STRATUS
ENVIRONMENTAL, INC.

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July 10, 2006
Project No. 2007-0057-01

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Fifth Dual Phase Extraction Event Report
Former USA Service Station No. 57
10700 MacArthur Boulevard
Oakland, California

Dear Mr. Chan:

Stratus Environmental, Inc. (Stratus), on behalf of USA Gasoline Corporation (USA), has prepared this report to present the results of the fifth dual phase extraction (DPE) event completed at former USA Service Station No. 57 (the site), located at 10700 MacArthur Boulevard, Oakland, California (see Figure 1). The fifth DPE event was conducted between May 1, 2006, and May 25, 2006, to reduce the subsurface petroleum hydrocarbon mass, using extraction wells EX-1 through EX-4. This report presents the DPE procedures adopted, tabulated summaries of field measurements and analytical results, and a discussion of the results.

SITE BACKGROUND

The site is currently an undeveloped, partially paved parcel situated on the western corner of the intersection of 108th Avenue and Foothills Boulevard in Oakland, California, approximately 400 feet west of Interstate 580. This parcel comprises the southeastern corner of the Foothills Square Shopping Center. It is our understanding that the property owner intends to re-develop the portion of the Foothills Square Shopping Center formerly occupied by the site.

USA Station 57 was closed, and the gasoline underground storage tanks (UST's) were removed, in July 1994. Approximately 775 cubic yards of impacted soil was excavated from the vicinity of the UST pit and product lines between August and October 1994. The approximate former locations of the UST's and dispenser islands are shown on Figure 2.

Eight groundwater monitoring wells (S-1, S-2, and MW-3 through MW-8) were installed, and twelve exploratory soil borings (A through D and B-1 through B-8) were advanced,

in order to assess the extent of subsurface petroleum hydrocarbon impact beneath the site. The well network has been monitored and sampled on a quarterly basis since 1995. Depth to groundwater has been reported in the monitoring wells at depths ranging from approximately 7 to 21 feet below ground surface (bgs) since groundwater monitoring was initiated.

Petroleum hydrocarbon impact to soil extends to the saturated zone in the vicinity of the former UST complex and fuel dispenser islands. Total petroleum hydrocarbons as gasoline (TPHG), benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds), methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA) have historically been reported in groundwater samples collected beneath the site.

Petroleum hydrocarbon mass reduction events using DPE technology have been periodically conducted at the site since July 2004. Three DPE events to reduce the subsurface petroleum hydrocarbon mass were conducted between July 2004 and September 2004. The first DPE event was conducted between July 6 and 25, 2004, using a 400 cubic feet per minute (cfm) DPE system. During the first DPE event, individual well DPE tests using wells S-1, S-2, and MW-3, and a combined DPE test using all three wells, were conducted to evaluate the technical viability of using DPE to mitigate the subsurface petroleum hydrocarbon impact. During the combined DPE test, an average applied vacuum of 22.66 inches mercury ("Hg) (or 308.18 inches water column ["WC]) resulted in an average soil vapor extraction rate of 86 cfm and an average groundwater extraction rate of 0.55 gallons per minute (gpm). Approximately 13.35 pounds of TPHG were extracted in vapor and aqueous phases during this DPE event. Based on the findings of this test and analytical results of subsequent quarterly monitoring, Stratus proposed (letter dated October 15, 2004) to conduct quarterly DPE events as an interim remedial measure to reduce the subsurface petroleum hydrocarbon mass. In a letter dated May 9, 2005, Alameda County Health Care Services Agency (ACHCSA) approved the proposal for conducting intermittent DPE events.

A second DPE petroleum hydrocarbon mass removal event was conducted at the site between June 6, 2005, and July 1, 2005, using a 400 cfm DPE system and wells S-1, S-2, and MW-3. During this DPE event, an applied vacuum in the range of 23 to 25 "Hg produced soil vapor flow rates in the range of 23 to 39.4 cfm, and an average groundwater extraction rate of 1.12 gpm. A total of 34,340 gallons of extracted groundwater were treated using the carbon vessels and discharged to the sanitary sewer. Approximately 6.449 pounds and 0.082 pounds of TPHG were extracted in vapor and aqueous phases, respectively, during this DPE event.

A third DPE petroleum hydrocarbon mass removal event was conducted at the site between August 29, 2005, and September 16, 2005, using a 200 cfm DPE system and wells S-1, S-2, MW-3, and MW-7. During this DPE event, an applied vacuum in the

range of 16 to 18 "Hg produced soil vapor flow rates in the range of 37.3 to 62.5 cfm, and an average groundwater extraction rate of 2.45 gpm. A total of 54,730 gallons of extracted groundwater were treated using the carbon vessels and discharged to the sanitary sewer. TPHG was not reported in any of the influent soil vapor samples collected during this DPE event. Approximately 0.024 pounds of TPHG was extracted in aqueous phase during this DPE event.

Based on the findings of the first three DPE events, Stratus, in a work plan dated August 31, 2005, proposed installation of four shallow-screened (5 to 25 feet bgs) extraction wells to maximize the petroleum hydrocarbon mass removal rates. In addition, this work plan also proposed installation of an oxygen injection system to supplement the DPE events in reducing the dissolved petroleum hydrocarbon mass. This work plan was subsequently approved by ACHCSA in a letter dated September 9, 2005.

Stratus oversaw the installation of four extraction wells (EX-1 through EX-4) on October 6 and 7, 2005. A well installation report documenting the findings during the installation of wells EX-1 through EX-4 was submitted to ACHCSA on December 30, 2005.

The construction and installation of an oxygen injection system was completed during December 2005, and upon approval by the City of Oakland Fire Department, operation of the oxygen injection system was initiated on January 18, 2006.

A fourth DPE petroleum hydrocarbon mass removal event was conducted at the site between February 20, 2006, and March 24, 2006, using the newly installed extraction wells EX-1 through EX-4. During this DPE event, an applied vacuum in the range of 18.5 to 23 "Hg produced influent soil vapor flow rates in the range of 22.4 to 50.6 cfm, and an average groundwater extraction rate of 0.40 gpm. A total of 13,340 gallons of extracted groundwater were treated using the carbon vessels and discharged to the sanitary sewer. Approximately 25.837 pounds of TPHG were extracted in vapor and aqueous phases during this DPE event. Tabulated summaries of the four DPE events completed at the site are included in Appendix A.

DUAL PHASE EXTRACTION EVENT

The fifth DPE event was conducted between May 1 and May 25, 2006, using wells EX-1 through EX-4. Wells S-1, S-2, MW-3, MW-6, MW-7, and MW-8 were used as observation wells during the DPE event. A 200 cfm DPE system (Serial Number: M1294) was used during the fifth DPE event. Details regarding the DPE equipment, analytical methods, and procedures are presented in the following sub-sections.

Prior to the commencement of the DPE event, in accordance with the Bay Area Air Quality Management District (BAAQMD) various locations permit (Application Number 12773 and Plant Number 17101) for the 200 cfm DPE system, Stratus notified

BAAQMD (letter dated April 28, 2006) regarding the schedule and duration of the petroleum hydrocarbon mass removal event. A sewer discharge permit (dated May 31, 2005) from the East Bay Municipal District (EBMUD) was obtained during the second DPE event (valid until May 31, 2010). Stratus also notified EBMUD regarding the schedule and duration of the fifth DPE event. A site-specific health and safety plan was developed and discussed prior to conducting field activities.

Dual Phase Extraction Equipment

A 200 cfm thermal oxidizer with a 15-horsepower (hp) liquid-ring pump was used to apply vacuum and extract soil vapors and groundwater from wells EX-1 through EX-4. The trailer-mounted system also housed a 100-gallon water/condensate knockout tank and a 2-hp liquid discharge pump to drain the knockout tank. A 15-hp propane generator, rated at 25 KVA, was used to power the DPE unit. Liquid propane was used as supplemental fuel to maintain combustion temperatures in the thermal oxidizer. The DPE system, generator, and the carbon vessels were all housed within a temporary fence enclosure.

The wellheads of the extraction wells were temporarily modified to provide a seal for vacuum conditions and to facilitate insertion of a drop-tube (1-inch diameter) to extract soil vapors and groundwater.

The liquid ring pump was used to extract groundwater and soil vapors from the extraction wells, and the extracted groundwater and soil vapor (dual phase flow) were directed to the knockout tank. The soil vapors, separated from the groundwater in the knockout tank, were directed to the thermal oxidizer for abatement before discharging to the atmosphere. The groundwater in the knockout tank of the DPE unit was treated using two USFilter Westates 500-pound granular activated carbon vessels, connected in series, prior to discharge to the sanitary sewer.

Dual Phase Extraction Procedure

The DPE event was conducted by lowering a 1-inch diameter drop tube into each extraction well. The drop tube (stinger) was situated near the base of each well casing. The liquid ring pump was used to apply high vacuum (20 to 24.5 "Hg) to the stinger to extract groundwater and soil vapors from the wells.

Wells S-1, S-2, MW-3, MW-6, MW-7, and MW-8 were used as observation wells to monitor for changes in groundwater elevation and/or induced vacuums during the DPE event. Magnahelic gauges were used to measure induced vacuum. Hand-operated electric water-level sounders were used to measure depth-to-groundwater in the observation wells. The DPE system was equipped to measure the groundwater extraction rate (discharge from the centrifugal pump after the knockout tank) and the soil vapor flow

rate. A flow totalizer was installed between the carbon vessels and the sewer discharge point to record the volume of treated groundwater discharged during the DPE event. Influent soil vapor concentrations were monitored using a photo-ionization detector (PID). Field data sheets documenting measurements recorded during the DPE event are presented in Appendix B. Table 1 summarizes observations recorded on the field data sheets.

Soil vapor and groundwater samples were collected during the DPE event to evaluate performance of the DPE system and to verify compliance with the air and water discharge permits. Soil vapor samples were collected in laboratory supplied tedlar bags, and groundwater samples were collected in preserved glass containers (voas). Groundwater samples were stored in an ice-chilled cooler and forwarded to the laboratory for chemical analysis under strict chain-of-custody procedures.

Laboratory Analytical Methods

Air and groundwater samples collected during the DPE event were forwarded to Alpha Analytical, Inc. (Alpha), a California state-certified laboratory (ELAP #2019), for chemical analysis. The samples were analyzed for TPHG using EPA Method SW8015B/DHS LUFT Manual, and for BTEX, MTBE, TBA, ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), and tertiary amyl methyl ether (TAME) using EPA Method SW8260B. Soil vapor analytical results are presented in Table 2, and groundwater analytical results are presented in Table 3. Certified analytical reports with chain-of-custody documentation are included in Appendix C.

DPE Event Results

The field and analytical data collected during the fifth DPE event are summarized below:

- An applied vacuum in the range of 20 to 24.5 "Hg produced influent soil vapor flow rates in the range of 21.9 to 56.2 cfm, and an average groundwater extraction rate of 0.30 gpm. A total of 7,400 gallons of extracted groundwater were treated using the carbon vessels and discharged to the sanitary sewer.

- Groundwater elevations at wells S-1, S-2, MW-3, MW-6, and MW-8 decreased during the DPE event, while the groundwater elevation at well MW-7 did not exhibit a noticeable increase or decrease. Groundwater elevation contour maps for depth to water measurements taken prior to the DPE event (May 1, 2006) and during the DPE event (May 16 and 22, 2006) are presented in Figures 3, 4, and 5, respectively.

- The highest decrease in groundwater elevation of approximately 2.11 feet was observed at well MW-3, located approximately 15 feet from the nearest extraction

well (EX-2), after approximately 10 days of the DPE event. The highest increase in groundwater elevation of approximately 0.33 feet was observed at well S-2, located approximately 27 feet from the nearest extraction well (EX-1).

- TPHG and benzene concentrations in the influent air samples were reported in the ranges of 37 milligrams per cubic meter [mg/m^3] to 180 mg/m^3, and 0.31 mg/m^3 to 5.4 mg/m^3, respectively. MTBE was not reported in any of the three influent air samples collected during this event.

- Based on influent soil vapor flow rates and concentrations, approximately 5.43 pounds of TPHG were extracted in vapor phase during this DPE event. A total of approximately 50.9 pounds of TPHG in vapor phase has been removed from the subsurface as a result of five DPE events (Table 4).

- TPHG and benzene concentrations in the influent water samples appear to have declined during the DPE event. TPHG and benzene concentrations in the influent water sample collected on the first day of the DPE event were reported at 990 micrograms per liter (µg/L) and 170 µg/L, respectively. The TPHG and benzene concentrations in the influent water sample collected on the last day of the DPE event were reported at 290 µg/L and 19 µg/L. The MTBE concentrations in the influent water samples appear to have increased during this DPE event from 12 µg/L (first day) to 20 µg/L (last day).

- Based on groundwater extraction rates and influent concentrations, approximately 0.027 pounds of TPHG was removed from the subsurface in aqueous phase during this DPE event. A total of approximately 0.296 pounds of TPHG has been removed in aqueous phase from the subsurface as a result of the five DPE events (Table 4).

DISCUSSION

Petroleum hydrocarbon concentrations in extracted soil vapors and groundwater during the fifth DPE event were lower than the concentrations observed during the fourth DPE event. The soil vapor flow rates during the fifth DPE event were similar to the flow rates measured during the previous DPE events, and the groundwater extraction rates during the fifth DPE event were lower than those observed during the previous DPE events. Given the concentrations of petroleum hydrocarbons reported in the vicinity of well EX-2, Stratus proposes to continue to conduct quarterly DPE events to further reduce the subsurface petroleum hydrocarbon mass.

LIMITATIONS

This report was prepared in general accordance with accepted standards of care that existed at the time this work was performed. No other warranty, expressed or implied, is made. Conclusions and recommendations are based on field observations and data obtained from this work and previous investigations. It should be recognized that definition and evaluation of geologic conditions is a difficult and inexact art. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the subsurface conditions present. More extensive studies may be performed to reduce uncertainties. This report is solely for the use and information of our client unless otherwise noted.

If you have any questions or comments concerning this report, please contact Gowri Kowtha at (530) 676-6001.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Kiran Nagaraju
Staff Engineer

Gowri S. Kowtha, P.E.
Project Manager

REGISTERED PROFESSIONAL ENGINEER
GOWRI SHANKAR KOWTHA
No. C 63413
Exp. 9/30/06
CIVIL
STATE OF CALIFORNIA

Attachments:

	Table 1	DPE Event Field Observation Summary
	Table 2	Soil Vapor Analytical Results
	Table 3	Groundwater Analytical Results
	Table 4	Petroleum Hydrocarbon Mass Extraction Summary
	Figure 1	Site Location Map
	Figure 2	Site Plan
	Figure 3	Groundwater Elevation Contour Map for 05/01/06
	Figure 4	Groundwater Elevation Contour Map for 05/16/06
	Figure 5	Groundwater Elevation Contour Map for 05/22/06
	Appendix A	Summaries of Previous DPE Events
	Appendix B	Field Data Sheets
	Appendix C	Certified Analytical Reports and Chain-of-Custody Documentation

cc: Mr. Charles Miller, USA Gasoline Corporation
Mr. Ken Phares, Jay-Phares Corporation
Mr. Peter McIntyre, AEI Consultants
Mr. Robert Cave, Bay Area Air Quality Management District

TABLE 1
DPE EVENT FIELD OBSERVATION SUMMARY
5th DPE Event - May 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Hour Meter Reading	TE days	Appl Vac "Hg	Air Flow[1] cfm	Totalizer Reading gallons	GW Ext Rate gpm	Inf PID ppmv	Oper Temp deg F	Depth to Water, feet bgs and Induced Vacuum, "WC													
									S-1		S-2		MW-3		MW-6			MW-7			MW-8		
									DTW	DD	DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
5/1/06 9:30	**Begin fifth DPE event using wells EX-1, EX-2, EX-3, and EX-4. Hour Meter Reading = 3,758. Totalizer reading = 107,790 gallons**																					
5/1/06 9:30	3,758.00	0.00	24.50	29.5	107,790	--	12	1,451	9.43	--	11.37	--	7.84	--	0.00	11.00	--	0.00	8.41	--	0.00	11.16	--
5/3/06 5:30	3,826.80	2.87	24.00	21.9	110,790	0.73	15	1,479	9.55	0.12	11.04	-0.33	8.85	1.01	0.00	11.05	0.05	0.00	8.37	-0.04	0.01	11.04	-0.12
5/8/06 6:00	3,923.20	6.88	22.00	26.1	112,920	0.37	17	1,450	9.58	0.15	11.42	0.05	9.51	1.67	0.00	11.08	0.08	0.00	8.35	-0.06	0.00	11.46	0.30
5/16/06 5:30	4,006.80	10.37	Upon arrival the DPE system was observed to be non-operating due to generator malfunction. Based on the hour meter readings, the DPE system was likely shutdown at 17:36 hrs on 5/11/06. The DPE system system was re-started at 5:30 hrs on 5/16/06 after troubleshooting the generator malfunction.																					
5/16/06 5:30	4,006.80	10.37	21.00	56.2	113,780	0.17	50	1,460	9.63	0.20	11.47	0.10	9.95	2.11	0.00	11.28	0.28	0.00	8.43	0.02	0.00	11.86	0.70
5/22/06 5:30	4,150.40	16.35	21.00	38.8	114,830	0.12	43	1,460	9.54	0.11	11.39	0.02	9.85	2.01	0.00	11.10	0.10	0.00	8.39	-0.02	0.00	11.88	0.72
5/25/06 5:30	4,190.20	18.01	Upon arrival the DPE system was observed to be non-operating due to generator malfunction. Based on the hour meter readings, the DPE system was likely shutdown at 21:18 hrs on 5/23/06. The DPE system system was re-started at 5:30 hrs on 5/25/06 after troubleshooting the generator malfunction.																					
5/25/06 5:30	4,190.20	18.01	20.00	48.4	115,090	0.11	20	1,452	NM	--	NM	--	NM	--	NM	NM	--	NM	NM	--	NM	NM	--
5/25/06 6:40	4,191.10	18.05	Discontinue fifth DPE event. Totalizer reading = 115,190 gallons																			
Average	--	--	**22.08**	**36.79**	--	**0.30**	**26.2**	**1459**	**9.55**	**0.15**	**11.34**	**-0.04**	**9.20**	**1.70**	**0.00**	**11.10**	**0.13**	**0.00**	**8.39**	**-0.03**	**0.00**	**11.48**	**0.40**
Distance to Nearest Extraction Well, feet									**20**		**27**		**15**		**75**			**33**			**62**		
Screening Interval : EX-1=EX-2=EX-3=EX-4= 5 to 25 feet bgs									**20 - 40**		**20 - 40**		**24 - 44**		**10 - 40.5**			**10 - 40**			**10 - 35**		

Notes:

TE - Time Elapsed calculated as difference of hour meter readings, days
Appl - Applied
Oper - Operating
Vac - Vacuum
DTW - depth to groundwater
" WC - Inches water column
Ext. - Extraction
GW Ext - Groundwater Extraction
GW Ext Rate = Difference of Totalizer Readings, gallons

cfm - cubic feet per minute
Inf - Influent
DD - Drawdown
bgs - below ground surface
gpm - gallons per minute
"Hg - Inches Mercury

Temp - Temperature
deg F - degree Farenheit
PID - Photo Ionization Detector
ppmv - parts per million by volume
NM - Not measured
-- = Not applicable

[1] Flow rate measured using a digital anemometer at 3" diameter steel pipe;
flow rate = velocity X area of pipe (e.g.: flow rate = 600 feet per minute X 0.05 sq.ft)

TABLE 2
SOIL VAPOR ANALYTICAL RESULTS
5th DPE Event - May 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA
05/01/06	10:40	USA57ASysEff	<15	<0.15	<0.15	<0.15	<0.15	<0.15	<7.5
05/01/06	10:45	USA57ASysInf	37	5.4	2.3	0.58	2.25	<0.15	<7.5
05/08/06	06:10	USA57ASYSINF	37	0.31	0.25	0.49	2.73	<0.15	<7.5
05/25/06	06:20	USA57ASysInf	180	1.1	0.22	0.32	0.58	<0.15	<7.5

Notes
All air sample values reported in milligrams per cubic meter (mg/m^3)
TPHG = Total petroleum hydrocarbons as gasoline (Gasoline Range Organics [GRO] C4-C13)
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
DIPE = Di-isopropyl ether

Analytical Laboratory
Alpha Analytical, Inc. (Alpha [ELAP #2019])

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, TAME, and ETBE analyzed by EPA Method SW8260B

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS
5th DPE Event - May 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME
05/01/06	10:28	USA57WINF	**990**	**170**	**96**	**15**	**205**	**12**	**66**	<2.0[1]	<2.0[1]	<2.0[1]
05/04/06	06:28	USA57WEFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
05/04/06	06:32	USA57WGAC1	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
05/08/06	06:45	USA57WINF	**110**	**0.61**	**<0.50**	**0.66**	**11.1**	**0.61**	**29**	<1.0	<1.0	<1.0
05/25/06	06:35	USA57WInf	**290**	**19**	**2.7**	**3.5**	**22.3**	**20**	**42**	<1.0	<1.0	<1.0
05/25/06	06:39	USA57WMid	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0

Notes:
All water sample values reported in micrograms per liter (µg/L)
TPHG = Total petroleum hydrocarbons as gasoline (Gasoline Range Organics [GRO] C4-C13)
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether

Analytical Laboratory
Alpha Analytical , Inc. (ELAP #2019)

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by
EPA Method SW8260B

[1] = Reporting limits were increased due to high concentrations of target analytes

TABLE 4
PETROLEUM HYDROCARBON MASS EXTRACTION SUMMARY
5th DPE Event - May 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Time Elapsed (days)	Flowrate (cfm)	Influent Concentration (mg/m^3)			Soil Vapor Extraction Rate (lbs/day)			Cumulative Mass (TPHG) Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	Period[1]	Total
									lbs	lbs
Petroleum hydrocarbon mass removed during the previous DPE events									45.469	45.469
05/01/06	--	29.5	37	5.4	<0.15	0.10	0.01	<0.0004	--	--
05/08/06	6.88	26.1	37	0.31	<0.15	0.09	0.00	<0.0003	0.629	46.098
05/25/06	11.16	48.4	180	1.1	<0.15	0.77	0.005	<0.001	4.801	50.900

Date	Time Elapsed (days)	Volume of groundwater extracted[2], gallons	Influent Concentration (µg/L)			Mass Extracted from groundwater (lbs)			Cumulative Mass Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	TPHG	MTBE
									lbs	lbs
Petroleum hydrocarbon mass removed during the previous DPE events									0.26809	0.01280
05/01/06	-	18	990	170	12	0.00015	0.000026	0.000002	0.26824	0.01280
05/08/06	6.88	5,130	110	0.61	0.61	0.02355	0.00365	0.00027	0.29178	0.01307
05/25/06	11.16	2,270	290	19	20	0.00379	0.00019	0.00020	0.29557	0.01327

Sample Calculations

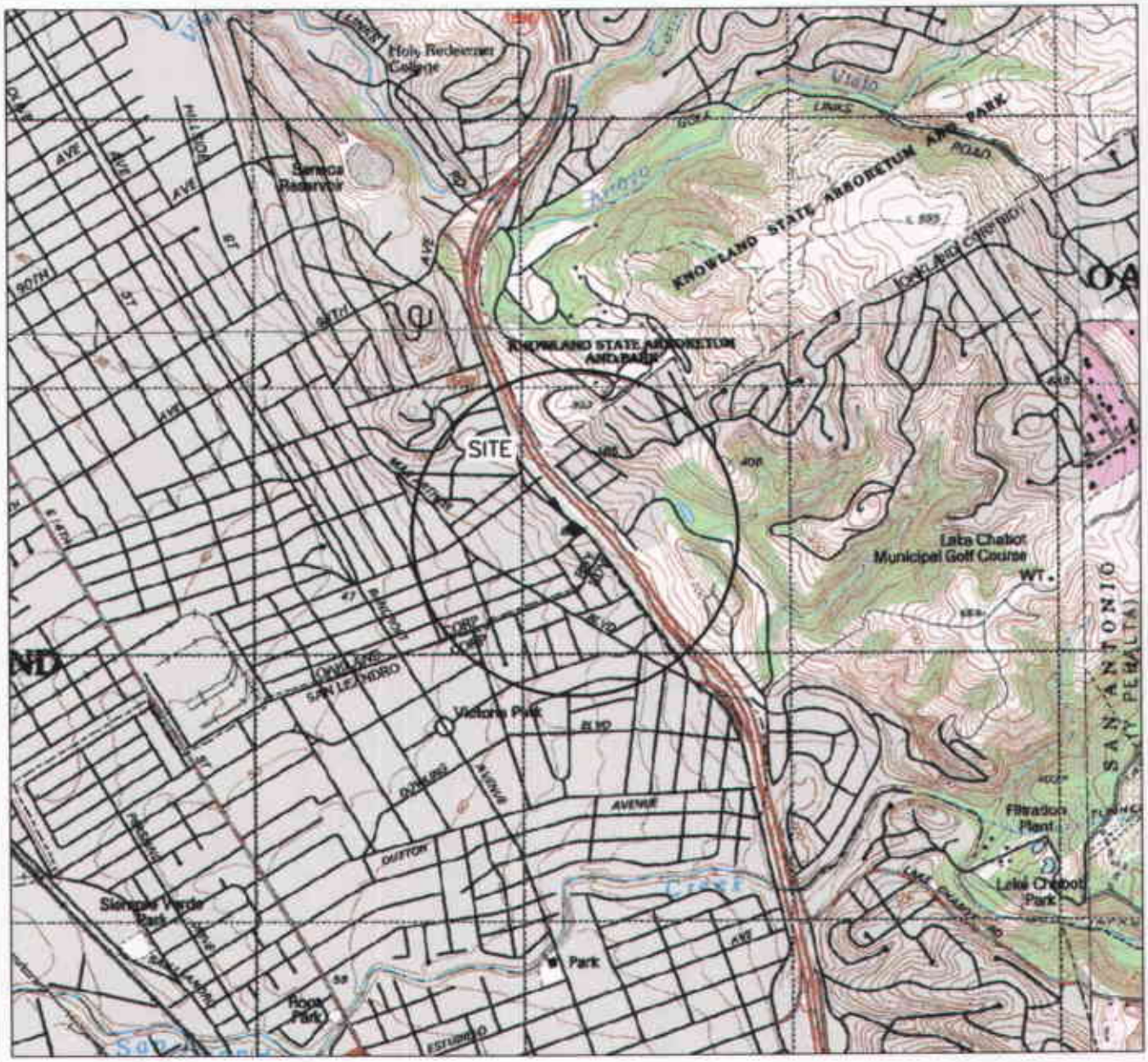
Ext. Rate from Wells (vapor) = $\frac{40.3 \text{ cu ft}}{\text{min}} \times \frac{690 \text{ mg}}{\text{cu meter}} \times \frac{\text{lb}}{453{,}593 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}} \times \frac{\text{cu meter}}{35.314 \text{ cu ft}}$

= 2.47 lbs/day

Mass removed from groundwater = concentration (µg/L) x gallons extracted x (2.2046×10^{-9})(lb/mg) / 0.26418 (gal/L)

[1] For mass estimates between the sampling dates, average mass extraction rate and time elapsed (operational uptime) between the sampling events were used

[2] Volume estimated based on flow totalizer measurements taken on the sampling days. For May 1, 2006, the volume of groundwater extracted was estimated based on the average groundwater extraction rate (0.30 gpm) and time elapsed between the start-up and sample collection



GENERAL NOTES:
BASE MAP FROM U.S.G.S.
OAKLAND, CA
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 1980

North

QUADRANGLE LOCATION

0 2000 FT

SCALE 1:24,000

STRATUS ENVIRONMENTAL, INC.

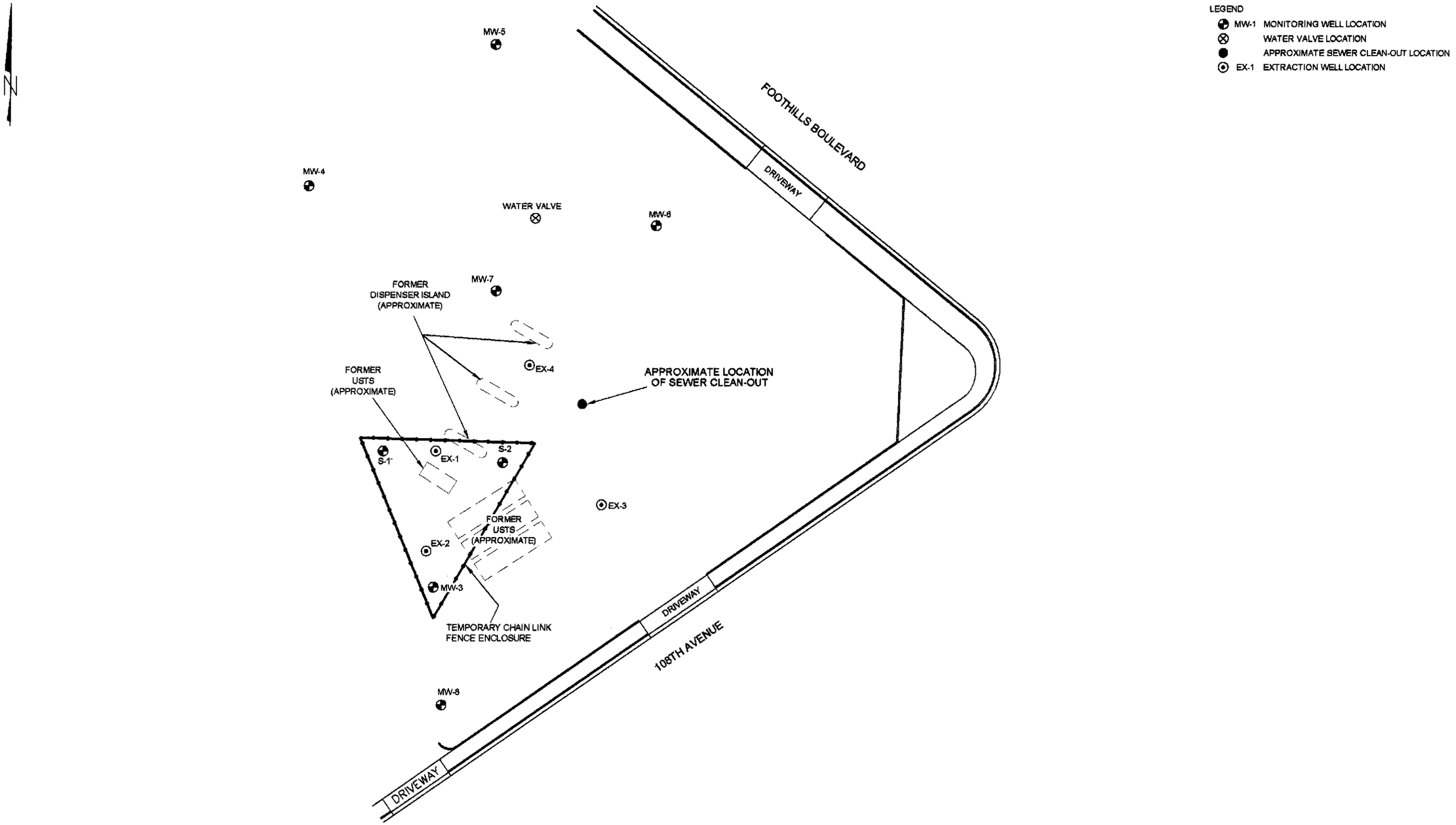
FORMER USA SERVICE STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE
1

PROJECT NO.
2007-0057-01

USA ST Site Location Map.dwg Jul 21, 2008 JMP USA57\Oakland



STRATUS ENVIRONMENTAL, INC.

0 40 FT
HORZ. SCALE

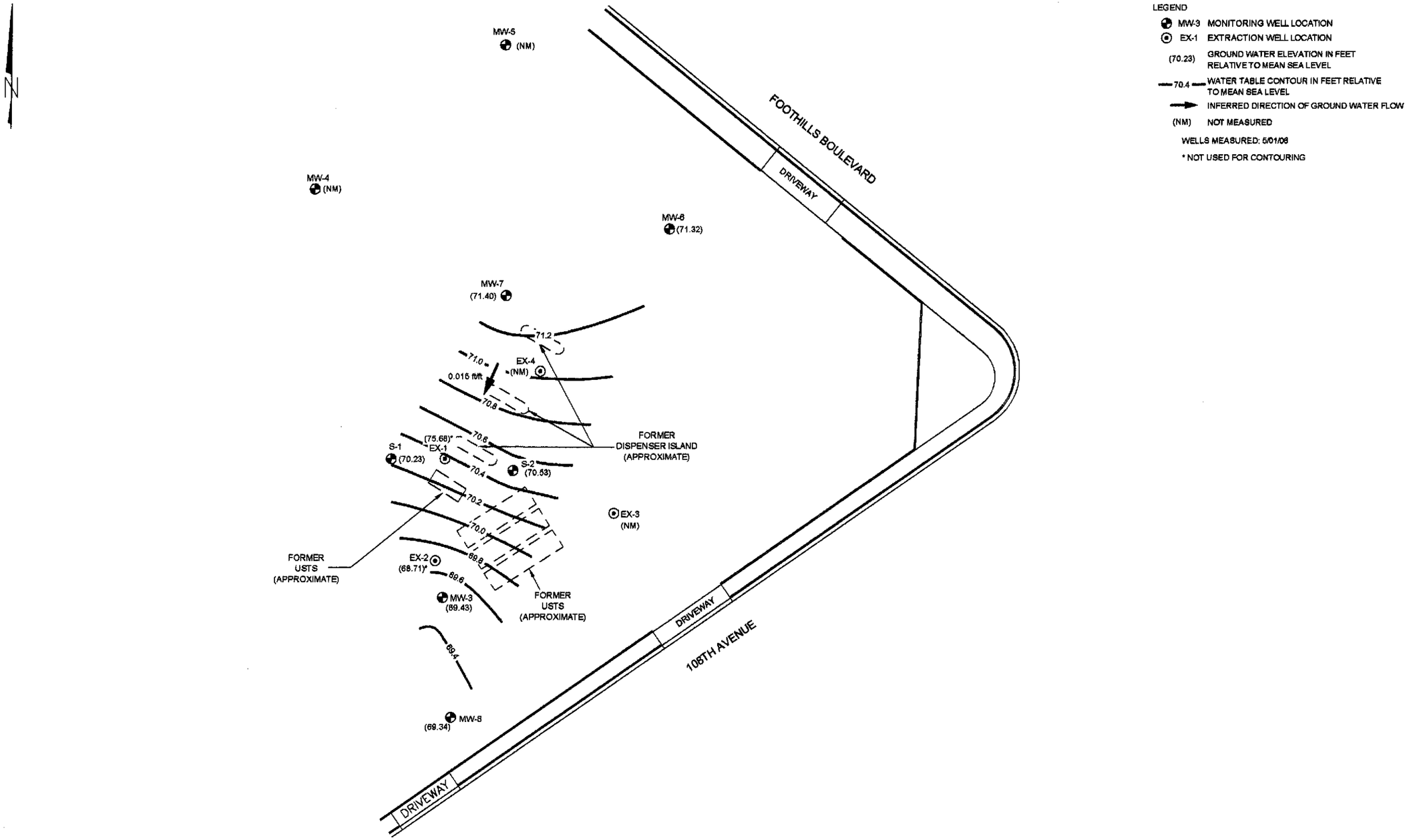
FORMER USA STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SITE PLAN

FIGURE
2

PROJECT NO.
2007-0057-01

USA57Source JNP REV Jun 23, 2008 USA 57 Site Plan.dwg



LEGEND

- MW-3 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- (70.23) GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL
- 70.4 WATER TABLE CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL
- INFERRED DIRECTION OF GROUND WATER FLOW
- (NM) NOT MEASURED

WELLS MEASURED: 5/01/06

* NOT USED FOR CONTOURING

STRATUS ENVIRONMENTAL, INC.

0 40 FT

HORZ. SCALE

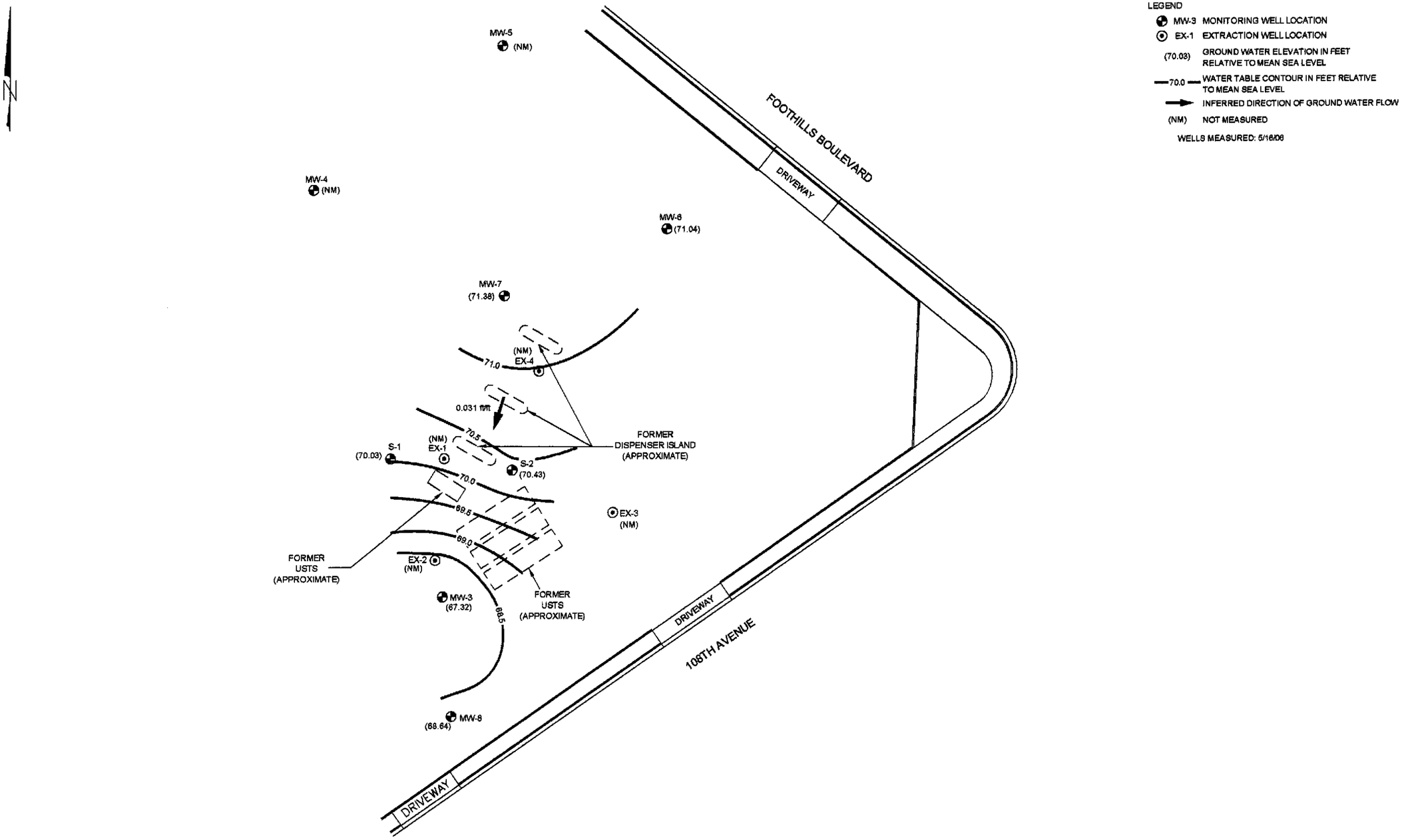
FORMER USA SERVICE STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
FOR 5/01/06

FIGURE
3

PROJECT NO.
2007-0057-01

USA57DPE JMP REV Jan 23, 2006 USA 57 Quarterly Report.dwg



STRATUS ENVIRONMENTAL, INC.

0 40 FT
HORZ. SCALE

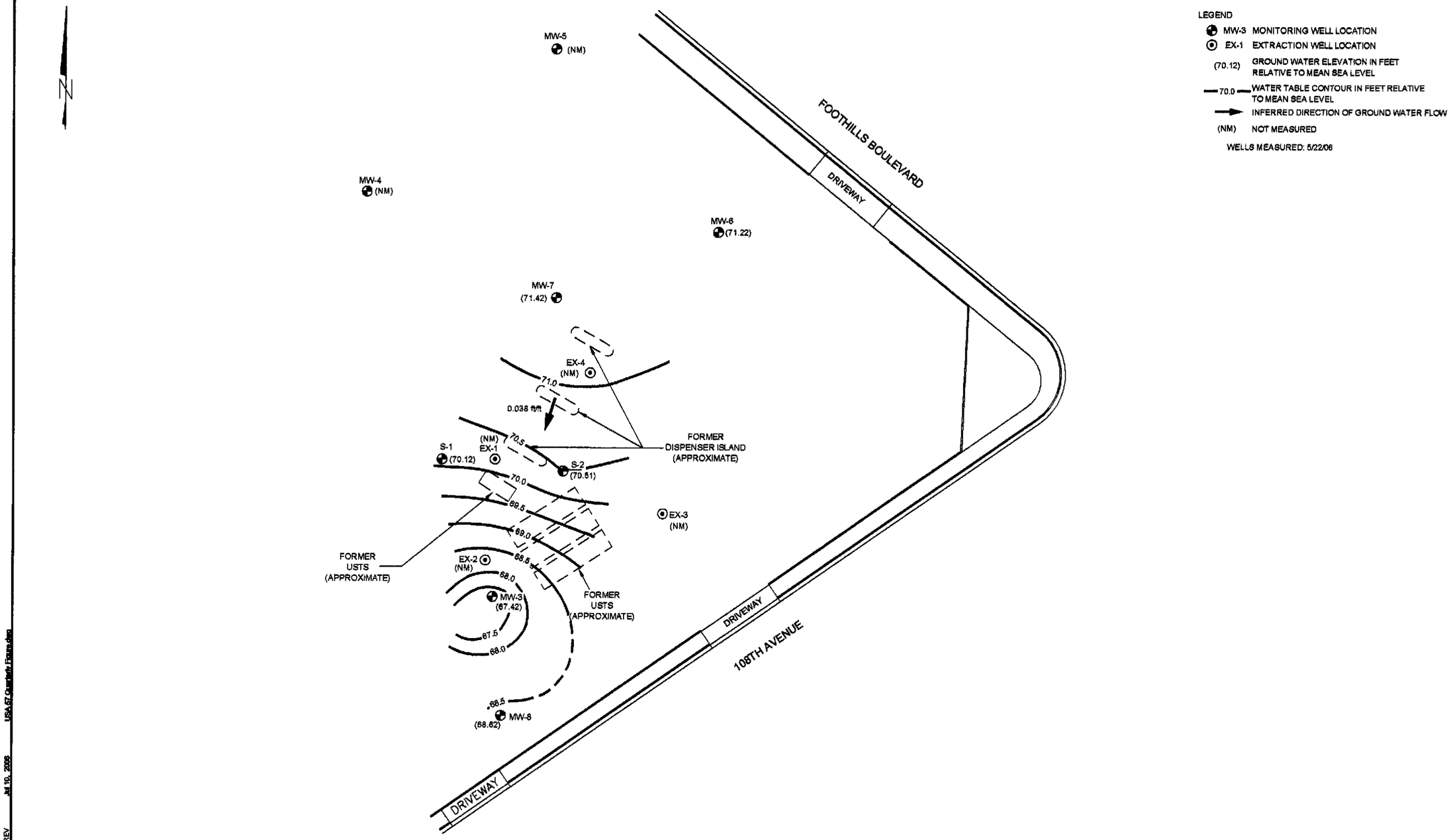
FORMER USA SERVICE STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
FOR 5/16/06

FIGURE
4

PROJECT NO.
2007-0057-01

JMP REV Jun 22, 2006 USA 57 Quarterly Rpts.dgn USA57GWDPE



STRATUS ENVIRONMENTAL, INC.

0 40 FT
HORZ. SCALE

FORMER USA SERVICE STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
FOR 5/22/06

FIGURE
5

PROJECT NO.
2007-0057-01

USA57DPE JMP REV Jul 10, 2006 USA FZ Quarterly Figure.dwg

APPENDIX A

SUMMARIES OF PREVIOUS DPE EVENTS

TABLE 1
DPE TEST USING WELL S-2
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date & Time	TE	Appl Vac	Air Flow	Totalizer Reading	GW Ext Rate	Inf PID	Oper Temp	Induced Vacuum ("WC) &/or DTW (feet bgs) Data in Observation Wells													
								S-1			MW-3			MW-4		MW-5		MW-7			MW-8	
	hh:mm	"Hg	cfm	gallons	gpm	ppmv	deg F	Vac	DTW	DD	Vac	DTW	DD	DTW	DD	DTW	DD	Vac	DTW	DD	DTW	DD
7/6/2004 7:00				42,120					18.13			15.70		12.26		18.07			18.19		19.55	
7/6/2004 8:30		Start Up Test using well S-2, DTW =20.26 feet bgs and DPE unit hour meter reading = 839.6																				
7/6/2004 9:00	00:30	25.50	87	42,120	--	2.9	1,450	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
7/6/2004 10:00	01:30	NM	NM	42,120	--	23.0	NM	0.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
7/6/2004 11:00	02:30	26.25	88	42,130	0.07	29.0	1,466	1.30	18.38	0.25	0.0	15.70	0.00	12.27	0.01	18.08	0.01	0.0	18.30	0.11	19.58	0.03
7/6/2004 12:00	03:30	26.50	87	42,200	0.33	24.0	1,444	0.50	18.58	0.45	0.0	15.69	-0.01	12.25	-0.01	18.05	-0.02	0.0	18.35	0.16	19.51	-0.04
7/7/2004 6:30	22:00	23.50	86	42,820	0.47	7.1	1,456	0.20	18.65	0.52	0.0	15.70	0.00	12.26	0.00	18.04	-0.03	0.0	18.38	0.19	19.55	0.00
7/7/2004 6:50	22:20	Discontinue Test on S-2																				
Distance to Extraction Well S-2								50			60			135		170		70			100	
Screening Interval		20 - 40 (S-2)						20 - 40			24 - 44			10 - 40.5		10 - 40		10 - 40.5			10 - 35	

Notes:

TE - Time Elapsed, hours: minutes
Appl - Applied
Oper - Operating
Vac - Vacuum
DTW - depth to groundwater
" WC - Inches water column
ppmv - parts per million by volume
Temp - Temperature
deg F - degree Farenheit
Ext. - Extraction
cfm - cubic feet per minute
Inf - Influent
DD - Drawdown
GW Ext - Groundwater Extraction
PID - Photo Ionization Detector
All induced vacuum measured in observation wells were in "WC
gpm - gallons per minute
"Hg - Inches Mercury
bgs - below ground surface
NM - Not measured

TABLE 2
DPE TEST USING WELL S-1
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date & Time	TE	Appl Vac	Air Flow	Totalizer Reading	GW Ext Rate	Inf PID	Oper Temp.	Induced Vacuum ("WC) &/or DTW (feet bgs) Data in Observation Wells													
								S-2			MW-3			MW-4		MW-5		MW-7			MW-8	
	hh:mm	"Hg	cfm	gallons	gpm	ppmv	deg F	Vac	DTW	DD	Vac	DTW	DD	DTW	DD	DTW	DD	Vac	DTW	DD	DTW	DD
7/7/2004 7:05	Start Up Test using Well S-1																					
7/7/2004 7:05	0.00	NM	NM	42,820	NM	NM	NM	NM	NM		NM	15.70		12.26		18.07			18.38		19.55	
7/7/2004 7:30	00:25	24.00	86	42,890	2.80	1.5	1,459	+7.4	30.08		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
7/7/2004 8:00	00:55	24.00	87	42,890	--	0.6	1,456	+4.4	25.35	-4.73	0.0	15.70	0.00	12.25	-0.01	18.06	-0.01	0.0	18.38	0.00	19.55	0.00
7/7/2004 9:00	01:55	24.00	87	42,960	0.61	0.0	1,457	+0.2	22.16	-7.92	0.0	15.70	0.00	12.25	-0.01	18.07	0.00	0.0	18.38	0.00	19.55	0.00
7/7/2004 9:05	02:00	Discontinue Test on S-1																				
Distance to Extraction Well S-1								50			60			110		170		80			105	
Screening Interval 20 - 40 (S-1)								20 - 40			24 - 44			10 - 40.5		10 - 40		10 - 40.5			10 - 35	

Notes:

TE - Time Elapsed, hours: minutes	cfm - cubic feet per minute
Appl - Applied	Inf - Influent
Oper - Operating	DD - Drawdown
Vac - Vacuum	GW Ext - Groundwater Extraction
DTW - depth to groundwater	PID - Photo Ionization Detector
" WC - Inches water column	All induced vacuum measured in observation wells were in "WC
ppmv - parts per million by volume	gpm - gallons per minute
Temp - Temperature	"Hg - Inches Mercury
deg F - degree Farenheit	bgs - below ground surface
Ext. - Extraction	NM - Not measured

TABLE 3
DPE TEST USING WELL MW-3
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date & Time	TE	Appl Vac	Air Flow	Totalizer Reading	GW Ext Rate	Inf PID	Oper Temp	Induced Vacuum ("WC) &/or DTW (feet bgs) Data in Observation Wells													
								S-1			S-2			MW-4		MW-5		MW-7			MW-8	
	hh:mm	"Hg	cfm	gallons	gpm	ppmv	deg F	Vac	DTW	DD	Vac	DTW	DD	DTW	DD	DTW	DD	Vac	DTW	DD	DTW	DD
7/7/2004 9:25	Start Up Test using Well MW-3																					
7/7/2004 9:25	0.00	NM	NM	42,960	--	NM	NM	NM	NM	--	NM	22.16	--	12.26	--	18.07	--	NM	18.38	--	19.55	NM
7/7/2004 10:00	00:35	24.50	87	42,960	--	0.0	1,450	0.0	NM	--	NM	NM	--	NM	--	NM	--	NM	NM	--	NM	NM
7/7/2004 10:30	01:05	25.50	87	42,960	--	0.0	1,447	0.0	19.38	--	+0.6	21.00	-1.16	12.25	0.00	18.06	-0.01	0.0	18.36	-0.02	19.53	-0.02
7/7/2004 11:30	02:05	26.00	87	42,960	--	0.0	1,456	0.0	19.11	-0.27	+0.2	20.91	-1.25	12.25	0.00	18.06	-0.01	0.0	18.35	-0.03	19.53	-0.02
7/7/2004 11:35	02:10	Discontinue test on MW-3																				
Distance to Extraction Well MW-3								60			60			170		220		120			50	
Screening Interval	24-44 (MW-3)							20 - 40			20 - 40			10 - 40.5		10 - 40		10 - 40.5			10 - 35	

Notes:

TE - Time Elapsed, hours: minutes	cfm - cubic feet per minute
Appl - Applied	Inf - Influent
Oper - Operating	DD - Drawdown
Vac - Vacuum	GW Ext - Groundwater Extraction
DTW - depth to groundwater	PID - Photo Ionization Detector
" WC - Inches water column	All induced vacuum measured in observation wells were in "WC
ppmv - parts per million by volume	gpm - gallons per minute
Temp - Temperature	"Hg - Inches Mercury
deg F - degree Farenheit	bgs - below ground surface
Ext. - Extraction	NM - Not measured

TABLE 4
COMBINED DPE TEST USING WELLS S-1, S-2, AND MW-3
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date & Time	TE	Appl Vac	Air Flow	Totalizer Reading	GW Ext Rate	Inf PID	Oper Temp	MW-4		MW-5		MW-6		MW-7			MW-8		
	hh:mm	"Hg	cfm	gallons	gpm	ppmv	deg F	DTW	DD	DTW	DD	Vac	DTW	Vac	DTW	DD	Vac	DTW	DD
7/7/2004 11:35	Start Test on S-1, S-2 and MW-3																		
7/7/2004 11:35	0.00	NM	NM	42,960	NM	NM	NM	12.25	--	18.06	--	NM	DRY	NM	18.35	--	NM	19.53	--
7/8/2004 6:15	18:40	22.25	87	44,610	1.47	4.0	1,460	12.25	0.00	18.11	0.05	0.0	DRY	0.0	18.63	0.28	0.0	19.70	0.17
7/9/2004 6:00	42:25	23.00	86	46,960	0.92	2.3	1,440	12.33	0.08	18.18	0.12	0.0	DRY	0.0	18.72	0.37	0.0	20.02	0.49
7/10/2004 6:00	66:25	23.00	86	48,690	0.43	3.5	1,460	12.41	0.16	18.26	0.2	0.0	DRY	0.0	18.78	0.43	0.0	20.32	0.79
7/11/2004 6:00	90:25	21.00	86	50,760	0.38	3.2	1,456	12.41	0.16	18.27	0.21	0.0	DRY	0.0	18.81	0.46	0.0	20.58	1.05
7/12/2004 6:30	114:55	22.50	86	52,780	0.29	3.0	1,453	12.42	0.17	18.32	0.26	0.0	DRY	0.0	18.84	0.49	0.0	20.75	1.22
7/15/2004 6:00	186:25	22.50	86	58,760	0.53	4.0	1,446	12.27	0.02	18.36	0.3	0.0	DRY	0.0	18.90	0.55	0.0	21.17	1.64
7/19/2004 5:45	282:10	23.25	86	66,320	0.45	3.2	1,459	11.67	-0.58	18.23	0.17	0.0	DRY	0.0	18.98	0.63	0.0	21.50	1.97
7/22/2004 5:45	354:10	23.25	86	71,870	0.26	3.0	1,458	12.05	-0.20	18.33	0.27	0.0	DRY	0.0	19.03	0.68	0.0	21.65	2.12
7/25/2004 10:36	431:01			77,720	0.23	**Discontinue DPE Test. DPE unit hour meter reading = 1,297.7**													
Distance to Nearest Extraction Well								110		170		110		70			50		
Screening Interval								10 - 40.5		10 - 40		10 - 40.5		10 - 40.5			10 - 35		

Notes:

TE - Time Elapsed, hours: minutes
Appl - Applied
Oper - Operating
Vac - Vacuum
DTW - depth to groundwater
" WC - Inches water column
ppmv - parts per million by volume
Temp - Temperature
deg F - degree Farenheit
Ext. - Extraction
cfm - cubic feet per minute
Inf - Influent
DD - Drawdown
GW Ext - Groundwater Extraction
PID - Photo Ionization Detector
All induced vacuum measured in observation wells were in "WC
gpm - gallons per minute
"Hg - Inches Mercury
bgs - below ground surface
NM - Not measured

TABLE 5
SOIL VAPOR ANALYTICAL RESULTS
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	Sample Type	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
07/06/04	1030	Eff Air	Air	<12	<0.12	<0.12	<0.12	<0.12	<0.12
07/06/04	1032	Inf Cat Air	Air	**660**	**2.1**	**0.38**	**1.2**	**1.1**	**1.0**
07/07/04	0904	Inf Cat Air S-1	Air	<12	<0.12	<0.12	<0.12	<0.12	**0.29**
07/07/04	1126	Inf Cat Air MW-3	Air	<12	<0.12	<0.12	<0.12	<0.12	**0.13**
07/19/04	0641	Eff Air	Air	<12	<0.12	<0.12	<0.12	<0.12	<0.12
07/19/04	0644	Inf Cat Air	Air	**88**	**0.26**	<0.12	<0.12	**0.19**	**0.25**

All air sample values reported in milligrams per cubic meter (mg/m^3)

TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether

Analytical Laboratory
Alpha Analytical, Inc. (ELAP #2019)

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX and MTBE analyzed by EPA Method SW8260B

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	Sample Type	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME	Methanol	Ethanol
07/06/04	1050	S-2	Water	2200	13	1.8	10	26.9	66	170	<1.0	<1.0	<1.0	<5,000	<5,000
07/08/04	0854	Influent	Water	<100[1]	<0.50	<0.50	0.66	4.4	16	NA	NA	NA	NA	NA	NA
07/08/04	0905	GAC Influent	Water	110	<0.50	<0.50	<0.50	1.89	17	NA	NA	NA	NA	NA	NA
07/08/04	1030	Effluent	Water	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
07/19/04	0623	Effluent	Water	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0	NA	NA
07/19/04	0630	Influent	Water	<50	<0.50	<0.50	<0.50	0.52	3.7	56	<1.0	<1.0	<1.0	NA	NA
07/27/04	1118	Effluent	Water	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0	NA	NA

All water sample values reported in micrograms per liter (µg/L)
TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
NA = Not analyzed
[1] Reporting limits were increased due to sample foaming

Analytical Laboratory
Alpha Analytical , Inc. (ELAP #2019)

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by EPA Method SW8260B
Methanol & Ethanol analyzed by EPA Method SW8260B-DI

TABLE 7
PETROLEUM HYDROCARBON MASS EXTRACTION RATES SUMMARY
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Test Well ID	Flowrate (cfm)	Influent Concentration (mg/m^3)			Soil Vapor Extraction Rate from Wells (lbs/day)			Cumulative Mass (TPHG) Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	Period[1] lbs	Total lbs
07/06/04	S-2	87.0	660	2.1	1.0	5.16	0.01	0.01	5.16	5.16
07/07/04	S-1	87.0	<12	<0.12	0.29	<0.09	<0.001	0.002	0.01	5.17
07/07/04	MW-3	87.0	<12	<0.12	0.13	<0.09	<0.001	0.001	0.01	5.18
07/19/04	S-1, S-2, MW-3	86.0	88	0.26	0.25	0.68	0.002	0.002	8.16	13.34

Date	Test Well ID	Volume of groundwater extracted[2], gallons	Influent Concentration (µg/L)			Mass Extracted from groundwater (lbs)			Cumulative Mass (TPHG) Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	Period lbs	Total lbs
07/06/04	S-2	80	2,200	13	66	0.001	0.00001	0.00004	0.001	0.001
07/08/04	S-1, S-2, MW-3	2,490	<100	<0.50	16	<0.002	<0.00001	0.0003	0.012	0.014
07/19/04	S-1, S-2, MW-3	21,710	<50	<0.50	4	<0.01	<0.0001	0.001	0.008	0.015

Sample Calculations

Ext. Rate from Wells (vapor) = $\frac{40 \text{ cu ft}}{\text{min}} \times \frac{8{,}400 \text{ mg}}{\text{cu meter}} \times \frac{\text{lb}}{453593 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}} \times \frac{\text{x cu meter}}{35.314 \text{ cu ft}}$

= 30.21 lbs/day

Mass removed from groundwater = concentration (µg/L) x gallons extracted x (2.2046×10^{-9})(lb/mg) / 0.26418 (gal/L)

[1] For mass estimates between the sampling dates, average mass extraction rate and time elapsed (operational uptime) between the sampling events were used

[2] Volume estimated based on flow totalizer measurements taken on the sampling days

Based on average groundwater extraction rate of 0.63 gpm and the average concentrations, the mass extraction rate for is calculated using:

Mass removed from groundwater (lbs/day) = concentration (µg/L) x average flowrate (gpm) x (2.2046×10^{-9})(lb/mg) / 0.26418 (gal/L) * 60 (mins/hr)*24 (hr/day)

TPHG = 0.017 lbs/day
Benzene = 0.0001 lbs/day
MTBE = 0.0002 lbs/day

TABLE 2
DPE EVENT FIELD OBSERVATION SUMMARY
2nd DPE Event - June/July 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Hour Meter Reading	TE days	Appl Vac "Hg	Air Flow cfm	Totalizer Reading gallons	GW Ext Rate gpm	Inf PID ppmv	Oper Temp deg F	MW-4		MW-5		MW-6			MW-7			MW-8		
									DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
06/06/05	**Begin June/July 2005 DPE Event, Using Wells S-1, S-2, and MW-3 for Extraction; Hour Meter Reading Prior to Test Start up = 3361.2**																				
06/06/05	3361.20	--	24.00	26.6	23,710	--	125.0	1,471	6.65	--	10.91	--	0.00	15.67	--	0.00	14.79	--	0.00	14.08	--
06/07/05	3383.60	0.93	24.00	NM	25,480	1.32	NM	1,443	NM	NM	NM	NM	0.02	NM	NM	0.00	NM	NM	0.00	NM	NM
06/09/05	3416.60	2.31	23.00	27.7	27,160	0.85	6.0	1,473	6.10	-0.55	10.62	-0.29	0.00	14.58	-1.09	0.00	13.58	-1.21	0.00	14.90	0.82
06/14/05	3468.10	4.45	24.00	28.4	31,000	1.24	6.0	1,450	6.35	-0.30	10.80	-0.11	0.00	15.60	-0.07	0.00	13.56	-1.23	0.00	14.81	0.73
06/16/05	3515.00	6.41	25.00	23.0	34,450	1.23	5.0	1,472	6.33	-0.32	10.98	0.07	0.00	15.85	0.18	0.00	13.97	-0.82	0.00	14.98	0.90
06/21/05	3638.20	11.54	25.00	39.4	43,130	1.17	0.0	1,470	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
06/28/05	3804.80	18.48	24.00	39.3	53,540	1.04	NM	1,456	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
07/01/05	3877.30	21.50	24.00	31.9	57,950	1.01	5.0	1,473	6.46	-0.19	11.09	0.18	0.00	15.65	-0.02	0.00	14.18	-0.61	0.00	16.35	2.27
07/01/05	3878.10	21.54	Event End Hr. Meter		58,050		**Discontinue DPE Event**														
Distance to Nearest Extraction Well									**110**		**170**		**110**			**70**			**50**		
Screening Interval									**10 - 40.5**		**10 - 40**		**10 - 40.5**			**10 - 40.5**			**10 - 35**		

Notes:

TE - Time Elapsed, days
Appl - Applied
Oper - Operating
Vac - Vacuum
DTW - depth to groundwater
" WC - Inches water column
* = time elapsed based on hour meter readings
ppmv - parts per million by volume
Temp - Temperature
deg F - degree Farenheit
Ext. - Extraction

cfm - cubic feet per minute
Inf - Influent
DD - Drawdown
GW Ext - Groundwater Extraction
PID - Photo Ionization Detector
All induced vacuum measured in observation wells were in "WC
gpm - gallons per minute
"Hg - Inches Mercury
bgs - below ground surface
NM - Not measured

TABLE 3
SOIL VAPOR ANALYTICAL RESULTS
2nd DPE Event - June/July 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA
06/06/05	11:18	SYS INF Air	**160**	**4.4**	**0.72**	**0.55**	**1.35**	**3.6**	<7.5
06/06/05	11:15	Eff Air	<15	<0.30	<0.30	<0.30	<0.30	<0.30	<7.5
06/28/05	06:16	Inf Air	<15	<0.15	<0.15	<0.15	<0.15	<0.15	NA
07/01/05	05:41	SYS INF AIR*	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0
07/01/05	05:39	EFF AIR*	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0

Notes
All air sample values reported in milligrams per cubic meter (mg/m^3)
TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
DIPE = Di-isopropyl ether
DIPE, ETBE, and TAME were reported below laboratory reporting limits in all samples.
NA = Not Analyzed

Analytical Laboratory
Alpha Analytical, Inc. (Alpha [ELAP #2019])
* = Analyzed by Severn Trent Laboratories (STL [ELAP #2496])

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual (Alpha) & by 8260B (STL)
BTEX, MTBE, TBA, DIPE, TAME, and ETBE analyzed by EPA Method SW8260B

TABLE 4
GROUNDWATER ANALYTICAL RESULTS
2nd DPE Event - June/July 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME
06/06/05	11:34	Influent	**590**	**11**	**3.8**	**6.1**	**33**	**62**	**140**	<1.0	<1.0	<1.0
06/07/05	09:41	MID (Fluent)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
06/07/05	09:39	EFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
06/28/05	06:08	Influent	<50	<0.50	<0.50	<0.50	<0.50	**2.6**	**52**	<1.0	<1.0	<1.0
06/28/05	06:04	Mid GAC	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
06/28/05	06:00	Effluent	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
07/01/05	05:46	INF	<50	<0.50	<0.50	<0.50	<0.50	**2.2**	**64**	<1.0	<1.0	<1.0
07/01/05	05:54	GAC-1	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
07/01/05	05:58	EFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0

All water sample values reported in micrograms per liter (µg/L)
TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether

Analytical Laboratory
Alpha Analytical , Inc. (ELAP #2019)

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by
EPA Method SW8260B

TABLE 5
PETROLEUM HYDROCARBON MASS EXTRACTION SUMMARY
2nd DPE Event June/July 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Time Elapsed (days)	Flowrate (cfm)	Influent Concentration (mg/m^3)			Soil Vapor Extraction Rate from Wells (lbs/day)			Cumulative Mass (TPHG) Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	Period[1] lbs	Total lbs
Petroleum hydrocarbon mass removed during first DPE event conducted during July 2004									13.34	13.34
06/06/05	-	26.6	160	4.4	3.6	0.378	0.010	0.009	0.378	13.718
06/28/05	18.48	39.3	<15	<0.15	<0.15	<0.052	<0.001	<0.001	3.980	17.698
07/01/05	21.54	31.9	<50	<0.50	<0.50	<0.142	<0.001	<0.001	<2.091	19.789

Date		Volume of groundwater extracted[2], gallons	Influent Concentration (µg/L)			Mass Extracted from groundwater (lbs)			Cumulative Mass Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	TPHG lbs	MTBE lbs
Petroleum hydrocarbon mass removed during first DPE event conducted during July 2004									0.015	0.00149
06/06/05	-	56[3]	590	11	62	0.00028	0.00001	0.00003	0.01528	0.00152
06/28/05	18.48	29,830	<50.0	<0.50	2.6	0.07966	0.00143	0.00804	0.09493	0.00956
07/01/05	21.54	4,510	<50.0	<0.50	2.2	<0.00188	<0.00002	0.00009	0.09682	0.00965

Sample Calculations

Ext. Rate from Wells (vapor) = $\frac{40 \text{ cu ft}}{\text{min}} \times \frac{8{,}400 \text{ mg}}{\text{cu meter}} \times \frac{\text{lb}}{453{,}593 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}} \times \frac{\text{x cu meter}}{35.314 \text{ cu ft}}$

30.21 lbs/day

Mass removed from groundwater = concentration (µg/L) x gallons extracted x (2.2046×10^{-9})(lb/mg) / 0.26418 (gal/L)

[1] For mass estimates between the sampling dates, average mass extraction rate and time elapsed (operational uptime) between the sampling events were used

[2] Volume estimated based on flow totalizer measurements taken on the sampling days

[3] Volume estimated based on average groundwater extraction rate and the time elapsed between the sample collection and start-up

The mass extraction rate is calculated by multiplying the mass extracted per day by the operational uptime for the period.

TABLE 1
DPE EVENT FIELD OBSERVATION SUMMARY
3rd DPE Event - August/September 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Hour Meter Reading	TE days	Appl Vac "Hg	Air Flow cfm	Totalizer Reading gallons	GW Ext Rate gpm	Inf PID ppmv	Oper Temp deg F	Depth to Water, feet bgs and Induced Vacuum, "WC									
									MW-4		MW-5		MW-6			MW-8		
									DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
8/29/05 5:30	Baseline measurements prior to start of third DPE event								8.71	--	12.90	--	0.00	DRY	--	0.00	16.75	--
8/29/05 7:00	**Begin Third DPE Event, Using Wells S-1, S-2, MW-3, and MW-7 for Extraction; Hour Meter Reading Prior to Test Start up = 435.6. Totalizer reading = 22,580**																	
8/29/05 8:30	437.00	0.06	18.00	48.8	22,740	1.90	5.5	1,458	NM	NM	NM	NM	NM	NM	--	NM	NM	--
8/31/05 5:00	480.70	1.88	18.00	37.3	29,840	2.71	5.5	1,456	8.73	0.02	13.18	0.28	0.00	DRY	--	0.00	17.21	0.46
9/6/05 6:00	619.10	7.65	NM	NM	51,690	2.63	System observed non-functional due to low propane											
9/6/05 9:15	System re-started after propane delivery. Based on hour meter readings for 8/31/5 at 0500 hrs & 9/6/5 at 0600 hrs, the DPE system was likely shutdown on 9/5/05 at 23:14 hrs																	
9/6/05 10:15	620.10	7.69	18.00	62.5	51,850	2.67	16.1	1,447	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
9/9/05 5:00	685.70	10.42	16.00	45.0	61,390	2.42	8.1	1,450	8.99	0.28	13.61	0.71	0.00	DRY	--	0.00	18.68	1.93
9/13/05 5:30	780.20	14.36	16.00	40.4	75,020	2.40	2.0	1,457	9.14	0.43	13.78	0.88	0.00	18.67	-0.33	0.00	19.08	2.33
9/16/05 5:00	796.10	15.02	NM	NM	77,310	2.40	System observed non-functional due to high water level in the knockout tank. Based on hour meter readings between 9/13/05 5:30 and 9/16/05 5:00, the DPE system was likely shutdown on 9/13/05 21:24 hrs. Since the influent concentrations were low, the third DPE event was discontinued.											
Distance to Nearest Extraction Well									**86**		**99**		**70**			**48**		
Screening Interval, feet bgs : S-1=20-40 , S-2=20-40, MW-3=24-44, & MW-7=10-40									**10 - 40.5**		**10 - 40**		**10 - 40.5**			**10 - 35**		

Notes:

TE - Time Elapsed calculated as difference of hour meter readings, days
Appl - Applied
Oper - Operating
Vac - Vacuum
DTW - depth to groundwater
" WC - Inches water column
Ext. - Extraction
GW Ext - Groundwater Extraction
GW Ext Rate = Difference of Totalizer Readings, gallons

cfm - cubic feet per minute
Inf - Influent
DD - Drawdown
bgs - below ground surface
gpm - gallons per minute
"Hg - Inches Mercury

Temp - Temperature
deg F - degree Farenheit
PID - Photo Ionization Detector
ppmv - parts per million by volume
NM - Not measured
-- = Not applicable

[1] Flow rate measured using a digital anemometer at 3" diameter steel pipe; flow rate = velocity X area of pipe (e.g.: flow rate = 994 feet per minute X 0.05 sq.ft)

TABLE 2
SOIL VAPOR ANALYTICAL RESULTS
3rd DPE Event - August/September 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA
08/29/05	09:01	USA57ASYSINF	<15	**0.59**	<0.15	**0.23**	**0.44**	**0.41**	<1.5
08/29/05	09:05	USA57ASYSEFF	<15	<0.15	<0.15	<0.15	<0.15	<0.15	<1.5
09/06/05	10:30	Sys Inf Air	<15	<0.15	<0.15	<0.15	<0.15	<0.15	<7.5
09/13/05	05:45	USA57ASYSINF	<15	**0.19**	<0.15	<0.15	<0.15	<0.15	<7.5

Notes
All air sample values reported in milligrams per cubic meter (mg/m^3)
TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
DIPE = Di-isopropyl ether

Analytical Laboratory
Alpha Analytical, Inc. (Alpha [ELAP #2019])

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, TAME, and ETBE analyzed by EPA Method SW8260B

DIPE, ETBE, and TAME were reported below laboratory reporting limits in all samples (<0.30 mg/m^3).

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
3rd DPE Event - August/September 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME
08/29/05	09:30	USA57WINF	**55**	**3.3**	**<0.50**	**0.68**	**3.3**	**17**	**160**	<1.0	<1.0	<1.0
08/29/05	09:35	USA57WEFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
09/06/05	10:36	Inf Water	<50	<0.50	<0.50	<0.50	<0.50	**4.7**	**61**	<1.0	<1.0	<1.0
09/13/05	06:20	USA57WINF	<50	<0.50	<0.50	<0.50	<0.50	**2.6**	**29**	<1.0	<1.0	<1.0
09/13/05	06:22	USA57WGAC1	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
09/13/05	06:25	USA57WEFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
09/16/05	5:32	USA57WINF	**67**	<0.50	<0.50	<0.50	**3.8**	**2.3**	**25**	<1.0	<1.0	<1.0

All water sample values reported in micrograms per liter (µg/L)
TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether

Analytical Laboratory
Alpha Analytical , Inc. (ELAP #2019)

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by
EPA Method SW8260B

TABLE 4
PETROLEUM HYDROCARBON MASS EXTRACTION SUMMARY
3rd DPE Event August/September 2005
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Time Elapsed (days)	Flowrate (cfm)	Influent Concentration (mg/m^3)			Soil Vapor Extraction Rate (lbs/day)			Cumulative Mass (TPHG) Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	Period[1]	Total
									lbs	lbs
Petroleum hydrocarbon mass removed during the previous DPE events									19.789	19.789
08/29/05	-	48.8	<15	0.59	0.41	<0.065	0.003	0.002	--	--
09/06/05	7.69	62.5	<15	<0.15	<0.15	<0.083	<0.001	<0.001	<0.570	19.789
09/13/05	6.67	40.4	<15	0.19	<0.15	<0.054	0.001	<0.001	<0.458	19.789

Date	Time Elapsed (days)	Volume of groundwater extracted[2], gallons	Influent Concentration (µg/L)			Mass Extracted from groundwater (lbs)			Cumulative Mass Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	TPHG	MTBE
									lbs	lbs
Petroleum hydrocarbon mass removed during the previous DPE events									0.09682	0.00965
08/29/05	-	160	55	3.3	17	0.00007	0.000004	0.00002	0.09689	0.00967
09/06/05	7.69	29,110	<50	<0.50	4.7	0.01275	0.00046	0.00264	0.10965	0.01231
09/13/05	6.67	23,170	<50	<0.50	2.6	<0.00967	<0.00010	0.00071	0.10965	0.01231
09/16/05	0.66	2,290	67	<0.50	2.3	0.00112	<0.00001	0.00005	0.11076	0.01231

Sample Calculations

Ext. Rate from Wells (vapor) = $\frac{40 \text{ cu ft}}{\text{min}} \times \frac{8{,}400 \text{ mg}}{\text{cu meter}} \times \frac{\text{lb}}{453{,}593 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}} \times \frac{\text{cu meter}}{35.314 \text{ cu ft}}$

30.21 lbs/day

Mass removed from groundwater = concentration (µg/L) x gallons extracted x (2.2046×10^{-9})(lb/mg) / 0.26418 (gal/L)

[1] For mass estimates between the sampling dates, average mass extraction rate and time elapsed (operational uptime) between the sampling events were used

[2] Volume estimated based on flow totalizer measurements taken on the sampling days

The mass extraction rate is calculated by multiplying the mass extracted per day by the operational uptime for the period.

TABLE 1
DPE EVENT FIELD OBSERVATION SUMMARY
4th DPE Event - February/March 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Hour Meter Reading	TE days	Appl Vac "Hg	Air Flow cfm	Totalizer Reading gallons	GW Ext Rate gpm	Inf PID ppmv	Oper Temp deg F	Depth to Water, feet bgs and Induced Vacuum, "WC													
									S-1		S-2		MW-3		MW-6			MW-7			MW-8		
									DTW	DD	DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
2/20/06 5:30	**Begin fourth DPE event using wells EX-1, EX-2, EX-3, and EX-4. Hour Meter Reading = 3,086.3. Totalizer reading = 94,450 gallons**																					
2/20/06 5:30	3,086.30	0.00	20.00	40.3	94,450	--	360	1,460	14.47	--	16.61	--	10.79	--	NM	15.70	--	NM	13.74	--	NM	13.82	--
2/24/06 5:15	3,161.30	3.13	System observed non-functional and re-started by resetting power supply. Based on hour meter readings, the DPE system was likely shutdown on 2/23/06 around 0830 hrs																				
2/24/06 5:15	3,161.30	3.13	18.50	50.6	98,740	0.95	150	1,462	14.45	-0.02	16.53	-0.08	11.82	1.03	0.00	15.64	-0.06	0.00	13.65	-0.09	0.00	14.29	0.47
3/3/06 7:00	3,262.40	7.34	23.00	29.0	100,540	0.30	212	1,451	14.20	-0.27	16.30	-0.31	11.55	0.76	0.00	15.10	-0.60	0.10	13.26	-0.48	0.00	14.38	0.56
3/9/06 6:30	3,403.10	13.20	23.00	22.4	103,490	0.35	150	1,470	13.97	-0.50	16.00	-0.61	11.47	0.68	0.00	14.49	-1.21	3.03	13.11	-0.63	3.05	13.69	-0.13
3/16/06 5:30	3,566.70	20.02	23.00	25.5	105,780	0.23	68	1,457	13.61	-0.86	15.60	-1.01	11.15	0.36	0.00	14.15	-1.55	0.00	12.55	-1.19	3.15	13.03	-0.79
3/24/06 5:00	3,752.80	27.77	23.00	30.5	107,790	0.18	35	1,459	13.10	-1.37	14.68	-1.93	10.73	-0.06	0.03	13.82	-1.88	0.05	11.99	-1.75	0.00	12.83	-0.99
3/24/06 5:30	Discontinue fourth DPE event.																						
Average	--	--	**21.75**	**33.04**	--	**0.40**	**162.5**	**1,460**	**13.97**	**-0.60**	**15.95**	**-0.79**	**11.25**	**0.55**	**0.01**	**14.82**	**-1.06**	**0.64**	**13.05**	**-0.83**	**1.24**	**13.67**	**-0.18**
Distance to Nearest Extraction Well, feet									**20**		**27**		**15**		**75**			**33**			**62**		
Screening Interval : EX-1=EX-2=EX-3=EX-4= 5 to 25 feet bgs									**20 - 40**		**20 - 40**		**24 - 44**		**10 - 40.5**			**10 - 40**			**10 - 35**		

Notes:

TE - Time Elapsed calculated as difference of hour meter readings, days
Appl - Applied
Oper - Operating
Vac - Vacuum
DTW - depth to groundwater
" WC - Inches water column
Ext. - Extraction
GW Ext - Groundwater Extraction
GW Ext Rate = Difference of Totalizer Readings, gallons

cfm - cubic feet per minute
Inf - Influent
DD - Drawdown
bgs - below ground surface
gpm - gallons per minute
"Hg - Inches Mercury

Temp - Temperature
deg F - degree Farenheit
PID - Photo Ionization Detector
ppmv - parts per million by volume
NM - Not measured
-- = Not applicable

[1] Flow rate measured using a digital anemometer at 3" diameter steel pipe;
flow rate = velocity X area of pipe (e.g.: flow rate = 994 feet per minute X 0.05 sq.ft)

TABLE 2
SOIL VAPOR ANALYTICAL RESULTS
4th DPE Event - February/March 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA
02/20/06	07:18	USA57ASysEff	<15	<0.15	<0.15	<0.15	<0.15	<0.15	<7.5
02/20/06	07:20	USA57ASysInf	**690**	**8.3**	**20**	**17**	**107**	<0.60	<30
03/03/06	07:25	USA57ASYSINF	**480**	**8.6**	**7.0**	**8.8**	**19.9**	**0.29**	<7.5
03/09/06	06:46	USA57ASysInf	**320**	**2.0**	**10**	**11**	**40.5**	<0.30	<15
03/24/06	05:30	USA57ASYSINF	**98**	**0.39**	**0.50**	**1.6**	**7.2**	<0.15	<7.5

Notes

All air sample values reported in milligrams per cubic meter (mg/m^3)
TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
DIPE = Di-isopropyl ether

DIPE, ETBE, and TAME were below laboratory reporting limits in all samples.

Analytical Laboratory

Alpha Analytical, Inc. (Alpha [ELAP #2019])

Analytical Methods

TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, TAME, and ETBE analyzed by EPA Method SW8260B

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
4th DPE Event - February/March 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME
02/20/06	07:28	USA57WINF	**3,800**	**65**	**300**	**71**	**740**	**2.7**	**160**	<5.0[1]	<5.0[1]	<5.0[1]
02/20/06	07:42	USA57WGAC1	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
02/20/06	07:39	USA57WEFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
03/03/06	07:25	USA57WSYSINF	**1,100**	**96**	**20**	**30**	**120**	**10**	**47**	<1.0	<1.0	<1.0
03/09/06	07:24	USA57WINF	**510**	**3.1**	**3.3**	**10**	**65**	**1.1**	**23**	<1.0	<1.0	<1.0
03/09/06	07:26	USA57WEFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
03/09/06	07:28	USA57GAC1	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
03/24/06	05:15	USA57WINF	**130**	**2.7**	**1.9**	**2.8**	**27**	<0.50	**28**	<1.0	<1.0	<1.0
03/24/06	05:20	USA57WEFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0

All water sample values reported in micrograms per liter (µg/L)
TPHG = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, and total xylenes
MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
[1] = Reporting limits were increased due to high concentrations of target analytes

Analytical Laboratory
Alpha Analytical , Inc. (ELAP #2019)

Analytical Methods
TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual
BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by
EPA Method SW8260B

TABLE 4
PETROLEUM HYDROCARBON MASS EXTRACTION SUMMARY
4th DPE Event February/March 2006
Former USA Station No. 57
10700 MacArthur Boulevard
Oakland, California

Date	Time Elapsed (days)	Flowrate (cfm)	Influent Concentration (mg/m^3)			Soil Vapor Extraction Rate (lbs/day)			Cumulative Mass (TPHG) Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	Period[1] lbs	Total lbs
Petroleum hydrocarbon mass removed during the previous DPE events									19.789	19.789
02/20/06	--	40.3	690	8.3	<0.60	2.47	0.03	<0.002	--	--
03/03/06	7.34	29.0	480	8.6	0.29	1.24	0.02	0.001	13.608	33.397
03/09/06	5.86	22.4	320	2.0	<0.30	0.64	0.004	<0.001	5.495	38.892
03/24/06	14.57	30.5	98	0.39	<0.15	0.27	0.001	<0.0004	6.578	45.469

Date	Time Elapsed (days)	Volume of groundwater extracted[2], gallons	Influent Concentration (µg/L)			Mass Extracted from groundwater (lbs)			Cumulative Mass Removed	
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	TPHG lbs	MTBE lbs
Petroleum hydrocarbon mass removed during the previous DPE events									0.11076	0.01231
02/20/06	-	48	3,800	65	2.7	0.00152	0.000026	0.000001	0.11228	0.01231
03/03/06	7.34	6,090	1,100	96	10.0	0.12451	0.00409	0.00032	0.23679	0.01263
03/09/06	5.86	2,950	510	3.1	1.1	0.01982	0.00122	0.00014	0.25661	0.01277
03/24/06	14.57	4,300	130	2.7	<0.50	0.01148	0.00010	0.00003	0.26809	0.01280

Sample Calculations

Ext. Rate from Wells (vapor) = $\frac{40.3 \text{ cu ft}}{\text{min}} \times \frac{690 \text{ mg}}{\text{cu meter}} \times \frac{\text{lb}}{453{,}593 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}} \times \frac{\text{cu meter}}{35.314 \text{ cu ft}}$

= 2.47 lbs/day

Mass removed from groundwater = concentration (µg/L) x gallons extracted x (2.2046×10^{-9})(lb/mg) / 0.26418 (gal/L)

[1] For mass estimates between the sampling dates, average mass extraction rate and time elapsed (operational uptime) between the sampling events were used

[2] Volume estimated based on flow totalizer measurements taken on the sampling days. For February 20, 2006, the volume of groundwater extracted was estimated based on the average groundwater extraction rate (0.40 gpm) and time elapsed between the start-up and sample collection

APPENDIX B

FIELD DATA SHEETS

Site Name / Address: Former USA Service Station No. 57 — 10700 McArthur Boulevard

Test Well ID: EX-1, EX-2, EX-3, and EX-4

3" steel

Date: 5-1-06

Test Operators: Chile-Mark

Equipment Model and Serial Nos.: 200 TCAT M1294

PID Model: Mini RAE 2000

Date & Time	Hour Meter Reading hrs	Applied Vacuum ~~"H2O~~ "WC	Inf Air Flow Rate ~~fpm~~ cfm	Dilution Air Flow Rate cfm	Sys Inf Air Flow Rate cfm	Flow totalizer (DPE unit) gallons	Influent Air Temp deg F	Control Temp deg F	Effluent Air Temp deg F	Influent PID ppmv	Effluent PID ppmv	Comments/Notes
Measure DTW in all the monitoring wells prior to commencement of test and also the total depth of test wells. Measure the stinger depth to each extraction well. Measure DTW in all wells after completion of all the tests. Record hour meter reading of the generator at the start and at the end.												
5-1-06 0930	3758.0	24.5	600	0	—	107790	117	1451	250	12	0	USA57W INF 1028
5-3-06 0930	3826.8	24	445	0	—	110790	100	1479	276	15	0	USA57A ~~SYS~~ INF 1045
												USA57A SYS EFF 1040
5-8-06 0600	3923.2	22	531	0	—	112920	108	1450	272	17	0	USA57W EFF 0928 5-4-06
												USA57W GAC 1 0632
5-16-06 0530	4006.8	21	1144	0	—	113780	120	1460	277	50	0	USA57A SYS INF 05-8-06
System Down 5-16-06 Generator out of oil Low oil on Rental Unit												USA57W INF 0645
Full In Engine												
5-22-06 0530	4150.4	21	790	0	—	114830	117	1460	275	43	0	
5/25/06 0730	4190.2	20	985	0	—	115090	108	1452	235	20	0	SYS S/D due to Gen low oil - restart USA57A SYS INF - 0620
0640	4191.1	S/D	SYS	- disconnect, propane @ 80%								USA57W INF - 0635
												USA57W MID - 0637
final	4191.1					115190						Sample lead GAC - 0700

Site N. & Former USA Service Station No. 57
Address 10700 McArthur Boulevard

Test Well ID EX-1, EX-2, EX-3, & EX-4

Date 5-1-06

Test Operators Chuck-Marty

Date & Time	Wellhead/Induced Vacuum ("WC) & Depth to Water (feet bgs)													Comments/Notes
	S-1	S-2	MW-3	MW-4		MW-6		MW-7		MW-8		EX-1	EX-2	
	DTW	DTW	DTW	Vac	DTW	Vac	DTW	Vac	DTW	Vac	DTW	DTW	DTW	
Measure DTW in all the monitoring wells prior to commencement of test and also the total depth of test wells. Measure depth to water before and after installation of the well head modification. Measure the stinger depth to each extraction well. Measure DTW in all monitoring after shutting down.														
0930	9.43	11.37	9.84	N/	M	0	11.00	0	8.41	0	11.16	2.04	8.25	~~DTW~~
5-4-06 0530	9.55	11.04	8.89	\	\	0	11.05	0	8.37	0	11.04	DPE	DPE	~~EX-1~~
														~~EX-2~~
5-5-06 0610	9.58	11.42	9.51	N/	M	0	11.08	0	8.35	0	11.46	DPE	DPE	
									6					
5-6-06 0530	9.63	11.47	9.45	N/	M	0	11.28	0	8.43	0	11.86	DPE	DPE	
5-22-06 0530	9.54	11.39	9.85	N	M	0	11.10	0	8.39	0	11.88	DPE	DPE	

APPENDIX C

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

FILE COPY
COPY

ANALYTICAL REPORT

MAY 15 2006

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6001
Fax: (530) 676-6005
Date Received : 05/02/06

Job#: USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	ND	15 mg/m³	05/01/06	05/02/06
USA 57A SYS EFF	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m³	05/01/06	05/02/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	05/01/06	05/02/06
STR06050247-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	05/01/06	05/02/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	05/01/06	05/02/06
	Benzene	ND	0.15 mg/m³	05/01/06	05/02/06
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	05/01/06	05/02/06
	Toluene	ND	0.15 mg/m³	05/01/06	05/02/06
	Ethylbenzene	ND	0.15 mg/m³	05/01/06	05/02/06
	m,p-Xylene	ND	0.15 mg/m³	05/01/06	05/02/06
	o-Xylene	ND	0.15 mg/m³	05/01/06	05/02/06

Gasoline Range Organics (GRO) C4-C13
Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.10 inches of mercury.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/2/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *04-May-06*

QC Summary Report

Work Order: 06050247

Method Blank Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **06050208.D** Batch ID: **MS15A0502B** Analysis Date: **05/02/2006 10:21**

Sample ID: **MBLK MS15A0502B** Units : **mg/m³** Run ID: **MSD_15_060502A** Prep Date: **05/02/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	2.22		2		111	76	127			
Surr: Toluene-d8	2.02		2		101	84	113			
Surr: 4-Bromofluorobenzene	1.84		2		92	79	119			

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **06050205.D** Batch ID: **MS15A0502B** Analysis Date: **05/02/2006 09:14**

Sample ID: **GLCS MS15A0502B** Units : **mg/m³** Run ID: **MSD_15_060502A** Prep Date: **05/02/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	414	10	400		103	78	127			
Surr: 1,2-Dichloroethane-d4	11.1		10		111	76	127			
Surr: Toluene-d8	10		10		100	84	113			
Surr: 4-Bromofluorobenzene	9.38		10		94	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *04-May-06*

QC Summary Report

Work Order: 06050247

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **06050208.D** Batch ID: **MS15A0502A** Analysis Date: **05/02/2006 10:21**

Sample ID: **MBLK MS15A0502A** Units : **mg/m³** Run ID: **MSD_15_060502A** Prep Date: **05/02/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	5								
Methyl tert-butyl ether (MTBE)	ND	0.1								
Di-isopropyl Ether (DIPE)	ND	0.2								
Ethyl Tertiary Butyl Ether (ETBE)	ND	0.2								
Benzene	ND	0.1								
Tertiary Amyl Methyl Ether (TAME)	ND	0.2								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	2.22		2		111	76	127			
Surr: Toluene-d8	2.02		2		101	84	113			
Surr: 4-Bromofluorobenzene	1.84		2		92	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **06050204.D** Batch ID: **MS15A0502A** Analysis Date: **05/02/2006 08:51**

Sample ID: **LCS MS15A0502A** Units : **mg/m³** Run ID: **MSD_15_060502A** Prep Date: **05/02/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.75	0.1	10		98	81	122			
Toluene	9.94	0.1	10		99	80	120			
Ethylbenzene	10.2	0.1	10		102	80	120			
m,p-Xylene	10.7	0.1	10		107	80	129			
o-Xylene	11	0.1	10		110	80	129			
Surr: 1,2-Dichloroethane-d4	10.7		10		107	76	127			
Surr: Toluene-d8	9.75		10		98	84	113			
Surr: 4-Bromofluorobenzene	9.35		10		94	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **5/2/2006** Date of Notice : **5/2/2006 9:46:50 AM**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**	Project ID : **USA 57**	
Project Manager: **Gowri Kowtha**	Client's EMail: **gkowtha@stratusinc.net**	
	Client's Phone: **(530) 676-6001**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR06050247**	Date Received: **5/2/2006**	Received by: Latricia Edrosa

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	☐ No	
Custody seals intact on shippping container/cooler ?	Yes ☑	☐ No	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	☐ No	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	☐ No	
Chain of custody agrees with sample labels ?	Yes ☑	☐ No	
Sample ID noted by Client on COC ?	Yes ☑	☐ No	
Date and time of collection noted by Client on COC ?	Yes ☑	☐ No	
Samplers's name noted on COC ?	Yes ☑	☐ No	
Internal Chain of Custody (COC) requested ?	Yes ☐	☑ No	
Sub Contract Lab Used :	None ☑	☐ SEM	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	☐ No	Not Present ☐
Samples in proper container/bottle?	Yes ☑	☐ No	
Sample containers intact?	Yes ☑	☐ No	
Sufficient sample volume for indicated test?	Yes ☑	☐ No	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	☐ No	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	☐ No	**NA** °C
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	☐ No	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	☐ No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	☐ No	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	☑ No	
Are there client specific Project requirements ?	Yes ☐	☑ No	If YES : see the Chain of Custody (COC)

Comments : Chain split into two seperate work orders due to different TAT's.

Billing Information :

CHAIN-OF-CUSTODY RECORD

RUSH! Page: 1 of 1

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06050247

Report Due By : 5:00 PM On : 02-May-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6001 x
FAX : (530) 676-6005
EMail : gkowtha@stratusinc.net

Job : USA 57
PO :

EDD Required : Yes

Sampled by : C. Hill

Client's COC # : 08423

Cooler Temp	Samples Received	Date Printed
NA °C	02-May-06	02-May-06

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests						Sample Remarks
STR06050247-01A	USA 57A SYS EFF	AR	05/01/06 10:40	1	0	1		TPH/P_A	VOC_A					TEDLAR
								GAS-N/C	BTEX/OXY					

Comments: Security seals intact. ASAP TAT. Chain split into two seperate work orders due to different TAT's. Send copy of receipt checklist with final report. ;

Logged in by:	Signature	Print Name	Company	Date/Time
	Patricia Edrosa	Patricia Edrosa	Alpha Analytical, Inc.	5/2/06 9:48

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Address 5550 Cumming Pk Dr
City, State, Zip Cumming Pk
Phone Number 530-676-6004 Fax 530-676-6005

255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Page # 1 of 1

99423

Client Name USA 57
Address
City, State, Zip Oakland

P.O. #
PWS #
Phone #
Job #
DWR #
Fax #

Sampled by CHILL
Report Attention Cowan

Analyses Required: TPH/BTEX | 5 OXYS

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers ** See below	TPH/BTEX	5 OXYS							REMARKS
1045	5-1-06	OT	8	USA 57 A SVS INF	1-T	✓	✓							Standard TAT
1040	\	OT	STR060502147-01	USA 57 A SVS EFF	1-T	✓	✓							24 HR TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	5-1-06	1300
Received by	E. Fmuiano	E. Fmuiano	alpha	5-1-06	1300
Relinquished by					
Received by	Latricia Edrosa	Latricia Edrosa	Alpha	5/2/06	9:48
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other

**: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

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FIELD COPY

ANALYTICAL REPORT

MAY 15 2006

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6001
Fax: (530) 676-6005
Date Received : 05/02/06

Job#: USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	37	15 mg/m³	05/01/06	05/04/06
USA 57A SYS INF	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m³	05/01/06	05/04/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	05/01/06	05/04/06
STR06050250-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	05/01/06	05/04/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	05/01/06	05/04/06
	Benzene	5.4	0.15 mg/m³	05/01/06	05/04/06
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	05/01/06	05/04/06
	Toluene	2.3	0.15 mg/m³	05/01/06	05/04/06
	Ethylbenzene	0.58	0.15 mg/m³	05/01/06	05/04/06
	m,p-Xylene	1.9	0.15 mg/m³	05/01/06	05/04/06
	o-Xylene	0.35	0.15 mg/m³	05/01/06	05/04/06

Gasoline Range Organics (GRO) C4-C13
Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.10 inches of mercury.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/9/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *09-May-06*

QC Summary Report

Work Order: 06050250

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **06050407.D** Batch ID: **MS15A0504B** Analysis Date: **05/04/2006 10:15**

Sample ID: **MBLK MS15A0504B** Units : **mg/m³** Run ID: **MSD_15_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	2.4		2		120	76	127			
Surr: Toluene-d8	2.02		2		101	84	113			
Surr: 4-Bromofluorobenzene	1.93		2		97	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **06050405.D** Batch ID: **MS15A0504B** Analysis Date: **05/04/2006 09:31**

Sample ID: **GLCS MS15A0504B** Units : **mg/m³** Run ID: **MSD_15_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	426	10	400		107	78	127			
Surr: 1,2-Dichloroethane-d4	11.7		10		117	76	127			
Surr: Toluene-d8	9.9		10		99	84	113			
Surr: 4-Bromofluorobenzene	9.58		10		96	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 09-May-06

QC Summary Report

Work Order: 06050250

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **06050407.D** Batch ID: **MS15A0504A** Analysis Date: **05/04/2006 10:15**

Sample ID: **MBLK MS15A0504A** Units : **mg/m³** Run ID: **MSD_15_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	5								
Methyl tert-butyl ether (MTBE)	ND	0.1								
Di-isopropyl Ether (DIPE)	ND	0.2								
Ethyl Tertiary Butyl Ether (ETBE)	ND	0.2								
Benzene	ND	0.1								
Tertiary Amyl Methyl Ether (TAME)	ND	0.2								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	2.4		2		120	76	127			
Surr: Toluene-d8	2.02		2		101	84	113			
Surr: 4-Bromofluorobenzene	1.93		2		97	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **06050404.D** Batch ID: **MS15A0504A** Analysis Date: **05/04/2006 09:08**

Sample ID: **LCS MS15A0504A** Units : **mg/m³** Run ID: **MSD_15_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.5	0.1	10		95	81	122			
Toluene	9.7	0.1	10		97	80	120			
Ethylbenzene	10	0.1	10		100	80	120			
m,p-Xylene	10.6	0.1	10		106	80	129			
o-Xylene	10.8	0.1	10		108	80	129			
Surr: 1,2-Dichloroethane-d4	11.6		10		116	76	127			
Surr: Toluene-d8	9.48		10		95	84	113			
Surr: 4-Bromofluorobenzene	9.47		10		95	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **5/10/2006** Date of Notice : **5/2/2006 10:56:07 A**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**	Project ID : **USA 57**	
Project Manager: **Gowri Kowtha**	Client's EMail: **gkowtha@stratusinc.net**	
	Client's Phone: **(530) 676-6001**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR06050250**	Date Received: **5/2/2006**	Received by: Latricia Edrosa

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	☐ No	
Custody seals intact on shippping container/cooler ?	Yes ☑	☐ No	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	☐ No	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	☐ No	
Chain of custody agrees with sample labels ?	Yes ☑	☐ No	
Sample ID noted by Client on COC ?	Yes ☑	☐ No	
Date and time of collection noted by Client on COC ?	Yes ☑	☐ No	
Samplers's name noted on COC ?	Yes ☑	☐ No	
Internal Chain of Custody (COC) requested ?	Yes ☐	☑ No	
Sub Contract Lab Used :	None ☑	☐ SEM	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	☐ No	Not Present ☐
Samples in proper container/bottle?	Yes ☑	☐ No	
Sample containers intact?	Yes ☑	☐ No	
Sufficient sample volume for indicated test?	Yes ☑	☐ No	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	☐ No	
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	☐ No	Cooler Temperature **NA °C**
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	☐ No	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	☐ No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	☐ No	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	☑ No	
Are there client specific Project requirements ?	Yes ☐	☑ No	If YES : see the Chain of Custody (COC)

Comments : Chain split into two seperate work orders due to different TAT's.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06050250

Report Due By : 5:00 PM On : 10-May-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6001 x
FAX : (530) 676-6005
EMail : gkowtha@stratusinc.net

Job : USA 57
PO :

Client's COC # : 08423

EDD Required : Yes

Sampled by : C. Hill

Cooler Temp	Samples Received	Date Printed
NA °C	02-May-06	02-May-06

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_A	VOC_A			Sample Remarks
STR06050250-01A	USA 57A SYS INF	AR	05/01/06 10:45	1	0	6		GAS-N/C	BTEX/OXY			TEDLAR

Comments: Security seals intact. Chain split into two seperate work orders due to different TAT's. Send copy of receipt checklist with final report.

Logged in by: Signature: Patricia Ednasa Print Name: Patricia Ednasa Company: Alpha Analytical, Inc. Date/Time: 5/2/06 10:55

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Name Stantec EMC
Address 3330 Cameron Park Dr
City, State, Zip Cameron Park
Phone Number 530 676 6004 Fax 530 676 6005

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Page # 1 of 1

Client Name USA 57	P.O. #	Job #
Address	PWS #	DWR #
City, State, Zip Oakland	Phone #	Fax #

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers ** See below	TPHd/BTEX	5 OXYS	REMARKS
1045	5-1-06	WT	STR0050250-01	USA 57 A SVS INF	1-T	X	X	Standard TAT
1040	1	OT		USA 57A SVS EFF	1-T	X	X	24 HR TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHILL	Stantec	5-1-06	1300
Received by	E. Fruciano	E. Fruciano	alpha	5-1-06	1300
Relinquished by					
Received by	Patricia Edrosa	Patricia Edrosa	Alpha	5/2/06	10:55
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

FILE COPY

ANALYTICAL REPORT

MAY 15 2006

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6001
Fax: (530) 676-6005
Date Received : 05/02/06

Job#: USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration		Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	990		200 µg/L	05/01/06	05/04/06
USA 57W INF	Tertiary Butyl Alcohol (TBA)	66		20 µg/L	05/01/06	05/04/06
Lab ID :	Methyl tert-butyl ether (MTBE)	12		1.0 µg/L	05/01/06	05/04/06
STR06050249-01A	Di-isopropyl Ether (DIPE)	ND	V	2.0 µg/L	05/01/06	05/04/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	2.0 µg/L	05/01/06	05/04/06
	Benzene	170		1.0 µg/L	05/01/06	05/04/06
	Tertiary Amyl Methyl Ether (TAME)	ND	V	2.0 µg/L	05/01/06	05/04/06
	Toluene	96		1.0 µg/L	05/01/06	05/04/06
	Ethylbenzene	15		1.0 µg/L	05/01/06	05/04/06
	m,p-Xylene	140		1.0 µg/L	05/01/06	05/04/06
	o-Xylene	65		1.0 µg/L	05/01/06	05/04/06

Gasoline Range Organics (GRO) C4-C13
Reported in micrograms per liter, per client request.
V = Reporting Limits were increased due to high concentrations of target analytes.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/9/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: STR06050249 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
06050249-01A	USA 57W INF	Aqueous	2

5/9/06

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *09-May-06*

QC Summary Report

Work Order: 06050249

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050413.D** Batch ID: **MS09W0504B** Analysis Date: **05/04/2006 15:19**

Sample ID: **MBLK MS09W0504B** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.65		10		97	76	127			
Surr: Toluene-d8	10.9		10		109	84	113			
Surr: 4-Bromofluorobenzene	10.2		10		102	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050411.D** Batch ID: **MS09W0504B** Analysis Date: **05/04/2006 14:32**

Sample ID: **GLCS MS09W0504B** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	344	50	400		86	78	127			
Surr: 1,2-Dichloroethane-d4	9.8		10		98	76	127			
Surr: Toluene-d8	10.8		10		108	84	113			
Surr: 4-Bromofluorobenzene	10.2		10		102	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050420.D** Batch ID: **MS09W0504B** Analysis Date: **05/04/2006 18:03**

Sample ID: **06050251-02AGS** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1910	250	2000	0	95	70	139			
Surr: 1,2-Dichloroethane-d4	50.5		50		101	76	127			
Surr: Toluene-d8	53.4		50		107	84	113			
Surr: 4-Bromofluorobenzene	51		50		102	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050421.D** Batch ID: **MS09W0504B** Analysis Date: **05/04/2006 18:27**

Sample ID: **06050251-02AGSD** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1920	250	2000	0	96	70	139	1906	0.8(12)	
Surr: 1,2-Dichloroethane-d4	50		50		100	76	127			
Surr: Toluene-d8	53.2		50		106	84	113			
Surr: 4-Bromofluorobenzene	51.3		50		103	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Reported in micrograms per liter, per client request.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 09-May-06

QC Summary Report

Work Order: 06050249

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050413.D** Batch ID: **MS09W0504A** Analysis Date: **05/04/2006 15:19**

Sample ID: **MBLK MS09W0504A** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	9.65		10		97	76	127			
Surr: Toluene-d8	10.9		10		109	84	113			
Surr: 4-Bromofluorobenzene	10.2		10		102	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050412.D** Batch ID: **MS09W0504A** Analysis Date: **05/04/2006 14:55**

Sample ID: **LCS MS09W0504A** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	8.87	0.5	10		89	81	122			
Toluene	10.4	0.5	10		104	80	120			
Ethylbenzene	9.98	0.5	10		99.8	80	120			
m,p-Xylene	11.1	0.5	10		111	80	129			
o-Xylene	10.1	0.5	10		101	80	129			
Surr: 1,2-Dichloroethane-d4	10.2		10		102	76	127			
Surr: Toluene-d8	10.6		10		106	84	113			
Surr: 4-Bromofluorobenzene	10		10		100	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050418.D** Batch ID: **MS09W0504A** Analysis Date: **05/04/2006 17:17**

Sample ID: **06050251-02AMS** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	41.6	1.3	50	0	83	74	125			
Toluene	49	1.3	50	0	98	76	120			
Ethylbenzene	46.9	1.3	50	0	94	77	124			
m,p-Xylene	51.7	1.3	50	0	103	73	130			
o-Xylene	48.1	1.3	50	0	96	74	131			
Surr: 1,2-Dichloroethane-d4	52.4		50		105	76	127			
Surr: Toluene-d8	52.7		50		105	84	113			
Surr: 4-Bromofluorobenzene	49.5		50		99	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060504\06050419.D** Batch ID: **MS09W0504A** Analysis Date: **05/04/2006 17:40**

Sample ID: **06050251-02AMSD** Units : **µg/L** Run ID: **MSD_09_060504A** Prep Date: **05/04/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	43.5	1.3	50	0	87	74	125	41.61	4.3(13)	
Toluene	51.2	1.3	50	0	102	76	120	48.97	4.5(13)	
Ethylbenzene	49	1.3	50	0	98	77	124	46.91	4.3(13)	
m,p-Xylene	54.1	1.3	50	0	108	73	130	51.74	4.4(14)	
o-Xylene	50.3	1.3	50	0	101	74	131	48.1	4.4(13)	
Surr: 1,2-Dichloroethane-d4	52.7		50		105	76	127			
Surr: Toluene-d8	52.7		50		105	84	113			
Surr: 4-Bromofluorobenzene	49.6		50		99	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **5/10/2006** Date of Notice : **5/2/2006 10:51:40 A**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**	Project ID : **USA 57**	
Project Manager: **Gowri Kowtha**	Client's EMail: **gkowtha@stratusinc.net**	
	Client's Phone: **(530) 676-6001**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR06050249**	Date Received: **5/2/2006**	Received by: Latricia Edrosa

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	No ☐	
Custody seals intact on shippping container/cooler ?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	No ☐	
Chain of custody agrees with sample labels ?	Yes ☑	No ☐	
Sample ID noted by Client on COC ?	Yes ☑	No ☐	
Date and time of collection noted by Client on COC ?	Yes ☑	No ☐	
Samplers's name noted on COC ?	Yes ☑	No ☐	
Internal Chain of Custody (COC) requested ?	Yes ☐	No ☑	
Sub Contract Lab Used :	None ☑	SEM ☐	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	No ☐	4 °C
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	No ☐	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	No ☑	
Are there client specific Project requirements ?	Yes ☐	No ☑	If YES : see the Chain of Custody (COC)

Comments :

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06050249

Report Due By : 5:00 PM On : 10-May-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6001 x
FAX : (530) 676-6005
EMail : gkowtha@stratusinc.net

Job : USA 57
PO :

EDD Required : **Yes**

Sampled by : C. Hill

Client's COC # : none

Cooler Temp	Samples Received	Date Printed
4 °C	02-May-06	**02-May-06**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_W	VOC_W			Sample Remarks
STR06050249-01A	USA 57W INF	AQ	05/01/06 10:28	5	0	6		GAS-C	BTEX/OXY_C			

Comments: Security seals intact. Frozen ice. Send copy of receipt checklist with final report. ;

Logged in by:	Signature	Print Name	Company	Date/Time
	Patricia Edrosa	Patricia Edrosa	Alpha Analytical, Inc.	5/2/06 10:52

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name Stratus ENV
Address 3330 Cameron PK DR
City, State, Zip Cameron PK
Phone Number 5306766004 Fax 5306766005

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA ✓ NV ___ WA ___
ID ___ OR ___ OTHER ___

Page # 1 of 1

Client Name USA 57	P.O. #
	Job #
Address	EMail Address
City, State, Zip Oakland	Phone #
	Fax #
Sampled by CHILL	Report Attention Cowan

Analyses Required

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPHG/BTEX	5 Oxys						REMARKS
1025	5-1-06	AQ	STR06050249-01	USA 57 W INF	STD		5V	X	X						

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	5-1-06	1300
Received by	E Friciano	E.Friciano	alpha	5-1-06	1300
Relinquished by					
Received by	Latricia Edrosa	Latricia Edrosa	Alpha	5/2/06	10:52
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other

**: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

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ANALYTICAL REPORT

MAY 15 2006

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6001
Fax: (530) 676-6005
Date Received : 05/05/06

Job#: USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	ND	50 µg/L	05/04/06	05/05/06
USA 57 W EFF	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	05/04/06	05/05/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	05/04/06	05/05/06
STR06050523-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	05/04/06	05/05/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	05/04/06	05/05/06
	Benzene	ND	0.50 µg/L	05/04/06	05/05/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	05/04/06	05/05/06
	Toluene	ND	0.50 µg/L	05/04/06	05/05/06
	Ethylbenzene	ND	0.50 µg/L	05/04/06	05/05/06
	m,p-Xylene	ND	0.50 µg/L	05/04/06	05/05/06
	o-Xylene	ND	0.50 µg/L	05/04/06	05/05/06

Gasoline Range Organics (GRO) C4-C13
Reported in micrograms per liter, per client request.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/5/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: STR06050523 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
06050523-01A	USA 57 W EFF	Aqueous	2

5/5/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 08-May-06

QC Summary Report

Work Order: 06050523

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050506.D** Batch ID: **MS09W0505A** Analysis Date: **05/05/2006 10:58**

Sample ID: **MBLK MS09W0505A** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	10.2		10		102	76	127			
Surr: Toluene-d8	10.6		10		106	84	113			
Surr: 4-Bromofluorobenzene	10		10		100	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050504.D** Batch ID: **MS09W0505A** Analysis Date: **05/05/2006 10:11**

Sample ID: **LCS MS09W0505A** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	8.97	0.5	10		90	81	122			
Toluene	10.3	0.5	10		103	80	120			
Ethylbenzene	10.1	0.5	10		101	80	120			
m,p-Xylene	10.9	0.5	10		109	80	129			
o-Xylene	10.4	0.5	10		104	80	129			
Surr: 1,2-Dichloroethane-d4	10.8		10		108	76	127			
Surr: Toluene-d8	10.3		10		103	84	113			
Surr: 4-Bromofluorobenzene	9.47		10		95	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050508.D** Batch ID: **MS09W0505A** Analysis Date: **05/05/2006 11:45**

Sample ID: **06050331-01AMS** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	46.4	1.3	50	0	93	74	125			
Toluene	53.8	1.3	50	0	108	76	120			
Ethylbenzene	52.1	1.3	50	0	104	77	124			
m,p-Xylene	56.6	1.3	50	0	113	73	130			
o-Xylene	53.6	1.3	50	0	107	74	131			
Surr: 1,2-Dichloroethane-d4	53.4		50		107	76	127			
Surr: Toluene-d8	51.9		50		104	84	113			
Surr: 4-Bromofluorobenzene	48.6		50		97	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050509.D** Batch ID: **MS09W0505A** Analysis Date: **05/05/2006 12:09**

Sample ID: **06050331-01AMSD** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	44.5	1.3	50	0	89	74	125	46.43	4.2(13)	
Toluene	52.1	1.3	50	0	104	76	120	53.76	3.1(13)	
Ethylbenzene	50.6	1.3	50	0	101	77	124	52.12	3.0(13)	
m,p-Xylene	55.7	1.3	50	0	111	73	130	56.61	1.7(14)	
o-Xylene	51.6	1.3	50	0	103	74	131	53.55	3.7(13)	
Surr: 1,2-Dichloroethane-d4	53.3		50		107	76	127			
Surr: Toluene-d8	52.3		50		105	84	113			
Surr: 4-Bromofluorobenzene	49.1		50		98	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *09-May-06*

QC Summary Report

Work Order: 06050523

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050506.D** Batch ID: **MS09W0505B** Analysis Date: **05/05/2006 10:58**

Sample ID: **MBLK MS09W0505B** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.2		10		102	76	127			
Surr: Toluene-d8	10.6		10		106	84	113			
Surr: 4-Bromofluorobenzene	10		10		100	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050505.D** Batch ID: **MS09W0505B** Analysis Date: **05/05/2006 10:34**

Sample ID: **GLCS MS09W0505B** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	380	50	400		95	78	127			
Surr: 1,2-Dichloroethane-d4	10.3		10		103	76	127			
Surr: Toluene-d8	10.5		10		105	84	113			
Surr: 4-Bromofluorobenzene	10.1		10		101	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050510.D** Batch ID: **MS09W0505B** Analysis Date: **05/05/2006 12:32**

Sample ID: **06050331-01AGS** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1950	250	2000	0	98	70	139			
Surr: 1,2-Dichloroethane-d4	50.7		50		101	76	127			
Surr: Toluene-d8	52.8		50		106	84	113			
Surr: 4-Bromofluorobenzene	51.2		50		102	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060505\06050511.D** Batch ID: **MS09W0505B** Analysis Date: **05/05/2006 12:56**

Sample ID: **06050331-01AGSD** Units : **µg/L** Run ID: **MSD_09_060505A** Prep Date: **05/05/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2040	250	2000	0	102	70	139	1954	4.1(12)	
Surr: 1,2-Dichloroethane-d4	50.5		50		101	76	127			
Surr: Toluene-d8	52.9		50		106	84	113			
Surr: 4-Bromofluorobenzene	51.6		50		103	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Reported in micrograms per liter, per client request.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **5/5/2006** Date of Notice : **5/5/2006 9:17:15 AM**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**	Project ID : **USA 57**	
Project Manager: **Gowri Kowtha**	Client's EMail: **gkowtha@stratusinc.net**	
	Client's Phone: **(530) 676-6001**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR06050523**	Date Received: **5/5/2006**	Received by: Tasha Pascal

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	No ☐	
Custody seals intact on shippping container/cooler ?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	No ☐	
Chain of custody agrees with sample labels ?	Yes ☑	No ☐	
Sample ID noted by Client on COC ?	Yes ☑	No ☐	
Date and time of collection noted by Client on COC ?	Yes ☑	No ☐	
Samplers's name noted on COC ?	Yes ☑	No ☐	
Internal Chain of Custody (COC) requested ?	Yes ☐	No ☑	
Sub Contract Lab Used :	None ☑	SEM ☐	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	No ☐	4°C
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	No ☐	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	No ☑	
Are there client specific Project requirements ?	Yes ☐	No ☑	If YES : see the Chain of Custody (COC)

Comments :

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Page: 1 of 1

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06050523

Report Due By : 5:00 PM On : 05-May-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861
Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6001 x
FAX : (530) 676-6005
EMail : gkowtha@stratusinc.net

Job : USA 57
PO :

EDD Required : **Yes**

Sampled by : C. Hill

Client's COC # : 07939

Cooler Temp	Samples Received	Date Printed
4 °C	05-May-06	05-May-06

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_W	VOC_W	Sample Remarks
								✓	✓	
STR06050523-01A	USA 57 W EFF	AQ	05/04/06 06:28	5	0	1		GAS-C	BTEX/OXY_C	

Comments: Security seals intact. Frozen ice. Chain split due to different TAT. ASAP TAT. Send copy of receipt checklist with final report. :

Logged in by:	Signature	Print Name	Company	Date/Time
	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	5/5/06 9:15

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Address 2110 Cameron Park DR
City, State, Zip Cameron Pk
Phone Number 5306766664 Fax 5306766665

255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Page # 1 of 1

07939

Client Name USA 57	P.O. #	Job #
Address	PWS #	DWR #
City, State, Zip Oakland	Phone #	Fax #
Sampled by CHILL	Report Attention Connie	

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers ** See below	TPHG/BTEX	5 OXYS	REMARKS
0625	5406	AQ	STR0605052 3-01	USA57 W EFF (USA57 W EFF)	5-V	X	X	24 HR TAT
0632	5406	AQ		USA57 W CAC1	5-V	X	X	Std TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHILL	STANTEC	5.4.06	1315
Received by		Lisa Bryles	ALPHA ANALYTICAL	5-4-06	1315
Relinquished by		Tasha Pascal	Alpha		
Received by				5/5/06	9:15
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6001
Fax: (530) 676-6005
Date Received : 05/05/06

MAY 2 2 2006

Job#: USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	ND	50 µg/L	05/04/06	05/08/06
USA 57 W GAC 1	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	05/04/06	05/08/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	05/04/06	05/08/06
STR06050524-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	05/04/06	05/08/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	05/04/06	05/08/06
	Benzene	ND	0.50 µg/L	05/04/06	05/08/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	05/04/06	05/08/06
	Toluene	ND	0.50 µg/L	05/04/06	05/08/06
	Ethylbenzene	ND	0.50 µg/L	05/04/06	05/08/06
	m,p-Xylene	ND	0.50 µg/L	05/04/06	05/08/06
	o-Xylene	ND	0.50 µg/L	05/04/06	05/08/06

Gasoline Range Organics (GRO) C4-C13
Reported in micrograms per liter, per client request.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/12/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: STR06050524 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
06050524-01A	USA 57 W GAC 1	Aqueous	4

5/12/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 16-May-06

QC Summary Report

Work Order: 06050524

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050806.D** Batch ID: **MS09W0508B** Analysis Date: **05/08/2006 13:34**

Sample ID: **MBLK MS09W0508B** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.5		10		105	76	127			
Surr: Toluene-d8	10.2		10		102	84	113			
Surr: 4-Bromofluorobenzene	9.85		10		99	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050805.D** Batch ID: **MS09W0508B** Analysis Date: **05/08/2006 13:11**

Sample ID: **GLCS MS09W0508B** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	430	50	400		108	78	127			
Surr: 1,2-Dichloroethane-d4	10.8		10		108	76	127			
Surr: Toluene-d8	10.2		10		102	84	113			
Surr: 4-Bromofluorobenzene	9.82		10		98	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050809.D** Batch ID: **MS09W0508B** Analysis Date: **05/08/2006 14:43**

Sample ID: **06050350-01AGS** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2010	250	2000	0	100	70	139			
Surr: 1,2-Dichloroethane-d4	51.3		50		103	76	127			
Surr: Toluene-d8	51.5		50		103	84	113			
Surr: 4-Bromofluorobenzene	51		50		102	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050810.D** Batch ID: **MS09W0508B** Analysis Date: **05/08/2006 15:06**

Sample ID: **06050350-01AGSD** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2030	250	2000	0	101	70	139	2006	1.1(12)	
Surr: 1,2-Dichloroethane-d4	51.3		50		103	76	127			
Surr: Toluene-d8	52.1		50		104	84	113			
Surr: 4-Bromofluorobenzene	50.8		50		102	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Reported in micrograms per liter, per client request.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 16-May-06

QC Summary Report

Work Order: 06050524

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050806.D** Batch ID: **MS09W0508A** Analysis Date: **05/08/2006 13:34**

Sample ID: **MBLK MS09W0508A** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	10.5		10		105	76	127			
Surr: Toluene-d8	10.2		10		102	84	113			
Surr: 4-Bromofluorobenzene	9.85		10		99	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050804.D** Batch ID: **MS09W0508A** Analysis Date: **05/08/2006 12:49**

Sample ID: **LCS MS09W0508A** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	100	5	100		100	50	156			
Methyl tert-butyl ether (MTBE)	9.62	0.5	10		96	62	138			
Di-isopropyl Ether (DIPE)	10.3	1	10		103	67	143			
Ethyl Tertiary Butyl Ether (ETBE)	10.3	1	10		103	72	137			
Benzene	9.5	0.5	10		95	81	122			
Tertiary Amyl Methyl Ether (TAME)	10.4	1	10		104	71	139			
Toluene	10.4	0.5	10		104	80	120			
Ethylbenzene	10.1	0.5	10		101	80	120			
m,p-Xylene	11	0.5	10		110	80	129			
o-Xylene	10.4	0.5	10		104	80	129			
Surr: 1,2-Dichloroethane-d4	11		10		110	76	127			
Surr: Toluene-d8	10.1		10		101	84	113			
Surr: 4-Bromofluorobenzene	9.75		10		98	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050807.D** Batch ID: **MS09W0508A** Analysis Date: **05/08/2006 13:57**

Sample ID: **06050350-01AMS** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	565	25	500	0	113	58	159			
Methyl tert-butyl ether (MTBE)	60.8	1.3	50	11.54	99	59	145			
Di-isopropyl Ether (DIPE)	50.3	2.5	50	0	101	67	143			
Ethyl Tertiary Butyl Ether (ETBE)	50.9	2.5	50	0	102	72	139			
Benzene	46	1.3	50	0	92	74	125			
Tertiary Amyl Methyl Ether (TAME)	51.2	2.5	50	0	102	70	143			
Toluene	50.9	1.3	50	0	102	76	120			
Ethylbenzene	48.9	1.3	50	0	98	77	124			
m,p-Xylene	54	1.3	50	0	108	73	130			
o-Xylene	50.5	1.3	50	0	101	74	131			
Surr: 1,2-Dichloroethane-d4	54.5		50		109	76	127			
Surr: Toluene-d8	51.4		50		103	84	113			
Surr: 4-Bromofluorobenzene	49		50		98	79	119			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *16-May-06*

QC Summary Report

Work Order: 06050524

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\060508\06050808.D** Batch ID: **MS09W0508A** Analysis Date: **05/08/2006 14:19**

Sample ID: **06050350-01AMSD** Units : **µg/L** Run ID: **MSD_09_060508A** Prep Date: **05/08/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	523	25	500	0	105	58	159	564.6	7.7(28)	
Methyl tert-butyl ether (MTBE)	59.7	1.3	50	11.54	96	59	145	60.8	1.8(21)	
Di-isopropyl Ether (DIPE)	49.7	2.5	50	0	99	67	143	50.26	1.1(16)	
Ethyl Tertiary Butyl Ether (ETBE)	50.4	2.5	50	0	101	72	139	50.88	1.1(18)	
Benzene	45.3	1.3	50	0	91	74	125	45.97	1.4(13)	
Tertiary Amyl Methyl Ether (TAME)	51.1	2.5	50	0	102	70	143	51.17	0.2(19)	
Toluene	50.5	1.3	50	0	101	76	120	50.94	0.9(13)	
Ethylbenzene	48.6	1.3	50	0	97	77	124	48.91	0.7(13)	
m,p-Xylene	53.8	1.3	50	0	108	73	130	53.96	0.2(14)	
o-Xylene	50	1.3	50	0	99.9	74	131	50.53	1.2(13)	
Surr: 1,2-Dichloroethane-d4	53.4		50		107	76	127			
Surr: Toluene-d8	51		50		102	84	113			
Surr: 4-Bromofluorobenzene	48.7		50		97	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **5/15/2006** Date of Notice : **5/5/2006 9:31:41 AM**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**	Project ID : **USA 57**	
Project Manager: **Gowri Kowtha**	Client's EMail: **gkowtha@stratusinc.net**	
	Client's Phone: **(530) 676-6001**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR06050524**	Date Received: **5/5/2006**	Received by: Tasha Pascal

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	No ☐	
Custody seals intact on shippping container/cooler ?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	No ☐	
Chain of custody agrees with sample labels ?	Yes ☑	No ☐	
Sample ID noted by Client on COC ?	Yes ☑	No ☐	
Date and time of collection noted by Client on COC ?	Yes ☑	No ☐	
Samplers's name noted on COC ?	Yes ☑	No ☐	
Internal Chain of Custody (COC) requested ?	Yes ☐	No ☑	
Sub Contract Lab Used :	None ☑	SEM ☐	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	No ☐	4°C
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	No ☐	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	No ☑	
Are there client specific Project requirements ?	Yes ☐	No ☑	If YES : see the Chain of Custody (COC)

Comments :

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06050524

Report Due By : 5:00 PM On : 15-May-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6001 x
FAX : (530) 676-6005
EMail : gkowtha@stratusinc.net

Job : USA 57
PO :

Client's COC # : 07939

EDD Required : **Yes**

Sampled by : C. Hill

Cooler Temp	Samples Received	Date Printed
4 °C	05-May-06	05-May-06

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_W	VOC_W	Sample Remarks
STR06050524-01A	USA 57 W GAC 1	AQ	05/04/06 06:32	5	0	6		GAS-C	BTEX/OXY_C	

Comments: Security seals intact. Frozen ice. Chain split due to different TAT. Send copy of receipt checklist with final report. :

Logged in by:	Signature	Print Name	Company	Date/Time
	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	5/5/06 9:30

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Name Stantec ENV
Address 3338 Cameron Park Dr
City, State, Zip Cameron Pk
Phone Number 5306666444 Fax 5306676005

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Page # 1 of 1

07939

Client Name USA 57		P.O. #	Job #
Address		PWS #	DWR #
City, State, Zip Oakland		Phone #	Fax #
Sampled by CHILL		Report Attention Connie	

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers ** See below	Analyses Required: TPH6 BTEX	Analyses Required: 5 OXYS	REMARKS
0629	5406	AQ		USA57 W EFF (USA57 W EFF)	5-V	X	X	24 HR TAT
0632	5406	AQ	STR06050524-01	USA57 W CAC1	5-V	X	X	Std TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHILL	Stantec	5.4.06	1315
Received by	Lisa Bryden	Lisa Bryden	ALPHA ANALYTICAL	5-4-06	1317
Relinquished by					
Received by	Tasha Pascal	Tasha Pascal	Alpha	5/5/06	9:30
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other

**: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

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FILE COPY

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6001
Fax: (530) 676-6005
Date Received : 05/09/06

JUN 1 0 2006

Job#: USA57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

Client ID :
USA 57 W INF
Lab ID :
STR06051040-01A

Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
TPH-P (GRO)	110	50 µg/L	05/08/06	05/12/06
Tertiary Butyl Alcohol (TBA)	29	10 µg/L	05/08/06	05/12/06
Methyl tert-butyl ether (MTBE)	0.61	0.50 µg/L	05/08/06	05/12/06
Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	05/08/06	05/12/06
Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	05/08/06	05/12/06
Benzene	0.61	0.50 µg/L	05/08/06	05/12/06
Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	05/08/06	05/12/06
Toluene	ND	0.50 µg/L	05/08/06	05/12/06
Ethylbenzene	0.66	0.50 µg/L	05/08/06	05/12/06
m,p-Xylene	7.7	0.50 µg/L	05/08/06	05/12/06
o-Xylene	3.4	0.50 µg/L	05/08/06	05/12/06

Gasoline Range Organics (GRO) C4-C13
Reported in micrograms per liter, per client request.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/16/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: STR06051040 **Project:** USA57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
06051040-01A	USA 57 W INF	Aqueous	2

5/16/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 20-May-06

QC Summary Report

Work Order: 06051040

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051206.D** Batch ID: **MS12W0512B** Analysis Date: **05/12/2006 13:19**

Sample ID: **MBLK MS12W0512B** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.2		10		112	76	127			
Surr: Toluene-d8	9.45		10		95	84	113			
Surr: 4-Bromofluorobenzene	9.05		10		91	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051204.D** Batch ID: **MS12W0512B** Analysis Date: **05/12/2006 12:37**

Sample ID: **GLCS MS12W0512B** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	422	50	400		105	78	127			
Surr: 1,2-Dichloroethane-d4	11.2		10		112	76	127			
Surr: Toluene-d8	9.38		10		94	84	113			
Surr: 4-Bromofluorobenzene	9.32		10		93	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051221.D** Batch ID: **MS12W0512B** Analysis Date: **05/12/2006 18:33**

Sample ID: **06051040-01AGS** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2190	250	2000	108.4	104	70	139			
Surr: 1,2-Dichloroethane-d4	56.3		50		113	76	127			
Surr: Toluene-d8	47.1		50		94	84	113			
Surr: 4-Bromofluorobenzene	47		50		94	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051222.D** Batch ID: **MS12W0512B** Analysis Date: **05/12/2006 18:54**

Sample ID: **06051040-01AGSD** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2170	250	2000	108.4	103	70	139	2193	1.2(12)	
Surr: 1,2-Dichloroethane-d4	56.2		50		112	76	127			
Surr: Toluene-d8	47.3		50		95	84	113			
Surr: 4-Bromofluorobenzene	46.7		50		93	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Reported in micrograms per liter, per client request.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 20-May-06

QC Summary Report

Work Order: 06051040

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051206.D** Batch ID: **MS12W0512A** Analysis Date: **05/12/2006 13:19**

Sample ID: **MBLK MS12W0512A** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	11.2		10		112	76	127			
Surr: Toluene-d8	9.45		10		95	84	113			
Surr: 4-Bromofluorobenzene	9.05		10		91	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051205.D** Batch ID: **MS12W0512A** Analysis Date: **05/12/2006 12:58**

Sample ID: **LCS MS12W0512A** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.99	0.5	10		99.9	81	122			
Toluene	9.82	0.5	10		98	80	120			
Ethylbenzene	10.6	0.5	10		106	80	120			
m,p-Xylene	10.8	0.5	10		108	80	129			
o-Xylene	9.99	0.5	10		99.9	80	129			
Surr: 1,2-Dichloroethane-d4	10.9		10		109	76	127			
Surr: Toluene-d8	9.82		10		98	84	113			
Surr: 4-Bromofluorobenzene	9.45		10		95	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051219.D** Batch ID: **MS12W0512A** Analysis Date: **05/12/2006 17:51**

Sample ID: **06051040-01AMS** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	49	1.3	50	0.61	97	74	125			
Toluene	47.2	1.3	50	0	94	76	120			
Ethylbenzene	51.6	1.3	50	0.66	102	77	124			
m,p-Xylene	59.4	1.3	50	7.74	103	73	130			
o-Xylene	51.7	1.3	50	3.36	97	74	131			
Surr: 1,2-Dichloroethane-d4	55.8		50		112	76	127			
Surr: Toluene-d8	47.9		50		96	84	113			
Surr: 4-Bromofluorobenzene	47.5		50		95	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060512\06051220.D** Batch ID: **MS12W0512A** Analysis Date: **05/12/2006 18:12**

Sample ID: **06051040-01AMSD** Units : **µg/L** Run ID: **MSD_12_060512A** Prep Date: **05/12/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	48.8	1.3	50	0.61	96	74	125	49.02	0.4(13)	
Toluene	47.2	1.3	50	0	94	76	120	47.24	0.1(13)	
Ethylbenzene	51.7	1.3	50	0.66	102	77	124	51.62	0.1(13)	
m,p-Xylene	59.5	1.3	50	7.74	104	73	130	59.39	0.3(14)	
o-Xylene	51.6	1.3	50	3.36	96	74	131	51.67	0.2(13)	
Surr: 1,2-Dichloroethane-d4	55.5		50		111	76	127			
Surr: Toluene-d8	48		50		96	84	113			
Surr: 4-Bromofluorobenzene	47.6		50		95	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **5/17/2006**

Date of Notice : **5/10/2006 10:09:54**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**

Project ID : **USA57**

Project Manager: **Gowri Kowtha**

Client's EMail: **gkowtha@stratusinc.net**

Client's Phone: **(530) 676-6001**

Client's FAX: **(530) 676-6005**

Work Order Number: **STR06051040**

Date Received: **5/9/2006**

Received by: Latricia Edrosa

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	No ☐	
Custody seals intact on shippping container/cooler ?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	No ☐	
Chain of custody agrees with sample labels ?	Yes ☑	No ☐	
Sample ID noted by Client on COC ?	Yes ☑	No ☐	
Date and time of collection noted by Client on COC ?	Yes ☑	No ☐	
Samplers's name noted on COC ?	Yes ☑	No ☐	
Internal Chain of Custody (COC) requested ?	Yes ☐	No ☑	
Sub Contract Lab Used :	None ☑	SEM ☐	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	No ☐	Cooler Temperature 4°C
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	No ☐	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	No ☑	
Are there client specific Project requirements ?	Yes ☐	No ☑	If YES : see the Chain of Custody (COC)

Comments : Recieved 5/9 kept cold and secure until login on 5/10.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06051040

Report Due By : 5:00 PM On : 17-May-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6001 x
FAX : (530) 676-6005
EMail : gkowtha@stratusinc.net

Job : USA57
PO :

Client's COC # : 8386

EDD Required : Yes

Sampled by : C Hill

Cooler Temp	Samples Received	Date Printed
4 °C	09-May-06	10-May-06

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_W	VOC_W						Sample Remarks
STR06051040-01A	USA 57 W INF	AQ	05/08/06 06:45	5	0	6		GAS-C	BTEX/OXY_C						

Comments: Security seals intact. Frozen ice. Recieved 5/9 kept cold and secure until login on 5/10. :

Logged in by:	Signature	Print Name	Company	Date/Time
	Patricia Edrosa	Patricia Edrosa	Alpha Analytical, Inc.	5/10/06 9:54

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name Stratus EWV
Address 3330 Cameron Pk DR
City, State, Zip Cameron Pk
Phone Number 5306761004 Fax 5306766005

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___
ID ___ OR ___ OTHER ___
Page # 1 of 1

8386

Client Name USA 57
P.O. #
Job #
Address
EMail Address
City, State, Zip Oakland
Phone #
Fax #
Sampled by CHILL
Report Attention Gowni

Analyses Required: TPHG/BTEX, 5OXYS

Required QC Level? I II III IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPHG/BTEX	5OXYS							REMARKS
1045	5-8-06	AQ	STR06051040-01	USA 57 W INF	STD		5-V	X	X							

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	5-8-06	1045
Received by	[signature]	Mike Cathkana	Alpha	5-8-06	1015
Relinquished by					
Received by	Latricia Edrosa	Latricia Edrosa	Alpha	5/9/06	11:30
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other
**: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

FILE COPY

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6001
Fax: (530) 676-6005
Date Received : 05/09/06

JUN 1 0 2006

Job#: USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :					
USA57 A SYS INF	TPH-P (GRO)	37	15 mg/m³	05/08/06	05/15/06
Lab ID :	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m³	05/08/06	05/15/06
STR06050943-01A	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	05/08/06	05/15/06
	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	05/08/06	05/15/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	05/08/06	05/15/06
	Benzene	0.31	0.15 mg/m³	05/08/06	05/15/06
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	05/08/06	05/15/06
	Toluene	0.25	0.15 mg/m³	05/08/06	05/15/06
	Ethylbenzene	0.49	0.15 mg/m³	05/08/06	05/15/06
	m,p-Xylene	2.3	0.15 mg/m³	05/08/06	05/15/06
	o-Xylene	0.43	0.15 mg/m³	05/08/06	05/15/06

Gasoline Range Organics (GRO) C4-C13
Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.07 inches of mercury.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/16/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *20-May-06*

QC Summary Report

Work Order: 06050943

Method Blank

File ID: **06051510.D** Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

Sample ID: **MBLK MS15A0515B** Units : **mg/m³** Batch ID: **MS15A0515B** Run ID: **MSD_15_060515A** Analysis Date: **05/15/2006 11:30** Prep Date: **05/15/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	2.14		2		107	76	127			
Surr: Toluene-d8	2.05		2		103	84	113			
Surr: 4-Bromofluorobenzene	1.82		2		91	79	119			

Laboratory Control Spike

File ID: **06051505.D** Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

Sample ID: **GLCS MS15A0515B** Units : **mg/m³** Batch ID: **MS15A0515B** Run ID: **MSD_15_060515A** Analysis Date: **05/15/2006 09:39** Prep Date: **05/15/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	413	10	400		103	78	127			
Surr: 1,2-Dichloroethane-d4	11.4		10		114	76	127			
Surr: Toluene-d8	10		10		100	84	113			
Surr: 4-Bromofluorobenzene	9.42		10		94	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 20-May-06

QC Summary Report

Work Order: 06050943

Method Blank

File ID: **06051510.D** Type **MBLK** Test Code: **EPA Method SW8260B**

Sample ID: **MBLK MS15A0515A** Units : **mg/m³** Batch ID: **MS15A0515A** Run ID: **MSD_15_060515A** Analysis Date: **05/15/2006 11:30** Prep Date: **05/15/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	5								
Methyl tert-butyl ether (MTBE)	ND	0.1								
Di-isopropyl Ether (DIPE)	ND	0.2								
Ethyl Tertiary Butyl Ether (ETBE)	ND	0.2								
Benzene	ND	0.1								
Tertiary Amyl Methyl Ether (TAME)	ND	0.2								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	2.14		2		107	76	127			
Surr: Toluene-d8	2.05		2		103	84	113			
Surr: 4-Bromofluorobenzene	1.82		2		91	79	119			

Laboratory Control Spike

File ID: **06051504.D** Type **LCS** Test Code: **EPA Method SW8260B**

Sample ID: **LCS MS15A0515A** Units : **mg/m³** Batch ID: **MS15A0515A** Run ID: **MSD_15_060515A** Analysis Date: **05/15/2006 09:16** Prep Date: **05/15/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.33	0.1	10		93	81	122			
Toluene	9.68	0.1	10		97	80	120			
Ethylbenzene	10.2	0.1	10		102	80	120			
m,p-Xylene	10.7	0.1	10		107	80	129			
o-Xylene	11.3	0.1	10		113	80	129			
Surr: 1,2-Dichloroethane-d4	11.1		10		111	76	127			
Surr: Toluene-d8	9.62		10		96	84	113			
Surr: 4-Bromofluorobenzene	9.3		10		93	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **5/17/2006**

Date of Notice : **5/9/2006 12:13:25 P**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**

Project ID : **USA 57**

Project Manager: **Gowri Kowtha**

Client's EMail: **gkowtha@stratusinc.net**

Client's Phone: **(530) 676-6001**

Client's FAX: **(530) 676-6005**

Work Order Number: **STR06050943**

Date Received: **5/9/2006**

Received by: Latricia Edrosa

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	No ☐	
Custody seals intact on shippping container/cooler ?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	No ☐	
Chain of custody agrees with sample labels ?	Yes ☑	No ☐	
Sample ID noted by Client on COC ?	Yes ☑	No ☐	
Date and time of collection noted by Client on COC ?	Yes ☑	No ☐	
Samplers's name noted on COC ?	Yes ☑	No ☐	
Internal Chain of Custody (COC) requested ?	Yes ☐	No ☑	
Sub Contract Lab Used :	None ☑	SEM ☐	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	No ☐	Cooler Temperature **NA °C**
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	No ☐	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	No ☑	
Are there client specific Project requirements ?	Yes ☐	No ☑	If YES : see the Chain of Custody (COC)

Comments :

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06050943

Report Due By : 5:00 PM On : 17-May-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6001 x
FAX : (530) 676-6005
EMail : gkowtha@stratusinc.net

Job : USA 57
PO :

EDD Required : **Yes**

Sampled by : C. Hill

Client's COC # : 8385

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Cooler Temp	Samples Received	Date Printed
NA °C	09-May-06	09-May-06

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_A	VOC_A						Sample Remarks
STR06050943-01A	USA57 A SYS INF	AR	05/08/06 06:30	1	0	6		GAS-N/C	BTEX/OXY						TEDLAR

Comments: Security seals intact. Send copy of receipt checklist with final report. :

Logged in by:	Signature	Print Name	Company	Date/Time
	Patricia Edrosa	Patricia Edrosa	Alpha Analytical, Inc.	5/9/06 12:14

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Name Stantec ENV
Address 3338 Camino Pk Dr
City, State, Zip Camino Pk
Phone Number 530 676 6004 Fax 530 676 6005

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___
ID ___ OR ___ OTHER ___

Page # 1 of 1

Client Name USA 57
Address
City, State, Zip Oakland
P.O. # Job #
EMail Address
Phone # Fax #
Report Attention Gowri

Sampled by CHILL

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPH-D BTEX	5 OXYS
0830	5-5-06	OT	STR060505943-01	USA57 A SYS INF	STD		1-T	X	X

Analyses Required

2395

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # ___

REMARKS

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHILL	Stantec	5-5-06	1045
Received by		Mike Hilton	Alpha	5-5-06	1245
Relinquished by					
Received by	Patricia Edrosa	Patricia Edrosa	Alpha	3/9/06	12:14
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

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FILE COPY

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Kiran Nagaraju
Phone: (530) 676-6004
Fax: (530) 676-6005
Date Received : 05/26/06

Job#: 2007-0057-01/USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	180	15 mg/m³	05/25/06	05/30/06
USA57ASysInf	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m³	05/25/06	05/30/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	05/25/06	05/30/06
STR06052651-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	05/25/06	05/30/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	05/25/06	05/30/06
	Benzene	1.1	0.15 mg/m³	05/25/06	05/30/06
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	05/25/06	05/30/06
	Toluene	0.22	0.15 mg/m³	05/25/06	05/30/06
	Ethylbenzene	0.32	0.15 mg/m³	05/25/06	05/30/06
	m,p-Xylene	0.58	0.15 mg/m³	05/25/06	05/30/06
	o-Xylene	ND	0.15 mg/m³	05/25/06	05/30/06

Gasoline Range Organics (GRO) C4-C13
Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.34 inches of mercury.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

6/5/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *06-Jun-06*

QC Summary Report

Work Order: 06052651

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **C:\HPCHEM\MS07\DATA\060530\06053009.D** Batch ID: **MS07A0530B** Analysis Date: **05/30/2006 11:04**

Sample ID: **MBLK MS07A0530B** Units : **mg/m³** Run ID: **MSD_07_060530A** Prep Date: **05/30/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	2.32		2		116	76	127			
Surr: Toluene-d8	1.92		2		96	84	113			
Surr: 4-Bromofluorobenzene	1.88		2		94	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **C:\HPCHEM\MS07\DATA\060530\06053004.D** Batch ID: **MS07A0530B** Analysis Date: **05/30/2006 08:53**

Sample ID: **GLCS MS07A0530B** Units : **mg/m³** Run ID: **MSD_07_060530A** Prep Date: **05/30/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	404	10	400		101	78	127			
Surr: 1,2-Dichloroethane-d4	12.2		10		122	76	127			
Surr: Toluene-d8	9.4		10		94	84	113			
Surr: 4-Bromofluorobenzene	9.66		10		97	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 06-Jun-06

QC Summary Report

Work Order: 06052651

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS07\DATA\060530\06053009.D** Batch ID: **MS07A0530A** Analysis Date: **05/30/2006 11:04**

Sample ID: **MBLK MS07A0530A** Units : **mg/m³** Run ID: **MSD_07_060530A** Prep Date: **05/30/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	5								
Methyl tert-butyl ether (MTBE)	ND	0.1								
Di-isopropyl Ether (DIPE)	ND	0.2								
Ethyl Tertiary Butyl Ether (ETBE)	ND	0.2								
Benzene	ND	0.1								
Tertiary Amyl Methyl Ether (TAME)	ND	0.2								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	2.32		2		116	76	127			
Surr: Toluene-d8	1.92		2		96	84	113			
Surr: 4-Bromofluorobenzene	1.88		2		94	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS07\DATA\060530\06053003.D** Batch ID: **MS07A0530A** Analysis Date: **05/30/2006 08:31**

Sample ID: **LCS MS07A0530A** Units : **mg/m³** Run ID: **MSD_07_060530A** Prep Date: **05/30/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.81	0.1	10		98	81	122			
Toluene	10.1	0.1	10		101	80	120			
Ethylbenzene	9.57	0.1	10		96	80	120			
m,p-Xylene	9.61	0.1	10		96	80	129			
o-Xylene	9.6	0.1	10		96	80	129			
Surr: 1,2-Dichloroethane-d4	12.6		10		126	76	127			
Surr: Toluene-d8	9.68		10		97	84	113			
Surr: 4-Bromofluorobenzene	9.53		10		95	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : 6/6/2006 Date of Notice : 5/26/2006 9:38:20 A

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: Stratus Environmental	Project ID : 2007-0057-01/USA 57	
Project Manager: Kiran Nagaraju	Client's EMail: knagaraju@stratusinc.net	
	Client's Phone: (530) 676-6004	Client's FAX: (530) 676-6005
Work Order Number: STR06052651	Date Received: 5/26/2006	Received by: Tara Dickinson

Chain of Custody (COC) Information

Carrier name FedEx

Chain of custody present ?	Yes ☑	☐ No	
Custody seals intact on shippping container/cooler ?	Yes ☑	☐ No	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	☐ No	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	☐ No	
Chain of custody agrees with sample labels ?	Yes ☑	☐ No	
Sample ID noted by Client on COC ?	Yes ☑	☐ No	
Date and time of collection noted by Client on COC ?	Yes ☑	☐ No	
Samplers's name noted on COC ?	Yes ☑	☐ No	
Internal Chain of Custody (COC) requested ?	Yes ☐	☑ No	
Sub Contract Lab Used :	None ☑	☐ SEM	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	☐ No	Not Present ☐
Samples in proper container/bottle?	Yes ☑	☐ No	
Sample containers intact?	Yes ☑	☐ No	
Sufficient sample volume for indicated test?	Yes ☑	☐ No	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	☐ No	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	☐ No	n/a °C
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	☐ No	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	☐ No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	☐ No	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	☑ No	
Are there client specific Project requirements ?	Yes ☐	☑ No	If YES : see the Chain of Custody (COC)

Comments : One day added to TAT due to holiday.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06052651

Report Due By : 5:00 PM On : 06-Jun-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Kiran Nagaraju
TEL : (530) 676-6004 x
FAX : (530) 676-6005
EMail knagaraju@stratusinc.net

EDD Required : Yes

Sampled by : MW Morgan

Report Attention : Kiran Nagaraju
CC Report :

Job : 2007-0057-01/USA 57
PO :

Client's COC # : 13442

Cooler Temp	Samples Received	Date Printed
n/a °C	26-May-06	26-May-06

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_A	VOC_A							Sample Remarks
STR06052651-01A	USA27ASYSINF	AR	05/25/06 06:20	1	0	6		GAS-N/C	BTEX/OXY							Tedlar

Comments: Security seals intact. Ice n/a. Send copy of receipt checklist with final report. One day added to TAT due to holiday. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tara Dickinson	Tara Dickinson	Alpha Analytical, Inc.	5/26/06 94

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name Stratus Env, Inc.
Address 3330 Cameron Park Dr. #550
City, State, Zip Cameron Park, CA 95682
Phone Number 530 676 6004 Fax 530 676 6005

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ ***CA*** X ***NV*** ___ ***WA*** ___
ID ___ ***OR*** ___ ***OTHER*** ___ *Page #* 1 *of* 1

13442

Client Name	USA 57
Address	10700 MacArthur Blvd
City, State, Zip	Oakland, CA
P.O. #	
Job #	2007-0057-01
EMail Address	
Phone #	
Fax #	
Sampled by	MW Morgan
Report Attention	K. Nagaraju

Analyses Required: TPHg (8015 DHS LUFT); BTEX; 5 Oxys

Required QC Level? I II III IV

EDD / EDF? YES ___ *NO* ___

Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPHg (8015 DHS LUFT)	BTEX	5 Oxys						REMARKS
0620	5/25/06	OT	STR06052651-01	USA57ASYSINF	5		1-T	X	X	X						

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	Martin W. Morgan	Stratus	5/25/06	1020
Received by	[signature]	Lisa Bryla	ALPHA	5-25-06	1020
Relinquished by					
Received by	[signature]	Tara Dickinson	Alpha	5/26/06	941
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other

**: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

FILE COPY

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Kiran Nagaraju
Phone: (530) 676-6004
Fax: (530) 676-6005
Date Received : 05/26/06

Job#: 2007-0057-01/USA 57

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	290	50 µg/L	05/25/06	05/31/06
USA57WInf	Tertiary Butyl Alcohol (TBA)	42	10 µg/L	05/25/06	05/31/06
Lab ID :	Methyl tert-butyl ether (MTBE)	20	0.50 µg/L	05/25/06	05/31/06
STR06052603-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	05/25/06	05/31/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	05/25/06	05/31/06
	Benzene	19	0.50 µg/L	05/25/06	05/31/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	05/25/06	05/31/06
	Toluene	2.7	0.50 µg/L	05/25/06	05/31/06
	Ethylbenzene	3.5	0.50 µg/L	05/25/06	05/31/06
	m,p-Xylene	17	0.50 µg/L	05/25/06	05/31/06
	o-Xylene	5.3	0.50 µg/L	05/25/06	05/31/06
Client ID :	TPH-P (GRO)	ND	50 µg/L	05/25/06	06/01/06
USA57WMid	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	05/25/06	06/01/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	05/25/06	06/01/06
STR06052603-02A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	05/25/06	06/01/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	05/25/06	06/01/06
	Benzene	ND	0.50 µg/L	05/25/06	06/01/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	05/25/06	06/01/06
	Toluene	ND	0.50 µg/L	05/25/06	06/01/06
	Ethylbenzene	ND	0.50 µg/L	05/25/06	06/01/06
	m,p-Xylene	ND	0.50 µg/L	05/25/06	06/01/06
	o-Xylene	ND	0.50 µg/L	05/25/06	06/01/06

Gasoline Range Organics (GRO) C4-C13
Reported in micrograms per liter, per client request.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

6/5/06
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: STR06052603 **Project:** 2007-0057-01/USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
06052603-01A	USA57WInf	Aqueous	2
06052603-02A	USA57WMid	Aqueous	2

6/5/06

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 06-Jun-06

QC Summary Report

Work Order: 06052603

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053136.D** Batch ID: **MS12W0531D** Analysis Date: **05/31/2006 20:36**

Sample ID: **MBLK MS12W0531D** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **05/31/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.2		10		102	76	127			
Surr: Toluene-d8	9.69		10		97	84	113			
Surr: 4-Bromofluorobenzene	10.2		10		102	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053135.D** Batch ID: **MS12W0531D** Analysis Date: **05/31/2006 20:14**

Sample ID: **GLCS MS12W0531D** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **05/31/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	83.7	50	400		21	78	127			L50
Surr: 1,2-Dichloroethane-d4	17.5		10		175	76	127			S55
Surr: Toluene-d8	8.76		10		88	84	113			
Surr: 4-Bromofluorobenzene	8.82		10		88	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053149.D** Batch ID: **MS12W0531D** Analysis Date: **06/01/2006 01:09**

Sample ID: **06052603-02AGS** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **06/01/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2060	250	2000	0	103	70	139			
Surr: 1,2-Dichloroethane-d4	53		50		106	76	127			
Surr: Toluene-d8	48.5		50		97	84	113			
Surr: 4-Bromofluorobenzene	50.9		50		102	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053150.D** Batch ID: **MS12W0531D** Analysis Date: **06/01/2006 01:30**

Sample ID: **06052603-02AGSD** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **06/01/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2000	250	2000	0	99.8	70	139	2060	3.1(12)	
Surr: 1,2-Dichloroethane-d4	52.7		50		105	76	127			
Surr: Toluene-d8	48.5		50		97	84	113			
Surr: 4-Bromofluorobenzene	51.4		50		103	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

S55 = Surrogate recovery was above laboratory acceptance limits.

Reported in micrograms per liter, per client request.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 06-Jun-06

QC Summary Report

Work Order: 06052603

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053136.D** Batch ID: **MS12W0531C** Analysis Date: **05/31/2006 20:36**

Sample ID: **MBLK MS12W0531C** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **05/31/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	10.2		10		102	76	127			
Surr: Toluene-d8	9.69		10		97	84	113			
Surr: 4-Bromofluorobenzene	10.2		10		102	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053133.D** Batch ID: **MS12W0531C** Analysis Date: **05/31/2006 19:32**

Sample ID: **LCS MS12W0531C** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **05/31/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.34	0.5	10		93	81	122			
Toluene	9.47	0.5	10		95	80	120			
Ethylbenzene	10.1	0.5	10		101	80	120			
m,p-Xylene	10.2	0.5	10		102	80	129			
o-Xylene	9.4	0.5	10		94	80	129			
Surr: 1,2-Dichloroethane-d4	10.6		10		106	76	127			
Surr: Toluene-d8	9.92		10		99	84	113			
Surr: 4-Bromofluorobenzene	10.3		10		103	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053147.D** Batch ID: **MS12W0531C** Analysis Date: **06/01/2006 00:27**

Sample ID: **06052603-02AMS** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **06/01/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	49.2	1.3	50	0	98	74	125			
Toluene	49.1	1.3	50	0	98	76	120			
Ethylbenzene	52.6	1.3	50	0	105	77	124			
m,p-Xylene	52.8	1.3	50	0	106	73	130			
o-Xylene	47.9	1.3	50	0	96	74	131			
Surr: 1,2-Dichloroethane-d4	54.5		50		109	76	127			
Surr: Toluene-d8	49.2		50		98	84	113			
Surr: 4-Bromofluorobenzene	52.1		50		104	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\MSDCHEM\MS12\DATA\060531\06053148.D** Batch ID: **MS12W0531C** Analysis Date: **06/01/2006 00:48**

Sample ID: **06052603-02AMSD** Units : **µg/L** Run ID: **MSD_12_060531B** Prep Date: **06/01/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	46.3	1.3	50	0	93	74	125	49.21	6.1(13)	
Toluene	46.4	1.3	50	0	93	76	120	49.1	5.7(13)	
Ethylbenzene	49.7	1.3	50	0	99	77	124	52.56	5.7(13)	
m,p-Xylene	49.7	1.3	50	0	99	73	130	52.76	6.1(14)	
o-Xylene	45.3	1.3	50	0	91	74	131	47.88	5.6(13)	
Surr: 1,2-Dichloroethane-d4	53.1		50		106	76	127			
Surr: Toluene-d8	49.4		50		99	84	113			
Surr: 4-Bromofluorobenzene	52.2		50		104	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **6/6/2006** Date of Notice : **5/26/2006 1:04:14 P**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**
Project ID : **2007-0057-01/USA 57**
Project Manager: **Kiran Nagaraju**
Client's EMail: **knagaraju@stratusinc.net**
Client's Phone: **(530) 676-6004** Client's FAX: **(530) 676-6005**
Work Order Number: **STR06052603** Date Received: **5/26/2006** Received by: Elizabeth Sauvageau

Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ?	Yes ☑	No ☐	
Custody seals intact on shippping container/cooler ?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles ?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received ?	Yes ☑	No ☐	
Chain of custody agrees with sample labels ?	Yes ☑	No ☐	
Sample ID noted by Client on COC ?	Yes ☑	No ☐	
Date and time of collection noted by Client on COC ?	Yes ☑	No ☐	
Samplers's name noted on COC ?	Yes ☑	No ☐	
Internal Chain of Custody (COC) requested ?	Yes ☐	No ☑	
Sub Contract Lab Used :	None ☑	SEM ☐	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	No ☐	4 °C
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	No ☐	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	No ☑	
Are there client specific Project requirements ?	Yes ☐	No ☑	If YES : see the Chain of Custody (COC)

Comments :

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : STR06052603

Report Due By : 5:00 PM On : 06-Jun-06

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

Report Attention : Kiran Nagaraju
CC Report :

Kiran Nagaraju
TEL : (530) 676-6004 x
FAX : (530) 676-6005
EMail knagaraju@stratusinc.net

Job : 2007-0057-01/USA 57
PO :
Client's COC # : 13443

EDD Required : **Yes**

Sampled by : M.W. Morgan

Cooler Temp	Samples Received	Date Printed
4 °C	26-May-06	26-May-06

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/P_W	VOC_W	Sample Remarks
STR06052603-01A	USA57WINF	AQ	05/25/06 06:35	5	0	6		GAS-C	BTEX/OXY_C	
STR06052603-02A	USA57WMID	AQ	05/25/06 06:39	5	0	6		GAS-C	BTEX/OXY_C	

Comments: Security seals intact. Frozen ice. One day added to TAT due to holiday. Send copy of receipt checklist with final report. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	Alpha Analytical, Inc.	5/26/06 1305

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name Stratus
Address 3330 Cameron Park Dr. #550
City, State, Zip Cameron Park, CA 95682
Phone Number 5306766004 Fax 5306766005

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___
ID ___ OR ___ OTHER ___ Page # 1 of 1

13443

Client Name: USA 57
Address: 10700 MacArthur Blvd
City, State, Zip: Oakland, CA
P.O. #
Job #: 2007-0057-01
EMail Address
Phone #
Fax #
Sampled by: MW Morgan
Report Attention: K. Nagaraju

Analyses Required

Required QC Level? I II III IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPHg (8015B) (Diluent)	BTEX	5 oxy's						REMARKS
0635	5/25/06	AQ	STR06052603-01	USA57WNF	5		5-V	X	X	X						
0639	5/25/06	AQ	-02	USA57WMID	5		5-V	X	X	X						

Alpha Analytical Sample Receipt
Security Seals? (YES) NO
Frozen Ice? (YES) NO
Temperature 4 °C

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	Martin W. Morgan	Stratus	5/25/06	1020
Received by	[signature]	Lisa Brylo	ALPHA	5-25-06	1020
Relinquished by					
Received by	E Sauvageau	E Sauvageau	Alpha	5-26-06	1305
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.