	"	"	"	"	
MTBE	ND	0.555	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		75.2 %		70-130	"	"	"	"	
Surrogate: Dibromofluoromethane		138 %		70-130	"	"	"	"	S-GC
Surrogate: Perdeuterotoluene		98.6 %		70-130	"	"	"	"	

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SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 5565 Tesla Rd, Livermore
Project Number: 2842
Project Manager: Joyce Bobek

Reported:
18-May-05 10:45

Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Joyce Bobek	Reported: 18-May-05 10:45
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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BE51201 - EPA 5030 Soil MS

Blank (BE51201-BLK1)

Prepared & Analyzed: 12-May-05

Surrogate: 4-Bromofluorobenzene	44.6		ug/kg	50.0		89.2	70-130			
Surrogate: Dibromofluoromethane	55.1		"	50.0		110	70-130			
Surrogate: Perdeuterotoluene	48.2		"	50.0		96.4	70-130			
Gasoline (C6-C12)	ND	200	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	1.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	0.500	"							
MTBE	ND	0.500	"							

LCS (BE51201-BS1)

Prepared & Analyzed: 12-May-05

Surrogate: 4-Bromofluorobenzene	48.7		ug/kg	50.0		97.4	70-130			
Surrogate: Dibromofluoromethane	52.1		"	50.0		104	70-130			
Surrogate: Perdeuterotoluene	48.9		"	50.0		97.8	70-130			
Gasoline (C6-C12)	1990	200	"	2000		99.5	70-130			
Benzene	102	0.500	"	104		98.1	70-130			
Ethylbenzene	112	0.500	"	104		108	70-130			
m&p-Xylene	116	1.00	"	104		112	70-130			
o-xylene	116	0.500	"	104		112	70-130			
Toluene	99.8	0.500	"	104		96.0	70-130			
MTBE	99.3	0.500	"	104		95.5	70-130			

LCS Dup (BE51201-BSD1)

Prepared: 12-May-05 Analyzed: 17-May-05

Surrogate: 4-Bromofluorobenzene	46.3		ug/kg	50.0		92.6	70-130			
Surrogate: Dibromofluoromethane	56.9		"	50.0		114	70-130			
Surrogate: Perdeuterotoluene	47.7		"	50.0		95.4	70-130			
Gasoline (C6-C12)	2190	200	"	2000		110	70-130	9.57	20	
Benzene	90.8	0.500	"	104		87.3	70-130	11.6	20	
Ethylbenzene	109	0.500	"	104		105	70-130	2.71	20	
m&p-Xylene	113	1.00	"	104		109	70-130	2.62	20	
o-xylene	112	0.500	"	104		108	70-130	3.51	20	
Toluene	87.9	0.500	"	104		84.5	70-130	12.7	20	
MTBE	101	0.500	"	104		97.1	70-130	1.70	20	

Pacific Analytical Laboratory

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SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Joyce Bobek	Reported: 18-May-05 10:45
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Volatile Organic Compounds by EPA Method 8260B - Quality Control
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BE51201 - EPA 5030 Soil MS

Matrix Spike (BE51201-MS1)	Source: 5050004-01			Prepared & Analyzed: 12-May-05						
Surrogate: 4-Bromofluorobenzene	46.5		ug/kg	50.0		93.0	70-130			
Surrogate: Dibromofluoromethane	58.3		"	50.0		117	70-130			
Surrogate: Perdeuterotoluene	48.0		"	50.0		96.0	70-130			
Gasoline (C6-C12)	1180	200	"	2000	76.1	55.2	70-130			QM-05
Benzene	69.5	0.500	"	104	ND	66.8	70-130			QM-05
Ethylbenzene	70.5	0.500	"	104	ND	67.8	70-130			QM-05
m&p-Xylene	71.9	1.00	"	104	ND	69.1	70-130			QM-05
o-xylene	72.7	0.500	"	104	ND	69.9	70-130			QM-05
Toluene	63.8	0.500	"	104	0.120	61.2	70-130			QM-05
MTBE	74.1	0.500	"	104	ND	71.2	70-130			

Matrix Spike Dup (BE51201-MSD1)	Source: 5050004-01			Prepared & Analyzed: 12-May-05						
Surrogate: 4-Bromofluorobenzene	46.5		ug/kg	50.0		93.0	70-130			
Surrogate: Dibromofluoromethane	58.1		"	50.0		116	70-130			
Surrogate: Perdeuterotoluene	47.7		"	50.0		95.4	70-130			
Gasoline (C6-C12)	1740	200	"	2000	76.1	83.2	70-130	38.4	20	QM-05
Benzene	90.2	0.500	"	104	ND	86.7	70-130	25.9	20	QR-03
Ethylbenzene	99.0	0.500	"	104	ND	95.2	70-130	33.6	20	QR-03
m&p-Xylene	99.7	1.00	"	104	ND	95.9	70-130	32.4	20	QR-03
o-xylene	101	0.500	"	104	ND	97.1	70-130	32.6	20	QR-03
Toluene	84.8	0.500	"	104	0.120	81.4	70-130	28.3	20	QR-03
MTBE	98.3	0.500	"	104	ND	94.5	70-130	28.1	20	QR-03

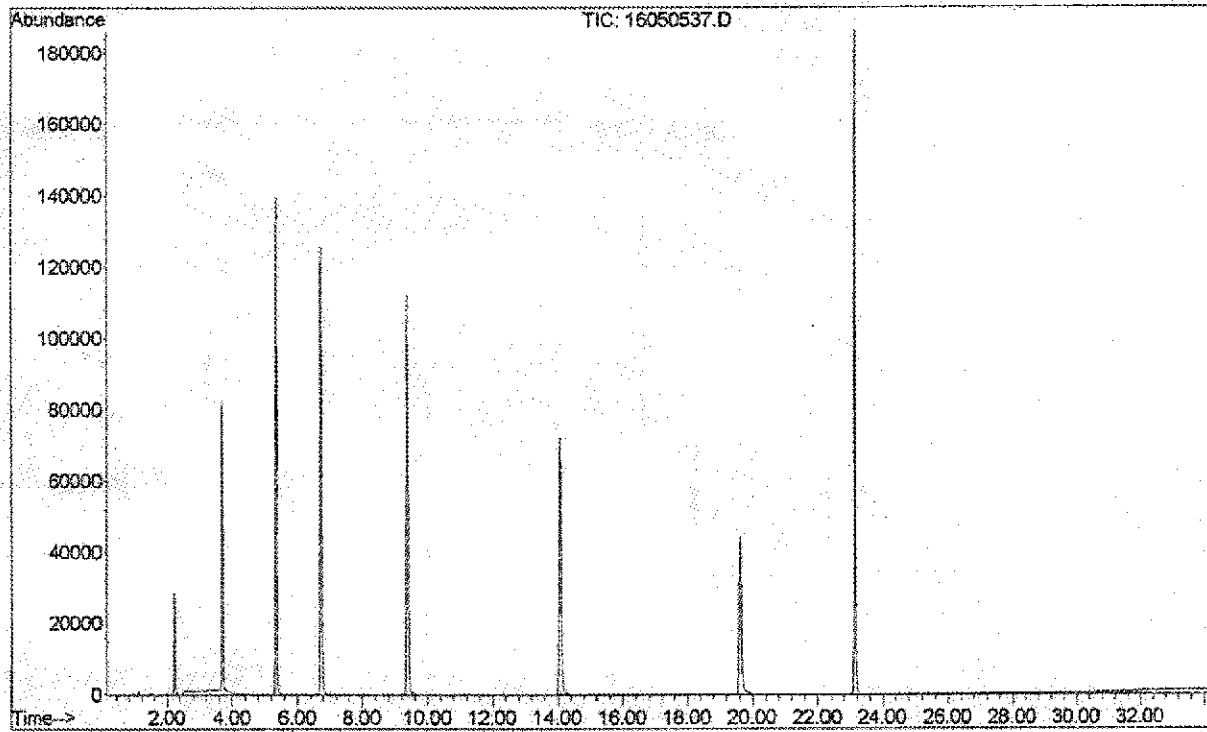


SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 5565 Tesla Rd, Livermore Project Number: 2842 Project Manager: Joyce Bobek	Reported: 18-May-05 10:45
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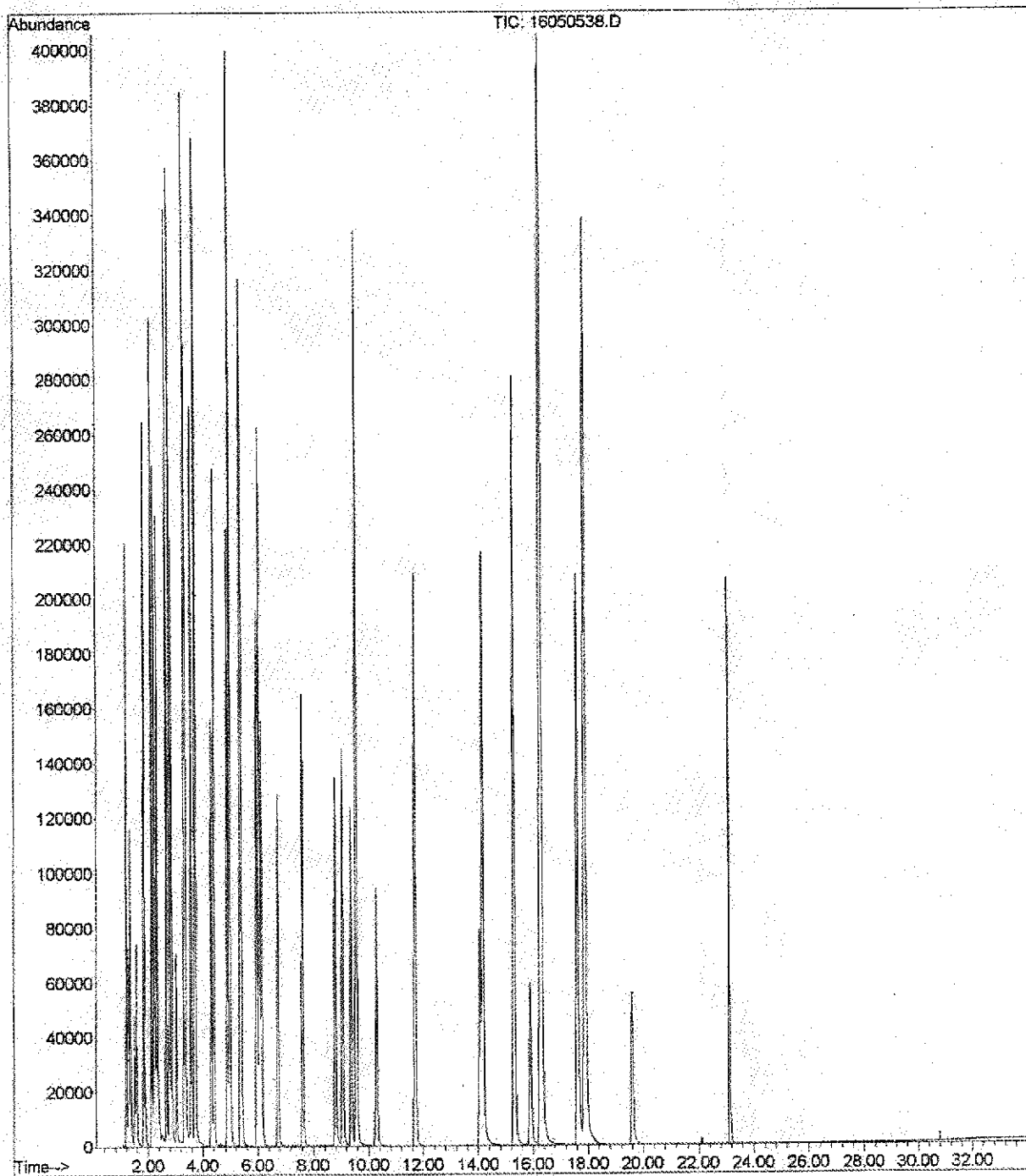
Notes and Definitions

- S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

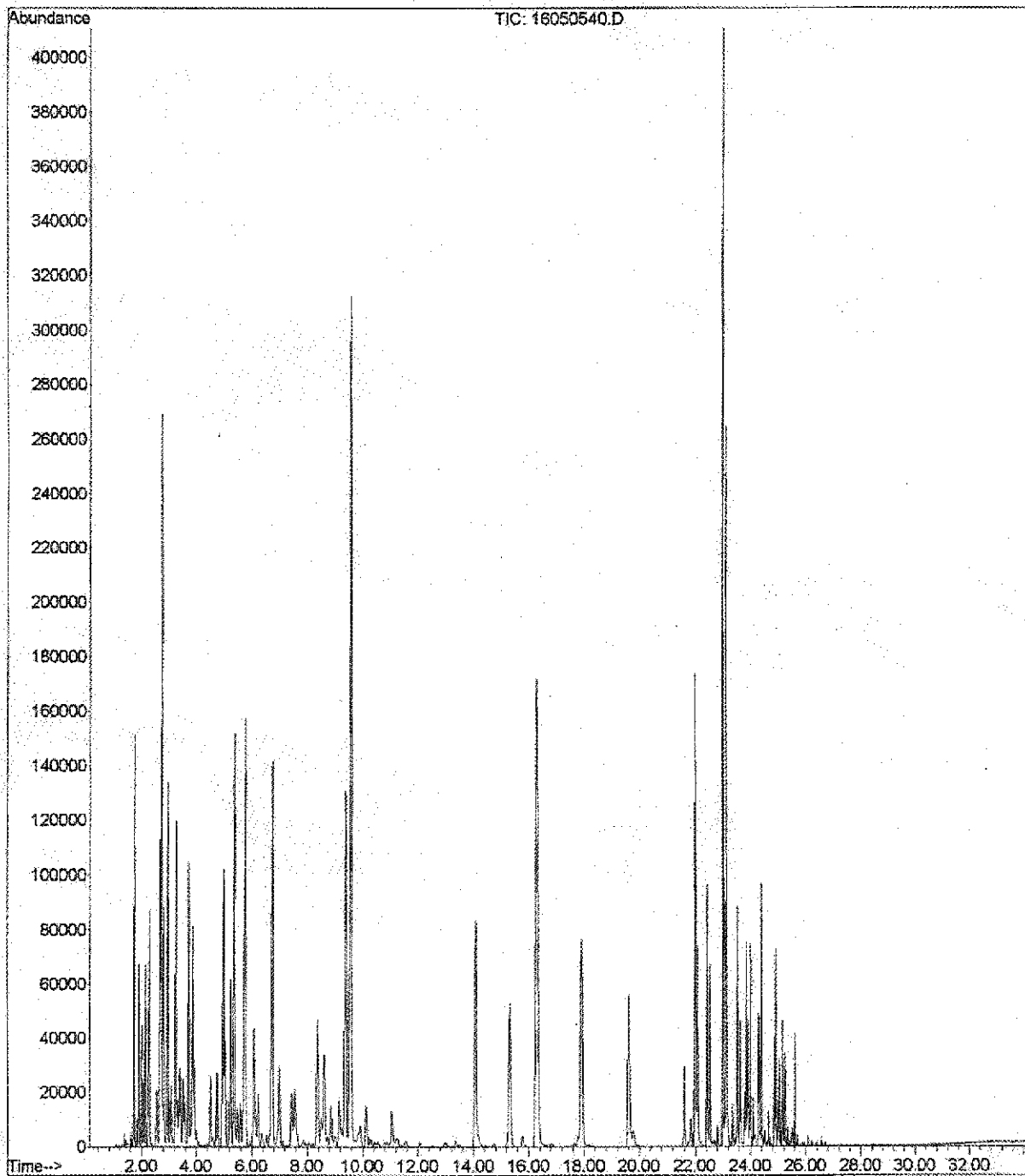
File : C:\MSDCHEM\1\DATA\2005-May-16-1134.b\16050537.D
Operator :
Acquired : 17 May 2005 4:18 pm using AcqMethod VOCCOXY.M
Instrument : PAL GCMS
Sample Name: BE51201-BLK1
Misc Info :
Vial Number: 37



File :C:\MSDCHEM\1\DATA\2005-May-16-1134.b\16050538.D
Operator :
Acquired : 17 May 2005 5:03 pm using AcqMethod VOCCOXY.M
Instrument : PAL GCMS
Sample Name: BE51201-BS1@voc
Misc Info :
Vial Number: 38



File : C:\MSDCHEM\1\DATA\2005-May-16-1134.b\16050540.D
Operator :
Acquired : 17 May 2005 6:31 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BE51201-BS1@gas
Misc Info :
Vial Number: 40





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

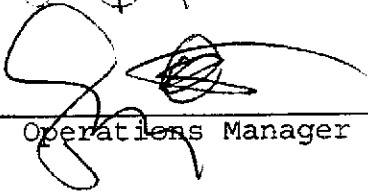
Prepared for:

Pacific Analytical Laboratory
851 West Midway Ave
Suite 201B
Alameda, CA 94501

Date: 17-MAY-05
Lab Job Number: 179293
Project ID: STANDARD
Location:

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: 
Project Manager

Reviewed by: 
Operations Manager

This package may be reproduced only in its entirety.

CASE NARRATIVE

Laboratory number: 179293
Client: Pacific Analytical Laboratory
Request Date: 05/06/05
Samples Received: 05/06/05

This hardcopy data package contains sample and QC results for three soil samples, requested for the above referenced project on 05/06/05. The samples were received on ice and intact.

TPH-Extractables by GC (EPA 8015B):

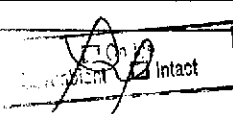
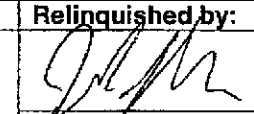
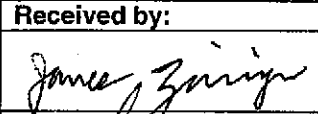


No analytical problems were encountered.

179293

CHAIN OF CUSTODY FORM

PAL Pacific Analytical Laboratory
 851 West Midway Ave., Suite 201B
 Alameda, CA 94501
 510-864-0364 Telephone
 510-864-0365 Fax

PAL
 Login# 5050004

Project No: 2842				Sampler: John Lohman				Analyses/Method							
Project Name: 5565 Tesla Rd, Livermore				Report To: Joyce Bobek				TPH P TPH S TPH MO GTEx-MARBE							
Project P.O.: ---				Company: SOMA Environmental Engineering, Inc.											
Turnaround Time: Standard				Tel: 925-244-6600 Fax: 925-244-6601											
Lab No.	Sample ID	Sampling Date/Time		Matrix			# of Containers	Preservatives				Field Notes			
		Date	Time	Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE				
-1	MW-1	5/5/05	10:00 AM	X			1				X	X	X	X	
-2	MW-2	5/5/05	11:40 AM	X			1				X	X	X	X	
-3	MW-3	5/5/05	1:15 PM	X			1				X	X	X	X	
Sampler Remarks:				Relinquished by:				Date/Time:		Received by:		Date/Time:			
								5/5/05 3:45 PM				5/5/05 3:45 PM			
								5/6/05 12:10 PM				5/6/05 12:10 PM			

Total Extractable Hydrocarbons

Lab #:	179293	Prep:	SHAKER TABLE
Client:	Pacific Analytical Laboratory	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Batch#:	101847
Units:	mg/Kg	Sampled:	05/05/05
Basis:	as received	Received:	05/06/05
Diln Fac:	1.000	Prepared:	05/09/05

Field ID:	MW-1	Lab ID:	179293-001
Type:	SAMPLE	Analyzed:	05/09/05

Analyte	Result	RL
Diesel C10-C24	ND	0.99

Surrogate	%REC	Limits
Hexacosane	85	51-136

Field ID:	MW-2	Lab ID:	179293-002
Type:	SAMPLE	Analyzed:	05/10/05

Analyte	Result	RL
Diesel C10-C24	2.7 H Y	0.99

Surrogate	%REC	Limits
Hexacosane	80	51-136

Field ID:	MW-3	Lab ID:	179293-003
Type:	SAMPLE	Analyzed:	05/10/05

Analyte	Result	RL
Diesel C10-C24	ND	0.99

Surrogate	%REC	Limits
Hexacosane	93	51-136

Type:	BLANK	Analyzed:	05/09/05
Lab ID:	QC293087	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	0.99

Surrogate	%REC	Limits
Hexacosane	88	51-136

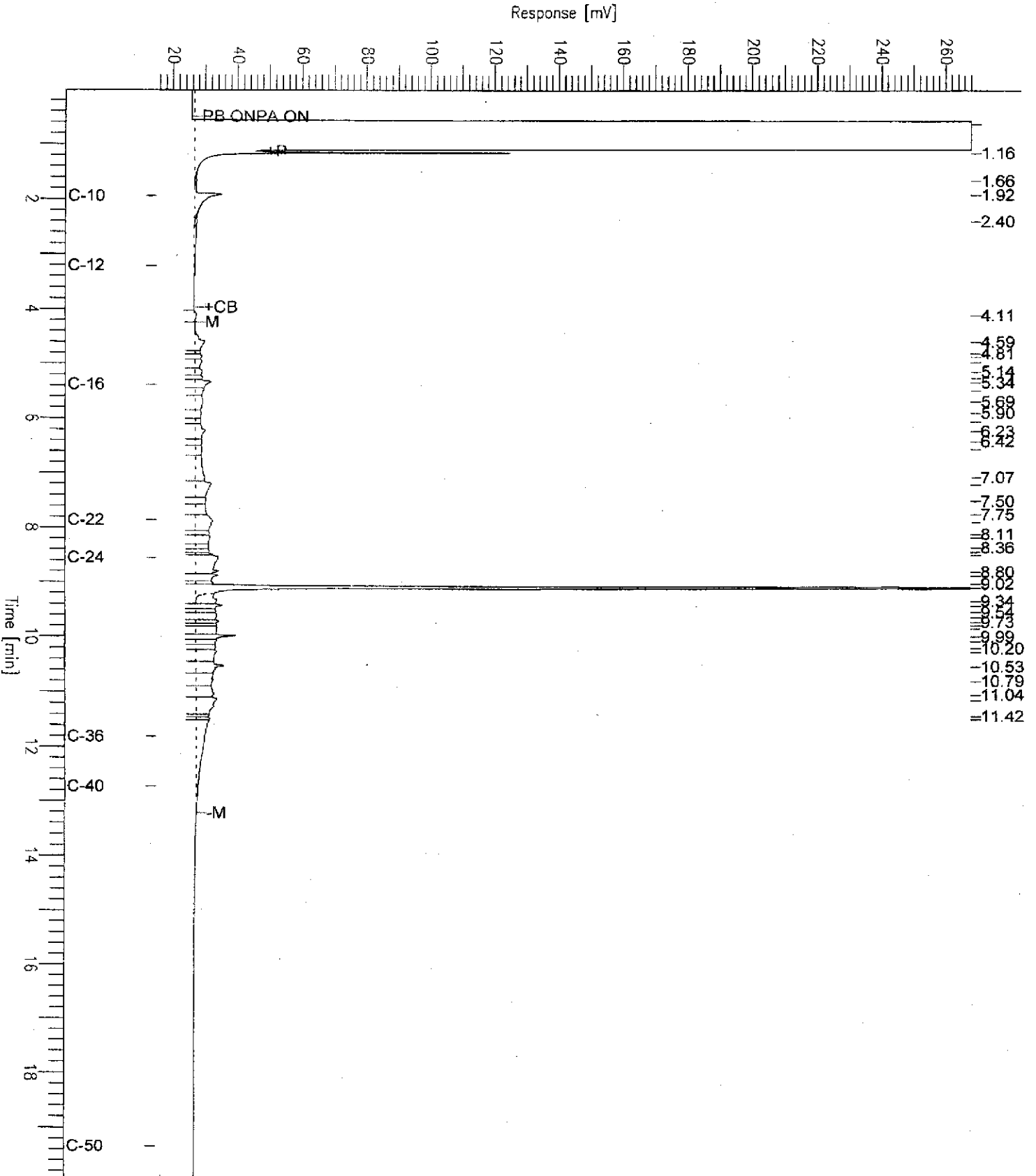
Chromatogram

Sample Name : 179293-002,101847
FileName : G:\GC15\CHB\129B023.RAW
Method :
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 19.99 min
Plot Offset: 15 mV

Sample #: 101847
Date : 5/11/05 10:48 AM
Time of Injection: 5/10/05 02:16 AM
Low Point : 14.84 mV
Plot Scale: 253.2 mV
High Point : 268.03 mV

Page 1 of 1

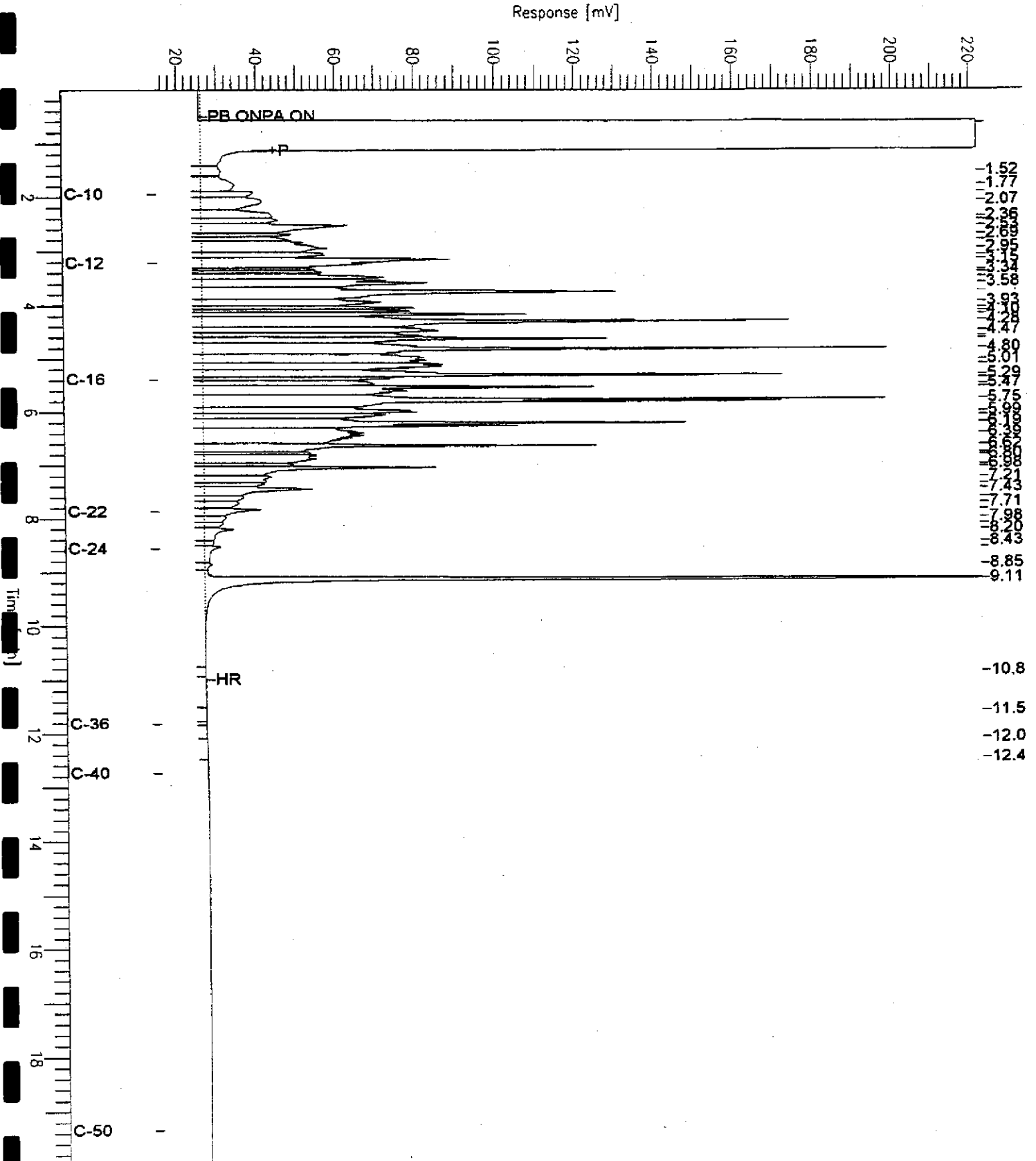


Chromatogram

Sample Name : ccv,S467,dsl
 File Name : G:\GC15\CHB\129B003.RAW
 Method : BTEH122S.MTH
 Start Time : 0.01 min
 Scale Factor : 0.0

End Time : 19.99 min
 Plot Offset : 15 mV

Sample #: 500mg/L
 Date : 5/9/05 10:22 AM
 Time of Injection: 5/9/05 10:00 AM
 Low Point : 15.06 mV
 High Point : 221.91 mV
 Plot Scale: 206.8 mV





Batch QC Report

Total Extractable Hydrocarbons

Lab #:	179293	Prep:	SHAKER TABLE
Client:	Pacific Analytical Laboratory	Analysis:	EPA 8015B
Project#:	STANDARD		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC293088	Batch#:	101847
Matrix:	Soil	Prepared:	05/09/05
Units:	mg/Kg	Analyzed:	05/09/05
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.59	45.21	91	52-137

Surrogate	%REC	Limits
Hexacosane	90	51-136

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	179293	Prep:	SHAKER TABLE
Client:	Pacific Analytical Laboratory	Analysis:	EPA 8015B
Project#:	STANDARD		
Field ID:	MW-1	Batch#:	101847
MSS Lab ID:	179293-001	Sampled:	05/05/05
Matrix:	Soil	Received:	05/06/05
Units:	mg/Kg	Prepared:	05/09/05
Basis:	as received	Analyzed:	05/09/05
Diln Fac:	1.000		

Type: MS Lab ID: QC293089

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.7089	49.94	47.98	95	11-169

Surrogate	%REC	Limits
Hexacosane	99	51-136

Type: MSD Lab ID: QC293090

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.53	48.38	96	11-169	2	49

Surrogate	%REC	Limits
Hexacosane	99	51-136

RPD= Relative Percent Difference

CASE NARRATIVE

Laboratory number: 179293
Client: Pacific Analytical Laboratory
Request Date: 05/06/05
Samples Received: 05/06/05

This hardcopy data package contains sample and QC results for three soil samples, requested for the above referenced project on 05/06/05. The samples were received on ice and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Total Extractable Hydrocarbons

Lab #:	179293	Prep:	SHAKER TABLE
Client:	Pacific Analytical Laboratory	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Batch#:	101847
Units:	mg/Kg	Sampled:	05/05/05
Basis:	as received	Received:	05/06/05
Diln Fac:	1.000	Prepared:	05/09/05

Field ID: MW-1 Lab ID: 179293-001
Type: SAMPLE Analyzed: 05/09/05

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	85	51-136

Field ID: MW-2 Lab ID: 179293-002
Type: SAMPLE Analyzed: 05/10/05

Analyte	Result	RL
Diesel C10-C24	2.7 H Y	0.99
Motor Oil C24-C36	7.1	5.0

Surrogate	%REC	Limits
Hexacosane	80	51-136

Field ID: MW-3 Lab ID: 179293-003
Type: SAMPLE Analyzed: 05/10/05

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	93	51-136

Type: BLANK Analyzed: 05/09/05
Lab ID: QC293087 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	88	51-136

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	179293	Prep:	SHAKER TABLE
Client:	Pacific Analytical Laboratory	Analysis:	EPA 8015B
Project#:	STANDARD		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC293088	Batch#:	101847
Matrix:	Soil	Prepared:	05/09/05
Units:	mg/Kg	Analyzed:	05/09/05
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.59	45.21	91	52-137

Surrogate	%REC	Limits
Hexacosane	90	51-136

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	179293	Prep:	SHAKER TABLE
Client:	Pacific Analytical Laboratory	Analysis:	EPA 8015B
Project#:	STANDARD		
Field ID:	MW-1	Batch#:	101847
MSS Lab ID:	179293-001	Sampled:	05/05/05
Matrix:	Soil	Received:	05/06/05
Units:	mg/Kg	Prepared:	05/09/05
Basis:	as received	Analyzed:	05/09/05
Diln Fac:	1.000		

Type: MS Lab ID: QC293089

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.7089	49.94	47.98	95	11-169

Surrogate	%REC	Limits
Hexacosane	99	51-136

Type: MSD Lab ID: QC293090

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.53	48.38	96	11-169	2	49

Surrogate	%REC	Limits
Hexacosane	99	51-136

Appendix E

Well Survey Data

Harrington Surveys Inc.
Land Surveying & Mapping

2278 Larkey Lane, Walnut Creek, Ca. 94597 Phone (925)935-7228 Fax (925)935-5118
Cell (925)788-7359 E-Mail (ben.5132@pacbell.net)

SOMA ENVIRONMENTAL ENGINEERING
2680 BISHOP DR. # 203
SAN RAMON, CA. 94583

JUNE 05, 2005

ATTN: ELENA

5565 TESLA ROAD,
LIVERMORE CA.

SURVEY REPORT

CONTROLLING POINTS FOR SURVEY:

CALIFORNIA HPGN MONUMENT 04 FL, CALIFORNIA COORDINATE SYSTEM, ZONE 3.
NAD 83. NORTH 2,085,087.52 - EAST 6,213,127.18, LAT. N37°42'56.31172"
W121°42'18.00018".
ELEVATION 566.57, NAVD 88,

CALIFORNIA HPGN MONUMENT 04 FK, CALIFORNIA COORDINATE SYSTEM, ZONE 3.
NORTH 2,055,842.44 - EAST 6,189,298.07, LAT N37°38'02.07933",
W121°47'09.51080"
ELEVATION 637.80NAVD 88,

INSTRUMENTATION:

TRIMBLE GPS, MODEL 5800 AND LEICA TCA 1800, 1" HORZ. & VERT.
OBSERVATION: EPOCH = 180.

FIELD SURVEY: JUNE 03, 2005.

BEN HARRINGTON
PLS 5132



