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Questa Engineering Corporation.

Transmittal

To:	Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502-6577	**From:**	Willard N. Hopkins, CEG Questa Engineering Corp. 1220 Brickyard Cove Road, Suite 206 Pt. Richmond, CA 94807
Fax:		**Date:**	November 27, 2006
Phone:	510-567-6700	**Copies:**	1 paper, 1 CD
Re:	Subsurface Investigation of Groundwater and Vadose Zone Soil, 4311-4333 Macarthur Blvd, Oakland, CA	**CC:**	Mr. Allan Hahn 8323 Saturn Park Drive San Ramon, CA 94582

Urgent ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

•Comments:

Enclosed please find one original paper copy and one CD of the subject report for property at 4311-4333 Macarthur Boulevard, Oakland, California, The Former Roberts Tire Site. This report is submitted for review on behalf of Mr. Allan Hahn, who is seeking a no further action required determination for the property. Please call me with any questions at 510-236-6114, ext. 222.

Sincerely,

Will Hopkins, CEG

Senior Engineering Geologist

QUESTA

ENGINEERING CORP.

Subsurface Investigation of Groundwater and Vadose Zone Soil

4311-4333 Macarthur Blvd., Oakland, California

Submitted To:

Mr. Allan Hahn
8323 Saturn Park Drive
San Ramon, CA 94582

November 2006

Civil,
Environmental
& Water
Resources

QUESTA ENGINEERING CORP.

Civil, Environmental & Water Resources

November 14, 2006

Mr. Allan Hahn
8323 Saturn Park Drive
San Ramon, CA 94582

Subject: Subsurface Investigation of Groundwater and Vadose Zone Soil at 4311 to 4333 Macarthur Boulevard, Oakland, California

Dear Mr. Hahn:

This letter presents results of the Subsurface Investigation of Deep Soil and Groundwater at 4311 to 4333 Macarthur Boulevard in Oakland, California. Our scope of work was based on discussions with you and review of a proposed work plan by another consultant. Samples of groundwater and soil (collected at the water table) were analyzed by a state-certified analytical testing laboratory to evaluate the presence of groundwater contamination by petroleum hydrocarbons. This work is a follow-up to the soil contamination remediation performed in 2004 and documented in our letter report summarizing work (Questa, 2005). Closure of the soil case was received from the Department of Toxic Substances and Control (DTSC) in 2005. Analytical testing results were compared to the San Francisco Bay Regional Water Quality Control Board (RWQCB, 2005) Environmental Screening Levels (ESLs) and previous analytical testing results.

The results of this investigation indicate that low levels of total petroleum hydrocarbons (TPH) as gasoline exceeding the ESLs for Commercial sites were detected in two of the six groundwater samples collected at site. No significant contamination was detected in the deep soil samples collected from near the water table. This suggests that the groundwater contamination is not related to significant on site soil contamination, but may be related to residual contamination from old fuel tanks, which may be located within the Macarthur Boulevard right-of-way. The surrounding area is also known to have an area-wide petroleum hydrocarbon contamination problem from several former Service Stations located nearby the project site. Based on our evaluation, we do not recommend additional remediation at the site, because no on-site source of contamination has been detected.

Box 70356, 1220 Brickyard Cove Rd. Suite 206 Pt. Richmond, CA 94807 *T:* 510/236.6114 *F:* 510/236.2423 *E:* Questa@QuestaEC.com

BACKGROUND

Site History

The project site is located at the southwest corner of High Street and Macarthur Boulevard in Oakland, a mixed light industrial, commercial and residential area. The subject property is bordered by Macarthur Boulevard to the east, High Street to the north, and Interstate 580 (I580) to the west. Slope is generally towards the northwest and the Interstate 580 overpass of High Street. The property has been the location of several different automotive businesses dating back to the 1940s, when the entire area was subject to rapid development both during and after World War II. It was about that time the first underground storage tanks were installed to service a gas station. The two major buildings on the site were constructed near the corner of High Street and Macarthur Boulevard at a similar time and are shown on a 1950 Sanborn Map of the site. These buildings occupied approximately 40,000 square feet south of the High Street and Macarthur Boulevard Intersection, while a smaller building was located next to the current entrance by the Freeway overpass of High Street. This building was demolished to make room for a transfer yard during the late 1950s or early 1960s. Around 1960 Macarthur Boulevard was widened and the Roberts family lost part of their property. Later the western portion of the property next to I580 was used as a Pacific Gas and Electric Company (PG&E) substation. From the 1950s up until about 1996 the eastern parcel owned by the Roberts family was used for automotive repair, wheelwork, tire work and sales. Finally, business closure and change in ownership lead to the series of environmental assessments described below. Buildings and underlying foundations and pavement on the property were not completely demolished until 2004.

Previous Environmental Assessments

Between 1999 and 2004 a series of environmental assessments and soil excavations were completed that lead to closure of the soil case in 2005. This started in 1999 when motor oil and lead were discovered in shallow soil near the border of the Roberts and PG&E properties. Geomatrix supervised cleanup on the PG&E property that involved the excavation of contaminated soil summarized in a report dated September 8, 2000. The area of soil removal is shown as Area A on **Figure 1**.

Clearwater Group Magnetometer Survey- Potential Underground Tanks

In 1999 the Clearwater Group (Clearwater Group, 9/14/99, *Magnetometer Survey Results*) completed a magnetometer survey to determine if there are any buried underground storage tanks on the Roberts property. Results of the magnetometer survey suggested three buried metal objects that could be tanks. These are shown on the site plan, **Figure 1**. One object was identified next to the Macarthur Boulevard crosswalk

northwest of the concrete traffic island at a depth of approximately 6 feet; another object estimated to be about 3 feet below the former pavement surface is shown midway along the Macarthur Boulevard property line and 20 feet southwest of the fence. The third object is shown southeast of the former building on the property, approximately 40 feet inside the fence line. This last object probably corresponds to a small waste oil container (approximately 100 gallons) removed during the 2004 excavation.

Clearwater Group Soil and Groundwater Sampling

Analytical testing results from soil and groundwater sampling in 2000 identified low levels of diesel fuel and motor oil in groundwater underlying the property, with concentrations less than the RWQCB screening levels for a non drinking water aquifer (RWQCB, 2/2005). Higher contaminant concentrations were identified in groundwater samples taken from holes penetrated next to the southernmost wall of the main building and next to the building corner that fronted against Macarthur Boulevard. A sample taken next to the southern wall had total petroleum hydrocarbons as gasoline (TPH-g) concentrations of 4,600 µg per liter, TPH- diesel concentrations of 12,000 µg per liter, and TPH-motor oil concentrations of 46,000 µg per liter. The sample taken next to the building corner had TPH-gas and TPH-diesel concentrations of 13,000 and 14,000 µg per liter.

Department of Toxic Substances Control Preliminary Assessment

Following these investigations the Department of Toxic Substances and Control (DTSC) completed a preliminary assessment of the site in May of 2001 that identified several environmental issues, most significantly lead and motor oil concentrations in soil above the EPA preliminary remediation goals. Groundwater was not identified as an issue.

Following this assessment further sampling and testing was completed to identify the extent of soil contamination by ERRG in May of 2002 (ERRG, 11/2002, *Final Removal Action Implementation Report*) under contract to the DTSC. Sampling results were limited to the vicinity of the former building and indicated lead and motor oil in soil shallower than 1.5 feet below the ground surface. Contaminated soil was excavated in two areas in September of 2002, areas B and C on **Figure 1**.

JMK Environmental Phase I and Phase II Environmental Site Assessments

In 2003 and 2004 JMK Environmental performed both Phase 1 and Phase 2 Environmental Site Assessments for the property. Sampling and testing results from their reports indicated localized areas of TPH-motor oil remained in the soil, with levels ranging from 830 mg/kg to 8,500 mg/kg immediately below concrete and asphalt, and from 1,600 to 2,200 mg/kg at 2 feet below the ground surface. JMK also identified lead concentrations in groundwater ranging from 290 to 4000 micrograms per liter, gasoline as high as 42,000 micrograms per liter, and benzene as high as 5,800 micrograms per liter. MTBE was not detected. As a result of testing, JMK hand excavated, removed, and

disposed of the upper 6 inches to 1-foot of contaminated soil in areas D and E during May of 2004 that are also shown on **Figure 1**. They ended up removing four 55-gallon drums full of soil and debris.

Questa Engineering Corporation 2004 Soil Excavation

In July of 2004, M. Douglas Construction Inc., under contract with Mr. Alex Hahn, demolished the remaining asphalt concrete pavement and Portland cement concrete slabs-on-grade present at the site. It was at this time that Questa was retained to provide further consulting services.

Questa Engineering Corporation and M. Douglas Construction (Questa Engineering Corporation, Last Revision January 24, 2005, *Removal Action Sampling and Testing Results*) completed a field investigation on August 2, 2004 that included analysis of soil samples taken as deep as 9 feet below the ground surface (bgs), including both fill and native soils. This information was used to determine the area where contaminated soils should be excavated. Prior to excavation, the remaining asphalt and concrete pavement were removed. C. Stevens Grading and Paving, a 40-hour hazardous waste trained operator, completed the excavation work.

Excavation of the site from October 18 through October 22, 2004, included removal of approximately 1.0 to 1.5 feet of soil from the entire site as part of the overall development plan. This was followed by focused removal of contaminated soil in areas F, G and H shown on the attached **Figure 1,** which shows excavation limits. Excavation of Area G was completed on October 22, 2004 and extended to a depth of 3.5 to 4.0 feet below the original ground surface. Excavation Area H was completed on November 5, 2004, and extended to depths of 1.5 to 3.0 feet below the original ground surface. Excavation Area F was completed on November 12, 2004, and extended to a depth of approximately 1.0 to 2.0 feet below the original ground surface. Confirmatory soil samples from the bottom and sides of excavations were used to verify that all contaminated soil was removed. The stockpile areas where contaminated soils were temporarily stockpiled were also sampled and tested to confirm that cleanup goals were met. Testing was completed to make sure that soil left in place had contaminant levels below the Regional Water Quality Control Board Cleanup Goals for Residential Sites, or less than 100 mg/kg TPH occurring as diesel and less than 500 mg/kg TPH occurring as motor oil (San Francisco Bay Regional Water Quality Control Board, 2/2005, *Screening for Environmental Sites with Contaminated Soil and Groundwater*).

In addition to contaminated soil, a small waste oil tank/container of approximately 100 gallons was removed. This metal container extended to a depth of approximately 2.5 feet below the original ground surface and had some residue of waste oil floating in water that had partially filled the tank. Following discovery, the tank was cleanly excavated and soil beneath the tank removed to at least 4.0 feet below the original ground surface (1.5 feet below the former bottom elevation of the container). Soil was also excavated at least 25 feet horizontally from the tank location. M. Douglas Construction and subcontractors

removed the tank from the site for recycling of the tank metal after pressure washing the tank. The tank was finally transported to the Martinez Transfer Station in Martinez, California where it was accepted for recycling.

Soil Case Closure

In a letter dated January 24, 2005, and addressed to Mr. Hahn, the Department of Toxic Substances and Control stated that no further action is necessary concerning soils on the property since soil with contaminant concentrations exceeding residential screening levels established by the Regional Water Quality Control Board was removed. While the soil case was closed the groundwater case was referred to the Alameda County Environmental Health Department in a letter dated April 28, 2005. They cited contamination with motor oil, diesel, gasoline, benzene, toluene, ethyl benzene and xylenes as reason for not closing the case. Presumably this is based on the previous groundwater sampling by JMK in 2003 (JMK, 3/31/2003, *Phase II Environmental Site Assessment Report*) and the Clearwater Group in 2000 (Clearwater Group, Inc., 11/2002, *Sampling Results*). The critical issue is that the groundwater sampling in 2000 and 2003 predates the removal of contaminated soil and therefore sampled water probably contained some residue from overlying contaminated soil.

CURRENT SUBSURFACE INVESTIGATION

Field Investigation

The most recent subsurface investigation included the completion of six boreholes to depths of approximately 21 to 28.5 feet below ground surface on October 4, 2006. Borehole locations are shown on **Figure 1.** Borehole logs are presented as **Figures 2** through **7,** while **Figure 8** summarizes the Unified Soils Classification System used to describe and classify soils. Drilling was accomplished using a track-mounted continuous flight auger drill rig. Samples were collected by driving the 2.45-inch inside diameter California modified sampler with a 140-pound hammer dropped from a height of 30 inches. The sampler was lined with pre-cleaned stainless steel liners. Some soil samples were also collected from the auger with a stainless steel trowel and immediately transferred to pre-cleaned glass jars. All sample containers were immediately sealed with airtight lids, labeled and placed in a cooler on blue ice. All soil samples were collected in accordance with EPA protocol and company standard operating procedures.

Groundwater was encountered in all the boreholes between 12 and 18 feet below the ground surface (bgs). Following drilling, water typically rose to between 7 and 12 feet bgs, with the exception of Borehole 2, where the water table rose to 4.6 feet bgs and Borehole 3, where the water level dropped to about 22.9 feet bgs. The primary water-bearing unit is a sandy gravel with clay or gravelly clay encountered at approximately 20 feet below ground surface (bgs), with local perched groundwater at approximately 15 feet bgs or shallower in some areas. Samples of groundwater were collected using pre-

cleaned disposable bailers and were immediately transferred into VOA vials, amber glass jars, and plastic bottles. VOA vials were sealed with no headspace, while amber glass jars were immediately sealed with lined plastic screw caps. Following sampling and measurement of the water table, the boreholes were backfilled with a Portland cement grout slurry tremied into the holes and extending to the ground surface.

Analytical Testing Results

Curtis and Tompkins Limited of Berkeley, a state-certified analytical testing laboratory, tested soil and groundwater samples. Samples were tested for total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, and TPH as motor oil by EPA Method 8015B and the gasoline constituents Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), and MTBE by EPA Method 8021B. Groundwater samples were tested for dissolved lead according to EPA Method 6020. Samples for TPH diesel/motor oil and lead testing were filtered through the 0.425-micrometer filter prior to preservation in accordance with EPA protocol. Results for soil samples are presented on **Table 1** and results for groundwater samples are presented on **Table 2.** Complete laboratory testing reports are presented in **Appendix A**

CONCLUSIONS

The results of soil sampling and testing indicate no significant soil contamination at the water table depth. The only detected soil contamination were very low levels of TPH as diesel (1.7 mg/kg) and TPH as motor oil (17 mg/kg) from Borehole 5 at 11.5 feet bgs. No other soil contamination was detected.

Groundwater testing results indicate low-level contamination in water samples collected from Borehole 1 and Borehole 4. Results of TPH as gasoline in Borehole 1 at 1,700 µg/L and Borehole 4 at 1,500 µg/L exceed the Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) for gasoline (500 µg/L) in groundwater at a Commercial site with a non-drinking water aquifer. These levels are much lower than the concentration of 4,600 µg/L measured in groundwater in the year 2000 in the same vicinity (Clearwater Group, 11/2000). Benzene, ethylene, and xylenes also exceeded the ESLs in Borehole 4, but are greatly reduced from the concentrations detected in 2000. TPH as diesel concentrations of 230 to 440 µg/L in the boreholes and dissolved lead concentrations in Boreholes 1 through 3 ranging from 1.4 to 1.6 µg/L are less than the RWQCB ESLs for these constituents.

Due to the commercial/industrial nature of the project vicinity and the history of underground fuel storage tanks, automotive businesses, and gasoline service stations, it is difficult to isolate a source for the low concentrations of TPH as gasoline and BTEX in groundwater sampled from Borehole 1 and Borehole 4. Sources of potential soil contamination on the site have been removed through the several remediation projects performed at the site; contamination seems unlikely to be from an as yet unknown source

underlying the site. However, several metallic objects were previously identified underlying soil at the site and vicinity.

A magnetometer survey performed in the year 1999 (Clearwater Group, 1999) identified 5 buried metal objects, 3 considered to be possible tanks based on shape and size. The three considered to be potential buried metallic tank locations are shown on **Figure 1**. Of these three objects, only the northeastern most may remain on the subject property; the object is shown along the Macarthur Boulevard property line and approximately 20 feet to the southwest. As previously mentioned, one of the identified metallic objects was removed during the 2004 excavation (Area G on **Figure 1**) when a small metallic waste oil tank/container was discovered during soil remediation at the site. This small metal container (<100 gallons) was excavated, cleaned, and the metal was recycled. The third object, located east of the site, is apparently buried beneath Macarthur Boulevard. Results of the previous investigations at the site concluded that this object was unlikely to be a significant source of contamination. We consider it likely that the groundwater contamination detected represents cumulative residual site contamination and background contamination from up-gradient sites. No vadose zone contamination was detected in the site soil samples collected in the soil/groundwater interface, suggesting that no significant groundwater contamination problem remains at the subject property.

RECOMMENDATIONS

Based on results of our investigation of the vadose zone soil and groundwater at the site, detected contamination appears to be residual contamination not representative of a significant contamination problem at the site. Based on a lack of contamination of soil, no soil vapor problems should exist at the site. The clay-rich site fill soils should act as a barrier to soil vapor migration. No further action to investigate the residual groundwater contamination is recommended at this time. The site can be developed for the identified Commercial land uses.

The possible remaining metallic object underlying the northeastern portion of the site at shallow depth should be excavated and removed. This could be done now to avoid delays during construction or it could be done during site redevelopment. Should this object be determined to be an underground storage tank, then it should be removed in accordance with local ordinances for underground storage tank removal. Any soils with residual contamination detected at that time, should be removed and disposed of in accordance with local, state and federal regulations at an appropriate landfill site. Based on the results of this and past investigations at the site, if the metallic object is an underground tank it is likely to be a small tank representing a minimal risk to site development.

LIMITATIONS

This investigation was performed in accordance with present environmental geologic standards applicable to this project. In our opinion, the scope of services adequately supports the conclusions and recommendations presented. The findings are valid now, but should not be relied upon after two years without our review.

The recommendations of this report are based upon the assumption that the subsurface conditions do not deviate from those interpreted from the surface and subsurface data of this investigation. If any variation or undesirable conditions are encountered during construction, or if the proposed construction differs from that planned at the present time, we should be notified so that supplemental recommendations can be given. The recommendations of this report are intended for the site described only, and must not be extended to adjacent areas.

It is the responsibility of the property owner to insure that the recommendations of this report are implemented.

We trust this is the information you require at this time. Should you require additional information please contact the undersigned at (510) 236-6114, extension 222.

Sincerely,

Joseph Farrow, PG #8277
Project Geologist

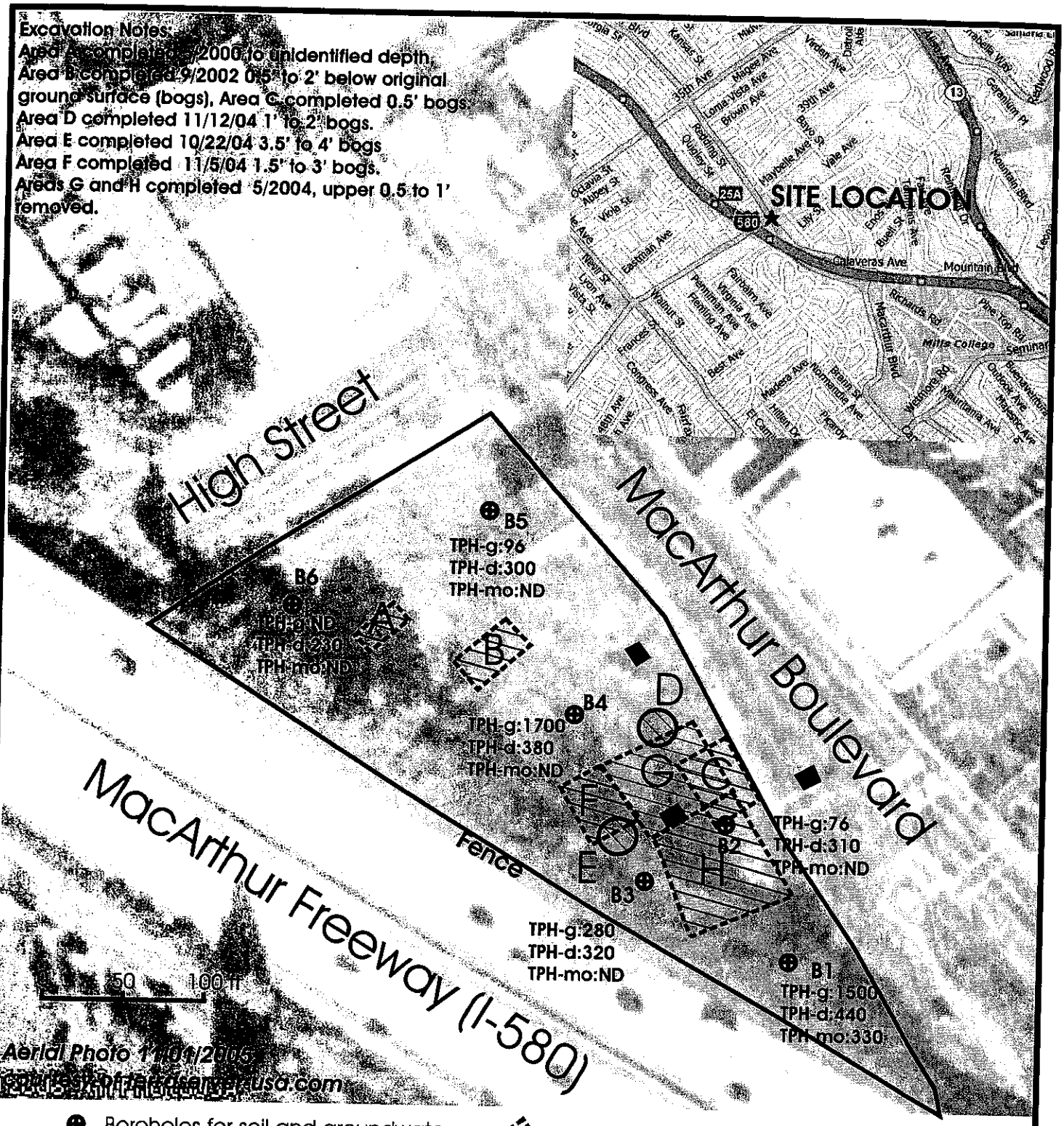
Willard N. Hopkins, CEG
Senior Engineering Geologist

REGISTERED GEOLOGIST
WILLARD N. HOPKINS
Expires 7/31/09
CERTIFIED ENGINEERING GEOLOGIST
NO. 1761
STATE OF CALIFORNIA

Ref: 260110_gwsamplingreport

Xc: Alameda County Environmental Health

FIGURES

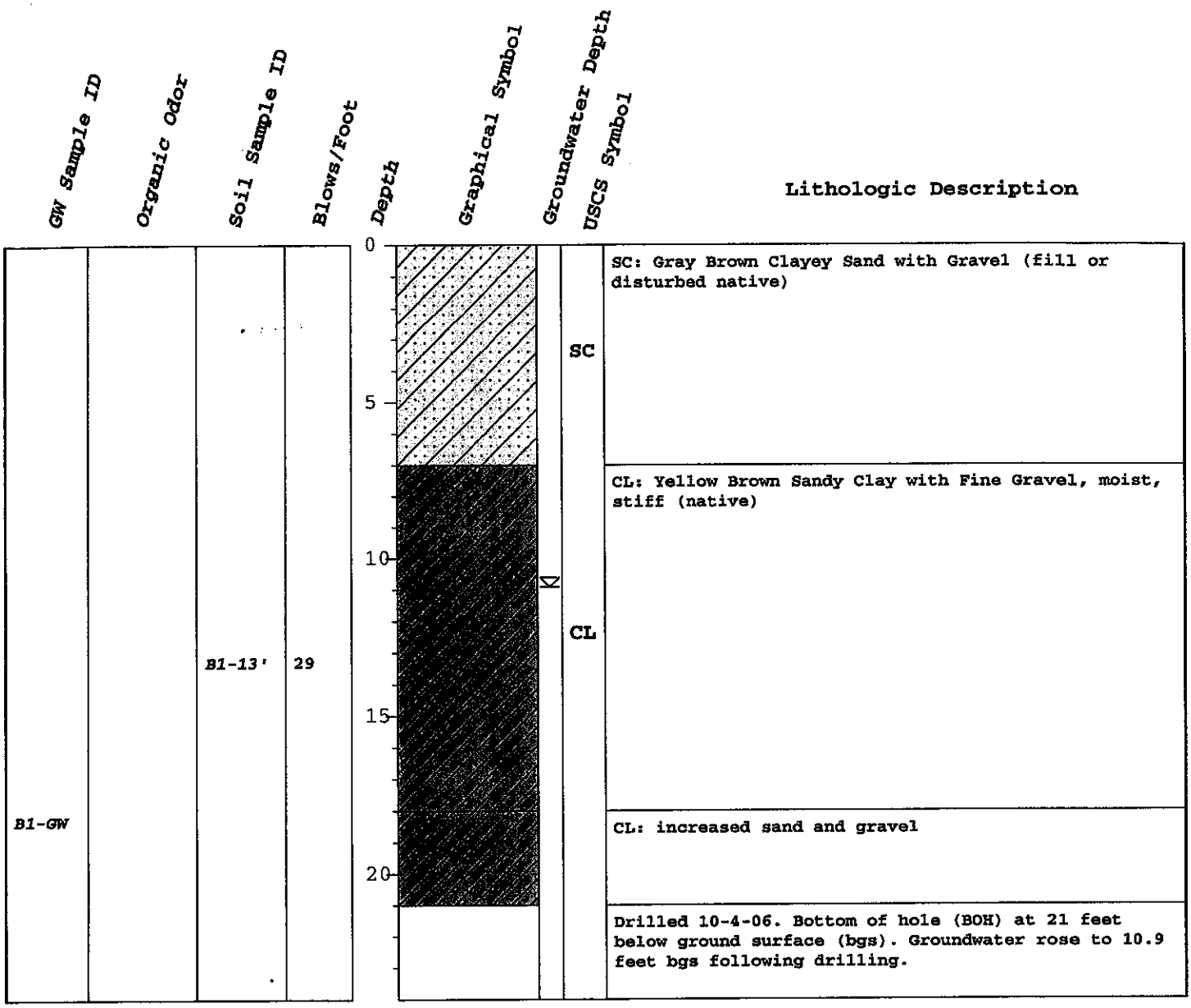


Date:	11/07/06
Drawn:	JF
Appr'd:	JF
Dwg. No.	260110...

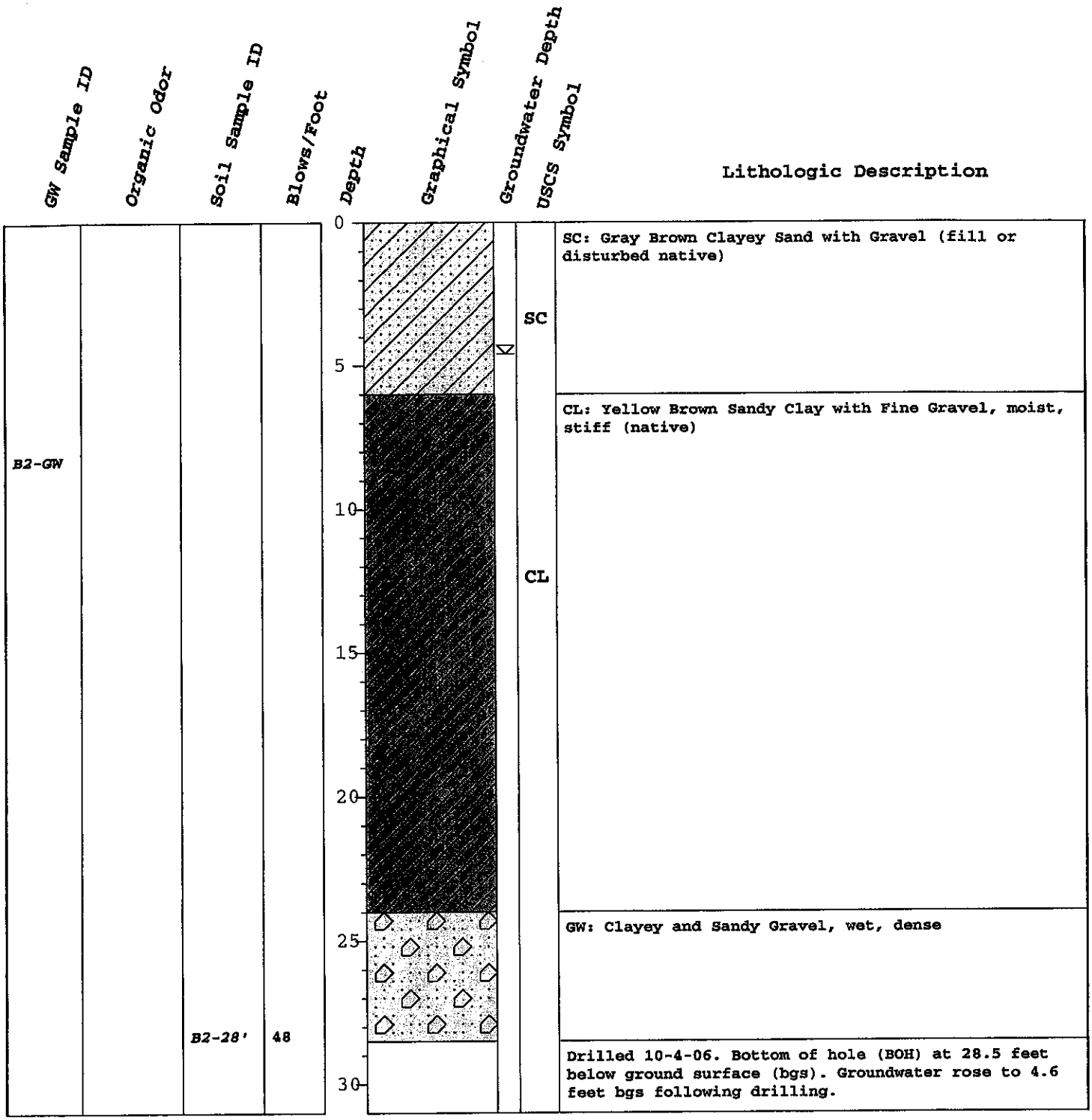
QUESTA ENGINEERING CORP
Civil Environmental & Water Resources
P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807

Site Location and Sample Locations
Groundwater Investigation
4311-4333 MacArthur Blvd.
Oakland, CA

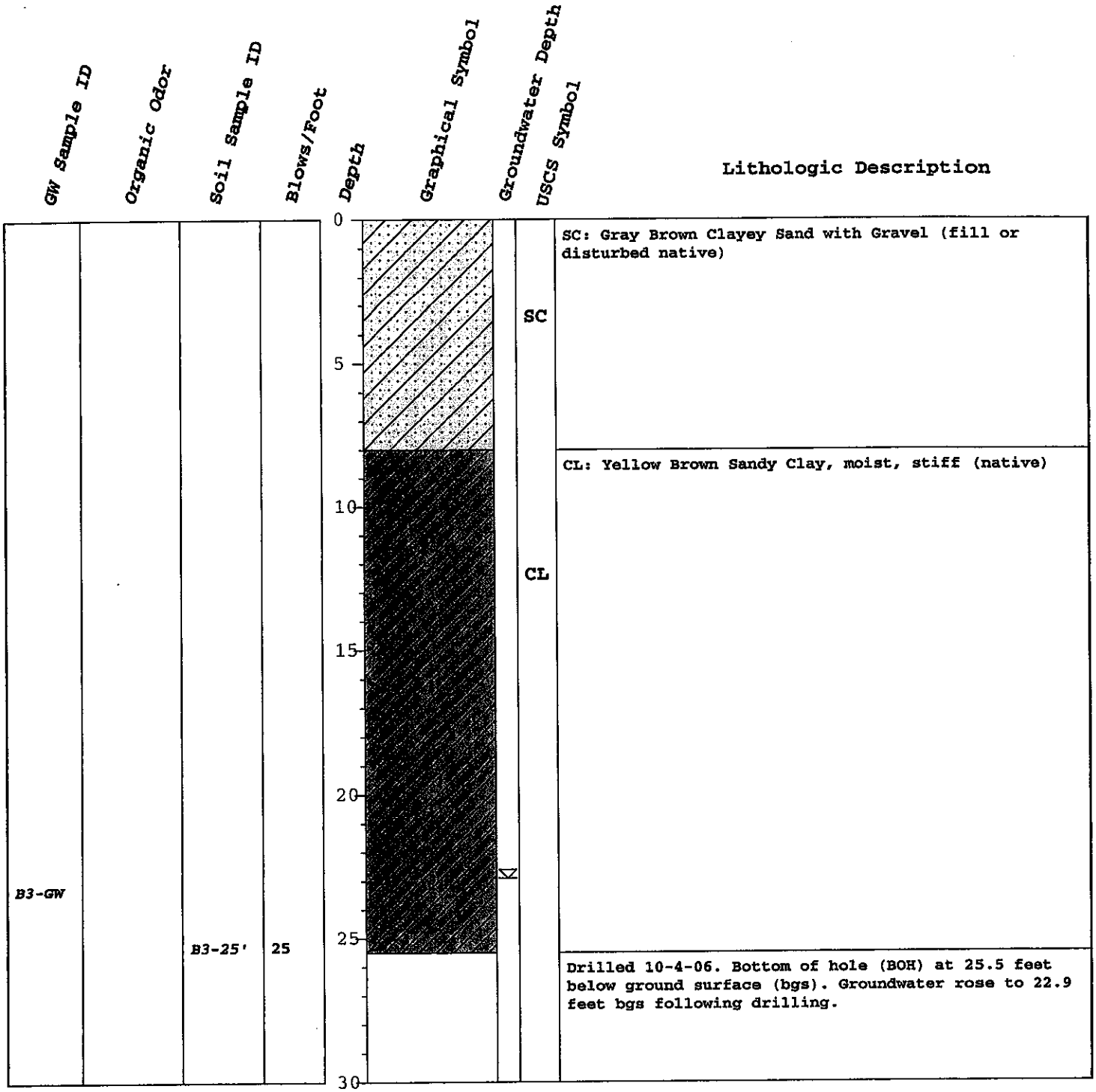
FIGURE
1



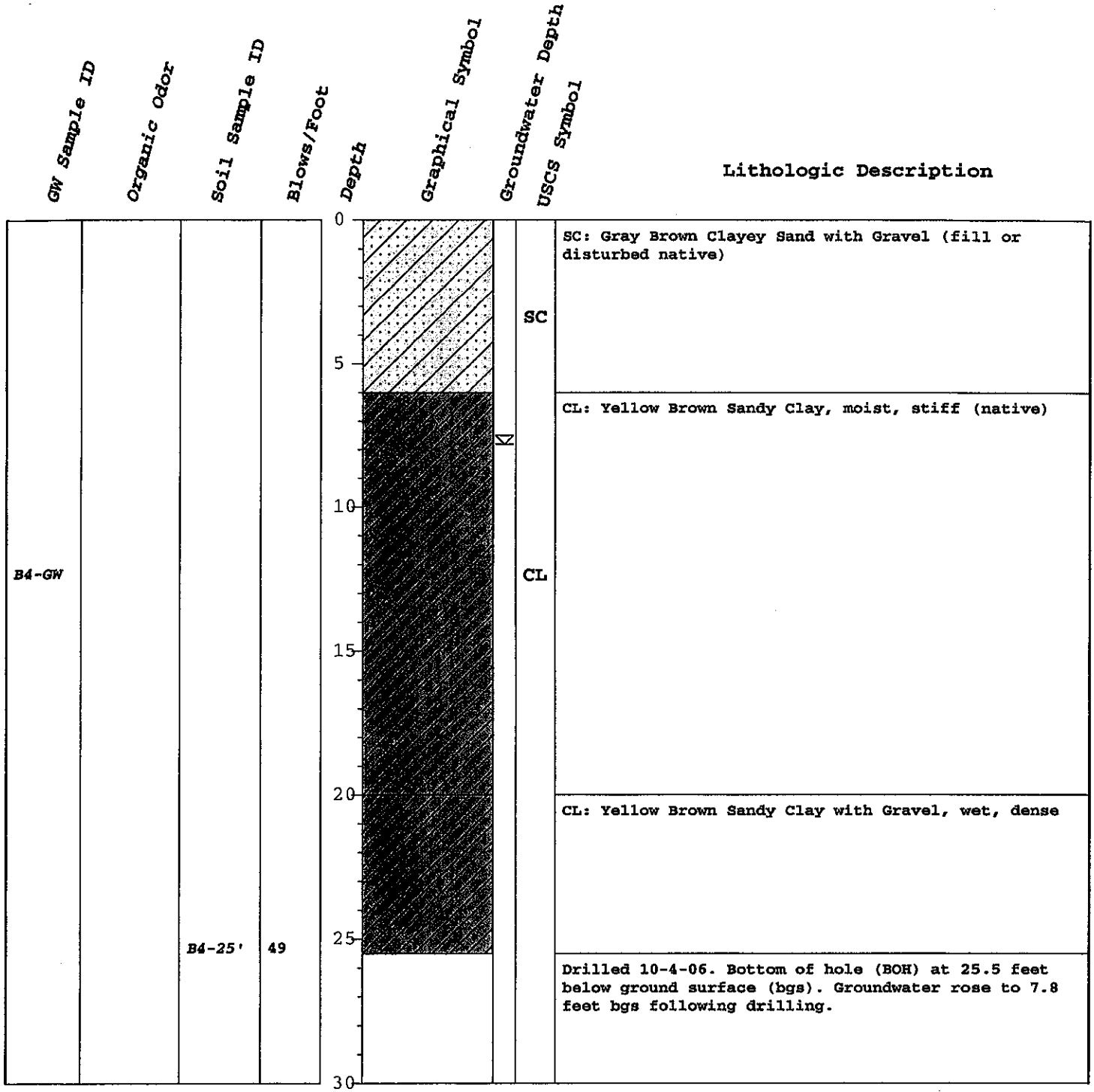
Questa Engineering Corporation 1220 Brickyard Cove Road, Suite 206 Point Richmond, CA 94807	LOG OF BOREHOLE 1 Groundwater Investigation 4311-4333 Macarthur Blvd, Oakland	Figure 2



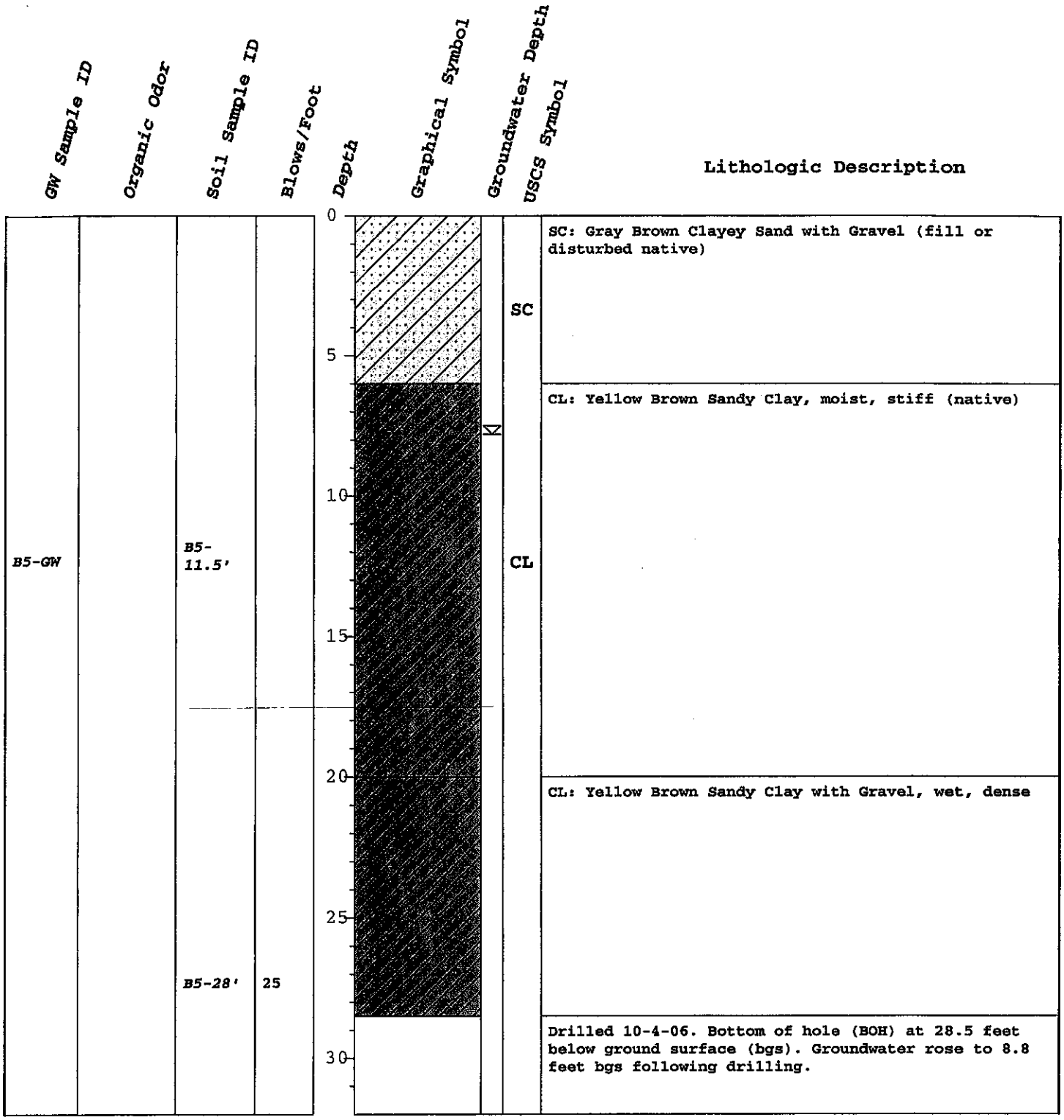
Questa Engineering Corporation 1220 Brickyard Cove Road, Suite 206 Point Richmond, CA 94807	**LOG OF BOREHOLE 2** Groundwater Investigation 4311-4333 Macarthur Blvd, Oakland	**Figure** **3**



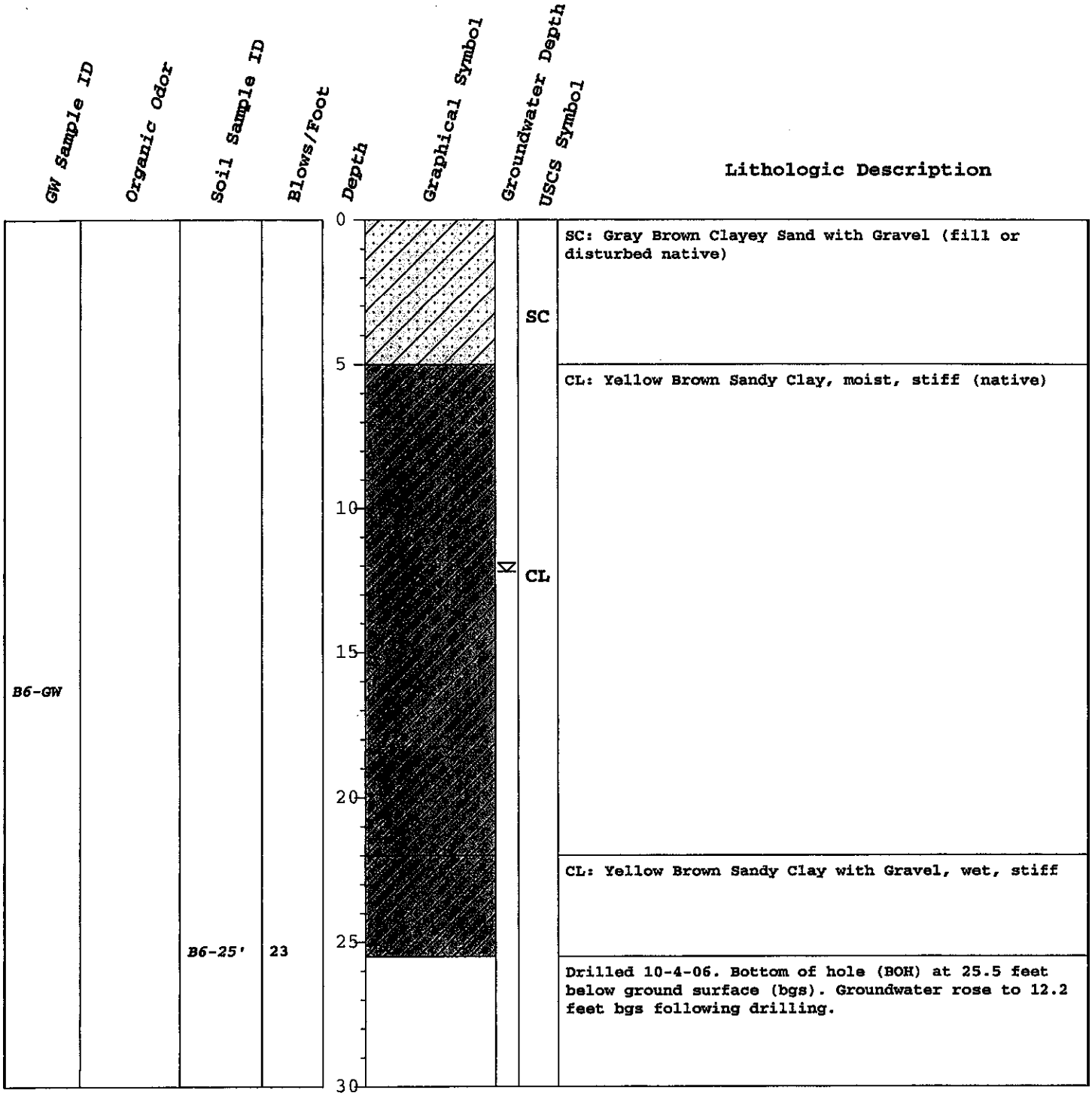
Questa Engineering Corporation 1220 Brickyard Cove Road, Suite 206 Point Richmond, CA 94807	**LOG OF BOREHOLE 3** Groundwater Investigation 4311-4333 Macarthur Blvd, Oakland	Figure **4**



Questa Engineering Corporation 1220 Brickyard Cove Road, Suite 206 Point Richmond, CA 94807	LOG OF BOREHOLE 4 Groundwater Investigation 4311-4333 Macarthur Blvd, Oakland	Figure 5

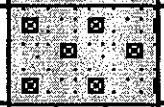
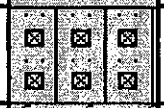
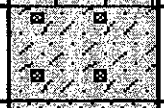
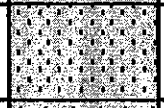
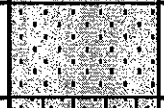
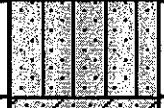
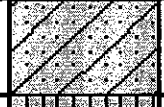
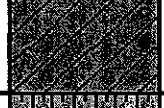
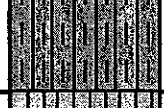
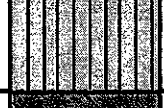


Questa Engineering Corporation 1220 Brickyard Cove Road, Suite 206 Point Richmond, CA 94807	LOG OF BOREHOLE 5 Groundwater Investigation 4311-4333 Macarthur Blvd, Oakland	Figure 6



Questa Engineering Corporation 1220 Brickyard Cove Road, Suite 206 Point Richmond, CA 94807	**LOG OF BOREHOLE 6** Groundwater Investigation 4311-4333 Macarthur Blvd, Oakland	Figure **7**

SOIL CLASS KEY.CDR

MAJOR DIVISION					TYPICAL NAMES
COARSE GRAINED SOILS MORE THAN HALF IS LARGER THAN #200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN #4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		Well graded Gravels, Gravel-Sand mixtures
			GP		Poorly graded Gravels, Gravel-Sand mixtures
		GRAVELS WITH OVER 12% FINES	GM		Silty Gravels, poorly graded, Gravel-Sand-Silt mixtures
			GC		Clayey Gravels, poorly graded Gravel-Sand-Clay mixtures
	SANDS MORE THAN HALF COARSE FRACTION IS LARGER THAN #4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW		Well graded Sands, Gravelly-Sands
			SP		Poorly graded Sands, Gravelly-Sands
		SANDS WITH OVER 12% FINES	SM		Silty Sands, poorly graded, Sand-Silt mixtures
			SC		Clayey Sands, poorly graded, Sand-Clay mixtures
FINE GRAINED SOILS MORE THAN HALF IS SMALLER THAN #200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML		Inorganic Silts and very fine Sands, rock flour, Silty or Clayey fine Sands, or Clayey-Silts with slight plasticity
			CL		Inorganic Clays of low to medium plasticity, Gravelly Clays, Sandy Clays, Silty Clays, lean Clays
			OL		Organic Clays and Organic Silty Clays of low plasticity
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH		Inorganic Silts, micaceous or diatomaceous fine Sandy or Silty Soils,elastic Silts
			CH		Inorganic Clays of high plasticity, fat Clays
			OH		Organic Clays of medium to high plasticity, organic Silts
HIGHLY ORGANIC SOILS			Pt		Peat and other highly organic soils

BOH	Bottom of hole	140 #	140 pound hammer dropped 30"
SPT	Standard Penetration Test Sampler (1.0" inside diameter)	70 #	70 pound hammer dropped 30"
CA MOD	California Modified Sampler (S & H) (2.5" inside diameter)	LL, PL, PI	Liquid Limit, Plastic Limit, Plasticity Index

Questa Engineering Corporation
P.O. Box 70356
1220 Brickyard Cove Road
Point Richmond, CA 94807
Phone: (510) 236-6114 FAX: (510) 236-2423

UNIFIED SOIL CLASSIFICATION SYSTEM AND KEY TO ABBREVIATIONS

FIGURE 8

TABLES

Table 1. Results of Analytical Testing for Soil Samples Sampled 10-04-2006

SAMPLE NUMBER AND DEPTH (FT)	TPH Gasoline (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	m, p - Xylenes (mg/kg)	o-Xylenes (mg/kg)	MTBE (mg/kg)	TPH Diesel (mg/kg)	TPH Motor Oil (mg/kg)
B1 13'	ND	ND	ND	ND	ND	ND	ND	ND	ND
B2 28'	ND	ND	ND	ND	ND	ND	ND	ND	ND
B3 25'	ND	ND	ND	ND	ND	ND	ND	ND	ND
B4 25'	ND	ND	ND	ND	ND	ND	ND	ND	ND
B5 11.5'	ND	ND	ND	ND	ND	ND	ND	1.7	17
B5 28'	ND	ND	ND	ND	ND	ND	ND	ND	ND
B6 25'	ND	ND	ND	ND	ND	ND	ND	ND	ND
ESL Table B Commercial/ Industrial Non-Drinking Water Shallow Aquifer (<3m)	**400**	**0.38**	**9.3**	**32**	**11**	**11**	**5.6**	**500**	**1,000**
ESLTable D Commercial/ Industrial Non-Drinking Water Deep Aquifer (>3m)	**400**	**0.51**	**9.3**	**32**	**11**	**11**	**5.6**	**500**	**1,000**

ND- None Detected; na- not analyzed; mg/kg- milligrams per kilogram; ESL- Environmental Screening Level

Table 2. Results of Analytical Testing for Groundwater Samples (ug/L)* Sampled 10-04-2006

BOREHOLE/ MON. WELL NUMBER	Depth to GW 1-2 hours after drilling	Depth to Bottom of Hole	Initial Groundwater Depth (ft)	TPH Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	m,p-Xylenes (total) (ug/L)	o-Xylenes (total) (ug/L)	Lead (ug/L)	MTBE (ug/L)	TPH Diesel (ug/L)	TPH Motor Oil (ug/L)
B1 GW	10.9	21	est. 12-15	**1,500**	ND	ND	ND	ND	ND	1.4	ND	440	330
B2 GW	4.6	28.5	est. 12-15	76	ND	ND	ND	ND	ND	1.6	ND	310	ND
B3 GW	22.9	25.5	est. 15-18	280	ND	ND	ND	ND	ND	1.4	ND	320	ND
B4 GW	7.8	25.5	15	**1,700**	**78**	**240**	49	**150**	57	ND	ND	380	ND
B5 GW	8.8	28.5	est. 15-18	96	ND	0.58	4	1.2	38	ND	2	300	ND
B6 GW	12.2	25.5	est. 15-18	ND	2.4	ND	ND	ND	ND	ND	ND	230	ND
ESL Table B Non-Drinking Water Shallow Aquifer (<3m)				**500**	**46**	**130**	**290**	**100**	**100**	**2.5**	**1,800**	**640**	**640**
ESLTable D Non-Drinking Water Deep Aquifer (>3m)				**500**	**46**	**130**	**290**	**100**	**100**	**2.5**	**1800**	**640**	**640**

***Did not include silica gel cleanup. GW = groundwater**

Appendix A

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

ANALYTICAL REPORT

Prepared for:

Questa Engineering Corporation
1220 Brickyard Cove Road
Suite 206
Point Richmond, CA 94801

Date: 01-NOV-06
Lab Job Number: 189869
Project ID: STANDARD
Location: 4311-4333 MacArther Blvd, OAK CA

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

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**189869**
Client:	**Questa Engineering Corporation**
Location:	**4311-4333 MacArther Blvd, OAK CA**
Request Date:	**10/05/06**
Samples Received:	**10/04/06**

This hardcopy data package contains sample and QC results for seven soil samples and six water samples, requested for the above referenced project on 10/05/06. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B) Water:
High surrogate recoveries were observed for bromofluorobenzene (FID) in B1-GW (lab # 189869-001) and B4-GW (lab # 189869-004); the corresponding trifluorotoluene (FID) surrogate recoveries were within limits. No other analytical problems were encountered.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B) Soil:
No analytical problems were encountered.

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

TPH-Extractables by GC (EPA 8015B) Filtrate:
Low recovery was observed for diesel C10-C24 in the LCS for batch 118257. Low surrogate recovery was observed for hexacosane in the LCS for batch 118257. No other analytical problems were encountered.

Metals (EPA 6020):
No analytical problems were encountered.

1 8[illegible]69 0037

Client: Allen Hahn	**Report To:** Questa Engineering	**Site Name:** 4311-4333 MacArthur Blvd, OAK CA
Address: 8233 Saturn Park Drive, San Ramon, CA 94582	**Bill To:**	**Project Manager:** W. Hopkins
	Billing Reference: 260110	**Requested Due Date:** Normal Turnaround
Phone:	**Project No.:** 260110	
Sampled by (Print): Joe Farrar		
Sampler Signature: Joseph Farrar		
Date Sampled: 10-4-06		

					NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA			TPH-d,m.o EPA 8015M						
-1	1.	B1-GW		Water	1L	2							X					Filter sediment first.
-2	2.	B2-GW		Water	1L	2							X					
-3	3.	B3-GW		Water	1L	1							X					
-4	4.	B4-GW		Water	1L	2							X					
-5	5.	B5-GW		Water	1L	2							X					
6	6.	B6-GW		Water	1L	2							X					
	7.																	
	8.																	
	9.																	

COOLER NO.								
				1-6	Joseph Farrar / Questa	Lawanna [illegible]	10-4-06	5:40pm

Additional Comments:

Questa Engineering Corporation

1220 Brickyard Cove Road
Point Richmond, CA 94807

P.O. Box 70356
Phone: (510) 236-6114
FAX: (510) 236-2423

CHAIN-OF-CUSTODY RECORD
ANALYTICAL REQUEST

Received ☐ On ice ☐ Ambient ☑ Intact

Client: Allen Hahn	**Report To:** Questa Engineering	**Site Name:** 4311-4333 MacArthur Blvd, OAK CA	
Address: 8233 Sutter Park Drive San Ramon, CA 94582	**Bill To:** Questa	**Project Manager:** W. Hopkins	
	Billing Reference: 260110	**Requested Due Date:** Normal Turnaround	
Phone:	**Project No.:** 260110		
Sampled by (Print): Joe Farrow			
Sampler Signature: Joseph Farrow			
Date Sampled: 10-4-06			

					NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA		Dissolved Lead EPA 6020						
-1	1.	B1-GW		Water	Soil Poly	1						X						Filter sediment first.
-2	2.	B2-GW				1						X						
	3.	~~B3-GW~~				—						~~X~~						no sample.
-4	4.	B4-GW				1						X						
-5	5.	B5-GW				1						X						
-6	6.	B6-GW				1						X						
	7.																	
	8.																	
	9.																	

COOLER(S) / PAGE	RELINQUISHED BY / AFFILIATION	DATE	TIME
	1-6 Joseph Farrow / Questa	10-4-06	5:40 p.m.

Additional Comments:

Questa Engineering Corporation

1220 Brickyard Cove Road
Point Richmond, CA 94807

P.O. Box 70356
Phone: (510) 236-6114
FAX: (510) 236-2423

CHAIN-OF-CUSTODY RECORD
ANALYTICAL REQUEST

Received ☐ On Ice ☐ Ambient ☑ Intact

Client: Allen Hahn	**Report To:** Questa Engineering	**Site Name:** 4311-4333 MacArthur Blvd, OAK CA
Address: 8233 Storm Park Drive, San Ramon, CA 94582	**Bill To:** Questa	**Project Manager:** W. Hopkins
	Billing Reference: 260110	**Requested Due Date:** Normal Turnaround
	Project No.: 260110	
Phone:		
Sampled by (Print):		
Sampler Signature:		
Date Sampled:		

					NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA			TPH-gas EPA 8015M	BTEX + MTBE EPA 8021					
-1	1.	B1-GW		Water	VOA	3							X	X					Filter first all samples if applicable
-2	2.	B2-GW				3							X	X					
-3	3.	B3-GW				2							X	X					
-4	4.	B4-GW				3							X	X					
-5	5.	B5-GW				3							X	X					
-6	6.	B6-GW				3							X	X					
	7.																		
	8.																		
	9.																		

COMMENTS/SPECIAL REQUIREMENTS/HAZARDS					RELINQUISHED BY:	RECEIVED BY:	DATE	TIME
					1-6 Joseph Farmer / Questa	Savannah [illegible]	10-4-06	5:40

Additional Comments:

Questa Engineering Corporation

1220 Brickyard Cove Road
Point Richmond, CA 94807

P.O. Box 70356
Phone: (510) 236-6114
FAX: (510) 236-2423

CHAIN-OF-CUSTODY RECORD
ANALYTICAL REQUEST

Ice? Y / N
Ambient / Chilled

1448(6

Client: Allan Hahn	Report To: Questa Engineering	Site Name: 4311-43333 MacArthur Blvd, OAK CA
Address: 8233 Saturn Park Drive	Bill To: Questa	Project Manager: W. Hopkins
San Ramon, CA 94582	Billing Reference: 260110	Requested Due Date: Normal Turnaround
	Project No.: 260110	
Phone:		
Sampled by (Print): Joe Farrow		
Sampler Signature: Joseph Farrow		
Date Sampled: 10-4-06		

	Item No.	Sample Description		Matrix	Container	No. of Containers	Unpreserved	H_2SO_4	HNO_3	VOA		TPH-d (EPA 8015M)	TPH-gas EPA 8015M	BTEX & MTBE EPA 8021					Remarks
-7	1.	B1 @ 13-13.5'		Soil	Brass	1						X	X	X					Normal Turnaround
-8	2.	B2 @ 28-28.5'		↓	Brass	1						X	X	X					
-9	3.	B3 @ 25-25.5'		↓	Brass	1						X	X	X					
-10	4.	B4 @ 25-25.5'		↓	Brass	1						X	X	X					
-11	5.	B5 @ 11.5'		↓	Glass Jar	1						X	X	X					~~Hold~~
-12	6.	B5 @ 28-28.5'		↓	Brass	1						X	X	X					
-13	7.	B6 @ 25-25.5'		↓	Brass	1						X	X	X					
	8.																		
	9.																		

Cooler No.	Trailers			Item No.	Relinquished By/Affiliation	Accepted By/Affiliation	Date	Time
				1-7	Joseph Farrow / Questa	[signature]	10-4-06	5:40pm

Additional Comments:

Questa Engineering Corporation

1220 Brickyard Cove Road
Point Richmond, CA 94807

P.O. Box 70356
Phone: (510) 236-6114
FAX: (510) 236-2423

CHAIN-OF-CUSTODY RECORD
ANALYTICAL REQUEST

REC'D intact; cold

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Water	Sampled:	10/04/06
Units:	ug/L	Received:	10/04/06
Diln Fac:	1.000	Analyzed:	10/10/06
Batch#:	118295		

Field ID: B1-GW
Type: SAMPLE
Lab ID: 189869-001

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,500 Y	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	123	69-137	EPA 8015B
Bromofluorobenzene (FID)	163 *	80-133	EPA 8015B
Trifluorotoluene (PID)	117	64-132	EPA 8021B
Bromofluorobenzene (PID)	116	80-120	EPA 8021B

Field ID: B2-GW
Type: SAMPLE
Lab ID: 189869-002

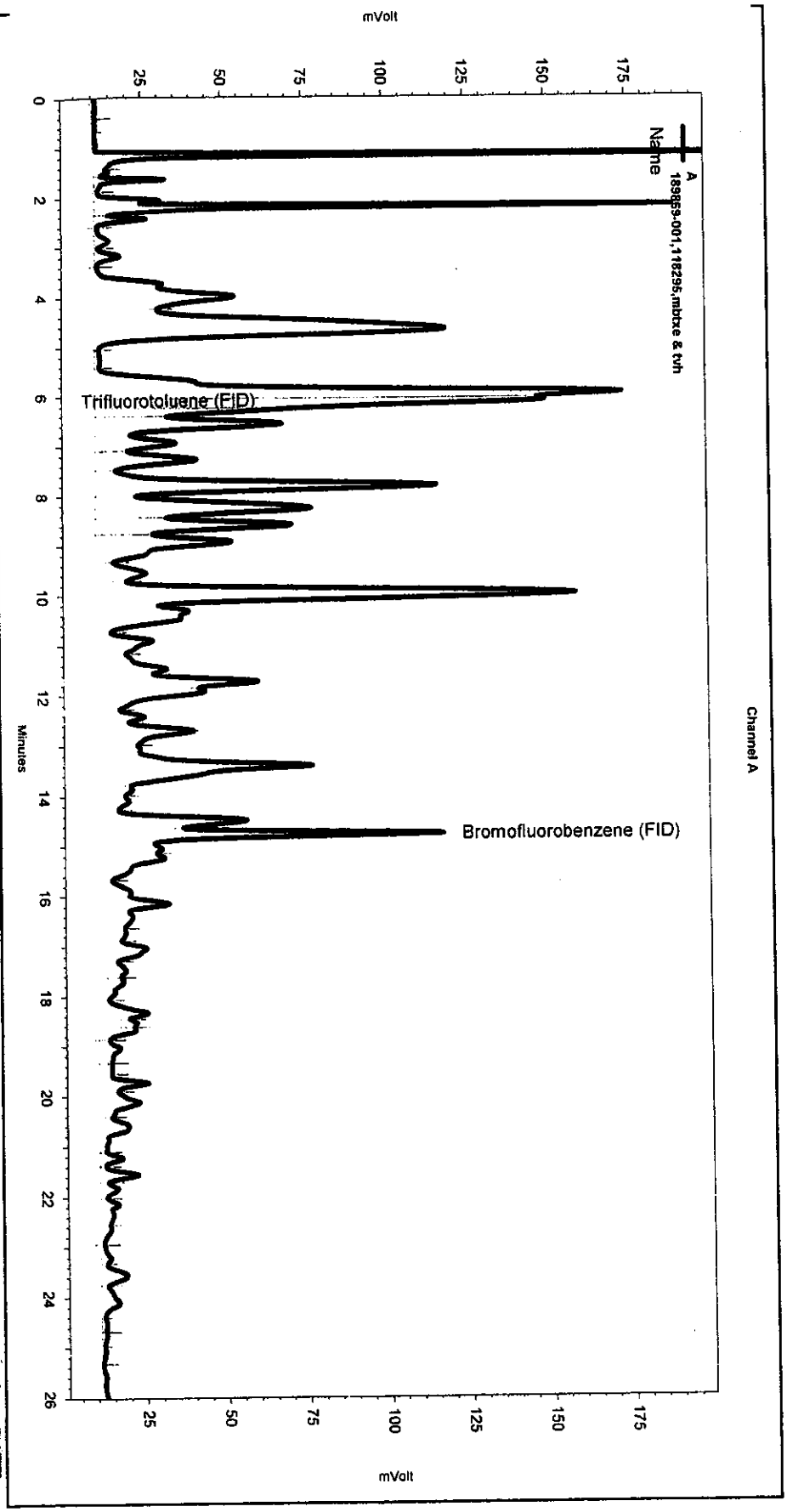
Analyte	Result	RL	Analysis
Gasoline C7-C12	76 Y	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	113	69-137	EPA 8015B
Bromofluorobenzene (FID)	131	80-133	EPA 8015B
Trifluorotoluene (PID)	95	64-132	EPA 8021B
Bromofluorobenzene (PID)	117	80-120	EPA 8021B

*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Sample Name: 189869-001,118295,mbtxe & tvh
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_004
Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\283.seq
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2, Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/10/2006 5:06:32 PM
Analysis Date: 10/11/2006 10:47:13 AM
Sample Amount: 5 Multiplier: 1
Vial & pH or Core ID: a1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.822	0	0

Manual Integration Fixes

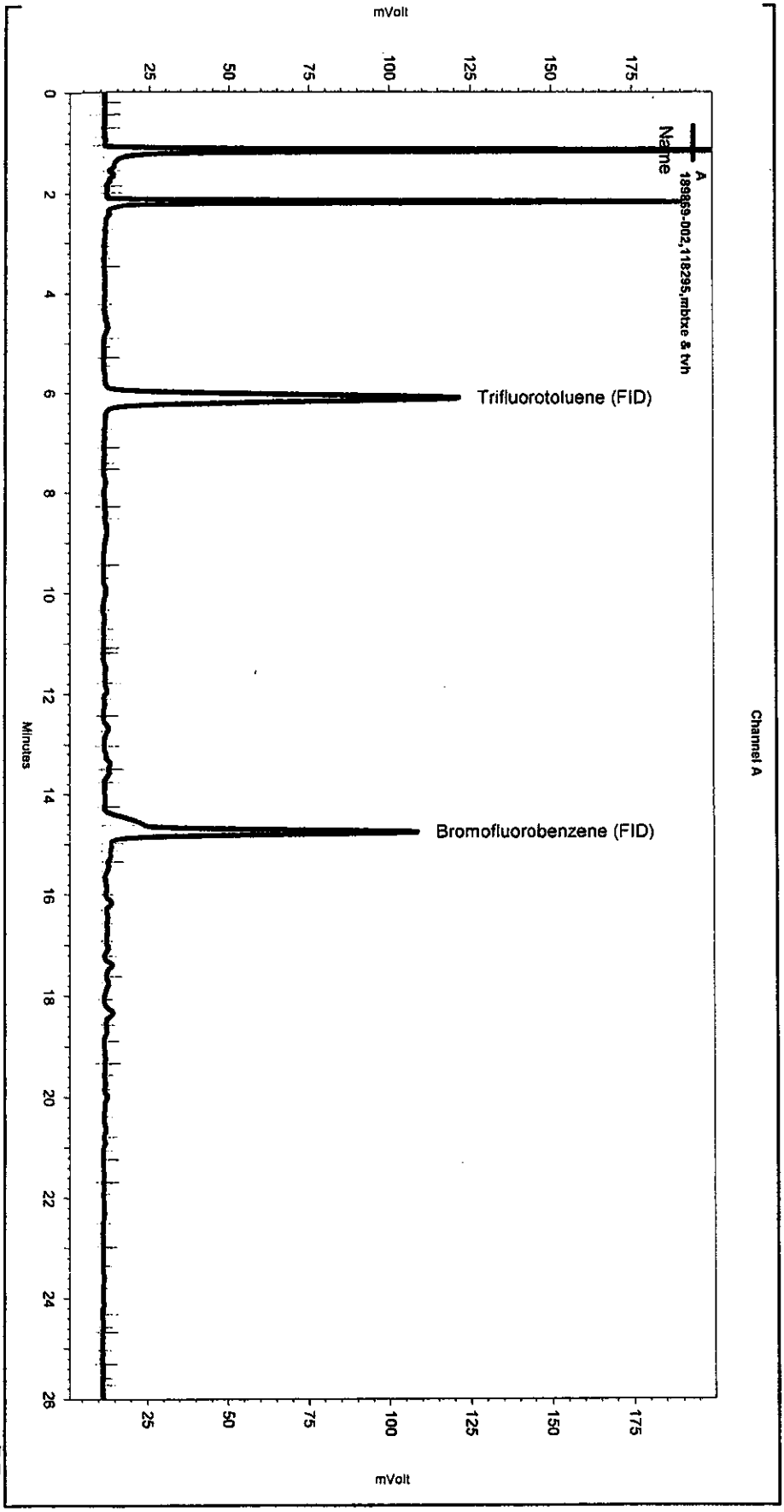
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0.034	26.017	0
Yes	Split Peak	6.046	0	0
Yes	Split Peak	6.239	0	0

B1-GW

Sample Name: 189869-002,118295,mbtxe & tvh
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_005
Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\283.seq
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/10/2006 5:43:12 PM
Analysis Date: 10/11/2006 10:11:28 AM
Sample Amount: 5 Multiplier: 1
Vial & pH or Core ID: a1.3



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.822	0	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_005

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	25.966	0
Yes	Split Peak	14.615	0	0

BA - GW

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Water	Sampled:	10/04/06
Units:	ug/L	Received:	10/04/06
Diln Fac:	1.000	Analyzed:	10/10/06
Batch#:	118295		

Field ID: B3-GW
Type: SAMPLE
Lab ID: 189869-003

Analyte	Result	RL	Analysis
Gasoline C7-C12	280 H Y	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	69-137	EPA 8015B
Bromofluorobenzene (FID)	132	80-133	EPA 8015B
Trifluorotoluene (PID)	91	64-132	EPA 8021B
Bromofluorobenzene (PID)	103	80-120	EPA 8021B

Field ID: B4-GW
Type: SAMPLE
Lab ID: 189869-004

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,700	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	78	0.50	EPA 8021B
Toluene	240	0.50	EPA 8021B
Ethylbenzene	49	0.50	EPA 8021B
m,p-Xylenes	150	0.50	EPA 8021B
o-Xylene	57	0.50	EPA 8021B

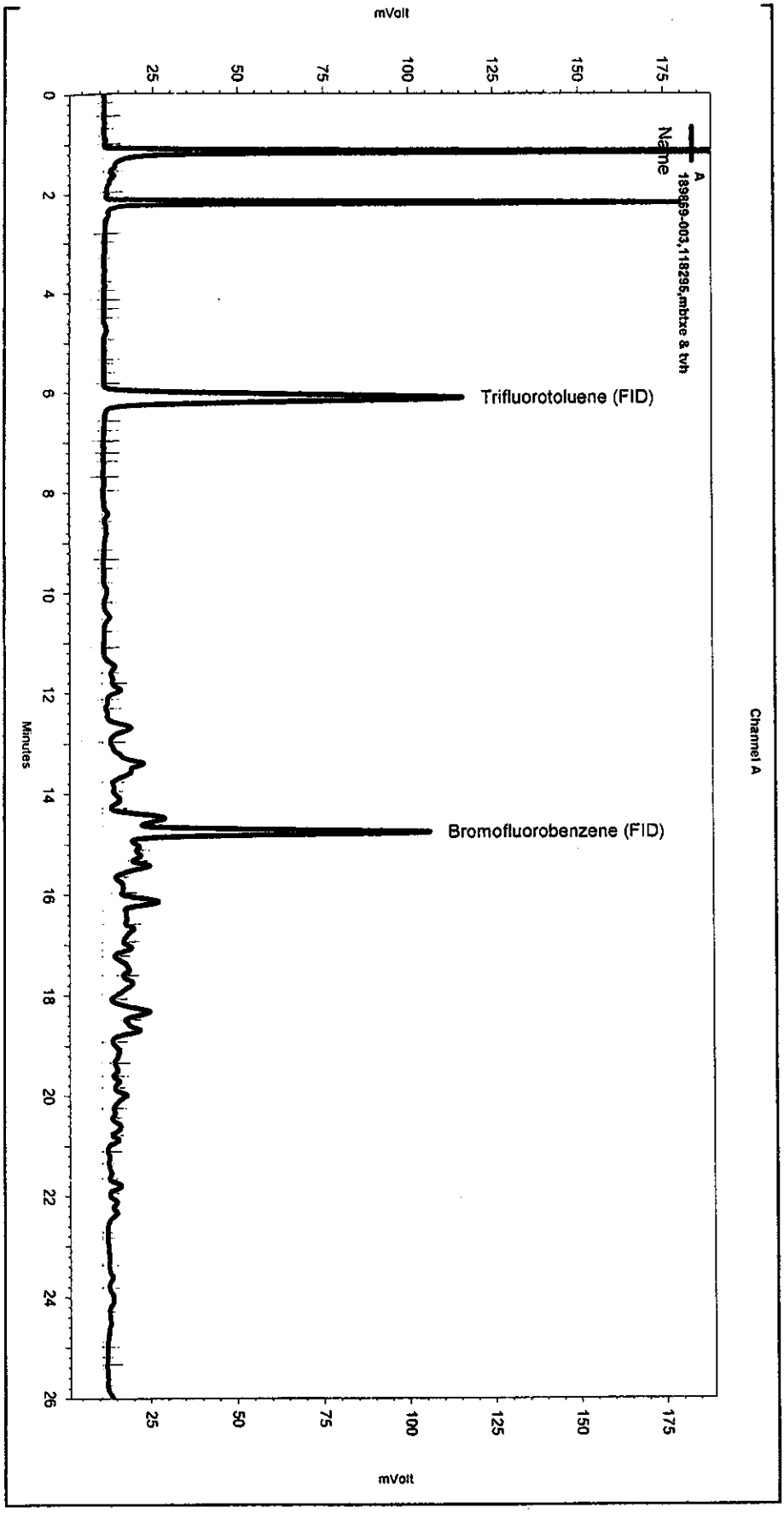
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	120	69-137	EPA 8015B
Bromofluorobenzene (FID)	142 *	80-133	EPA 8015B
Trifluorotoluene (PID)	95	64-132	EPA 8021B
Bromofluorobenzene (PID)	105	80-120	EPA 8021B

*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

4.0

Sample Name: 189869-003,118295,mbtxe & tvh
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_006
Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\283.seq
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/10/2006 6:19:50 PM
Analysis Date: 10/11/2006 10:50:12 AM
Sample Amount: 5 Multiplier: 1
Vial & pH or Core ID: a1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.822	0	0

Manual Integration Fixes

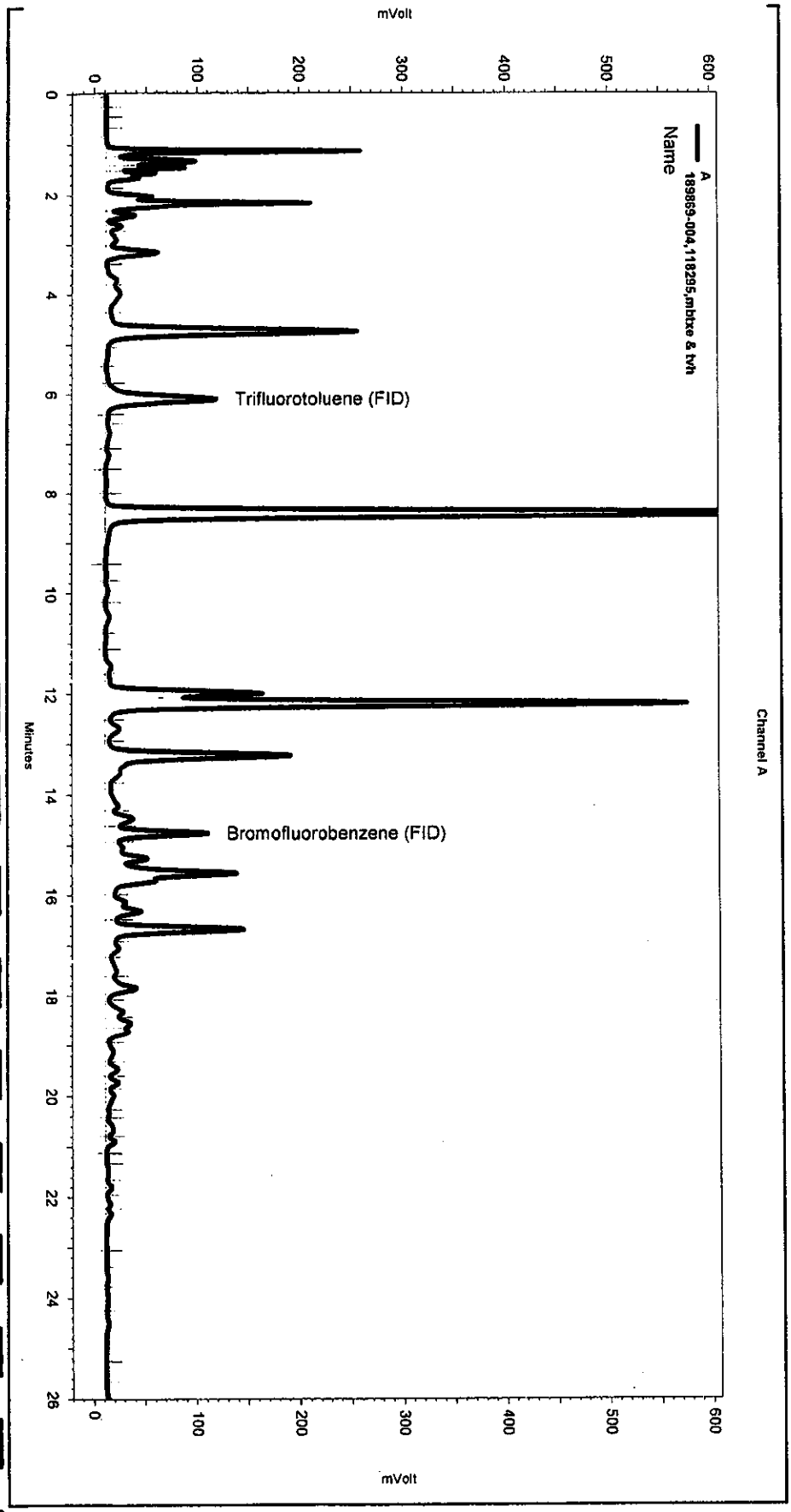
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

B3-GW

Sample Name: **189869-004,118295,mbtxe & tvh**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\283_007**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\283.seq**
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/10/2006 6:56:29 PM
Analysis Date: 10/11/2006 10:11:36 AM
Sample Amount: 5 Multiplier: 1
Vial & pH or Core ID: a1.3



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.822	0	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Backward Horizontal Baseline	0	26.017	0
Yes	Split Peak	5.787	0	0
Yes	Split Peak	6.417	0	0

B4- GW

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Water	Sampled:	10/04/06
Units:	ug/L	Received:	10/04/06
Diln Fac:	1.000	Analyzed:	10/10/06
Batch#:	118295		

Field ID: B5-GW
Type: SAMPLE
Lab ID: 189869-005

Analyte	Result	RL	Analysis
Gasoline C7-C12	96	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	0.58	0.50	EPA 8021B
Toluene	4.0	0.50	EPA 8021B
Ethylbenzene	1.2	0.50	EPA 8021B
m,p-Xylenes	3.8	0.50	EPA 8021B
o-Xylene	2.0	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	109	69-137	EPA 8015B
Bromofluorobenzene (FID)	128	80-133	EPA 8015B
Trifluorotoluene (PID)	93	64-132	EPA 8021B
Bromofluorobenzene (PID)	111	80-120	EPA 8021B

Field ID: B6-GW
Type: SAMPLE
Lab ID: 189869-006

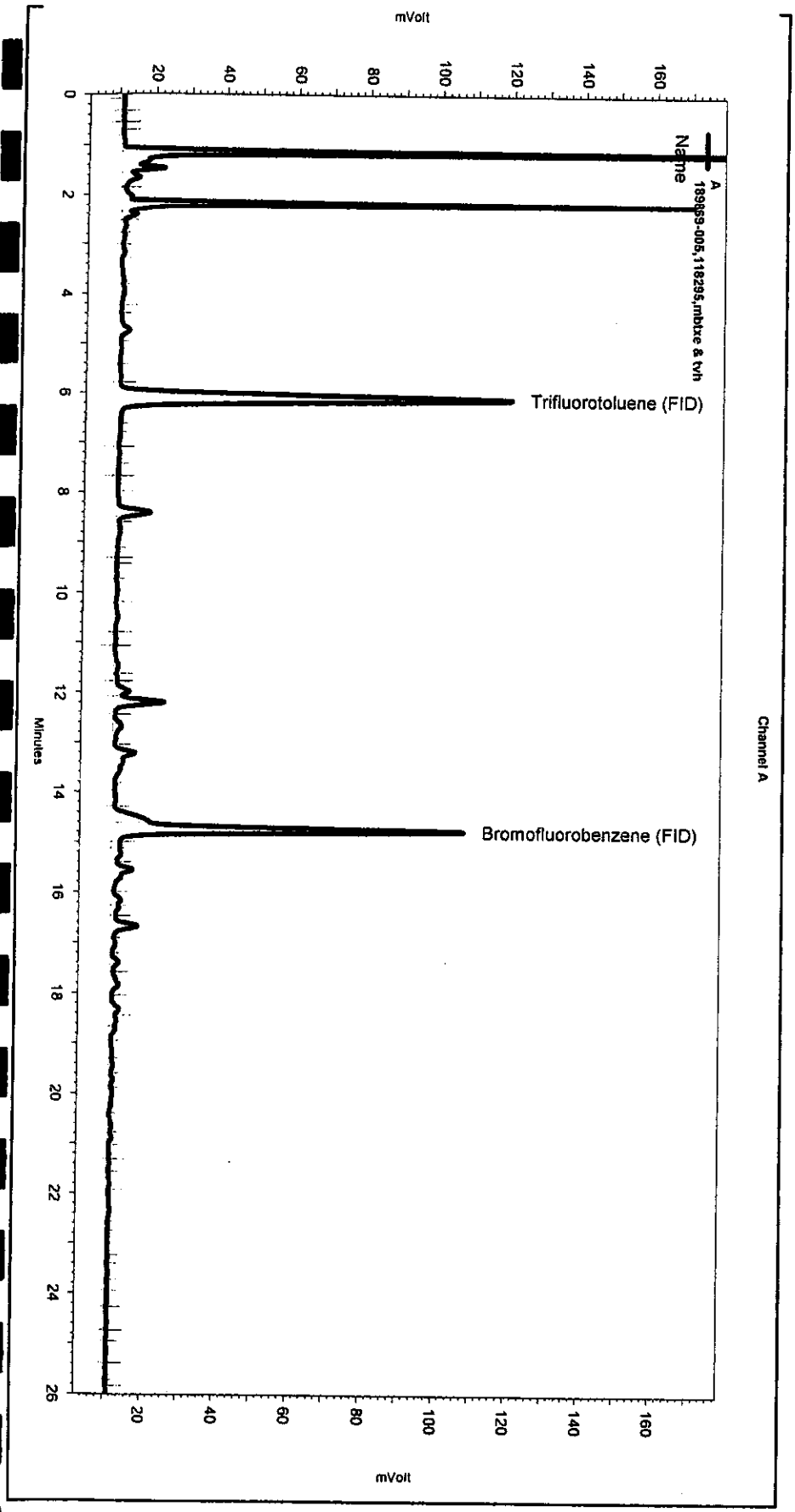
Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.4	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	109	69-137	EPA 8015B
Bromofluorobenzene (FID)	129	80-133	EPA 8015B
Trifluorotoluene (PID)	93	64-132	EPA 8021B
Bromofluorobenzene (PID)	112	80-120	EPA 8021B

Y= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Sample Name: 189869-005,118295,mbtxe & tvh
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_008
Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\283.seq
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/10/2006 7:33:43 PM
Analysis Date: 10/11/2006 10:57:38 AM
Sample Amount: 5 Multiplier: 1
Vial & pH or Core ID: a7.0



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.822	0	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	14.611	0	0
Yes	Split Peak	14.999	0	0

B5-GW

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Water	Sampled:	10/04/06
Units:	ug/L	Received:	10/04/06
Diln Fac:	1.000	Analyzed:	10/10/06
Batch#:	118295		

Type: BLANK Lab ID: QC359720

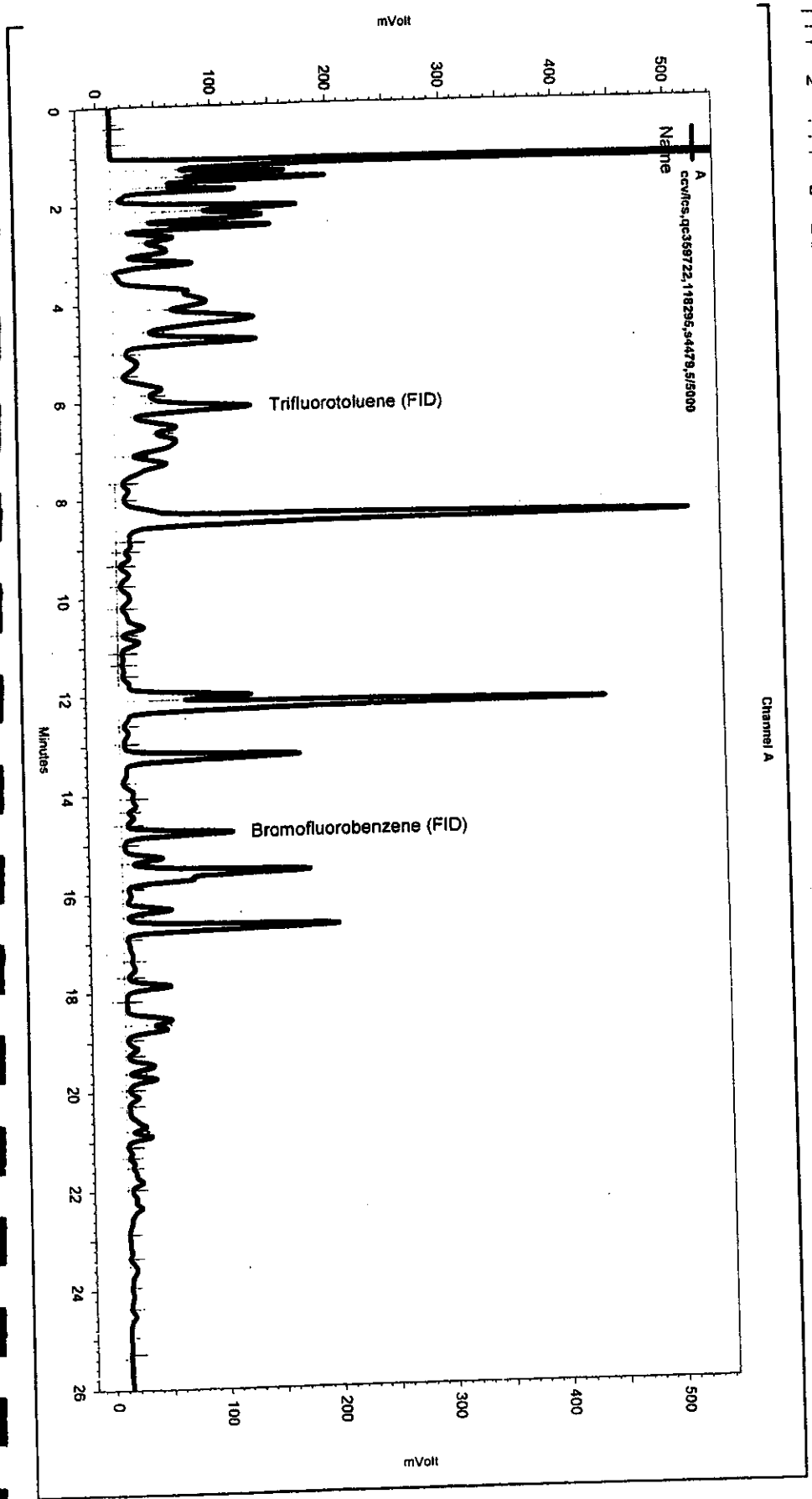
Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	115	69-137	EPA 8015B
Bromofluorobenzene (FID)	120	80-133	EPA 8015B
Trifluorotoluene (PID)	97	64-132	EPA 8021B
Bromofluorobenzene (PID)	105	80-120	EPA 8021B

*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Sample Name: ccv/lcs,qc359722,118295,s4479,5/5000
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_001
Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\283.seq
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/10/2006 2:26:26 PM
Analysis Date: 10/11/2006 10:11:13 AM
Sample Amount: 5 Multiplier: 1
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10
Yes	Reset Baseline	0.822	0	0

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\283_001

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.015	0	0

Gasoline Standard

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC359721	Batch#:	118295
Matrix:	Water	Analyzed:	10/10/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.70	93	72-124
Benzene	20.00	19.22	96	80-120
Toluene	20.00	19.28	96	80-120
Ethylbenzene	20.00	21.33	107	80-120
m,p-Xylenes	20.00	18.44	92	80-120
o-Xylene	20.00	19.58	98	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	102	64-132
Bromofluorobenzene (PID)	104	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC359722	Batch#:	118295
Matrix:	Water	Analyzed:	10/10/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,859	93	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	69-137
Bromofluorobenzene (FID)	126	80-133

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	189924-004	Batch#:	118295
Matrix:	Water	Sampled:	10/05/06
Units:	ug/L	Received:	10/06/06

Type: MS Analyzed: 10/10/06
Lab ID: QC359744

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	23.16	2,000	1,860	92	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	118	69-137
Bromofluorobenzene (FID)	131	80-133

Type: MSD Analyzed: 10/11/06
Lab ID: QC359745

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,824	90	80-120	2	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	118	69-137
Bromofluorobenzene (FID)	126	80-133

RPD= Relative Percent Difference

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Soil	Batch#:	118292
Basis:	as received	Sampled:	10/04/06
Diln Fac:	1.000	Received:	10/04/06

Field ID:	B1@13-13.5'	Lab ID:	189869-007
Type:	SAMPLE	Analyzed:	10/10/06

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.99	mg/Kg	EPA 8015B
MTBE	ND	20	ug/Kg	EPA 8021B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	67	62-137	EPA 8015B
Bromofluorobenzene (FID)	70	60-148	EPA 8015B
Trifluorotoluene (PID)	86	66-127	EPA 8021B
Bromofluorobenzene (PID)	84	74-127	EPA 8021B

Field ID:	B2@28-28.5'	Lab ID:	189869-008
Type:	SAMPLE	Analyzed:	10/10/06

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	EPA 8015B
MTBE	ND	21	ug/Kg	EPA 8021B
Benzene	ND	5.3	ug/Kg	EPA 8021B
Toluene	ND	5.3	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.3	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.3	ug/Kg	EPA 8021B
o-Xylene	ND	5.3	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	66	62-137	EPA 8015B
Bromofluorobenzene (FID)	66	60-148	EPA 8015B
Trifluorotoluene (PID)	82	66-127	EPA 8021B
Bromofluorobenzene (PID)	78	74-127	EPA 8021B

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Soil	Batch#:	118292
Basis:	as received	Sampled:	10/04/06
Diln Fac:	1.000	Received:	10/04/06

Field ID:	B3@25-25.5'	Lab ID:	189869-009
Type:	SAMPLE	Analyzed:	10/11/06

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.94	mg/Kg	EPA 8015B
MTBE	ND	19	ug/Kg	EPA 8021B
Benzene	ND	4.7	ug/Kg	EPA 8021B
Toluene	ND	4.7	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.7	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.7	ug/Kg	EPA 8021B
o-Xylene	ND	4.7	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	72	62-137	EPA 8015B
Bromofluorobenzene (FID)	73	60-148	EPA 8015B
Trifluorotoluene (PID)	93	66-127	EPA 8021B
Bromofluorobenzene (PID)	90	74-127	EPA 8021B

Field ID:	B4@25-25.5'	Lab ID:	189869-010
Type:	SAMPLE	Analyzed:	10/11/06

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
MTBE	ND	21	ug/Kg	EPA 8021B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	67	62-137	EPA 8015B
Bromofluorobenzene (FID)	67	60-148	EPA 8015B
Trifluorotoluene (PID)	86	66-127	EPA 8021B
Bromofluorobenzene (PID)	81	74-127	EPA 8021B

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Soil	Batch#:	118292
Basis:	as received	Sampled:	10/04/06
Diln Fac:	1.000	Received:	10/04/06

Field ID:	B5@11.5'	Lab ID:	189869-011
Type:	SAMPLE	Analyzed:	10/11/06

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.94	mg/Kg	EPA 8015B
MTBE	ND	19	ug/Kg	EPA 8021B
Benzene	ND	4.7	ug/Kg	EPA 8021B
Toluene	ND	4.7	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.7	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.7	ug/Kg	EPA 8021B
o-Xylene	ND	4.7	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	70	62-137	EPA 8015B
Bromofluorobenzene (FID)	70	60-148	EPA 8015B
Trifluorotoluene (PID)	88	66-127	EPA 8021B
Bromofluorobenzene (PID)	85	74-127	EPA 8021B

Field ID:	B5@28-28.5'	Lab ID:	189869-012
Type:	SAMPLE	Analyzed:	10/11/06

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.95	mg/Kg	EPA 8015B
MTBE	ND	19	ug/Kg	EPA 8021B
Benzene	ND	4.8	ug/Kg	EPA 8021B
Toluene	ND	4.8	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.8	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.8	ug/Kg	EPA 8021B
o-Xylene	ND	4.8	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	65	62-137	EPA 8015B
Bromofluorobenzene (FID)	65	60-148	EPA 8015B
Trifluorotoluene (PID)	81	66-127	EPA 8021B
Bromofluorobenzene (PID)	76	74-127	EPA 8021B

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD		
Matrix:	Soil	Batch#:	118292
Basis:	as received	Sampled:	10/04/06
Diln Fac:	1.000	Received:	10/04/06

Field ID:	B6@25-25.5'	Lab ID:	189869-013
Type:	SAMPLE	Analyzed:	10/11/06

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
MTBE	ND	20	ug/Kg	EPA 8021B
Benzene	ND	5.1	ug/Kg	EPA 8021B
Toluene	ND	5.1	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.1	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.1	ug/Kg	EPA 8021B
o-Xylene	ND	5.1	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	68	62-137	EPA 8015B
Bromofluorobenzene (FID)	69	60-148	EPA 8015B
Trifluorotoluene (PID)	83	66-127	EPA 8021B
Bromofluorobenzene (PID)	78	74-127	EPA 8021B

Type:	BLANK	Analyzed:	10/10/06
Lab ID:	QC359707		

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.20	mg/Kg	EPA 8015B
MTBE	ND	4.0	ug/Kg	EPA 8021B
Benzene	ND	1.0	ug/Kg	EPA 8021B
Toluene	ND	1.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	1.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	1.0	ug/Kg	EPA 8021B
o-Xylene	ND	1.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	68	62-137	EPA 8015B
Bromofluorobenzene (FID)	68	60-148	EPA 8015B
Trifluorotoluene (PID)	87	66-127	EPA 8021B
Bromofluorobenzene (PID)	82	74-127	EPA 8021B

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC359708	Diln Fac:	1.000
Matrix:	Soil	Batch#:	118292
Units:	ug/Kg	Analyzed:	10/10/06

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	17.63	88	75-127
Benzene	20.00	18.94	95	80-120
Toluene	20.00	19.64	98	80-120
Ethylbenzene	20.00	21.00	105	80-120
m,p-Xylenes	20.00	20.01	100	80-120
o-Xylene	20.00	19.72	99	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	91	66-127
Bromofluorobenzene (PID)	91	74-127

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC359711	Diln Fac:	1.000
Matrix:	Soil	Batch#:	118292
Units:	mg/Kg	Analyzed:	10/10/06

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2.000	1.844	92	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	62-137
Bromofluorobenzene (FID)	109	60-148

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	B1@13-13.5'	Diln Fac:	1.000
MSS Lab ID:	189869-007	Batch#:	118292
Matrix:	Soil	Sampled:	10/04/06
Units:	mg/Kg	Received:	10/04/06
Basis:	as received	Analyzed:	10/10/06

Type: MS Lab ID: QC359709

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.1338	10.53	6.462	61	38-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	62-137
Bromofluorobenzene (FID)	82	60-148

Type: MSD Lab ID: QC359710

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.20	4.873	48	38-120	25	26

Surrogate	%REC	Limits
Trifluorotoluene (FID)	76	62-137
Bromofluorobenzene (FID)	78	60-148

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	118249
Units:	mg/Kg	Sampled:	10/04/06
Basis:	as received	Received:	10/04/06
Diln Fac:	1.000	Prepared:	10/09/06

Field ID: B1@13-13.5' Lab ID: 189869-007
Type: SAMPLE Analyzed: 10/12/06

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

Surrogate	%REC	Limits
Hexacosane	106	48-130

Field ID: B2@28-28.5' Lab ID: 189869-008
Type: SAMPLE Analyzed: 10/12/06

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

Surrogate	%REC	Limits
Hexacosane	93	48-130

Field ID: B3@25-25.5' Lab ID: 189869-009
Type: SAMPLE Analyzed: 10/12/06

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

Surrogate	%REC	Limits
Hexacosane	103	48-130

Field ID: B4@25-25.5' Lab ID: 189869-010
Type: SAMPLE Analyzed: 10/12/06

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

Surrogate	%REC	Limits
Hexacosane	107	48-130

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

12.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	118249
Units:	mg/Kg	Sampled:	10/04/06
Basis:	as received	Received:	10/04/06
Diln Fac:	1.000	Prepared:	10/09/06

Field ID:	B5@11.5'	Lab ID:	189869-011
Type:	SAMPLE	Analyzed:	10/12/06

Analyte	Result	RL
Diesel C10-C24	1.7 H Y	1.0
Motor Oil C24-C36	17 H	5.0

Surrogate	%REC	Limits
Hexacosane	95	48-130

Field ID:	B5@28-28.5'	Lab ID:	189869-012
Type:	SAMPLE	Analyzed:	10/12/06

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

Surrogate	%REC	Limits
Hexacosane	105	48-130

Field ID:	B6@25-25.5'	Lab ID:	189869-013
Type:	SAMPLE	Analyzed:	10/12/06

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

Surrogate	%REC	Limits
Hexacosane	83	48-130

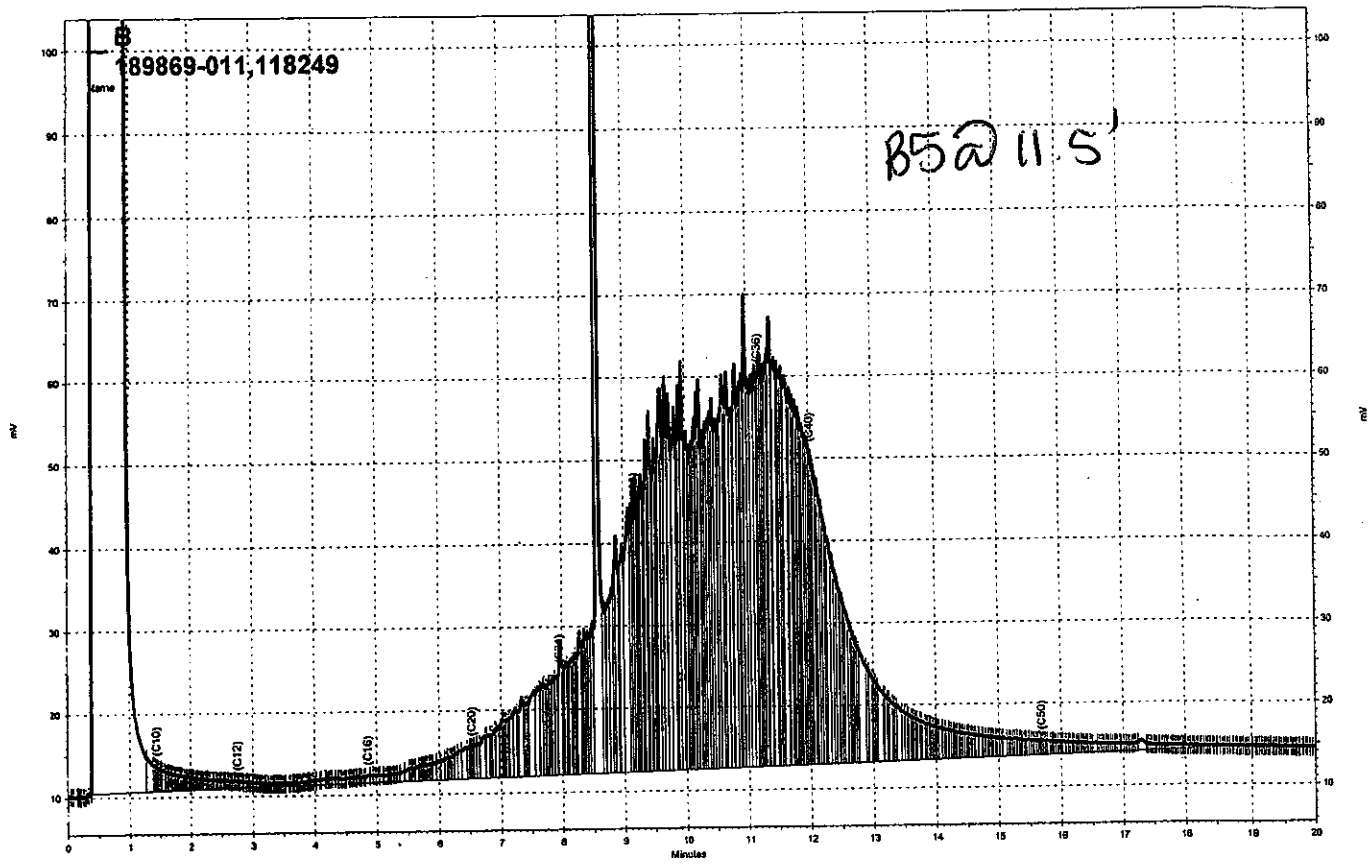
Type:	BLANK	Analyzed:	10/10/06
Lab ID:	QC359524	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
Hexacosane	108	48-130

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

12.0



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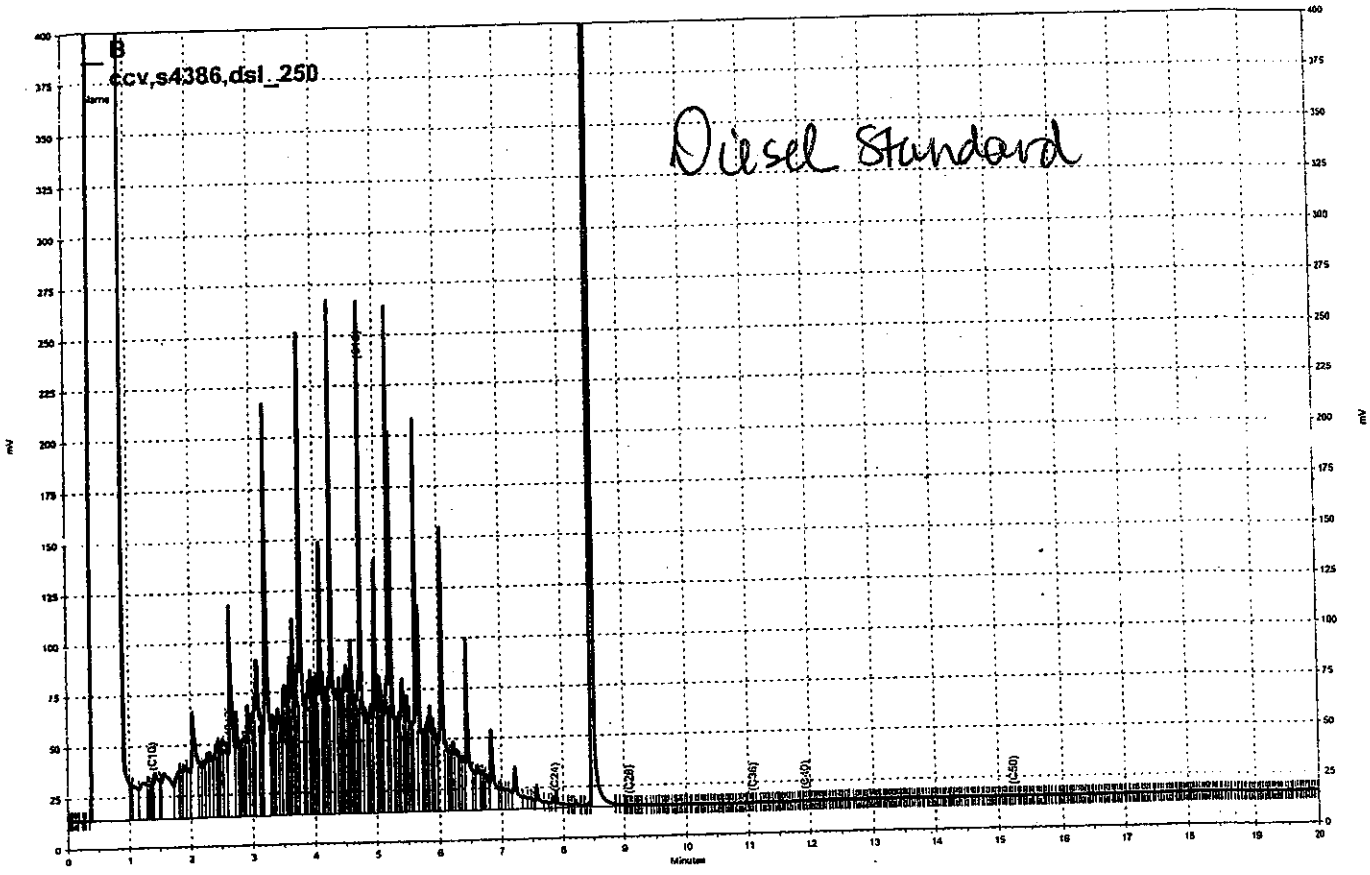

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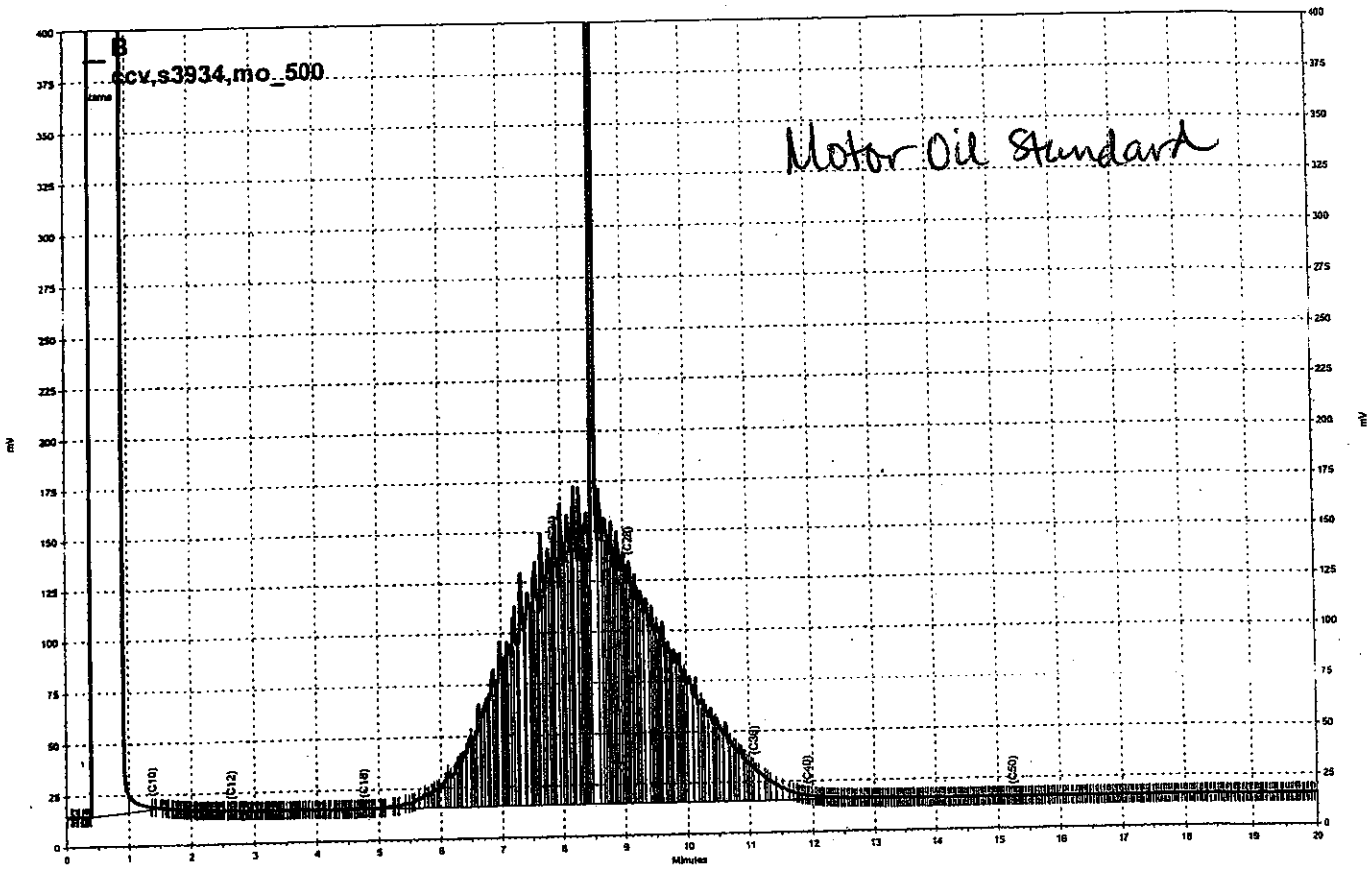

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Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC359525	Batch#:	118249
Matrix:	Soil	Prepared:	10/09/06
Units:	mg/Kg	Analyzed:	10/10/06
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.36	50.44	100	59-133

Surrogate	%REC	Limits
Hexacosane	107	48-130

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	118249
MSS Lab ID:	189757-002	Sampled:	09/28/06
Matrix:	Soil	Received:	09/29/06
Units:	mg/Kg	Prepared:	10/09/06
Basis:	as received	Analyzed:	10/10/06
Diln Fac:	1.000		

Type: MS
Lab ID: QC359526

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	7.464	49.60	65.73	117	37-153

Surrogate	%REC	Limits
Hexacosane	122	48-130

Type: MSD
Lab ID: QC359527

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.34	50.66	86	37-153	27	43

Surrogate	%REC	Limits
Hexacosane	94	48-130

RPD= Relative Percent Difference

14.0

Curtis & Tompkins, Ltd.

Dissolved Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Units:	ug/L	Sampled:	10/04/06
Dil'n Fac:	1.000	Received:	10/04/06
Batch#:	118257	Prepared:	10/09/06

Field ID:	B1-GW	Matrix:	Filtrate
Type:	SAMPLE	Analyzed:	10/12/06
Lab ID:	189869-001		

Analyte	Result	RL
Diesel C10-C24	440 H Y	50
Motor Oil C24-C36	330 L	300

Surrogate	%REC	Limits
Hexacosane	90	65-130

Field ID:	B2-GW	Matrix:	Filtrate
Type:	SAMPLE	Analyzed:	10/12/06
Lab ID:	189869-002		

Analyte	Result	RL
Diesel C10-C24	310 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	65-130

Field ID:	B3-GW	Matrix:	Filtrate
Type:	SAMPLE	Analyzed:	10/12/06
Lab ID:	189869-003		

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

Surrogate	%REC	Limits
Hexacosane	88	65-130

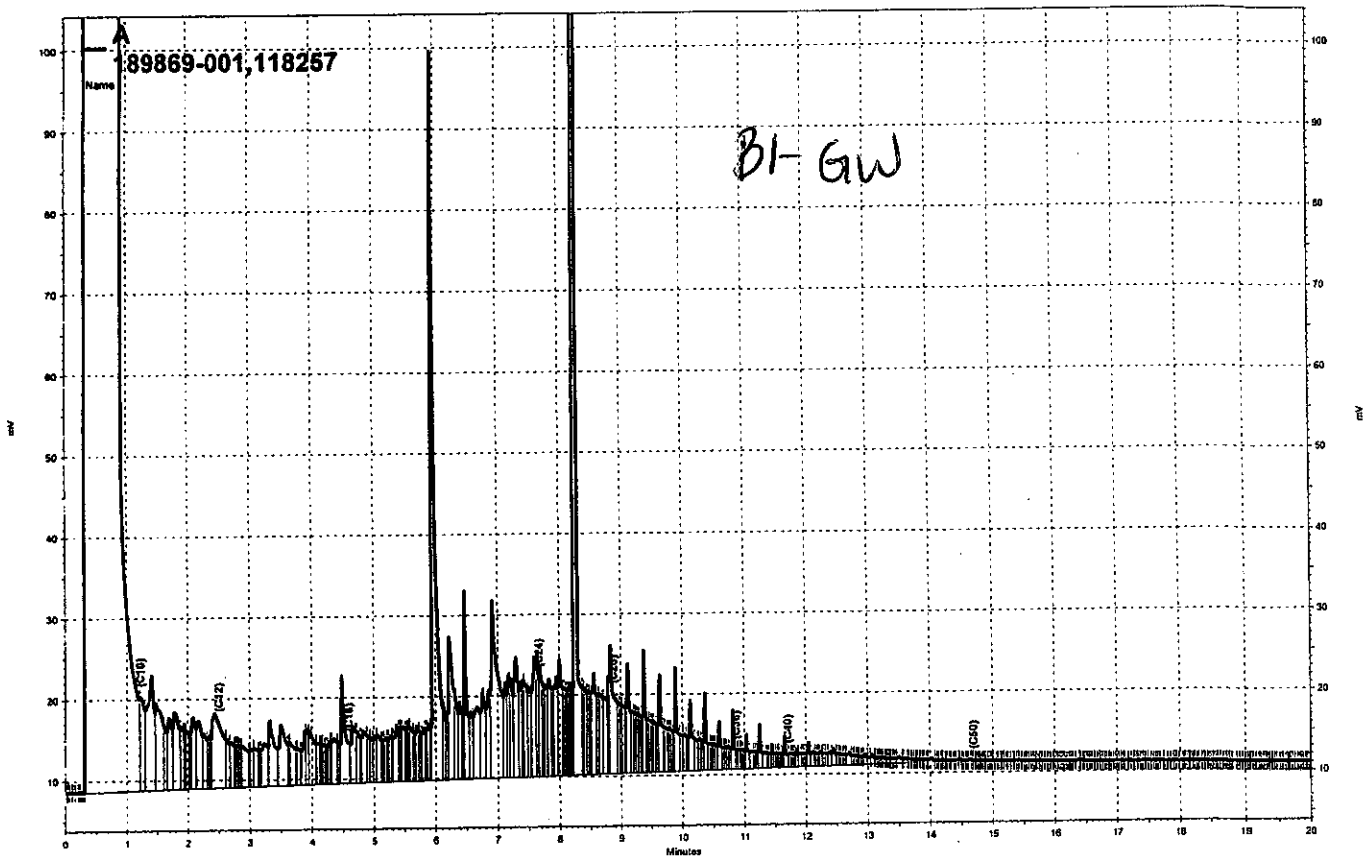
Field ID:	B4-GW	Matrix:	Filtrate
Type:	SAMPLE	Analyzed:	10/12/06
Lab ID:	189869-004		

Analyte	Result	RL
Diesel C10-C24	380 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	87	65-130

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

15.0



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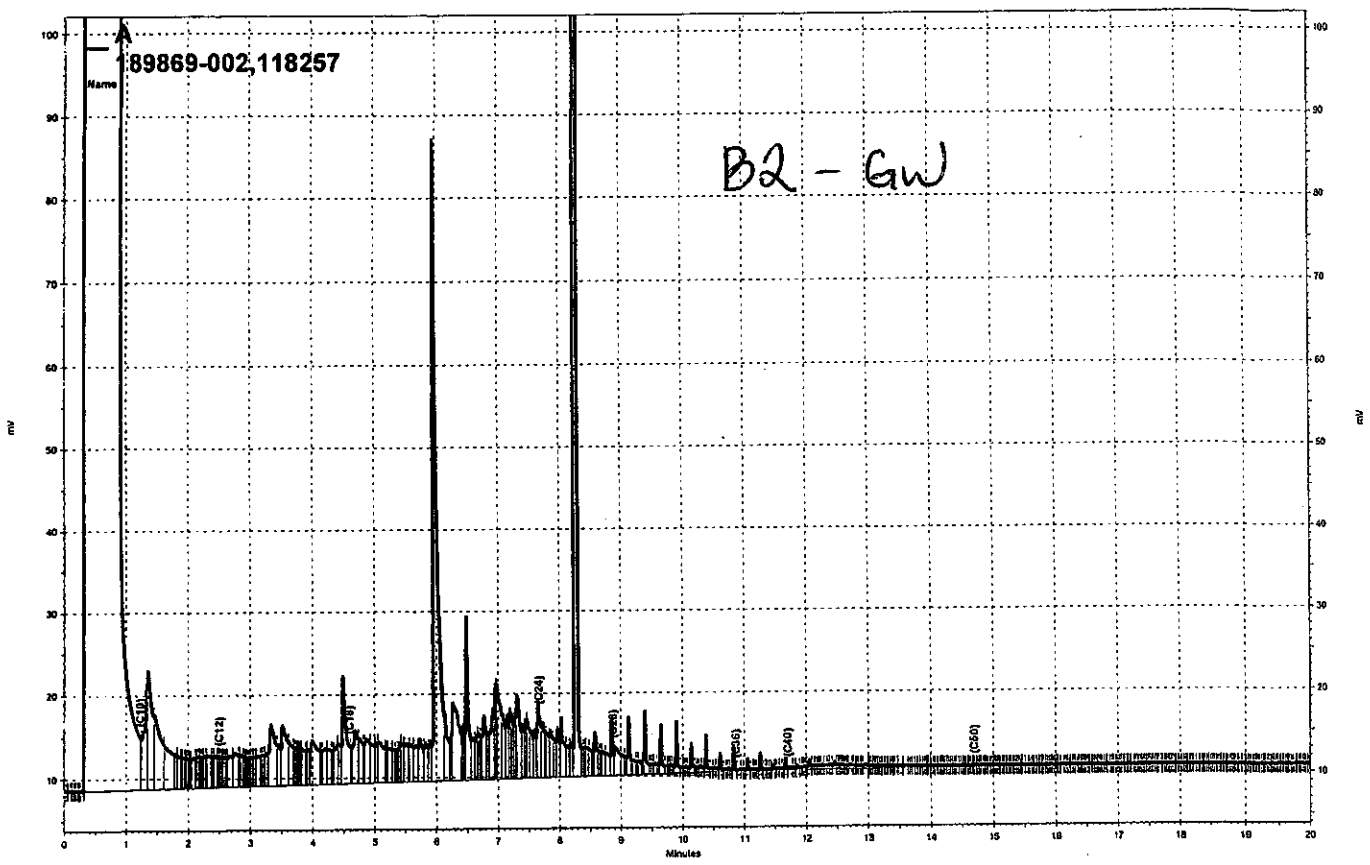

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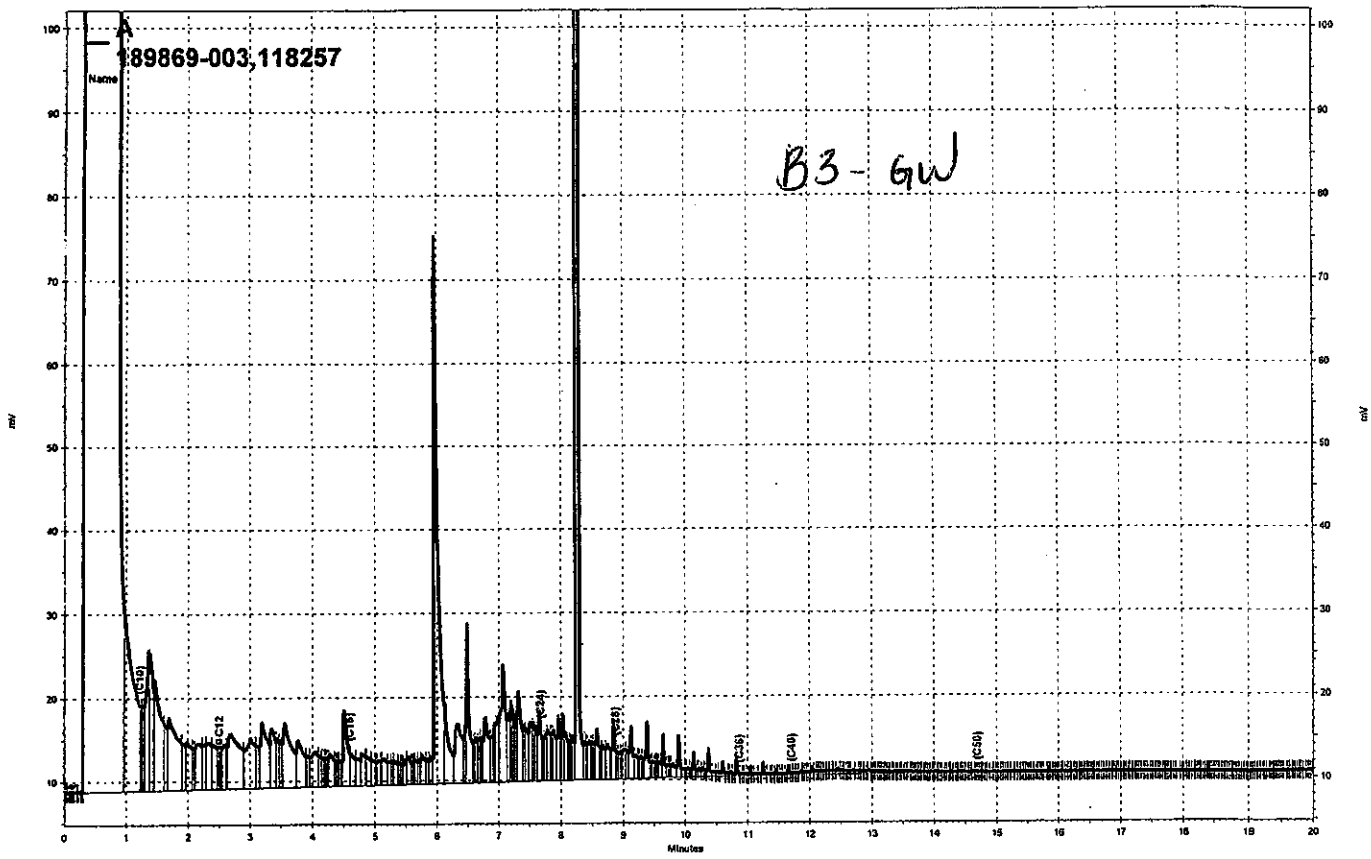

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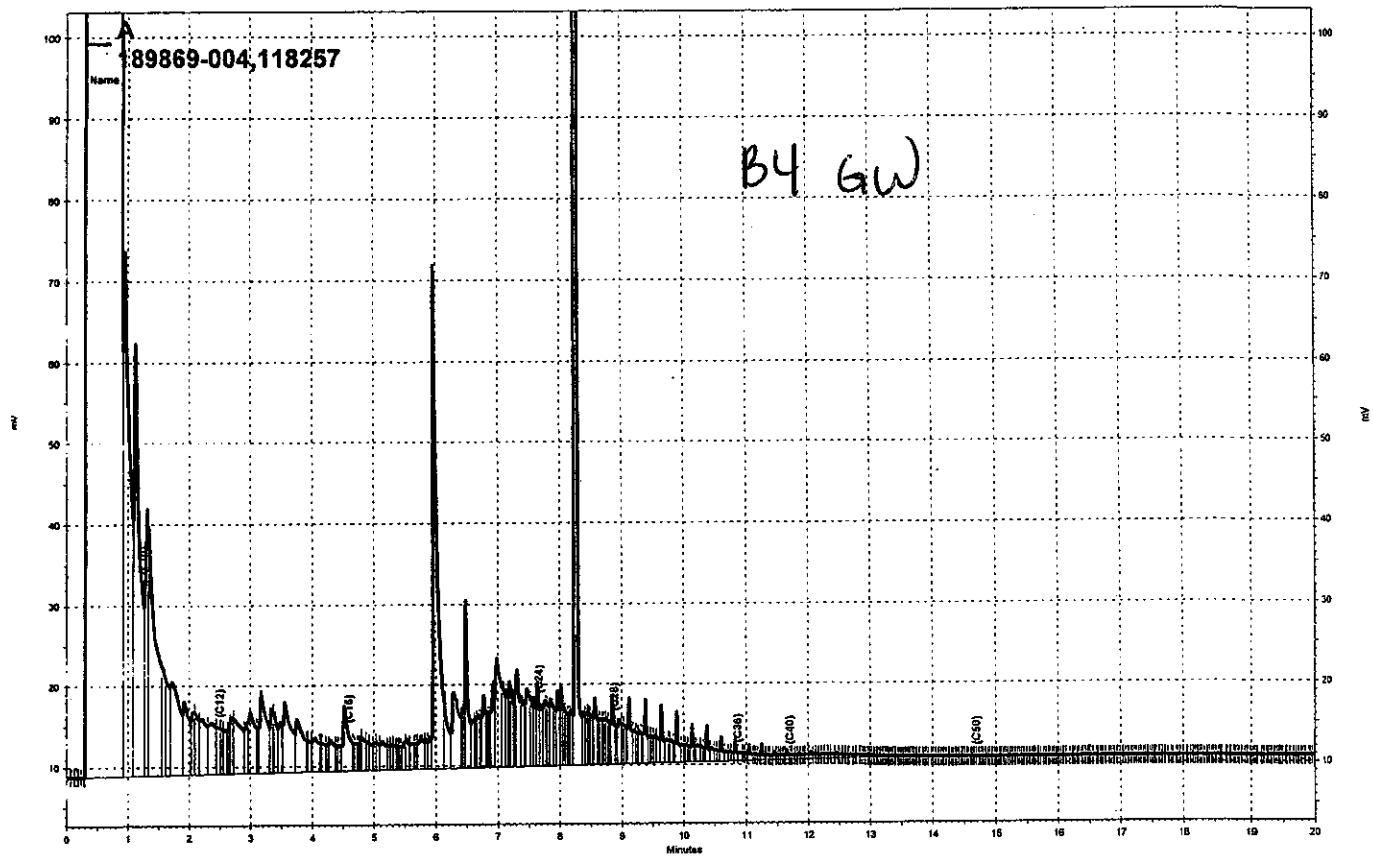

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Curtis & Tompkins, Ltd.

Dissolved Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Units:	ug/L	Sampled:	10/04/06
Diln Fac:	1.000	Received:	10/04/06
Batch#:	118257	Prepared:	10/09/06

Field ID:	B5-GW	Matrix:	Filtrate
Type:	SAMPLE	Analyzed:	10/13/06
Lab ID:	189869-005		

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

Surrogate	%REC	Limits
Hexacosane	92	65-130

Field ID:	B6-GW	Matrix:	Filtrate
Type:	SAMPLE	Analyzed:	10/13/06
Lab ID:	189869-006		

Analyte	Result	RL
Diesel C10-C24	230 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	65-130

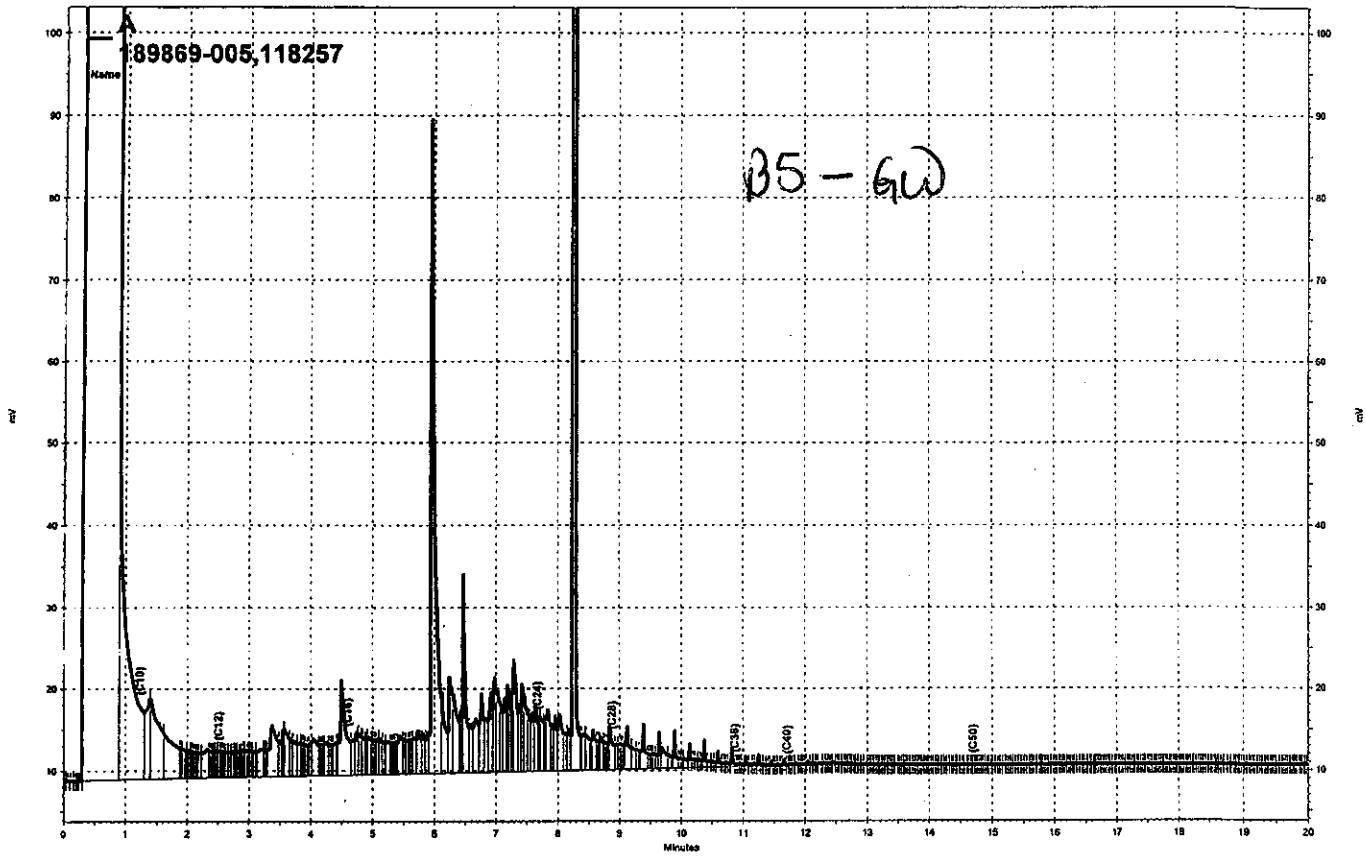
Type:	BLANK	Analyzed:	10/10/06
Lab ID:	QC359560	Cleanup Method:	EPA 3630C
Matrix:	Water		

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

Surrogate	%REC	Limits
Hexacosane	109	65-130

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

15.0



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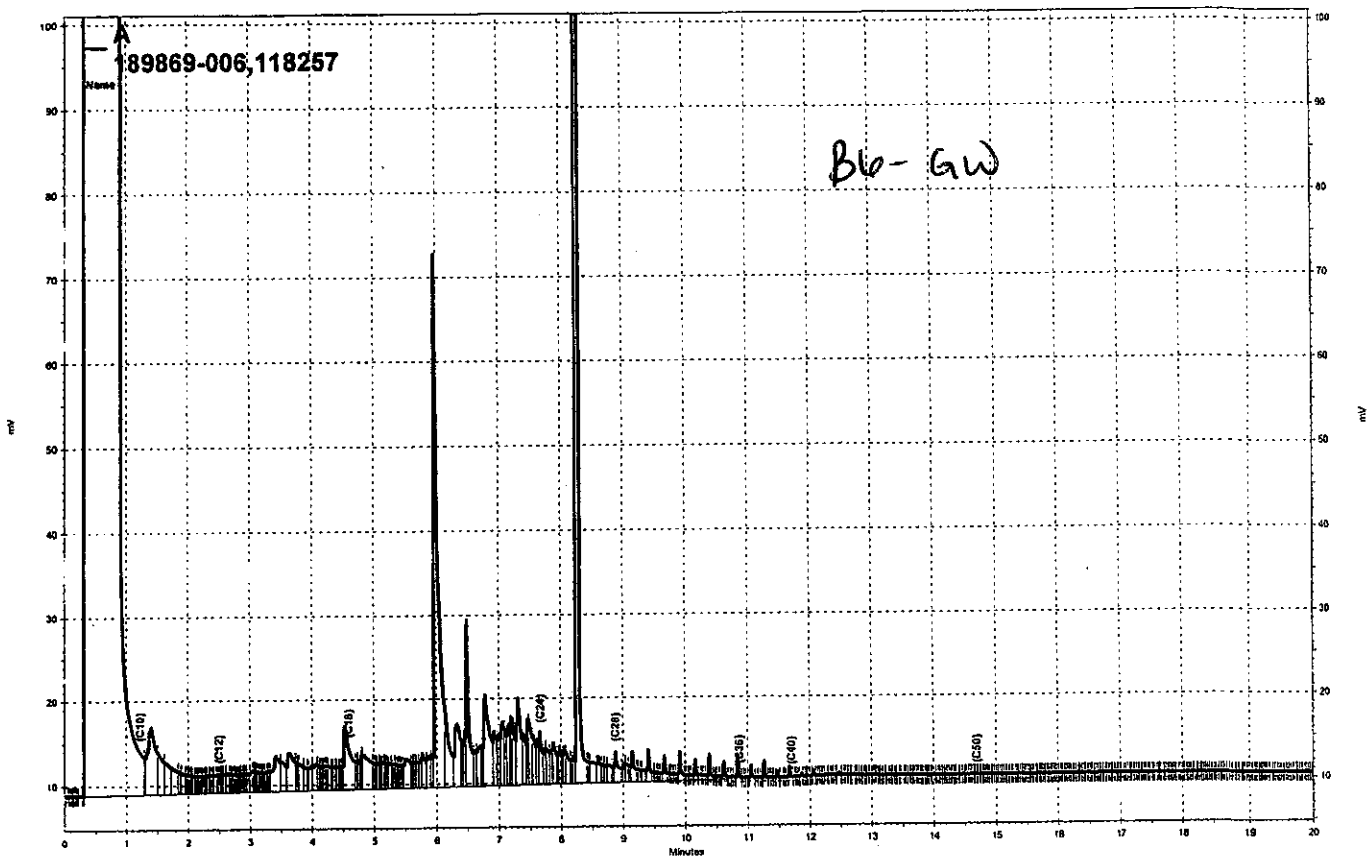

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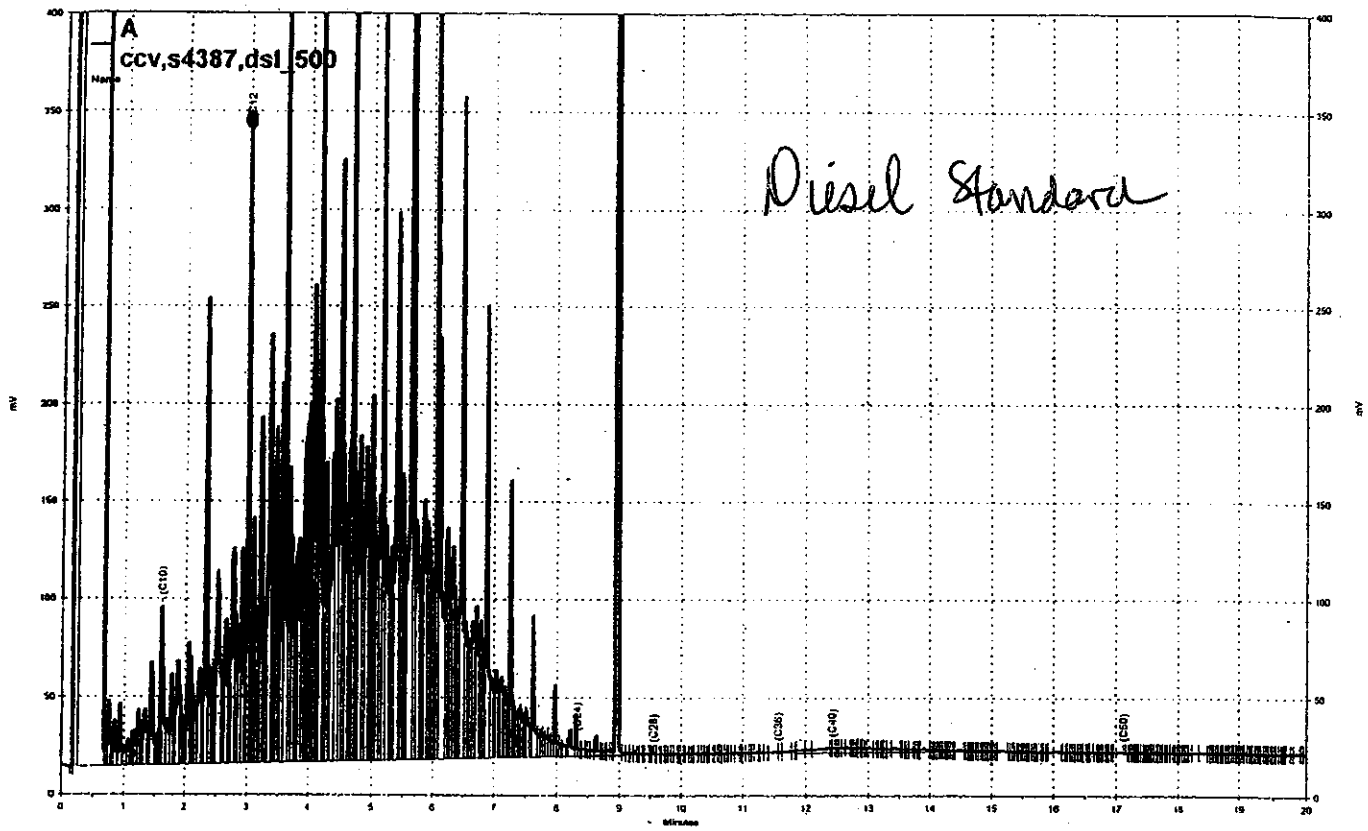

Diesel Standard

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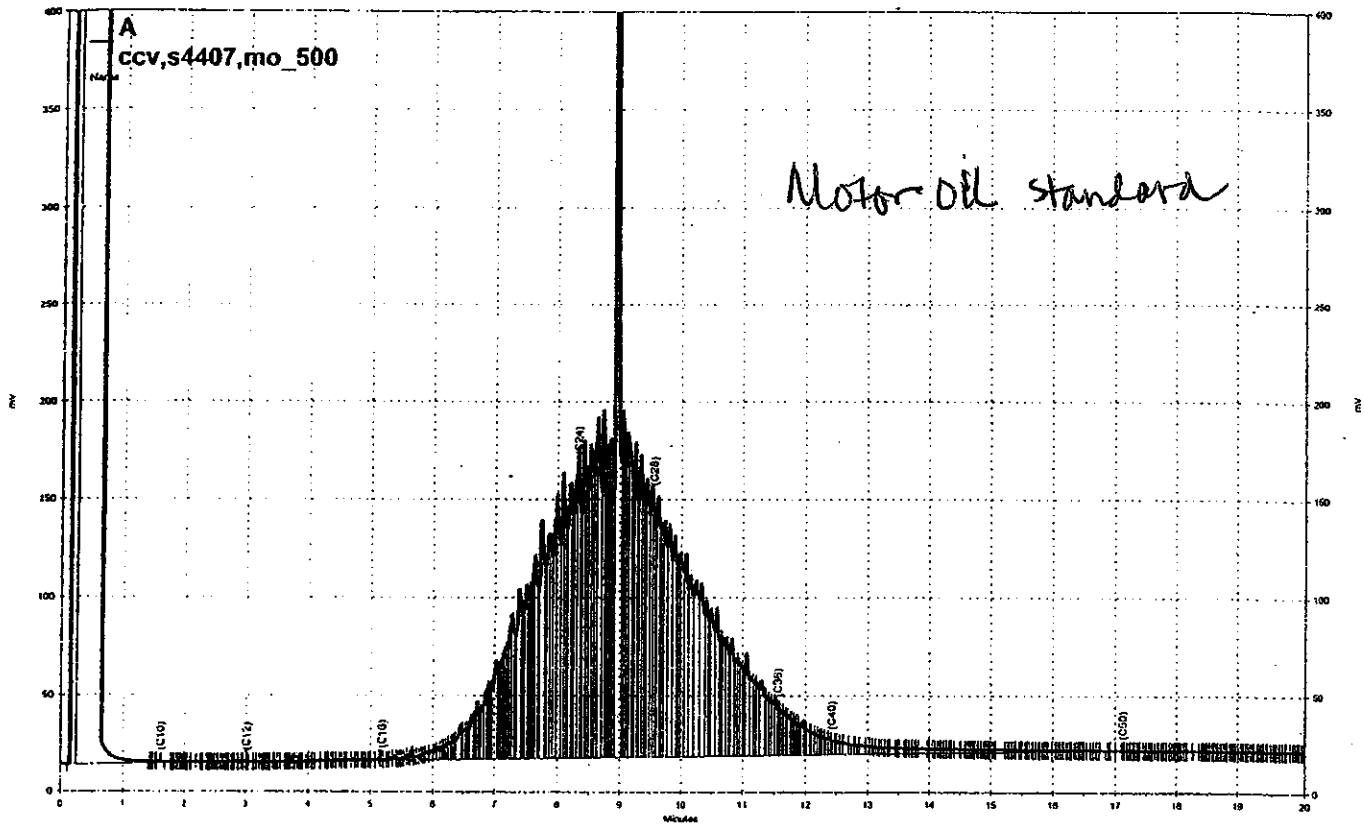

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Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC359564	Batch#:	118257
Matrix:	Filtrate	Prepared:	10/09/06
Units:	ug/L	Analyzed:	10/10/06

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	489.4	20 *	61-133

Surrogate	%REC	Limits
Hexacosane	12 *	65-130

* Value outside of QC limits; see narrative

17.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Extractable Hydrocarbons

Lab #:	189869	Location:	4311-4333 MacArther Blvd, OAK CA
Client:	Questa Engineering Corporation	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	118257
Units:	ug/L	Prepared:	10/09/06
Diln Fac:	1.000	Analyzed:	10/11/06

Type: BS
Lab ID: QC359561

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,108	84	61-133

Surrogate	%REC	Limits
Hexacosane	100	65-130

Type: BSD
Lab ID: QC359562

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,076	83	61-133	1	31

Surrogate	%REC	Limits
Hexacosane	99	65-130

RPD= Relative Percent Difference

16.0