Paulette Satterley 14601 Guadalupe Dr. Rancho Murieta, Ca 95683 Telephone 916-768-2003

#### RECEIVED

Ms. Barbara Jakub Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

8:16 am, Mar 13, 2012

Alameda County Environmental Health

Re: Fuel Leak Case No: RO0000133

Enclosed please find the *Site Investigation Report* dated February 1, 2012, the *Natural Attenuation Analysis* dated February 1, 2012, the *Human Health Risk Assessment* dated February 1, 2012, and the *2011 Second Semi-Annual Monitoring Report* dated February 1, 2012. These reports were prepared by Taber Consultants of West Sacramento, California.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document are true and correct to the best of my knowledge.

Sincerely,

March 12, 2011

Paulette Satterley

Paulette Satterley

## 2011 SECOND SEMI-ANNUAL MONITORING REPORT

Former City of Paris Cleaners 3516 Adeline Street Oakland, California 94608

#### USTCF Claim #002192

#### **Prepared For:**

Ms. Paulette Satterley 14601 Guadalupe Drive Rancho Murieta, CA 95683

#### **Prepared By:**

Taber Consultants 3911 West Capitol Avenue West Sacramento, CA 95691

Taber Project No. 2011-0107

February 1, 2012



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#### 1.0 INTRODUCTION

#### 1.1 **Project Description**

On behalf of Ms. Paulette Satterley, Taber Consultants has prepared this *2011 Second Semi-Annual Monitoring Report* for submittal to the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) and Alameda County Health Care Services Agency (ACHSA). The scope of work conducted during this project complies with existing SFBRWQCB and ACHSA directive letters.

#### **1.2 Site Location and Description**

The former City of Paris Cleaners, located at 3516 Adeline St., Oakland, CA, is a former dry cleaning, laundry and dyeing operation currently owned by Mrs. Debra Runyon. The site location is shown on Figure 1. A site plan is shown on Figure 2. The facility operated as City of Paris Cleaners and Dyers for about 40 years until the 1960's, but cleaning materials and tanks were not completely removed from the site until 1992. The site buildings remained vacant for a number of years following the closure of the dry cleaning operation, and then the owner converted them to residential and light commercial use.

The site lies at the southeastern corner of the intersection of 35th Street and Adeline Street at approximately 30 feet above mean sea level (amsl) in the northwest portion of the City of Oakland, California. The site buildings currently house on-site living quarters and City of Paris Studios, a workshop for art, art restoration, collectibles and hobbies. Mrs. Runyon acquired the property in July 2000.

#### **1.3 Chronological Site History and Subsurface Investigations**

In 1987, Frank Champion, the owner at that time, applied for permits for remove Stoddard Solvent storage tanks at the site. Mr. Champion applied for five permits, obtaining permission to remove two 1000-gallon tanks, a 500-gallon tank, a 250-gallon tank and a 150-gallon tank. Underground storage tanks at the site were used to store Stoddard Solvent, the dry cleaning solvent used during operation of the dry cleaning facility until the 1960s when the facility was closed.

On October 4, 1990, Semco Company of San Mateo excavated and reported removing one 750-gallon and two 1,000-gallon underground tanks used to store Stoddard Solvent. Six soil samples were collected in conjunction with the UST removal.

On July 31 and August 1 and 2, 1991, Uriah Inc. (UES) performed a soil vapor survey at the site using photoionization technology (a Photovac TIP I) in an attempt to define the approximate boundaries of soil impacted by Stoddard Solvent. Soil vapors were found to be widely



distributed across the site, but due to physical impediments posed by site structures, sidewalks, etc., the full extent of the impacted soil was not defined.

UES contracted W.A. Craig to overexcavate the eastern portion of the tank pit on August 30, 1991. Approximately 44 cubic yards were excavated and placed in a cell for on-site bioremediation of the impacted soil. During overexcavation, EUS reports that the contractor discovered an additional 250-gallon UST containing "a small volume of liquid" that was stored in a 55-gallon drum on site after removing an aliquot for analysis. This UST was removed and disposed by W. A. Craig on October 31, 1991. An additional 15 cubic yards was overexcavated from the tank pit by W.A. Craig on January 27, 1992 and added to the on-site bioremediation cell.

On March 31, 1992, composite samples of the on-site bioremediated soil were analyzed to verify that sufficient hydrocarbon removal had occurred to reuse as fill on the site. No additional soils were excavated due to safety concerns regarding building foundation integrity; however soil samples were collected from the tank pit side walls. ACHCSA approved use of the bioremediated soil as backfill, and W. A. Craig backfilled the tank pit with bioremediated soil and clean fill on April 21, 1992.

On October 29 and 30, 1992, UES supervised on-site installation of ground water monitoring wells. Soils Exploration Services of Vacaville, California, installed three 30-foot monitoring wells. Initial depth to groundwater measurements in the wells ranged from 13 to 14 feet below grade. Beginning November 18, 1992, groundwater samples were analyzed for Total Petroleum Hydrocarbons as Stoddard Solvent (TPH-SS), TPH as diesel (TPH-D), TPH as gasoline (TPH-G), methyl tertiary butyl ether (MTBE), and benzene, toluene, ethylbenzene and total xylenes (BTEX). Samples from all three monitoring wells contained TPH-SS ranging from 630 parts per billion (ppb) in MW-2 to 11,000 ppb in MW-3. TPH-D, TPH-G, MTBE and BTEX concentrations were below laboratory detection limits.

On March 19, 1998, Dugan Associates of San Jose, California (Dugan) advanced six on and offsite soil borings to a total depth of 18 feet below grade. Five of the soil borings were advanced on the north side of 35th Street in the projected downgradient direction from the site (EB-2 through EB-6). One soil boring was advanced on-site to the northwest of the former UST location (EB-1). At each soil boring, Dugan collected a soil sample at 5, 10 and 15 feet below grade and one grab-groundwater sample at 18 feet below grade. The on-site soil boring (EB-1) groundwater sample concentration was 270,000 ppb TPH-SS, with one off-site groundwater sample (EB-5) reporting 780 ppb TPH-SS. Concentrations of analytes for all other groundwater samples from the soil borings were below laboratory detection limits. Soil samples at EB-1 contained 310 and 340 ppb of TPH-SS at 10 and 15 ft. below grade, respectively, and trace amounts of total xylenes and/or toluene.

In September, 1999, ACHSA issued a directive letter which required groundwater analysis for semivolatile organics (SVOCs) and volatile organics (VOCs) historically associated with dry cleaning operations. In December 1999, using EPA method 625 and 3510, or 8270 and 3550, 1,2-dichlorobenzene (DCB), 1,1-dichloroethane (1,1 DCA), 2-methylnaphthalene and



naphthalene were detected in samples from one or more wells. Concentrations of other SVOC and VOC analytes were below laboratory detection limits, including denser than aqueous phase liquids (DNAPLs, i.e. pentachlorophenol (PCP)). At that time Dugan defined a north-trending groundwater gradient at 0.003 ft./ft.

In their September, 1999 letter, the ACHSA also noted that according to a database search they believed a 97-foot industrial well had been drilled at the site. The well was located southeast of Monitoring Well 3 (Figure 2).

In March 2002, in compliance with an ACHSA directive letter, WellTest, Inc. (formerly Dugan and Associates) redeveloped the three monitoring wells (by purging 10 well-volumes) and sampled the three wells pursuant to quarterly monitoring responsibilities. WellTest, Inc. also sampled the industrial well on-site. The analytical results of the sampling indicated up to 11,000 micrograms per liter ( $\mu$ g/L) of TPH-SS in the sample from MW-1, no BTEX above laboratory detection limits, up to 31  $\mu$ g/L MTBE in the sample from MW-3, 0.61  $\mu$ g/L DCB in the sample from MW-1, and 130 ug/I Naphthalene in MW-1. The groundwater gradient was also defined to the southeast at 0.14 ft./ft., which appears to be an anomalously steep gradient for this site. This steep gradient may be a result of sediment blocking some or all of the screened section of one or more well. When Dugan redeveloped the wells in 2002, they appear to have adversely impacted the ability of the wells to adjust to changing water levels.

Taber Consultants, formerly Western Resource Management (WRM), assumed environmental consulting responsibilities for the site commencing in June 2007. Taber performed groundwater monitoring at the site for the first and second semiannual periods of 2009. In response to a query by ACHSA, Taber submitted a well completion report request to the California Department of Water Resources, in which undated well boring logs for a well at the City of Paris Cleaners, at 3516 Adeline Street, indicated a 97-foot industrial well on the site. Taber also found well drilling information for another industrial well drilled in 1927 for the City of Paris Cleaners, drilled to 295 feet. The location of this well is unknown, and the well could have been covered by buildings constructed after the well was taken out of service.

July 28, 2009, ACHCSA advised Responsible Parties that The California State Water Resources Control Board (State Water Board) had approved Resolution No. 2009-0042, which reduced quarterly groundwater monitoring requirements to semiannual or less frequent monitoring at all sites. In 2009, Taber reduced monitoring at the City of Paris Cleaners site to two semiannual monitoring events at the site in February and August. Corresponding reports were the First Semiannual and Second Semiannual Monitoring Reports.

In August of 2009 Taber Consultants evaluated using the HydraSleeve<sup>®</sup> no-purge sampling protocol at the site. With verbal authorization from Barbara Jakub of ACHCSA, on March 17, 2010, Taber Consultants implemented ongoing use of the HydraSleeve<sup>®</sup> sampling protocol for all wells at the site.

In March 2011 Taber Consultants resurveyed top of well casings during groundwater monitoring activities. In May 2011 Taber Consultants conducted site investigation activities which included:



video well logging to evaluate well screen and casing condition; hydrogeology characterization using cone penetrometer testing (CPT), the GeoProbe® hydraulic profiling tool (CPT), continuous push soil borings; assessing distribution of impacted soil by analyzing soil samples and grab groundwater samples; and assessing site groundwater chemistry by analyzing grab groundwater samples for natural attenuation parameters.

#### 1.4 Zimmerman Residence Plume

A source of TPH-G and MTBE has been identified at the adjacent property to the south and southeast. This site, referred to as the Zimmerman Residence, is located approximately 60 feet to the southwest and up-gradient/cross-gradient of the former City of Paris Cleaners site. The Zimmerman Residence property includes a residential building and a warehouse and spans the distance from Adeline Street to Chestnut Street to the east.

On February 22, 2000, one 3,750-gallon gasoline UST was removed from the sidewalk between the warehouse building and Chestnut Street. The former UST location is approximately 220 feet southeast of the City of Paris site. Site investigations were conducted at the site in June 2006, October 2007, December 2007 and May 2008.

Soil and groundwater samples from the Zimmerman residence site contained TPH-G, TPH-D and BTEX. Maximum concentrations reported in groundwater samples from soil borings were 120,000  $\mu$ g/L TPH-G (S-4), 12,000 TPH-D (SB-14), 10,000  $\mu$ g/L benzene (SB-11), 930  $\mu$ g/L toluene (pit water), 3,500  $\mu$ g/L ethyl-benzene (S-4), and 7,900  $\mu$ g/L xylenes (SB-11), respectively. Grab groundwater samples taken in May 2008 had concentrations of 740  $\mu$ g/L TPH-G in soil boring SB-27 (east of the industrial well W-IND at the site), 3,600  $\mu$ g/L TPH-G in soil boring SB-25 (on the southeast corner of the site), and 2,300  $\mu$ g/L TPH-G in soil boring SB-26 (south of the monitoring wells at the site).

At the Zimmerman site, approximately 1,100 tons of gasoline impacted soil was removed in March 2009 from the warehouse interior adjacent to Chestnut Street. During soil removal, AEI observed free product. In March, 2009, AEI Consultants injected hydrogen peroxide into the permeable bridge they had installed in the backfill area as a measure to treat the free product and to mitigate plume migration from the source. An injection well was installed in the tank excavation area at the Zimmerman residence in May 2009 to aerate impacted groundwater.

In correspondence from Alameda County dated December 29, 2008, notes that sorbed-phase soil concentrations of petroleum hydrocarbons further than 100 feet from the tank on Chestnut Street indicated an additional source was likely at the site.

Seven groundwater monitoring wells (MW-1 through MW-7) and one injection well (IW-1) are at the Zimmerman Residence site. Groundwater monitoring has being ongoing since April 2009. Based on the *First Semi-Annual Groundwater Monitoring* report dated September 30, 2011 by AEI Consultants Environmental & Engineering Services, elevated TPH-G and benzene concentrations have been detected in groundwater sample. The highest TPH-G and benzene



concentrations indicated in the report were 27,000  $\mu$ g/L (May 5, 2011 sample from MW-2) and 3,800  $\mu$ g/L (August 27, 2009 sample from MW-3), respectively. The closest well to the former City of Paris site is MW-4 located approximately 60 feet southeast. Concentrations of TPH-G and benzene in MW-4 groundwater samples collected on May 5, 2011 were 5,900  $\mu$ g/L and 560  $\mu$ g/L, respectively. MTBE concentration have not been reported because of elevated reporting limits ranging from 5 and 1,200 ug/L; resulting in a lack of meaningful data regarding MTBE concentrations in groundwater at the Zimmerman Residence site.

### 2.0 GROUNDWATER MONITORING ACTIVITIES AND RESULTS

On August 25, 2011, Taber Consultants visited the site to measure water levels and collect groundwater samples from monitoring wells MW-1 through MW-3 and the industrial well W-IND.

#### 2.1 Site Activities

Video logging performed at the site on May 4, 2011, revealed that a disposable bailer had been left in monitoring well MW-1. The bailer was removed during groundwater sampling activities on August 25, 2011.

#### 2.2 Groundwater Elevation Measurements

Depth-to-groundwater was measured in wells MW-1, MW-2, MW-3 and W-IND using a water level meter capable of measurements to within 0.01 foot. Depth to groundwater was 11.35, 11.06, 11.85, and 12.34 feet below top of casing (BTOC) in MW-1, MW-2, MW-3 and W-IND, respectively. Depth to groundwater data were converted to groundwater elevations referenced to feet above mean sea level (amsl). Corresponding groundwater elevations were 19.95, 19.97, 19.28, and 20.14 feet amsl.

#### 2.3 Groundwater Sampling and Analysis

Following groundwater level measurements, the four wells were sampled in accordance with the HydraSleeve<sup>®</sup> no-purge sampling protocol. The HydraSleeve<sup>®</sup> was lowered into the well, water levels were allowed to equilibrate, and then a representative sample from the groundwater was collected using the HydraSleeve<sup>®</sup> as it was carefully retrieved from the well. Taber Consultants then transferred the sample from the HydraSleeve<sup>®</sup> into the laboratory-supplied containers. The samples were transported in an iced cooler with chain-of-custody documentation to Sparger Technology, Inc. (Sparger), of Rancho Cordova, California, a state certified analytical laboratory (ELAP Certification #1614).



The groundwater samples were analyzed for TPH-SS and TPH-G by EPA Method 8015B; and BTEX and MTBE by EPA Method 8260B.

#### 2.4 Analytical Results

TPH-SS was detected in the groundwater samples from monitoring wells MW-1 and MW-3 at concentrations of 2,100  $\mu$ g/L and 1,000  $\mu$ g/L, respectively. TPH-G was detected in the groundwater samples from monitoring wells MW-1 and MW-3 at concentrations of 7,200 and 2,300  $\mu$ g/L, respectively. No TPH-SS or TPH-G was detected in the sample from MW-2 at or above the laboratory reporting limit. MTBE was detected in the groundwater samples from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 2.1  $\mu$ g/L, 1.5  $\mu$ g/L, and 4.5  $\mu$ g/L, respectively. No BTEX was detected at or above the laboratory reporting limits in the monitoring well samples. No analytes were detected at or above the laboratory reporting limits in well W-IND.

Groundwater elevations based on the August 25, 2001 water level measurements in the wells are shown on Figure 3. The Laboratory analytical results are shown on Figure 4 and summarized in Table 1. A historical summary of groundwater elevations and analytical results for the wells is included in Table 2. Time history graphs of concentrations of TPH-SS, TPH-G, and MTBE, and groundwater elevations for MW-1, MW-2, MW-3 are shown on Figure 5. The field data sheets are included in Appendix A. The laboratory analytical reports and chain-of-custody documentation are included in Appendix B.

#### 2.5 Schedule of Upcoming Activities

In March, 2012, Taber Consultants will gather monitoring data for the First Semi-Annual Groundwater Monitoring Report for 2012. Taber Consultants will compile that monitoring data with historical data to further evaluate trends at the site.



#### 3.0 CONCLUSIONS AND DISCUSSION

The California Department of Health Services (DHS) and the EPA have established Maximum Contaminant Levels (MCLs) for certain chemicals as part of drinking water standards. The MCLs are numerical limits that are used by the RWQCB as water quality goals. MCLs have not been established for middle distillates like TPH-SS, however there is a taste and odor threshold used for comparison as described below. MCLs have been established for benzene (1  $\mu$ g/L), toluene (150  $\mu$ g/L), ethyl-benzene (300  $\mu$ g/L), xylenes (1,750  $\mu$ g/L) and MTBE (13  $\mu$ g/L).

The TPH taste and odor threshold of 100 ug/L is used by the San Francisco Bay RWQCB as an environmental screening level (ESL) for middle distillates. Concentrations of TPH-SS in MW-1, MW-2 and MW-3 groundwater samples exceed the TPH screening level. Historically, the concentrations of TPH-SS at the site have also exceeded the groundwater nuisance and odor concerns screening level of 5,000 ug/L for TPH. MTBE concentrations have been below the MCL in groundwater from MW-1 and MW-2 and occasionally above the MCL in MW-3. The concentrations over time have fluctuated seasonally, however, since 2007 there appears to be a consistent decreasing trend in groundwater sample concentrations.

The groundwater elevation contours and flow direction for the second semi-annual 2011 was not assessed because of the close spacing of the monitoring wells at the site and historical results indicating that groundwater flow direction beneath the site is not consistent with other environmental sites in the general area which are conducting groundwater monitoring. Based on monitoring results of wells in the upper groundwater zone at four nearby UST release sites, groundwater in the area flows west-southwest. Three of the sites are to the east and up-gradient of the subject site; Shell Gas Station at 3420 San Pablo Avenue, Thrifty Gas Station at 3400 San Pablo Avenue, and the Zimmerman Residence at 3442 Adeline Street (closest and adjacent to the site). The fourth site is to the north-northwest and cross-gradient to up-gradient of the subject site; Ambassador Laundry at 3623 Adeline Street. Historical site information also indicates that the former consultant may have damaged the well filter pack during redevelopment of the onsite monitoring wells in 2002 and this has resulted in anomalous water level data since that event.



#### 4.0 REPORT DISTRIBUTION

Ms. Paulette Satterley 14601 Guadalupe Drive Rancho Murieta, CA 95683

Ms. Barbara Jakub Alameda County Health Care Services Agency 1131 Harbor Parkway, Suite 250 Alameda CA, 94502

Ms. Cherie McCaulou San Francisco Bay Regional Water Quality Control Board 1515 Clay St., Suite 1400 Oakland, CA 94612



#### 5.0 REMARKS AND SIGNATURE

The interpretations and/or conclusions contained in this report represent our professional opinions and are based in part on information supplied by the client. These opinions are based on currently available information and were developed in accordance with currently accepted geologic, hydrogeologic, and engineering practices in Alameda County, California in 2012. Other than this, no warranty is implied or intended.

This report has been prepared solely for the use of Ms. Paulette Satterley. Any reliance on this report by third parties shall be at such parties' sole risk. The work described herein was performed under the direct supervision of the professional geologist, registered with the State of California, whose signature appears below.

We appreciate the opportunity to provide you with geologic, engineering and environmental consulting services and trust this report meets your needs. If you have any questions or concerns, please call us at (916) 371-1690.

CHRISTOPHER D

ROSSITTO No. 7559 ROFESSIONAL GEOLOGIST

OF CAL

Sincerely,

**Taber Consultants** 

Ellen Pyatt, MSc. Project Geologist

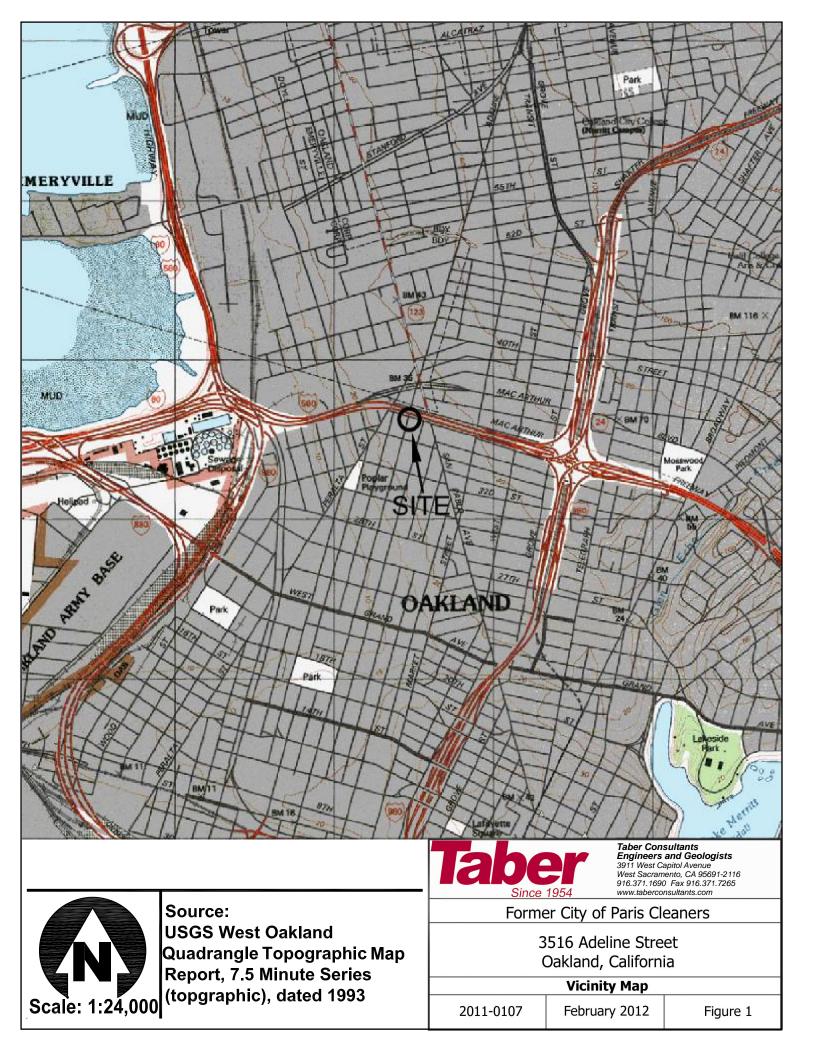
Chris Rossitto, P.G. 7559 Senior Geologist

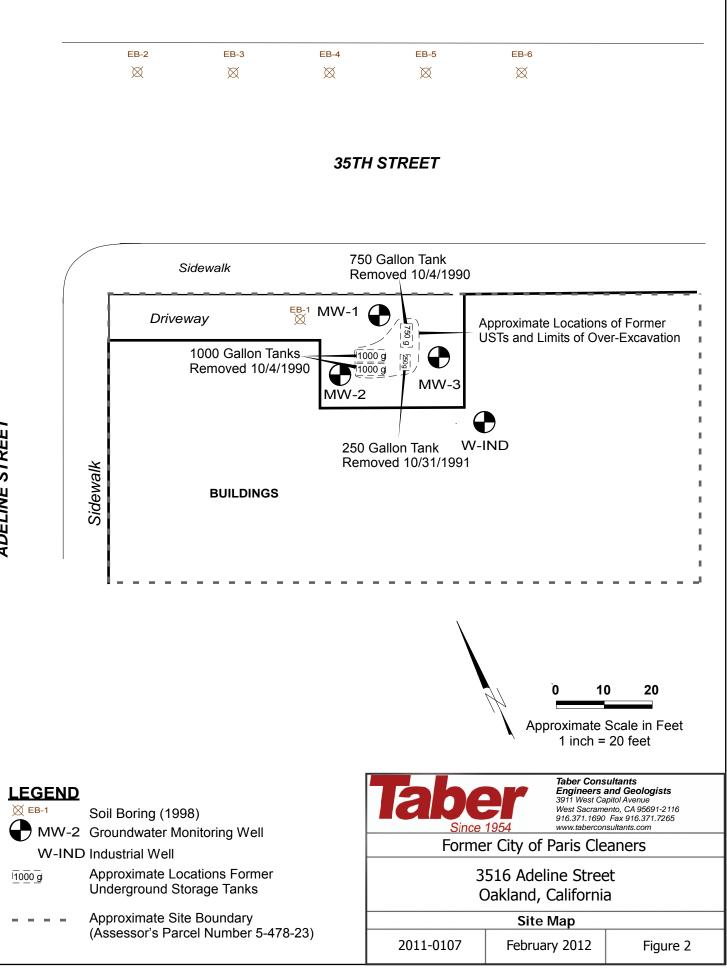
**Quality Control Reviewer** 

Thomas E. Ballard, P.G. #7299, C.H.G. #961 Principal Geologist



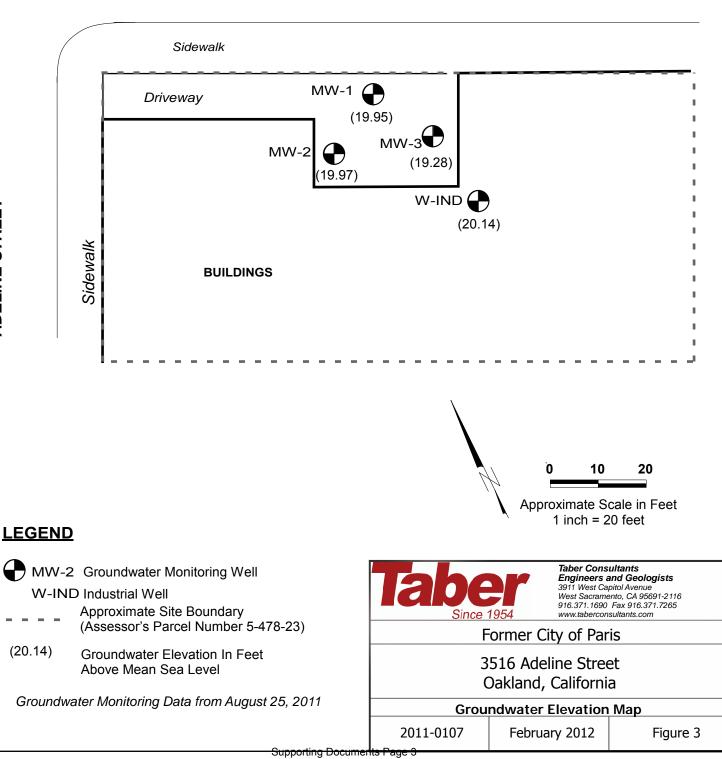
FIGURES





**ADELINE STREET** 

#### 35TH STREET



ADELINE STREET

35TH STREET

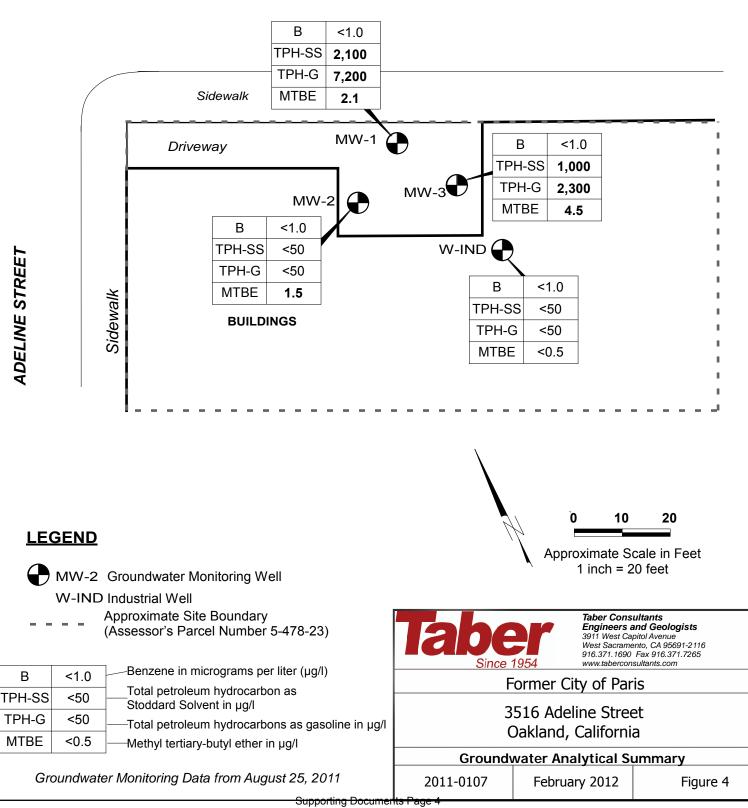
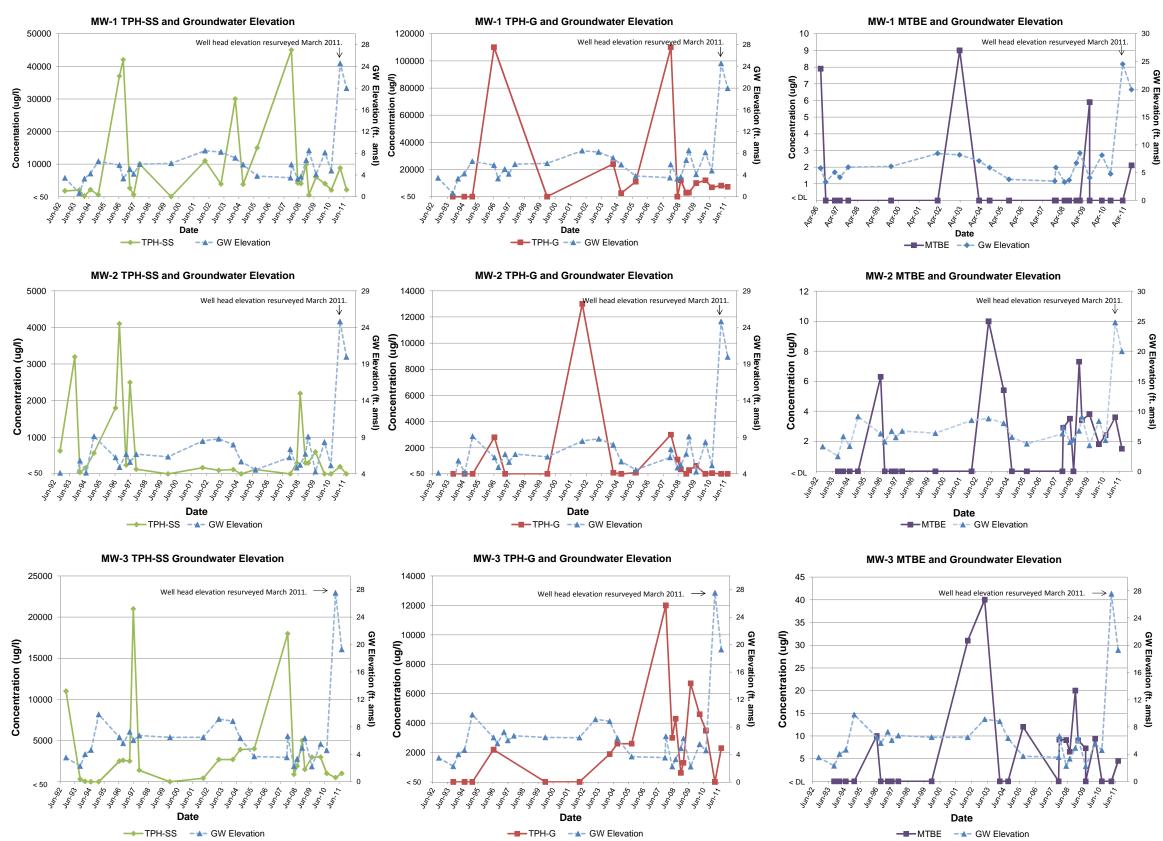


FIGURE 5 TPH-SS, TPH-G, MTBE and Groundwater Elevation v. TIME GRAPHS City of Paris Cleaners 3516 Adeline Street, Oakland, California 94608



TABLES

## TABLE 1GROUNDWATER ELEVATION AND ANALYTICAL RESULTSAugust 25, 2011

#### City of Paris Cleaners 3516 Adeline Street, Oakland, California 94608

		EI	evation Su	mmary	Analytical Summary						
Well ID	Date	Top of Casing Elevation (feet amsl)	Depth to Water (feet BTOC)	Groundwater Elevation (feet amsl)	TPH-SS	TPH-G	Benzene	Toluene (ug/l)	Ethyl benzene	Xylenes	MTBE
MW-1 <sup>a</sup>	08/25/11	31.30	11.35	19.95	2100	7200	<1.0	<1.0	<1.0	<1.0	2.1
MW-2	08/25/11	31.03	11.06	19.97	<50	<50	<1.0	<1.0	<1.0	<1.0	1.5
MW-3	08/25/11	31.13	11.85	19.28	1000	2300	<1.0	<1.0	<1.0	<1.0	4.5
W-IND	08/25/11	32.48	12.34	20.14	<50	<50	<1.0	<1.0	<1.0	<1.0	<0.50

#### **Explanation:**

TPH-G = Total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8015B. TPH-SS = Total petroleum hydrocarbons as stoddard solvent, analyzed by the 8015B. Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B. MTBE = Methyl tertiary-butyl ether, analyzed by EPA Method 8260B.

amsl = Above mean sea level. BTOC = Below top of casing.

ug/I = Micrograms per liter.

<1.0 = Not detected at or above indicated laboratory reporting limit.

On March 17, 2010, Taber Consultants implemented the HydraSleeve® no purge protocol for all wells.

On March 23, 2011, Taber Consultants resurveyed top of casing elevations for all wells.

MW-3<sup>a</sup> During the 8/25/11 monitoring event, Taber Consultants removed a disposable bailer from MW-1. Please see report for discussion.

# TABLE 2 GROUNDWATER ELEVATION AND ANALYTICAL RESULTS SUMMARY City of Paris Cleaners

3516 Adeline Street, Oakland, California 94608

		EI	levation Su	mmary					Α	nalytical S	ummary				
Well ID	Date	Top of Casing Elevation (feet amsl)	Depth to Water (feet BTOC)	Groundwater Elevation (feet amsl)	TPH-SS	TPH-G	Benzene	Toluene	Ethyl benzene	Xylenes (ug/l	MTBE	1,2-DCB	1,1-DCA	2-Methyl- Naphthalene	Naphthalene
Groundw	ater Sample	Locations	5												
EB1-18	03/19/98	18' bgs	Groundwater	Grab Sample	270000		<5.0	93	66	1700	<100				
EB2-18	03/19/98	18' bgs	Groundwater	Grab Sample	<1.0		<0.5	<0.5	<0.5	<0.5	<5.0				
EB3-18	03/19/98	18' bgs	Groundwater	Grab Sample	<1.0		<0.5	<0.5	<0.5	<0.5	<5.0				
EB4-18	03/19/98	18' bas	Groundwater	Grab Sample	<1.0		<0.5	<0.5	<0.5	<0.5	<5.0				
EB5-18	03/19/98	-		Grab Sample	780		<0.5	< 0.5	<0.5	2	<5.0				
EB6-18	03/19/98	-		Grab Sample	<1.0		<0.5	<0.5	<0.5	<0.5	<5.0				
MW-1	11/18/92	17.44	13.99	3.45	1800	NA	<0.5	<0.5	<0.5	<0.5	NA				
MW-1	11/4/1993	17.44	16.79	0.65	2000	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-1	3/8/1994	17.44	14.14	3.3	150	NA	35	40	72	120	NA				
MW-1	8/2/1994	17.44	13.18	4.26	2100	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-1	2/8/1995	17.44	10.92	6.52	620	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-1**	7/8/1996	17.44	11.62	5.82	37000	110000	1.6	<0.5	<0.5	74	7.9				
MW-1	10/9/1996	17.44	14.11	3.33	42000	NA	<0.5	5	<0.5	<0.5	NA				
MW-1	3/18/1997	17.44	12.37	5.07	2600	NA	<0.5	1.5	1.5	9.6	<6.0				
MW-1	6/19/1997	17.44	13.26	4.18	660	NA	<0.5	<0.5	1.2	0.71	<5.0				
MW-1	11/14/1997	17.44	11.45	5.99	10000	NA	<0.5	<0.5	110	1.2	<5.0				
MW-1	12/15/1999	17.44	11.31	6.13	<20	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5	0.59	<0.5	<0.5
MW-1	03/22/02	17.44	8.97	8.47	11000						<5.0				130
MW-1	04/15/03	17.44	9.23	8.21	3900		<2.5	<2.5	<2.5	3	9				
MW-1	03/26/04	17.44	10.32	7.12	30000	24000	<50	<50	<50	<50	<500				
MW-1	09/30/04	17.44	11.53	5.91	3800	2600	<0.5	<0.5	<0.5	2.7	<5				
MW-1	09/09/05	17.44	13.63	3.81	15000	11000	С	<5	<5	15	<50				
MW-1	11/30/07	17.44	13.95	3.49											
MW-1	12/20/07	17.44	11.51	5.93	45000	110000	20	50	20	100	<5				
MW-1	05/23/08	17.44	14.14	3.3	4200	<500	<1	<1	<1	20	<0.50				
MW-1	08/12/08	17.44	13.78	3.66	4000	12000	<1	<1	<1	<1	<0.50				
MW-1	12/18/08	17.44	10.71	6.73	9900	2700	<1	<1	<1	<1	<0.50				
MW-1	02/19/09	17.44	8.91	8.53	500	3100	<10	<10	<10	<10	<5				
MW-1	08/11/09	17.44	13.35	4.09	13000	7800	<10	<10	<10	<10	5.9				
MW-1 NP	08/11/09	17.44	13.35	4.09	6000	10000	<10	<10	<10	<10	<5				

# TABLE 2 GROUNDWATER ELEVATION AND ANALYTICAL RESULTS SUMMARY City of Paris Cleaners

3516 Adeline Street, Oakland, California 94608

		Ele	vation Su	mmary	Analytical Summary										
Well ID	Date	Top of Casing Elevation (feet amsl)	Depth to Water (feet BTOC)	Groundwater Elevation (feet amsl)	TPH-SS	TPH-G	Benzene	Toluene	Ethyl benzene	Xylenes (ug/l	MTBE )	1,2-DCB	1,1-DCA	2-Methyl- Naphthalene	Naphthalene
MW-1	03/17/10	17.44	9.31	8.13	4000	12000	<20	<20	<20	20	<10				
MW-1	08/18/10	17.44	12.65	4.79	2000	6900	<100	<100	<100	<100	<50				
MW-1	03/23/11	31.30	6.75	24.55	8800	8100	<10	<10	<10	<10	<5				
MW-1 <sup>a</sup>	08/25/11	31.30	11.35	19.95	2100	7200	<1	<1	<1	<1	2.1				
MW-2	11/18/92	17.31	13.18	4.13	630	NA	<0.5	<0.5	<0.5	<0.5	NA				
MW-2	11/04/93	17.31	14.84	2.47	3200	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-2	03/08/94	17.31	11.5	5.81	45	NA	1.4	2	11	19	NA				
MW-2	08/02/94	17.31	13.14	4.17	170	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-2	02/08/95	17.31	8.18	9.13	570	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-2**	07/08/96	17.31	11.06	6.25	1800	2800	<0.5	2.6	15	24	6.3				
MW-2	10/09/96	17.31	12.38	4.93	4100	NA	<0.5	0.57	<0.5	<0.5	NA				
MW-2	03/18/97	17.31	10.61	6.7	240	<0.5	0.57	<0.5	<0.5	5.3	NA				
MW-2	06/19/97	17.31	11.68	5.63	2500	NA	<0.5	<0.5	9.1	<0.5	<5.0				
MW-2	11/14/97	17.31	10.61	6.7	130	NA	<0.5	<0.5	0.9	1.2	<5.0				
MW-2	12/15/99	17.31	10.97	6.34	<20	<50	<0.5	<0.5	<0.5	<0.5	NA	<0.5	0.53	<0.5	49
MW-2	03/22/02	17.31	8.82	8.49	170	13000	410	1000	210	1100	<5.0				<10
MW-2	04/15/03	17.31	8.52	8.79	99		<0.5	<0.5	<0.5	0.76	10				
MW-2	03/26/04	17.31	9.32	7.99	120	93	<0.5	<0.5	<0.5	0.76	5.4				
MW-2	09/30/04	17.31	11.62	5.69	<50	<50	<0.5	<0.5	<0.5	<0.5	<5				
MW-2	09/09/05	17.31	12.75	4.56	120	98	<0.5	<0.5	<0.5	<0.5	<5				
MW-2	11/30/07	17.31	11.06	6.25											
MW-2	12/20/07	17.31	9.95	7.36	<50	3000	<1	1.6	<1	2.4	2.9				
MW-2	05/23/08	17.31	12.46	4.85	300	1100	<1	<1	<1	<1	3.5				
MW-2	08/12/08	17.31	12.08	5.23	2200	350	<1	<1	<1	<1	<0.50				
MW-2	12/18/08	17.31	10.58	6.73	300	<50	<1	<1	<1	<1	7.3				
MW-2	02/19/09	17.31	8.22	9.09	300	300	<1	<1	<1	<1	3.4				
MW-2	08/11/09	17.31	13.00	4.31	600	610	<1	<1	<1	<1	3.8				
MW-2	03/17/10	17.31	8.95	8.36	<50	<50	<1	<1	<1	<1	1.8				
MW-2	08/18/10	17.31	12.15	5.16	<50.0	70	<1.0	<1.0	<1.0	<1.0	2.4				
MW-2	03/23/11	31.03	6.22	24.81	200	<50	<1.0	<1.0	<1.0	<1.0	3.6				
MW-2	08/25/11	31.03	11.06	19.97	<50	<50	<1.0	<1.0	<1.0	<1.0	1.5				
MW-3	11/18/92	17.44	13.93	3.51	11000	NA	<0.5	<0.5	<0.5	<0.5	NA				

#### TABLE 2 **GROUNDWATER ELEVATION AND ANALYTICAL RESULTS** SUMMARY City of Paris Cleaners 3516 Adeline Street, Oakland, California 94608

		Ele	evation Su	mmary	Analytical Summary										
Well ID	Date	Top of Casing Elevation	Depth to Water	Groundwater Elevation	TPH-SS	TPH-G	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	1,2-DCB	1,1-DCA	2-Methyl- Naphthalene	Naphthalene
		(feet amsl)	(feet BTOC)	(feet amsl)						(ug/					
MW-3	11/04/93	17.44	15.16	2.28	320	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-3	03/08/94	17.44	13.43	4.01	45	NA	0.8	0.9	5	10	NA				
MW-3	08/02/94	17.44	12.82	4.62	<20	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-3	02/08/95	17.44	7.62	9.82	<20	<50	<0.5	<0.5	<0.5	<0.5	NA				
MW-3**	07/08/96	17.44	10.97	6.47	2500	2200	1	<0.5	8.8	8	10				
MW-3	10/09/96	17.44	11.84	5.6	2600	NA	<0.5	<0.5	<0.5	<0.5	NA				
MW-3	03/18/97	17.44	10.16	7.28	2500	NA	<0.5	0.61	0.63	5.2	NA				
MW-3	06/19/97	17.44	11.40	6.04	21000	NA	<0.5	<0.5	11	<0.5	<5.0				
MW-3	11/14/97	17.44	10.71	6.73	1,400	NA	< 0.5	<0.5	28	28	<5.0				
MW-3	12/15/99	17.44	10.96	6.48	<20	<50	< 0.5	<0.5	< 0.5	< 0.5	NA	0.87	0.57	25	88
MW-3	03/22/02	17.44	10.97	6.47	420	<50	< 0.5	<0.5	< 0.5	<0.5	31				<50
MW-3	04/15/03	17.44	8.31	9.13	2700		< 0.5	< 0.5	< 0.5	<0.5	40				
MW-3	03/26/04	17.44	8.61	8.83	2700	1900	<1.7	<1.7	<1.7	4.3	<17				
MW-3	09/30/04	17.44	11.1	6.34	3900	2600	<0.5	<0.5	<0.5	3.2	<10				
MW-3	09/09/05	17.44	13.75	3.69	4000	2600	<0.5	<0.5	0.57	2.7	12				
MW-3	11/30/07	17.44	13.9	3.54											
MW-3	12/20/07	17.44	10.79	6.65	18000	12000	<1	1.6	1.1	2.4	9.2				
MW-3	05/23/08	17.44	15.2	2.24	900	3000	<1	<1	<1	<1	9.1				
MW-3	08/12/08	17.44	14.14	3.3	1900	4300	<1	<1	<1	<1	6.5				
MW-3	12/18/08	17.44	12.53	4.91	5000	610	<1	1	<1	<1	20				
MW-3	02/19/09	17.44	11.11	6.33	1500	1300	<1	1	<1	<1	9				
MW-3	08/11/09	17.44	15.22	2.22	1000	2200	<10	<10	<10	<10	7.3				
MW-3 NP	08/11/09	17.44	15.22	2.22	3000	6700	<10	<10	<10	<10	<5				
MW-3	03/17/10	17.44	11.94	5.5	3000	4600	<10	<10	<10	<10	9.4				
MW-3	08/18/10	17.44	12.86	4.58	1000	3500	<50	<50	<50	<50	<25				
MW-3 <sup>a</sup>	03/23/11	31.13	3.58	27.55	500	<50	<1.0	<1.0	<1.0	<1.0	<0.50				
MW-3	08/25/11	31.13	11.85	19.28	1000	2300	<1.0	<1.0	<1.0	<1.0	4.5				
W-IND	03/22/02	NA			<50	190	<0.5	<0.5	<0.5	0.8	<5.0				
W-IND	04/15/03	NA													
W-IND	03/26/04	NA			500	200	<0.5	<0.5	<0.5	<0.5	<5				
W-IND	09/30/04	NA			<50	<50	<0.5	<0.5	<0.5	<0.5	<5				
W-IND	09/09/05	NA			<50	<50	<0.5	<0.5	<0.5	<0.5	<5				
W-IND	11/30/07	NA	12.92												
W-IND	12/20/07	NA	11.68		<50	500	<1	1	<1	2.2	<.50				

#### TABLE 2 GROUNDWATER ELEVATION AND ANALYTICAL RESULTS SUMMARY City of Paris Cleaners

3516 Adeline Street, Oakland, California 94608

		Ele	evation Su	mmary		Analytical Summary									
Well ID	Date	Top of Casing Elevation (feet amsl)	Depth to Water (feet BTOC)	Groundwater Elevation (feet amsl)	TPH-SS	TPH-G	Benzene	Toluene	Ethyl benzene	Xylenes (ug/	MTBE	1,2-DCB	1,1-DCA	2-Methyl- Naphthalene	Naphthalene
W-IND	05/23/08	NA	12.72		300	250	<1	3.7	<1	2.4	<0.50				
W-IND	08/12/08	NA	13.42		<50	<50.0	<1	<1	<1	<1	<0.50				
W-IND	12/18/08	NA	12.65		<50	<50	<1	<1	<1	<1	0.7				
W-IND	02/19/09	NA	9.74		<50	<50	<1	<1	<1	<1	<0.5				
W-IND	08/11/09	NA	14.13		<50	<50	<1	<1	<1	<1	<0.5				
W-IND	03/17/10	NA	9.78		<50	<50	<1	<1	<1	<1	<0.5				
W-IND	08/18/10	NA	12.84		<50	<50	<1.0	<1.0	<1.0	<1.0	<0.50				
W-IND	03/23/11	32.48	8.32	24.16	<50	<50	<1.0	<1.0	<1.0	<1.0	<0.50				
W-IND	08/25/11	32.48	12.34	20.14	<50	<50	<1.0	<1.0	<1.0	<1.0	<0.50				

#### **Explanation:**

TPH-G = Total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8015B. TPH-SS = Total petroleum hydrocarbons as stoddard solvent, analyzed by the 8015B. Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B. MTBE = Methyl tertiary-butyl ether, analyzed by EPA Method 8260B.

amsl = Above mean sea level. BTOC = Below top of casing.

ug/I - Micrograms per liter. <1.0 = Not detected at or above indicated laboratory reporting limit. -- = not analyzed

NA = Data not available

-- Components found in the gasoline range, however they are not characteristic of gasoline components.

NP = HydraSleeve® no purge protocol

On March 17, 2010, Taber Consultants implemented the HydraSleeve® no purge protocol for all wells.

On March 23, 2011, Taber Consultants resurveyed top of casing elevations for all wells.

MW-3<sup>a</sup> During the 3/23/11 monitoring event, Taber Consultants replaced a damaged well cap. See First Semiannual Monitoring Report 2011 for discussion.

### APPENDIX A FIELD DATA SHEETS

#### Taber Consultants Groundwater/Liquid Level Data (Measurements in Feet)

Project Address:

City of Paris Cleaners 3516 Adeline Street Oakland, CA. Date:

8/25/1

Project: 51074

Recorded by:

AN

Well No.	Time	Depth to	Measured	Sleeve	Sample	
		Groundwater	Total Depth	Deployment	Time	Comments
				Time		
MW-1	8:45	11.35	27.30 * Rost Mailan 29.82	69110	09:50	* RETAINER Brilan
-		-	29.82			
MW-2	03150	11:06	29.48	09:15	10:30	
		_				
MW-3	08:55	11.85	29.70	09:20	10:45	CAP O.K. WELL Under PRESSNER.
				ler v		•
IND	08:40	12.34	72.87	09130	10:15	
			an agenter and	And a state of the		
			10		-	
	The second se		and and a second second			
			12.0			

Notes: All wells somplied of Hydro slawns Repinced 2 will Comps MW-1 med MW-3 MW-3 WALL Comp Shawker - will is under The

#### APPENDIX B LABORATORY REPORTS



Tom Ballard Taber Consultants 3911 West Capitol Ave. West Sacramento, CA 95691

Client	Taber Co	onsultants
Workorder	20032	NoPurge_CityOfParis
Received	08/30/11	

The samples were received in EPA specified containers. The samples were transported and received under documented chain of custody and stored at four (4) degrees C until analysis was performed.

Sparger Technology, Inc. ID Suffix Keys - These descriptors will follow the Sparger Technology, Inc. ID numbers and help identify the specific sample and clarify the report.

DUP - Matrix Duplicate MS - Matrix Spike MSD - Matrix Spike Duplicate LCS - Lab Control Sample LCSD - Lab Control Sample Duplicate RPD - Relative Percent Difference QC - Additional Quality Control DIL - Results from a diluted sample ND - None Detected RL - Reporting Limit

Note: In an effort to conserve paper, the results are printed on both sides of the paper.

MES

Ray James Laboratory Director

 Certification No. 1614
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Tom Ballard Taber Consultants 3911 West Capitol Ave. West Sacramento, CA 95691

Workorder 20032

Enclosed are the results from samples received on August 30, 2011.

The requested analyses are listed below.

SAMPLE	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
20032001	MW-1, Water	08/25/11	8015B TEPH 8015B TPHgas 8260B BTEX/FOC W
20032002	MW-2, Water	08/25/11	8015B TEPH 8015B TPHgas 8260B BTEX/FOC W
20032003	MW-3, Water	08/25/11	8015B TEPH 8015B TPHgas 8260B BTEX/FOC W
20032004	W-IND, Water	08/25/11	8015B TEPH 8015B TPHgas 8260B BTEX/FOC W

Certification No. 1614



**Test Certificate of Analysis** 

Client ID Workorder #	Taber Consultants 20032			Workorder I	<b>D</b> NoPurge_City	OfParis	
Laboratory ID	20032001			Sampled	08/25/11		
Sample ID	MW-1			Received	08/30/11		
Matrix	Water			Reported	09/08/11		
8015B TEPH Parameter		Method	Prep Da	te Analyzed	Result	<b>RL</b> Units	Dilution
Stoddard Solv	vent	8015B TEPH	09/01/	11 09/08/1	L1 2100	50.0 ug/L	1:1
Laboratory ID	20032001			Sampled	08/25/11		
Sample ID	MW-1			Received	08/30/11		
Matrix	Water			Reported	09/08/11		
8015B TPH Ga Parameter	as	Method	Prep Da	te Analyzed	Result	<b>RL</b> Units	Dilution
$\mathbf{TPHgas}^{1}$		8015B TPHgas	s 09/02/	11 09/02/1	L1 7200	50 ug/L	1:1
<b>Surrogates</b> Trifluorotolu	lene	<b>Result</b> 21 ug/L	<b>Recovery</b> 105 %	<b>Limits</b> (65 – 13	35)		

1 - Non-typical TPH pattern present in gas range.

Laboratory ID Sample ID	20032001 MW-1			Rec	eived (	08/25/11 08/30/11	8/30/11				
Matrix 8260B BTEX/( Parameter	Water Oxygenates	Method	Prep I	-	orted ( Analyzed	09/08/11 <b>Result</b>	<b>RL</b> Units	Dilution			
Methyl-tert-H	outyl-ether	8260B BTE	X/FOC 09/01	/11	09/01/11	2.1	0.50 ug/L	1:1			
Benzene		8260B BTE	X/FOC 09/01	/11	09/01/11	ND	1.0 ug/L	1:1			
Toluene		8260B BTE	X/FOC 09/01	/11	09/01/11	ND	1.0 ug/L	1:1			
Ethylbenzene		8260B BTE	X/FOC 09/01	/11	09/01/11	ND	1.0 ug/L	1:1			
Xylene,Total		8260B BTE	X/FOC 09/01	/11	09/01/11	ND	1.0 ug/L	1:1			

Surrogates	Result	Recovery	Limits
1,2-Dichloroethane-d4	64 ug/L	128 %	(65 - 135)



**Test Certificate of Analysis** 

Client ID Workorder #	Taber Consultants 20032				Wo	rkorder ID	NoPurge_City	yOfParis	
Laboratory ID Sample ID Matrix 2015D TEDH	20032002 MW-2 Water				Rec	eived	08/25/11 08/30/11 09/08/11		
8015B TEPH Parameter		Method		Prep Da	te	Analyzed	Result	<b>RL</b> Units	Dilution
Stoddard Solv	vent	8015B	TEPH	09/01/	11	09/08/11	l ND	50.0 ug/L	1:1
Laboratory ID Sample ID Matrix	20032002 MW-2 Water				Rec	eived	08/25/11 08/30/11 09/08/11		
8015B TPH Ga Parameter	IS	Method		Prep Da	te	Analyzed	Result	<b>RL</b> Units	Dilution
TPHgas		8015B	TPHgas	09/02/	11	09/02/11	l nd	50 ug/L	1:1
<b>Surrogates</b> Trifluorotolu	lene	<b>Result</b> 23 ug/L		covery 5 %		<b>imits</b> 65 – 135	5)		
Laboratory ID Sample ID Matrix	20032002 MW-2 Water				Rec	eived	08/25/11 08/30/11 09/08/11		
8260B BTEX/C	Dxygenates	Method		Prep Da	ite	Analyzed	Result	<b>RL</b> Units	Dilution
<b>Methyl-tert-b</b> Benzene Toluene Ethylbenzene Xylene,Total	outyl-ether	8260B 8260B 8260B	BTEX/FOC BTEX/FOC BTEX/FOC BTEX/FOC	09/01/ 09/01/ 09/01/	'11 '11 '11	09/01/11 09/01/11 09/01/11	l nd l nd l nd	0.50 ug/L 1.0 ug/L 1.0 ug/L 1.0 ug/L 1.0 ug/L	1:1 1:1 1:1 1:1 1:1
Surrogates 1,2-Dichloroe	ethane-d4	<b>Result</b> 62 ug/L		covery 4 %		<b>imits</b> 65 - 135	5)		
Laboratory ID Sample ID Matrix	20032003 MW-3 Water				Rec	eived	08/25/11 08/30/11 09/08/11		
8015B TEPH Parameter		Method		Prep Da	ite	Analyzed	Result	<b>RL</b> Units	Dilution
Stoddard Solv	vent	8015B	TEPH	09/01/	'11	09/08/11	L 1000	50.0 ug/L	1:1

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**Test Certificate of Analysis** 

Client ID Workorder #	Taber Consultants 20032	Workorder ID NoPurge_CityOfParis						
Laboratory ID	20032003		S	Sampled	08/25/11			
Sample ID	MW-3		J	Received	08/30/11			
Matrix	Water		J	Reported	09/08/11			
8015B TPH Garameter	as	Method	Prep Dat	e Analyzed	Result	<b>RL</b> Units	Dilution	
TPHgas		8015B TPHgas	s 09/02/1	1 09/02/1	1 2300	50 ug/L	1:1	
Surrogates		Result	Recovery	Limits				
Trifluorotol	uene	22 ug/L	110 %	(65 - 135	5)			

1 - Non-typical TPH pattern present in gas range.

Laboratory ID Sample ID Matrix 8260B BTEX/( Parameter	20032003 MW-3 Water <b>Dxygenates</b>	Method	Sampled Received Reported Prep Date Analyzed	08/25/11 08/30/11 09/08/11 <b>Result</b>	RL Units	Dilution
Methyl-tert-h Benzene Toluene Ethylbenzene Xylene,Total	outyl-ether	8260B BTEX/FOC 8260B BTEX/FOC 8260B BTEX/FOC	c       09/01/11       09/01/11         2       09/01/11       09/01/11         2       09/01/11       09/01/11         2       09/01/11       09/01/11         2       09/01/11       09/01/11         2       09/01/11       09/01/11	.1 ND .1 ND .1 ND	<b>0.50 ug/L</b> 1.0 ug/L 1.0 ug/L 1.0 ug/L 1.0 ug/L	<b>1:1</b> 1:1 1:1 1:1 1:1
Surrogates	ethane-d4	Result R	ecovery Limits 26 % (65 - 13		1.0 49/1	
Laboratory ID Sample ID Matrix 8015B TEPH Parameter	20032004 W-IND Water	Method	Sampled Received Reported Prep Date Analyzed	08/25/11 08/30/11 09/08/11 <b>Result</b>	RL Units	Dilution
Stoddard Solv	vent	8015B TEPH	09/01/11 09/08/1	1 ND	50.0 ug/L	1:1

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**Test Certificate of Analysis** 

Client ID Workorder #	Taber Consultants 20032			Workorder I	<b>D</b> NoPurge_City	OfParis	
Laboratory ID Sample ID Matrix	20032004 W-IND Water			Sampled Received Reported	08/25/11 08/30/11 09/08/11		
8015B TPH Ga Parameter	IS	Method	Prep Da	ate Analyzed	Result	<b>RL</b> Units	Dilution
TPHgas		8015B TPHgas	09/02/	/11 09/02/2	L1 ND	50 ug/L	1:1
<b>Surrogates</b> Trifluorotolu	lene	<b>Result</b> 21 ug/L	<b>Recovery</b> 105 %	<b>Limits</b> (65 - 13	35)		
Laboratory ID Sample ID Matrix 8260B BTEX/( Parameter	20032004 W-IND Water <b>Dxygenates</b>	Method	Duon D	Sampled Received Reported	08/25/11 08/30/11 09/08/11 <b>Result</b>	RL Units	Dilution
Methyl-tert-k Benzene Toluene Ethylbenzene Xylene,Total		8260B BTEX/F0 8260B BTEX/F0 8260B BTEX/F0 8260B BTEX/F0 8260B BTEX/F0	OC 09/01, OC 09/01, OC 09/01,	/11 09/01/2 /11 09/01/2 /11 09/01/2 /11 09/01/2	L1 ND L1 ND L1 ND L1 ND	RL Units 0.50 ug/L 1.0 ug/L 1.0 ug/L 1.0 ug/L 1.0 ug/L	1:1 1:1 1:1 1:1 1:1 1:1
Surrogates 1,2-Dichloroe	ethane-d4	<b>Result</b> 62 ug/L	Recovery 124 %	<b>Limits</b> (65 – 13	35)		



Environmei	ntal Laboratorie	S N	/Iethod Blank	Report			
Client ID Laboratory ID	Taber Consultants 101668			Sample ID Matrix	MB for HBN 41 Water	17876 [SGXV/279	[0]
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
Stoddard Solv	vent	8015B TEPH	09/01/11	09/08/11	ND	50.0 ug/L	1:1
Client ID Laboratory ID	Taber Consultants 101669	Lat	) Control San	pple Report Sample ID Matrix	LCS for HBN 4 Water	17876 [SGXV/279	0]
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
Stoddard Solv	vent	8015B TEPH	09/01/11	09/08/11	995	50.0 ug/L	1:1
		Lab Co	ntrol Sample	Duplicate Repo			
Client ID Laboratory ID	Taber Consultants 101670			Sample ID Matrix	LCSD for HBN Water	417876 [SGXV/2	790
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
Stoddard Solv	vent	8015B TEPH	09/01/11	09/08/11	859	50.0 ug/L	1:1
Client ID Laboratory ID	Taber Consultants 101673	Method Blank Report         Sample ID       MB for HBN 417971 [VGXV/31         Matrix       Water					2]
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
TPHgas		8015B TPHgas	09/02/11	09/02/11	ND	50 ug/L	1:1
<b>Surrogates</b> Trifluorotolu	lene	<b>Result</b> 21 ug/L	<b>Recovery</b> १०५ %	<b>Limits</b> (65 – 1	35)		
Client ID Laboratory ID	Taber Consultants 101674	Lat	) Control San	pple Report Sample ID Matrix	LCS for HBN 4 Water	17971 [VGXV/312	22]
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
TPHgas		8015B TPHgas	09/02/11	09/02/11	870	50 ug/L	1:1

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Environmer	ntal Laboratorie	S Lab Co	ntrol Sample	Duplicate Repo	ort		
Client ID Laboratory ID	Taber Consultants 101675			Sample ID Matrix	LCSD for HBN 417971 [VGXV/3122 Water		
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
TPHgas		8015B TPHgas	09/02/11	09/02/11	895	50 ug/L	1:1
		Ν	Aatrix Spike	-			
Client ID Laboratory ID	Taber Consultants 101676			Sample ID Matrix	MS for HBN 41 Water	17971 [VGXV/312	2]
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
TPHgas		8015B TPHgas	09/02/11	09/02/11	5660	50 ug/L	1:1
		Matr	ix Spike Dup	-			
Client ID Laboratory ID	Taber Consultants 101677			Sample ID Matrix	MSD for HBN 417971 [VGXV/3122] Water		
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
TPHgas		8015B TPHgas	09/02/11	09/02/11	5060	50 ug/L	1:1
		Ν	Aethod Blank	-			
Client ID Laboratory ID	Taber Consultants 101678			Sample ID Matrix	MB for HBN 4 Water	17974 [VMXV/33′	73]
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
Methyl-tert-b	outyl-ether	8260B BTEX/FC	C09/01/11	09/01/11	ND	0.50 ug/L	1:1
Benzene		8260B BTEX/FC			ND	1.0 ug/L	1:1
Toluene		8260B BTEX/FC			ND	1.0 ug/L	1:1
Ethylbenzene		8260B BTEX/FC			ND	1.0 ug/L	1:1
Xylene,Total		8260B BTEX/FC	C09/01/11	09/01/11	ND	1.0 ug/L	1:1
Surrogates		Result	Recovery	Limits			
1,2-Dichloroe	ethane-d4	50 ug/L	100 %	(65 - 1	35)		
		Lab	o Control San	ple Report			
Client ID Laboratory ID	Taber Consultants 101679			Sample ID Matrix	LCS for HBN 4 Water	17974 [VMXV/33	73]
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution
Methyl-tert-b	outyl-ether	8260B BTEX/FC	0C09/01/11	09/01/11	57	0.50 ug/L	1:1

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Lab Control Sample Duplicate Report								
Client ID Laboratory ID	Taber Consultants 101680			Sample ID Matrix	LCSD for HBN Water	417974 [VMXV/3	3373	
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution	
Methyl-tert-M	outyl-ether	8260B BTEX	/FOC09/01/11	09/01/11	56	0.50 ug/L	1:1	
			Matrix Spike	Report				
Client ID Laboratory ID	Taber Consultants 101681		-	Sample ID Matrix	MS for HBN 42 Water	17974 [VMXV/337	73]	
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution	
Methyl-tert-	outyl-ether	8260B BTEX	/FOC09/01/11	09/01/11	59	0.50 ug/L	1:1	
Client ID Laboratory ID	Taber Consultants 101682	Matrix Spike Duplicate ReportSample IDMSD for HBN 417974 [VMXV/3373]MatrixWater					373]	
Parameter		Method	Prep Date	Analyzed	Result	<b>RL</b> Units	Dilution	
Methyl-tert-	outyl-ether	8260B BTEX	/FOC09/01/11	09/01/11	61	0.50 ug/L	1:1	



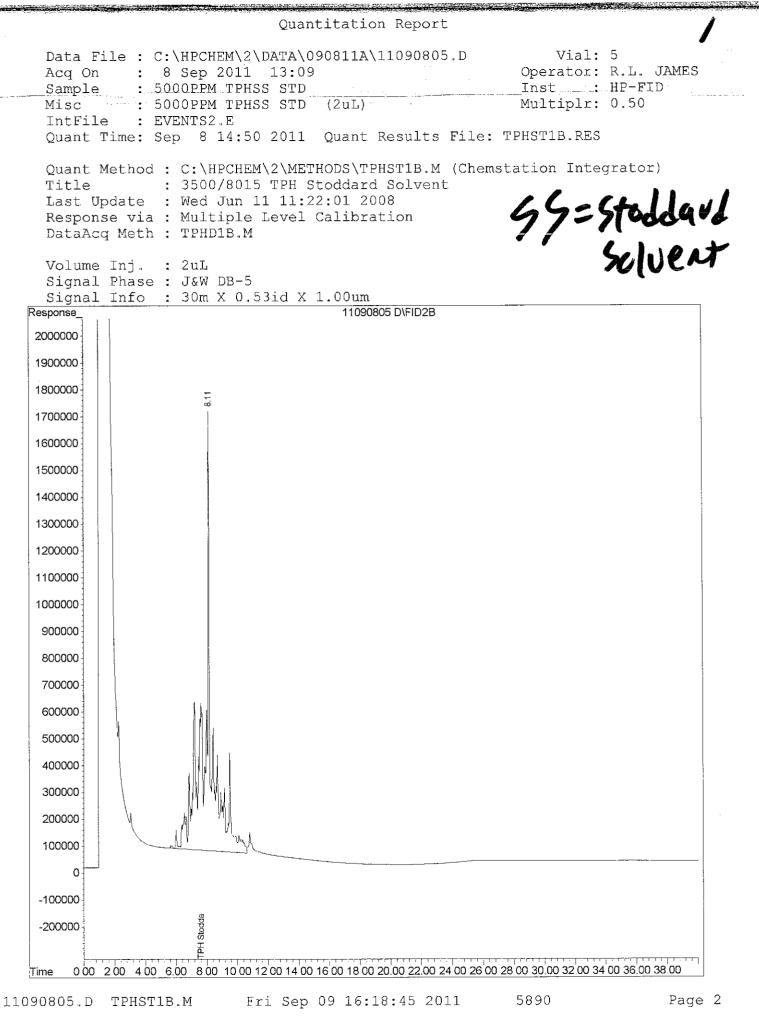
## Analytical Laboratory Division Mobile Laboratory Division Scientific Division

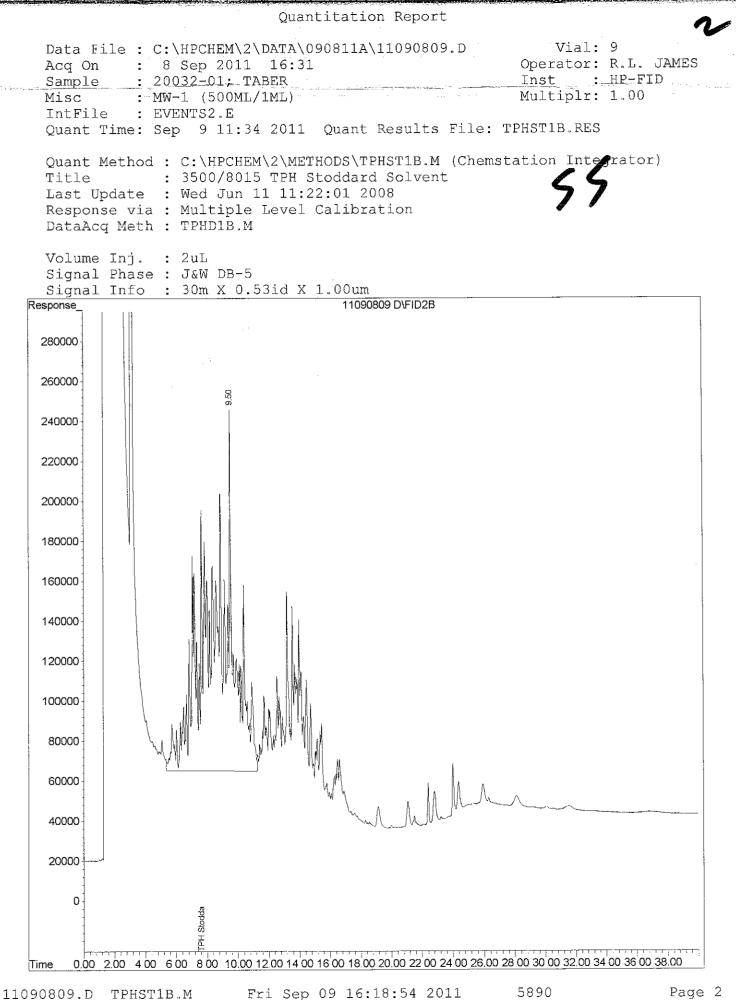
Environm	ental Laboratories		QC SUMMARY									
Client ID QC Batch Matrix	Taber Consultants VGX 3242 Water	Original20032001SamplesMatrix Spike [101676]Matrix Spike Duplicate[101677]										
<b>Parameter</b> TPHgas		<b>Spike %Recovery</b> –154	<b>Spike Dup %Recovery</b> -214	<b>Recovery</b> Limits (65–135)	<b>RPD</b> -33	RPD Limits (20 MAX)						
Client ID QC Batch Matrix	Taber Consultants VMX 3411 Water		Origir Sampl	es Matrix Sp	pike [101681] pike Duplicate							
<b>Parameter</b> Methyl-tert	-butyl-ether	<b>Spike %Recovery</b> 118	Spike Dup %Recovery 122	<b>Recovery</b> <b>Limits</b> (65-135)	<b>RPD</b> 3.3	RPD Limits (20 MAX)						
Client ID QC Batch Matrix	Taber Consultants SGX 2819 Water		Sampl		rol Sample [1 rol Sample D	01669] 1plicate [101670]						
<b>Parameter</b> Stoddard So		<b>Check</b> %Recovery 100	<b>Check Dup %Recovery</b> 86	<b>Recovery</b> <b>Limits</b> (65–135)	<b>RPD</b> 15	RPD Limits (20 MAX)						
Client ID QC Batch Matrix	Taber Consultants VGX 3242 Water		Sampl		rol Sample [1 rol Sample D	01674] 1plicate [101675]						
<b>Parameter</b> TPHgas		<b>Check %Recovery</b> 87	<b>Check Dup</b> <b>%Recovery</b> 90	<b>Recovery</b> <b>Limits</b> (65–135)	<b>RPD</b> 3.4	RPD Limits (20 MAX)						
Client ID QC Batch Matrix	Taber Consultants VMX 3411 Water		Sampl		rol Sample [1 rol Sample D	01679] 1plicate [101680]						
Parameter	-butyl-ether	Check %Recovery 114	<b>Check Dup</b> %Recovery 112	<b>Recovery</b> Limits (65–135)	<b>RPD</b> 1.8	RPD Limits (20 MAX)						

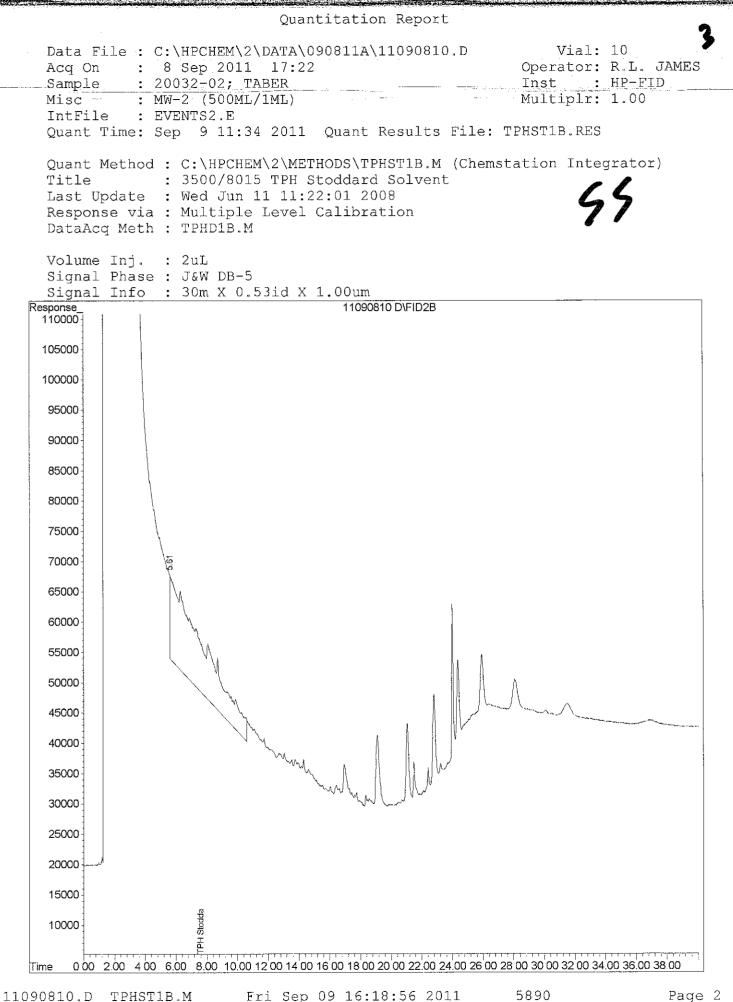
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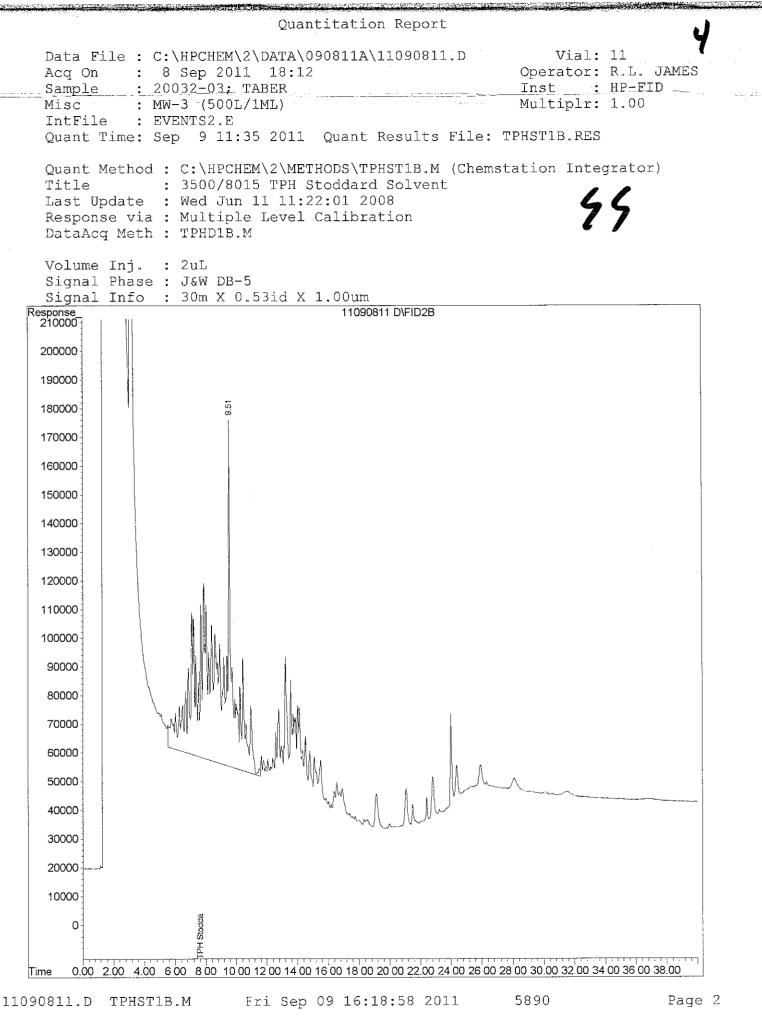
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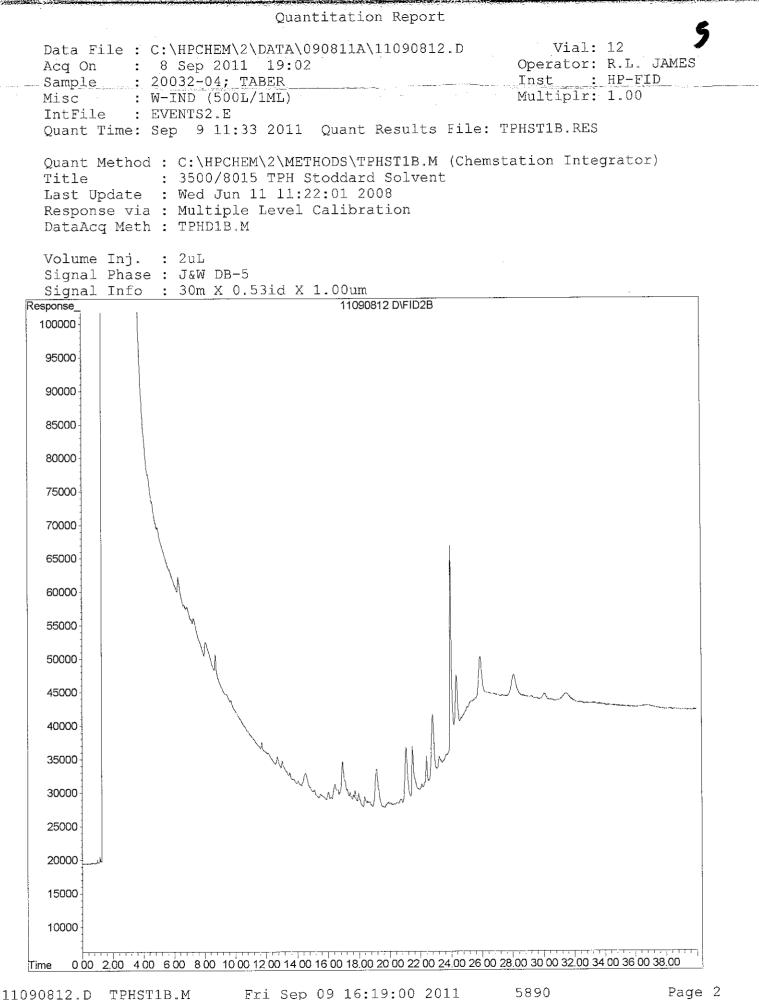
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Project Contact ( PDF To): Tom Ballard (to email address's)					California EDF Report?							Chain-of-Custody Record and Analysis Request								st											
Company / Address: Taber Consultants: 3911 West Capitol Ave.					Sampling Company Log Code: WRMC								Analysis Request								TAT										
West Sacramento, CA 95691				Glot	bal II	D:	<b>T06</b> (	0100	1037	79																1					
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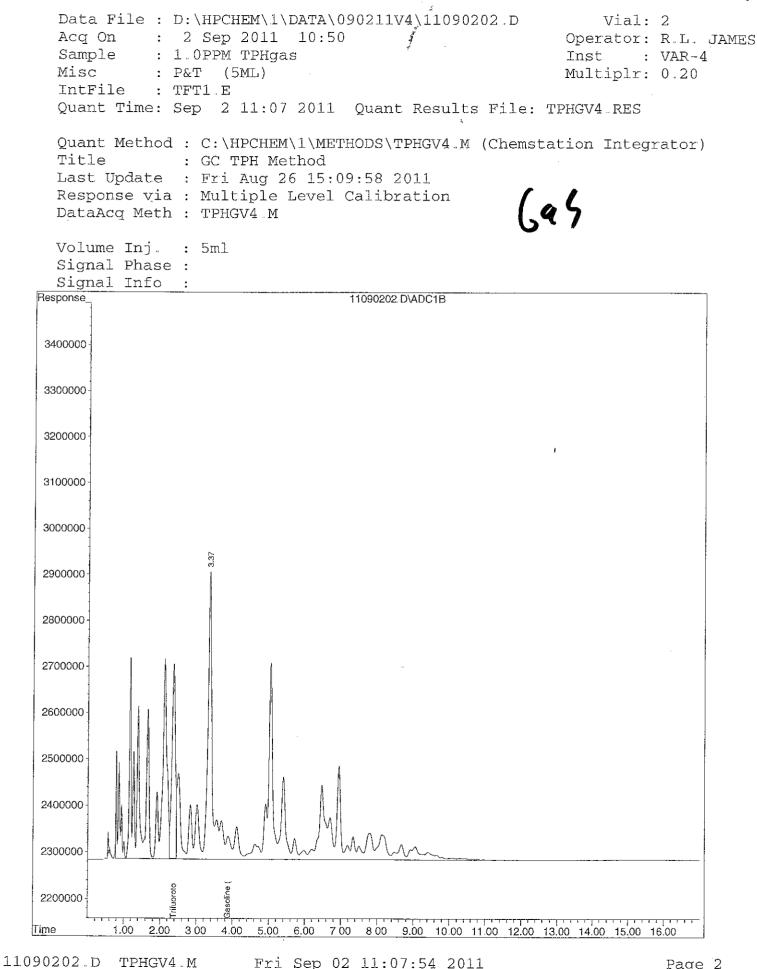


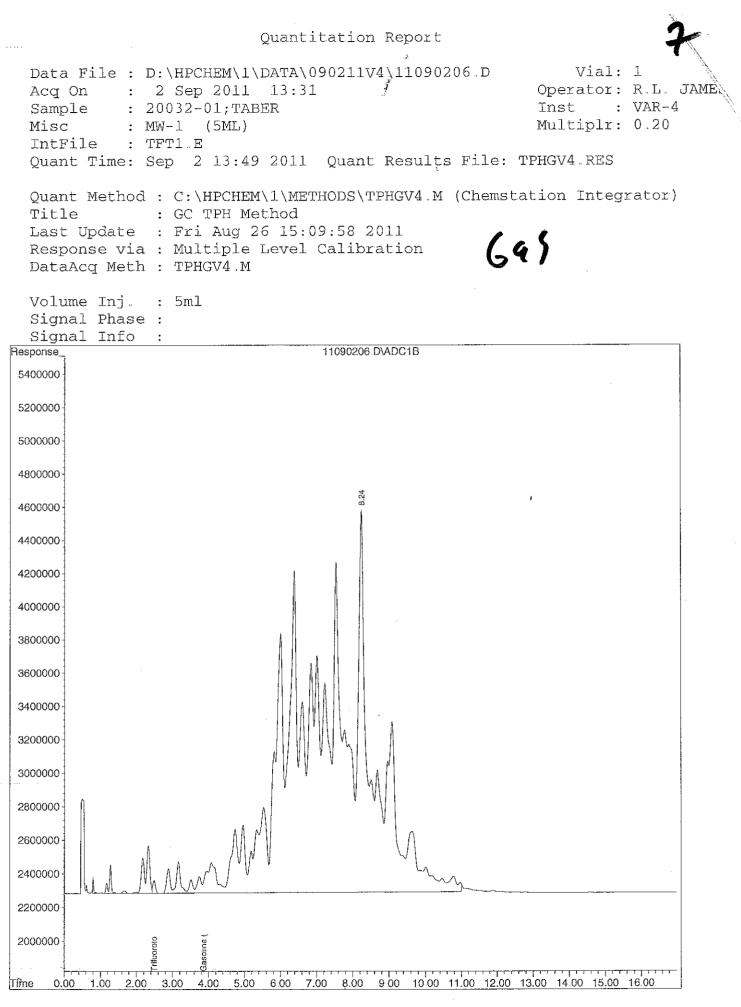




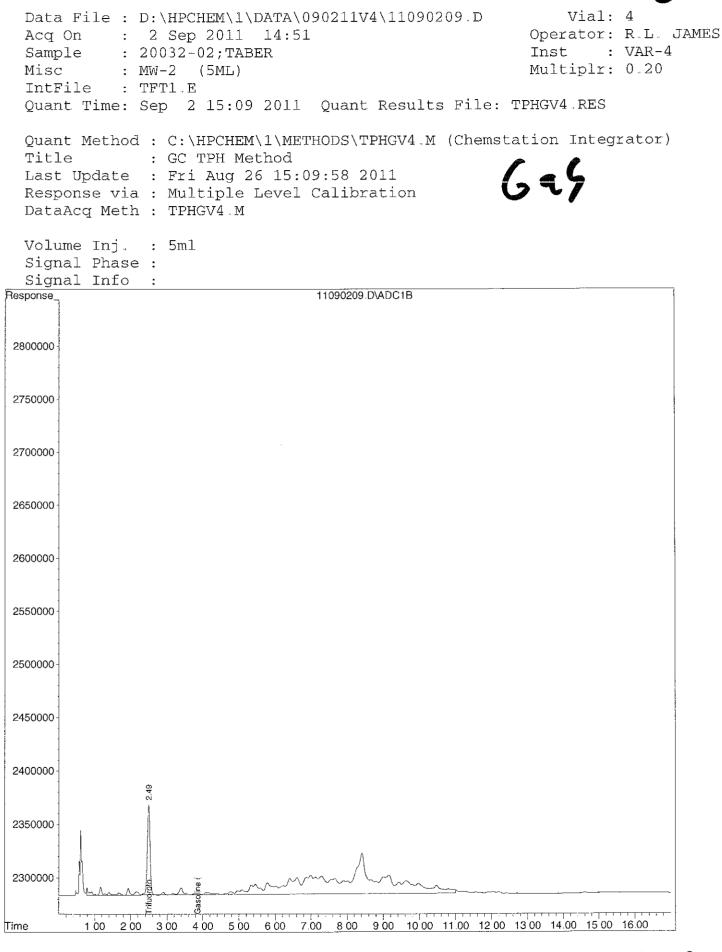
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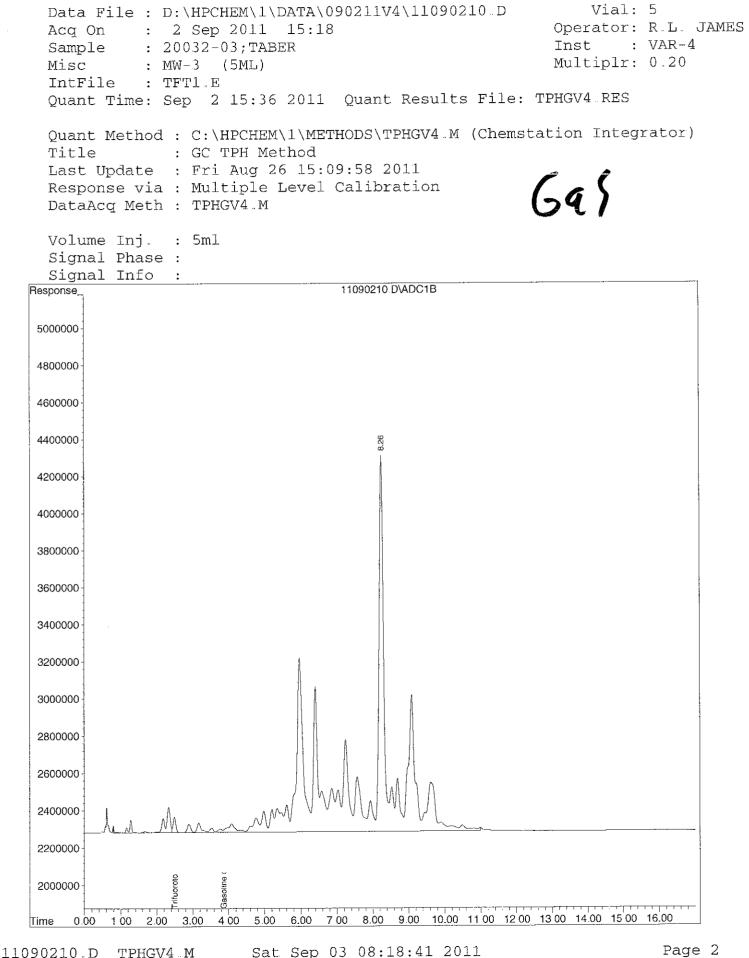




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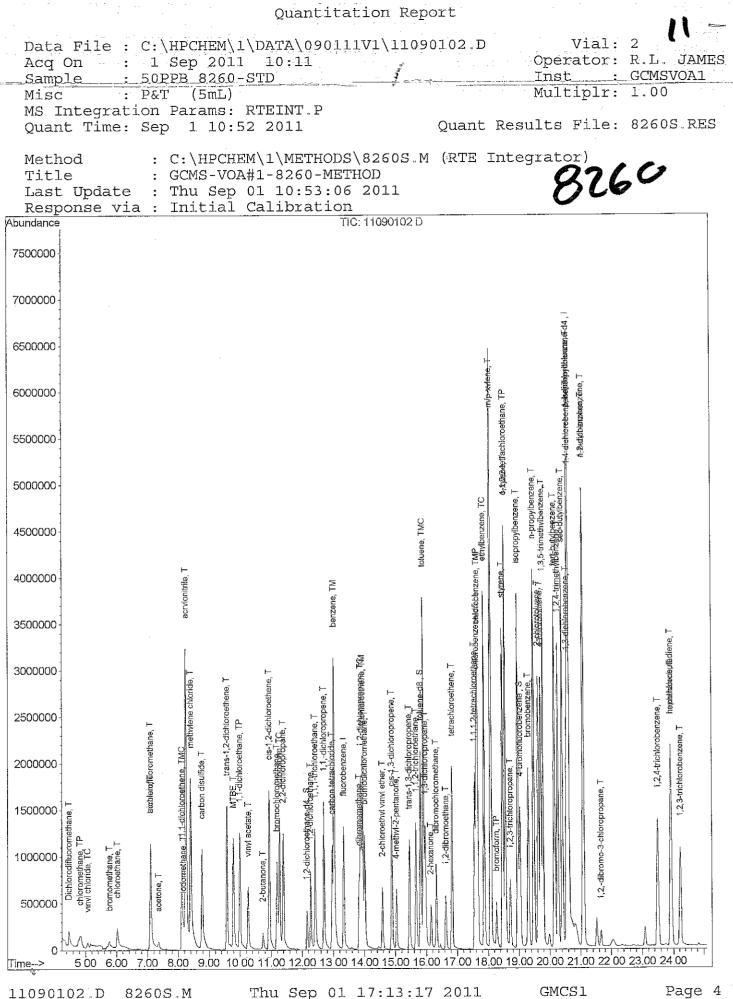
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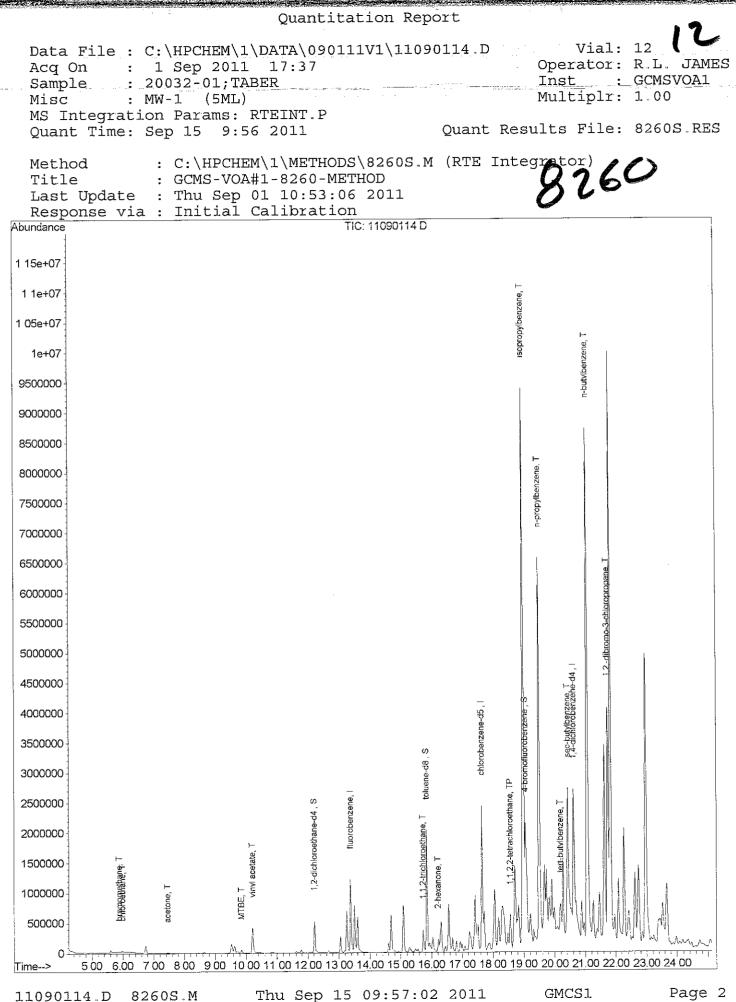


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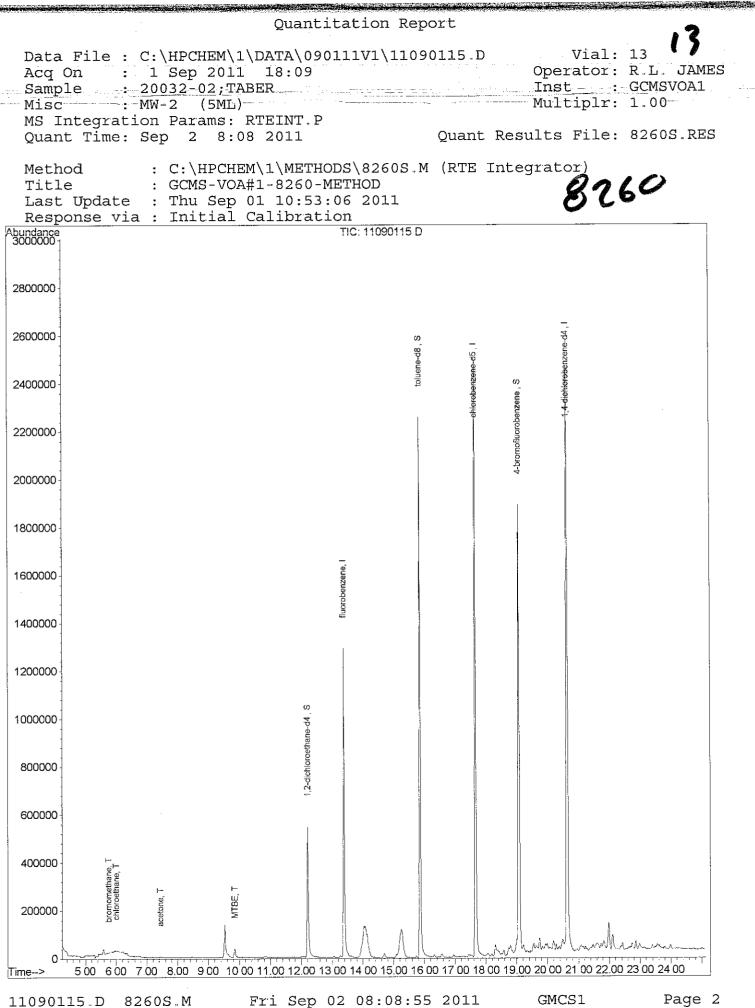
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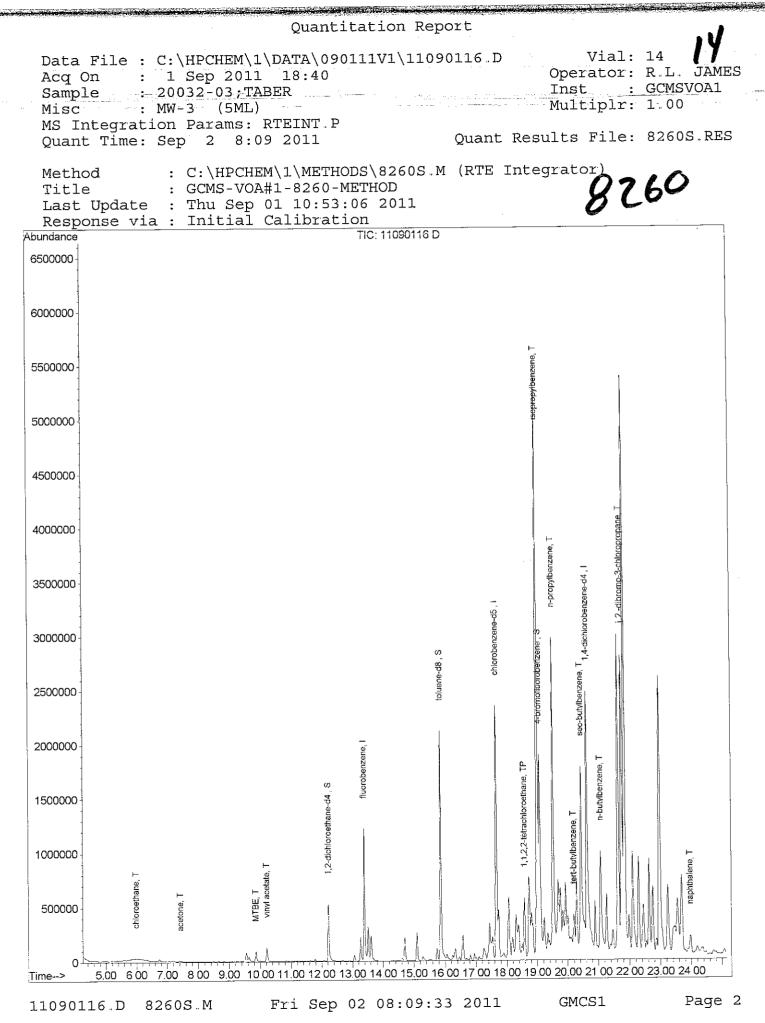
Supporting Documents Page 32





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