STRATUS
ENVIRONMENTAL, INC.

3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
(530) 676-6004 ~ Fax: (530) 676-6005

November 11, 2005
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: Third 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 third 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 third DPE event to reduce the subsurface petroleum hydrocarbon mass was conducted between August 29, 2005, and September 16, 2005. 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. This site characterization work was completed between 1987 and 1995. 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. The area of impacted groundwater is predominately situated in the vicinity of wells S-1, S-2, and MW-3.

An 18-day DPE feasibility test/mass removal event using a CBA Equipment LLC (CBA) 400 cubic feet per minute (cfm) DPE system, to evaluate the technical viability of using DPE to mitigate the subsurface petroleum hydrocarbon impact, was completed in July 2004. Individual well DPE tests using S-1, S-2, and MW-3, and a combined DPE test using these three wells, were conducted during the 18-day period. During the combined DPE tests, 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. The proposed intermittent DPE events were subsequently approved by Alameda County Health Care Services Agency (ACHCSA) in a letter dated May 9, 2005.

A second DPE petroleum hydrocarbon mass removal event was conducted at the site between June 6, 2005, and July 1, 2005, using the CBA 400 cfm DPE system. 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. Tabulated summaries of the first and second DPE events completed at the site are included in Appendix A.

Based on the findings of the two 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 in-situ groundwater remediation 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. Stratus is currently preparing a report documenting the findings of this well installation activity.

DUAL PHASE EXTRACTION EVENT

The third DPE event was conducted between August 29, 2005, and September 16, 2005, using wells S-1, S-2, MW-3, and MW-7 for extraction. Wells MW-4, MW-5, MW-6, and MW-8 were used as observation wells during the DPE event. A CBA 200 cfm DPE system was used during the third 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 (Plant Number 17101, dated July 29, 2005) for the CBA 200 cfm DPE system, Stratus notified BAAQMD 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 third 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-horse power (hp) liquid-ring pump was used to apply vacuum and extract soil vapors and groundwater from wells S-1, S-2, MW-3, and MW-7. 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 49-hp propane generator, rated at 68 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 separated vapors from 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 US Filter 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 (16 to 18 "Hg) to the stinger to extract groundwater and soil vapors from the well.

Wells MW-4, MW-5, MW-6, 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 facilitate compliance with the air and water discharge permits. Soil vapor samples were collected in laboratory supplied tedlar bags, and groundwater samples were collected in properly preserved glass vials (voas). Groundwater samples were stored in an ice-chilled cooler until relinquishment to a laboratory representative.

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 under strict chain-of-custody procedures. 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 third DPE event are summarized below:

- The applied wellhead vacuum ranged from 16 to 18 "Hg, with influent 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.

- Drawdown in observation wells MW-4, MW-5, and MW-8 were approximately 0.43 feet, 0.88 feet, and 2.33 feet, respectively. Drawdown estimates are based on baseline depth to water measurements taken prior to the commencement of the DPE event and water levels measured on September 13, 2005. During the initial part of the DPE event, well MW-6 was dry, and during the later part of the DPE event, approximately 2 inches of static head was measured in this well.

- TPHG concentrations in all the influent air samples were reported below laboratory detection limits. Benzene and MTBE were reported at concentrations of 0.59 milligrams per cubic meter (mg/m^3) and 0.41 mg/m^3, respectively, on the start-up day (August 29, 2005). Benzene and MTBE concentrations were reported below laboratory detection limits for all other samples analyzed during the DPE event, except for the sample collected on September 13, 2005, where benzene was reported just above the laboratory detection limit (0.19 mg/m^3).

- TPHG, benzene, and MTBE concentrations in the influent groundwater sample collected on the first day (August 29, 2005) of the DPE event were reported at 55 micrograms per liter (µg/L), 3.3 µg/L, and 17 µg/L, respectively. TPHG and benzene concentrations were below laboratory detection limits in the influent water sample collected on September 13, 2005, while MTBE was reported at a concentration of 2.6 µg/L in this sample. Although the DPE system was not operational on September 16, 2005, due to a transfer pump malfunction, an influent water sample was collected from the water accumulated in the knockout tank, and TPHG and MTBE concentrations in this sample were reported at 67 µg/L and 2.3 µg/L, respectively.

- Based on groundwater extraction rates and influent concentrations, approximately .0241 pounds (Table 4) of TPHG was removed from the subsurface during this DPE event. Since the influent TPHG concentrations in soil vapors were below laboratory detections, TPHG mass removed in soil vapors could not be estimated.

- A total of approximately 19.90 pounds of TPHG has been removed in both vapor and aqueous phases from the subsurface as a result of the three DPE events.

DISCUSSION

Petroleum hydrocarbon concentrations in extracted soil vapors and groundwater during the third DPE event were relatively lower than the concentrations observed during the previous DPE events. Due to low influent concentrations in both soil vapors and groundwater, the third DPE event was only conducted for approximately 15 days. The groundwater extraction rate during the third DPE event was higher compared to the first and second DPE events, likely due to the inclusion of well MW-7 in the extraction train. Based on the boring logs, well MW-7 appears to have a greater screen exposure in the silty sand and clayey sand zone than the other extraction wells (S-1, S-2, and MW-3). Shallow screened extraction wells (EX-1 through EX-4) were installed on October 6 and 7, 2005, targeting areas of high petroleum hydrocarbon impact. Stratus will utilize these newly installed wells for soil vapor and groundwater extraction during the fourth DPE event, which is currently scheduled for the second week of November 2005.

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

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
	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
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).

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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	
									Period[1]	Total
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	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	MTBE
			TPHG	Benzene	MTBE	TPHG	Benzene	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) = $\frac{40 \text{ cu ft}}{\text{min}} \times \frac{8{,}400 \text{ mg}}{\text{cu meter}} \times \frac{\text{lb}}{453{,}593 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}} \times \frac{\text{cu meter}}{35.314 \text{ cu ft}}$

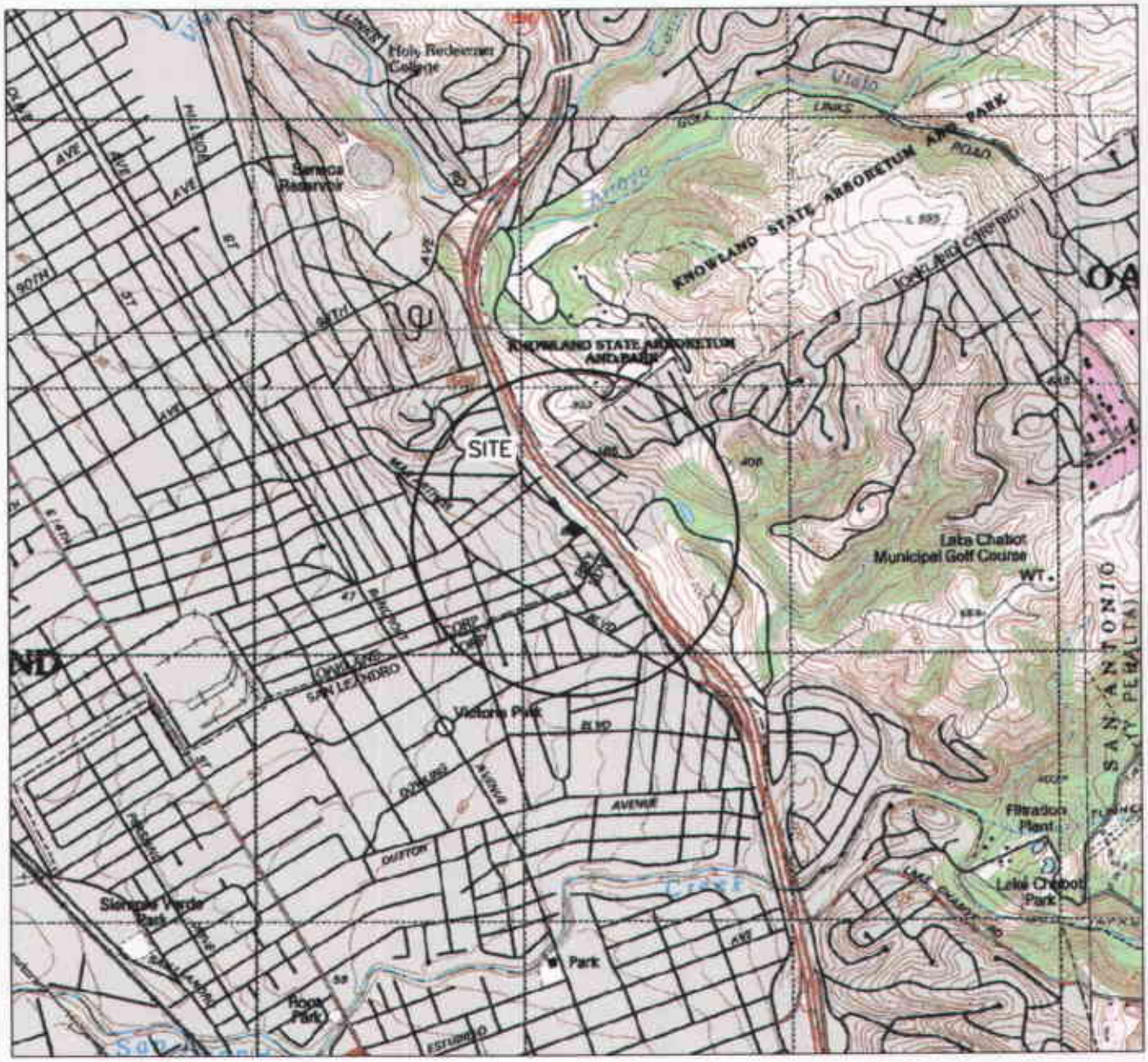
30.21 lbs/day

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.



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.

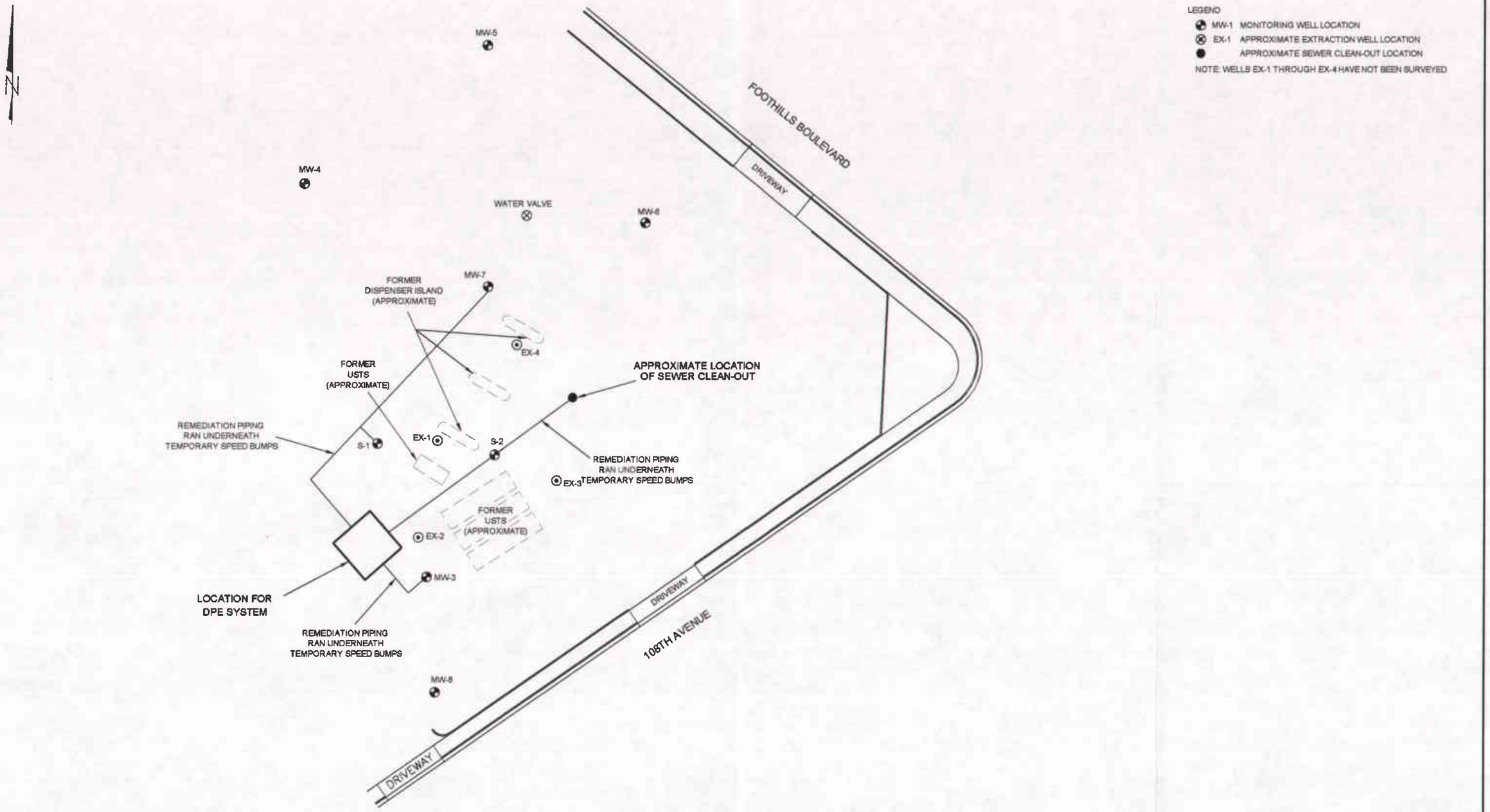
FORMER USA SERVICE STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE
1

PROJECT NO.
2007-0057-01

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



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

Oct 21, 2005 LWA-57 Site Plan.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
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 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) = $\frac{40 \text{ cu ft}}{\text{min}} \times \frac{8{,}400 \text{ mg}}{\text{cu meter}} \times \frac{\text{lb}}{453593 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}} \times \frac{\text{cu meter}}{35.314 \text{ cu ft}}$

= 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	Flowrate	Influent Concentration (mg/m^3)			Soil Vapor Extraction Rate from Wells (lbs/day)			Cumulative Mass (TPHG) Removed	
									Period[1]	Total
	(days)	(cfm)	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	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	MTBE
			TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	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.

APPENDIX B

FIELD DATA SHEETS

Site Name & Address: Former USA Service Station No. 57, 10700 McArthur Boulevard

ORIGINAL

Test Date: 8-29-05

Operators: CHILL

Equipment Model and Serial Nos.: 200TCAT M1294

PID Model: Mini RAE 2000

Test Well ID: S-1, S-2, MW-3, and MW-7

Unit gauge Flow Temp

Date & Time	Hour Meter Reading hrs	Applied Vacuum HG	Inf Air Flow Rate cfm	~~Dilution~~ Air Flow Rate cfm	Sys Inf Air Flow Rate 3" 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.												
8-29-05 0700	435.6	—	—	—	—	See 2nd Unit 212	—	—	—	—	—	TOTAL START 22580
0830	437.0	18	—	200	900/133	22740	133	1458	320	5.5	.4	Sample SYSINF 0901 SYSEFF 0905 INF water 0930 EFF water 0935
8-31-05 0500	480.7	18	—	180	900/126	29340	126	1456	311	5.5	0	
9/6/05 0600	619.1					51690						SYS off - NO propane
0915												restart SYS
1015	620.1	18	—	182	1250	51850	131	1447	430	16.1	0	sample SYS inf Air 1030 Inf water 1036
0500 9-9-05	685.7	16	—	180	900/124	61390	124	1450	286	8.1	0	

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

ORIGINAL

Date 8-29-05

Test Operators CHILC

Test Well ID S-1, S-2, MW-3, & MW-7

Date & Time	Wellhead/Induced Vacuum ("WC) & Depth to Water (feet bgs)													Comments/Notes
	S-1	S-2	MW-3	MW-7	MW-6		MW-8		MW-4	MW-5				
	Vac	Vac	Vac	Vac	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. DTW DTB														
8-29-05 0530	0	0	0	0	0	19.0	0	16.75	8.71	12.90				MW-7 15.15 42
														MW 3 12.82 42.8
8-30-05 0500	7150	7150	>150	7150	0	19.0	0	17.21	8.73	13.18				S-1 15.58 33.70
														S-2 17.26 43.0
9-9-05 0500	7150	—	—	—	0	19.0	0	18.68	8.99	13.61				

Site Name & Address: Former USA Service Station No. 57, 10700 McArthur Boulevard

ORIGINAL Test

Date: 9-13-05

Operators: CHILL

Equipment Model and Serial Nos.: 2000 CAT M1294

PID Model: MINI RAE 2000

Test Well ID: S-1, S-2, MW-3, and MW-7

Chart SYS

Flow/Temp

Date & Time	Hour Meter Reading hrs	Applied Vacuum "WC	Inf Air Flow Rate 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.												
91305 0530	75012	16	160	—	408 119	75020	119	1457	315	2.0	XR	SYS INF Air 0545
												All waters INF 0620
91605 0500	System	Down	Air	Flow								GAC 0622 EFF 0625
	Also	High	water	Trans	Pump	BAD						Stop test
	7961					77310						

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

Test Well ID S-1, S-2, MW-3, & MW-7

ORIGINAL

Date 9-13-05

Test Operators CHILC

Date & Time	Wellhead/Induced Vacuum ("WC) & Depth to Water (feet bgs)													Comments/Notes
	S-1	S-2	MW-3	MW-7	MW-6		MW-8		MW-4	MW-5				
	Vac	Vac	Vac	Vac	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.														
9/13 0530	7150	7150	7150	7150	0	18.67	0	19.08	9.14	13.78				

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Steve Carter
Phone: (530) 676-6008
Fax: (530) 676-6005
Date Received : 08/30/05

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 Purgeable	ND	15 mg/m³	08/29/05	09/01/05
USA57 A SYS INF	Tertiary Butyl Alcohol (TBA)	ND	1.5 mg/m³	08/29/05	09/01/05
Lab ID :	Methyl tert-butyl ether (MTBE)	0.41	0.15 mg/m³	08/29/05	09/01/05
STR05083004-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	08/29/05	09/01/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	08/29/05	09/01/05
	Benzene	0.59	0.15 mg/m³	08/29/05	09/01/05
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	08/29/05	09/01/05
	Toluene	ND	0.15 mg/m³	08/29/05	09/01/05
	Ethylbenzene	0.23	0.15 mg/m³	08/29/05	09/01/05
	m,p-Xylene	0.44	0.15 mg/m³	08/29/05	09/01/05
	o-Xylene	ND	0.15 mg/m³	08/29/05	09/01/05

Note: Concentrations of air in a Tedlar Bag are at 23 degrees Celsius and 25.38 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

RS
9/7/05
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: *13-Sep-05*

QC Summary Report

Work Order: 05083004

Method Blank

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

File ID: **C:\HPCHEM\MS06\DATA\050901\05090126.D** Batch ID: **MS06A0901B** Analysis Date: **09/01/2005 17:07**

Sample ID: **MBLK MS06A0901B** Units : **mg/m³** Run ID: **MSD_06_050901B** Prep Date: **09/01/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	10								
Surr: 1,2-Dichloroethane-d4	1.97		2		99	76	127			
Surr: Toluene-d8	2		2		100	84	113			
Surr: 4-Bromofluorobenzene	2.21		2		111	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS06\DATA\050901\05090105.D** Batch ID: **MS06A0901B** Analysis Date: **09/01/2005 09:22**

Sample ID: **GLCS MS06A0901B** Units : **mg/m³** Run ID: **MSD_06_050901B** Prep Date: **09/01/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	379	10	400		95	78	127			
Surr: 1,2-Dichloroethane-d4	9.22		10		92	76	127			
Surr: Toluene-d8	10.4		10		104	84	113			
Surr: 4-Bromofluorobenzene	10.3		10		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.

Alpha Analytical, Inc.

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

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

Date: *13-Sep-05*

QC Summary Report

Work Order: 05083004

Method Blank

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

File ID: **C:\HPCHEM\MS06\DATA\050901\05090126.D** Batch ID: **MS06A0901A** Analysis Date: **09/01/2005 17:07**

Sample ID: **MBLK MS06A0901A** Units : **mg/m³** Run ID: **MSD_06_050901B** Prep Date: **09/01/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	1								
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	1.97		2		99	76	127			
Surr: Toluene-d8	2		2		100	84	113			
Surr: 4-Bromofluorobenzene	2.21		2		111	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS06\DATA\050901\05090104.D** Batch ID: **MS06A0901A** Analysis Date: **09/01/2005 09:00**

Sample ID: **LCS MS06A0901A** Units : **mg/m³** Run ID: **MSD_06_050901B** Prep Date: **09/01/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	10.6	0.1	10		106	81	122			
Toluene	10.7	0.1	10		107	80	120			
Ethylbenzene	10.3	0.1	10		103	80	120			
m,p-Xylene	11	0.1	10		110	80	129			
o-Xylene	11.2	0.1	10		112	80	129			
Surr: 1,2-Dichloroethane-d4	8.78		10		88	76	127			
Surr: Toluene-d8	10.1		10		101	84	113			
Surr: 4-Bromofluorobenzene	10.4		10		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 : **9/8/2005** Date of Notice : **8/30/2005 10:24:42**

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: **Steve Carter**	Client's EMail: **scarter@stratusinc.net**	
	Client's Phone: **(530) 676-6008**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR05083004**	Date Received: **8/30/2005**	Received by: Stephanie Sifuentes

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 : Air/Tedlar. Chain split due to ASAP TAT, see w/o STR05083003.

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 : STR05083004

Report Due By : 5:00 PM On : 08-Sep-05

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

Report Attention : Steve Carter
CC Report :

Steve Carter
TEL : (530) 676-6008
FAX : (530) 676-6005
EMail scarter@stratusinc.net

Job : USA 57
PO :

Client's COC # : 09543

EDD Required : **Yes**

Sampled by : C.Hill

Cooler Temp : 4 °C

Date Printed: **30-Aug-05**

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
								TPH/P_A	VOC_A							
STR05083004-01A	USA57 A SYS INF	AR	08/29/05 09:01	1	0	6		GAS-N/C	BTEX/OXY							

Comments: Chain split due to ASAP TAT, see w/o STR05083003. Secuirty seals intact, frozen ice. Send copy of receipt checklist with final report :

	Signature	Print Name	Company	Date/Time
Received by:			**Alpha Analytical, Inc.**	

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 Stratus
Address 3330 Cameron Pk Dr
City, State, Zip Cameron Pk
Phone Number 5306766004 Fax 5306766005

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

AZ ___ CA ✓ NV ___ WA ___
ID ___ OR ___ OTHER ___

Analyses Required

09543

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

Required QC Level? I II III IV

EDD / EDF? YES ✓ NO ___

Global ID # ___

Sampled by CHILL
Report Attention Steve

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
0401	8-29-05	OT	[illegible]	USA 57 A SYS INF	Std		1-T	X	X						Standard TAT
0405	✓	OT		USA 57 A SYS EFF	24		1-T	X	X						24 HR TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	82905	1230
Received by	[signature]	Mike [illegible]	Alpha	82905	1230
Relinquished by					
Received by	[illegible]	[illegible]	[illegible]		
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: Steve Carter
Phone: (530) 676-6008
Fax: (530) 676-6005
Date Received : 08/30/05

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 Purgeable	ND	15 mg/m³	08/29/05	08/30/05
USA57 A SYS EFF	Tertiary Butyl Alcohol (TBA)	ND	1.5 mg/m³	08/29/05	08/30/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	08/29/05	08/30/05
STR05083003-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	08/29/05	08/30/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	08/29/05	08/30/05
	Benzene	ND	0.15 mg/m³	08/29/05	08/30/05
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	08/29/05	08/30/05
	Toluene	ND	0.15 mg/m³	08/29/05	08/30/05
	Ethylbenzene	ND	0.15 mg/m³	08/29/05	08/30/05
	m,p-Xylene	ND	0.15 mg/m³	08/29/05	08/30/05
	o-Xylene	ND	0.15 mg/m³	08/29/05	08/30/05

Note: Concentrations of air in a Tedlar Bag are at 23 degrees Celsius and 25.38 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

8/30/05
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-Sep-05*

QC Summary Report

Work Order: 05083003

Method Blank

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

File ID: **C:\HPCHEM\MS07\DATA\050830\05083021.D** Batch ID: **MS07A0830B** Analysis Date: **08/30/2005 15:42**

Sample ID: **MBLK MS07S0830B** Units : **mg/m³** Run ID: **MSD_07_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	10								
Surr: 1,2-Dichloroethane-d4	1.99		2		100	76	127			
Surr: Toluene-d8	1.96		2		98	84	113			
Surr: 4-Bromofluorobenzene	1.8		2		90	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS07\DATA\050830\05083003.D** Batch ID: **MS07A0830B** Analysis Date: **08/30/2005 08:57**

Sample ID: **GLCS MS07A0830B** Units : **mg/m³** Run ID: **MSD_07_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	406	10	400		102	78	127			
Surr: 1,2-Dichloroethane-d4	10.6		10		106	76	127			
Surr: Toluene-d8	9.14		10		91	84	113			
Surr: 4-Bromofluorobenzene	9.5		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.

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

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

Date: *09-Sep-05*

QC Summary Report

Work Order: 05083003

Method Blank

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

File ID: **C:\HPCHEM\MS07\DATA\050830\05083021.D** Batch ID: **MS07A0830A** Analysis Date: **08/30/2005 15:42**

Sample ID: **MBLK MS07S0830A** Units : **mg/m³** Run ID: **MSD_07_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	1								
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	1.99		2		100	76	127			
Surr: Toluene-d8	1.96		2		98	84	113			
Surr: 4-Bromofluorobenzene	1.8		2		90	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS07\DATA\050830\05083002.D** Batch ID: **MS07A0830A** Analysis Date: **08/30/2005 08:34**

Sample ID: **LCS MS07A0830A** Units : **mg/m³** Run ID: **MSD_07_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	11.3	0.1	10		113	81	122			
Toluene	10.6	0.1	10		106	80	120			
Ethylbenzene	10.4	0.1	10		104	80	120			
m,p-Xylene	10.7	0.1	10		107	80	129			
o-Xylene	11.1	0.1	10		111	80	129			
Surr: 1,2-Dichloroethane-d4	10.6		10		106	76	127			
Surr: Toluene-d8	10.3		10		103	84	113			
Surr: 4-Bromofluorobenzene	9.52		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 : **8/30/2005** Date of Notice : **8/30/2005 10:15:20**

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 :
Client's EMail: **scarter@stratusinc.net**
Project Manager: **Steve Carter**
Client's Phone: **(530) 676-6008** Client's FAX: **(530) 676-6005**
Work Order Number: **STR05083003** Date Received: **8/30/2005** Received by: Stephanie Sifuentes

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 : Air/Tedlar. Chain split due to ASAP TAT, see w/o STR05083004.

RUSH!

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 : STR05083003

Report Due By : 5:00 PM On : 30-Aug-05

Billing Information :

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

Report Attention : Steve Carter
CC Report :

Steve Carter
TEL : (530) 676-6008
FAX : (530) 676-6005
EMail scarter@stratusinc.net

Job :
PO :

Client's COC # : 09543

EDD Required : **Yes**

Sampled by : C. Hill

Cooler Temp : 4 °C

Date Printed: **30-Aug-05**

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
STR05083003-01A	USA57 A SYS EFF	AR	08/29/05 09:05	1	0	1		GAS-N/C	BTEX/OXY							

Comments: Chain split due to ASAP TAT, see w/o STR05083004. Secuirty seals intact, frozen ice :

	Signature	Print Name	Company	Date/Time
Received by:			Alpha Analytical, Inc.	

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 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 X NV ___ WA ___
ID ___ OR ___ OTHER ___
Page # 1 of 1

09543

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

Analyses Required: TPH-G/BTEX, 5 Oxys

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

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sampled by CHILL / Report Attention Steve — Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPH-G/BTEX	5 Oxys						REMARKS
0901	8-24-05	OT		USA 57 A SYS INF	STD		1-T	X	X						Standard TAT
0905	↘	OT	STR05083003-01	USA 57 A SYS EFF	24		1-T	X	X						24 HR TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	82405	1230
Received by	[signature]	Mike Wilson	Alpha	82405	1230
Relinquished by					
Received by					
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) 676-6005
Fax: (530) 676-6005
Date Received : 09/07/05

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 Purgeable	ND	15 mg/m³	09/06/05	09/13/05
Sys Inf Air	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m³	09/06/05	09/13/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	09/06/05	09/13/05
STR05090705-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	09/06/05	09/13/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	09/06/05	09/13/05
	Benzene	ND	0.15 mg/m³	09/06/05	09/13/05
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	09/06/05	09/13/05
	Toluene	ND	0.15 mg/m³	09/06/05	09/13/05
	Ethylbenzene	ND	0.15 mg/m³	09/06/05	09/13/05
	m,p-Xylene	ND	0.15 mg/m³	09/06/05	09/13/05
	o-Xylene	ND	0.15 mg/m³	09/06/05	09/13/05

Note: Concentrations of air in a Tedlar Bag are at 22 degrees Celsius and 25.17 inches of mercury.
This replaces the report signed 9/14/05 due to a change in the reporting limit for TBA, due to lab error.
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

9/20/05
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: *22-Sep-05*

QC Summary Report

Work Order: 05090705

Method Blank

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

File ID: **C:\HPCHEM\MS06\DATA\050912\05091244.D** Batch ID: **MS06A0912B** Analysis Date: **09/13/2005 02:02**

Sample ID: **MBLK MS06A0912B** Units : **mg/m³** Run ID: **MSD_06_050912B** Prep Date: **09/13/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	10								
Surr: 1,2-Dichloroethane-d4	1.92		2		96	76	127			
Surr: Toluene-d8	1.97		2		99	84	113			
Surr: 4-Bromofluorobenzene	2.09		2		105	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS06\DATA\050912\05091242.D** Batch ID: **MS06A0912B** Analysis Date: **09/13/2005 01:18**

Sample ID: **GLCS MS06A0912B** Units : **mg/m³** Run ID: **MSD_06_050912B** Prep Date: **09/13/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	395	10	400		99	78	127			
Surr: 1,2-Dichloroethane-d4	9.65		10		97	76	127			
Surr: Toluene-d8	10.2		10		102	84	113			
Surr: 4-Bromofluorobenzene	10.4		10		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.

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

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

Date: *22-Sep-05*

QC Summary Report

Work Order: 05090705

Method Blank

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

File ID: **C:\HPCHEM\MS06\DATA\050912\05091244.D** Batch ID: **MS06A0912A** Analysis Date: **09/13/2005 02:02**

Sample ID: **MBLK MS06A0912A** Units : **mg/m³** Run ID: **MSD_06_050912B** Prep Date: **09/13/2005**

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	1.92		2		96	76	127			
Surr: Toluene-d8	1.97		2		99	84	113			
Surr: 4-Bromofluorobenzene	2.09		2		105	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS06\DATA\050912\05091239.D** Batch ID: **MS06A0912A** Analysis Date: **09/13/2005 00:11**

Sample ID: **LCS MS06A0912A** Units : **mg/m³** Run ID: **MSD_06_050912B** Prep Date: **09/13/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.9	0.1	10		99	81	122			
Toluene	10.1	0.1	10		101	80	120			
Ethylbenzene	9.96	0.1	10		99.6	80	120			
m,p-Xylene	10.7	0.1	10		107	80	129			
o-Xylene	10.6	0.1	10		106	80	129			
Surr: 1,2-Dichloroethane-d4	9.23		10		92	76	127			
Surr: Toluene-d8	10		10		100	84	113			
Surr: 4-Bromofluorobenzene	10.5		10		105	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 : **9/15/2005** Date of Notice : **9/7/2005 1:14:17 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) 676-6005**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR05090705**	Date Received: **9/7/2005**	Received by: Stephanie Sifuentes

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 : Air/Tedlar

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 : STR05090705

Report Due By : 5:00 PM On : 15-Sep-05

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

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

Report Attention : Kiran Nagaraju
CC Report :

Job : 2007-0057-01/USA 57
PO :
Client's COC # : 6829

EDD Required : **Yes**
Sampled by : MW Morgan
Cooler Temp : **n/a °C**
Date Printed: **07-Sep-05**

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
STR05090705-01A	Sys Inf Air	AR	09/06/05 10:30	1	0	6		GAS-N/C	BTEX/OXY							

Comments: Security seals, no ice. Send copy of receipt checklist with final report :

	Signature	Print Name	Company	Date/Time
Received by:			**Alpha Analytical, Inc.**	

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 Environmental, 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

Analyses Required

6829

Client Name	P.O. #	Job #
USA 57		2007-0057-01
Address	**EMail Address**	
10700 MacArthur Blvd		
City, State, Zip	**Phone #**	**Fax #**
Oakland CA		

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	Sampled by: Martin Morgan / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	BTEX / TPHg	Stoxy 5	REMARKS
1030	9/6/05	OT		Sys Inf Air	5		1-T	X	X	
	9/6									

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		Martin Morgan	Stratus	9/6/05	1305
Received by	Eduardo M. Fruciano	E. Fruciano	Alpha Analytical Inc	09/06/05	1305
Relinquished by					
Received by					
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 : 09/14/05

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 Purgeable	ND	15 mg/m³	09/13/05	09/16/05
USA 57 A SYS INF	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m³	09/13/05	09/16/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	09/13/05	09/16/05
STR05091402-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m³	09/13/05	09/16/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m³	09/13/05	09/16/05
	Benzene	0.19	0.15 mg/m³	09/13/05	09/16/05
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	09/13/05	09/16/05
	Toluene	ND	0.15 mg/m³	09/13/05	09/16/05
	Ethylbenzene	ND	0.15 mg/m³	09/13/05	09/16/05
	m,p-Xylene	ND	0.15 mg/m³	09/13/05	09/16/05
	o-Xylene	ND	0.15 mg/m³	09/13/05	09/16/05

Note: Concentrations of air in a Tedlar Bag are at 22 degrees Celsius and 25.42 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

9/21/05
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: *27-Sep-05*

QC Summary Report

Work Order: 05091402

Method Blank

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

File ID: **C:\HPCHEM\MS06\DATA\050915\05091542.D** Batch ID: **MS06A0915B** Analysis Date: **09/16/2005 01:30**

Sample ID: **MBLK MS06A0915B** Units : **mg/m³** Run ID: **MSD_06_050615A** Prep Date: **09/16/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	10								
Surr: 1,2-Dichloroethane-d4	1.88		2		94	76	127			
Surr: Toluene-d8	2		2		100	84	113			
Surr: 4-Bromofluorobenzene	2.14		2		107	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS06\DATA\050915\05091540.D** Batch ID: **MS06A0915B** Analysis Date: **09/16/2005 00:46**

Sample ID: **GLCS MS06A0915B** Units : **mg/m³** Run ID: **MSD_06_050615A** Prep Date: **09/16/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	373	10	400		93	78	127			
Surr: 1,2-Dichloroethane-d4	9.63		10		96	76	127			
Surr: Toluene-d8	9.99		10		99.9	84	113			
Surr: 4-Bromofluorobenzene	10.4		10		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.

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

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

Date: *27-Sep-05*

QC Summary Report

Work Order: 05091402

Method Blank

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

File ID: **C:\HPCHEM\MS06\DATA\050915\05091542.D** Batch ID: **MS06A0915A** Analysis Date: **09/16/2005 01:30**

Sample ID: **MBLK MS06A0915A** Units : **mg/m³** Run ID: **MSD_06_050615A** Prep Date: **09/16/2005**

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	1.88		2		94	76	127			
Surr: Toluene-d8	2		2		100	84	113			
Surr: 4-Bromofluorobenzene	2.14		2		107	79	119			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS06\DATA\050915\05091537.D** Batch ID: **MS06A0915A** Analysis Date: **09/15/2005 23:39**

Sample ID: **LCS MS06A0915A** Units : **mg/m³** Run ID: **MSD_06_050615A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	10.5	0.1	10		105	81	122			
Toluene	10.4	0.1	10		104	80	120			
Ethylbenzene	10.1	0.1	10		101	80	120			
m,p-Xylene	11	0.1	10		110	80	129			
o-Xylene	10.8	0.1	10		108	80	129			
Surr: 1,2-Dichloroethane-d4	9.35		10		94	76	127			
Surr: Toluene-d8	9.86		10		99	84	113			
Surr: 4-Bromofluorobenzene	10.2		10		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.

Alpha Analytical, Inc.

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

Sample Receipt Checklist

Date Report is due to Client : **9/22/2005** Date of Notice : **9/14/2005 11:17:01**

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**	
	Client's EMail: **gkowtha@stratusinc.net**	
Project Manager: **Gowri Kowtha**	Client's Phone: **(530) 676-6001**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR05091402**	Date Received: **9/14/2005**	Received by: Stephanie Sifuentes

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 : Air/Tedlar

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 : STR05091402

Report Due By : 5:00 PM On : 22-Sep-05

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

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

EDD Required : Yes

Sampled by : C. Hill

Report Attention : Gowri Kowtha
CC Report :

Job : USA 57
PO :

Client's COC # : 09547

Cooler Temp : 4 °C

Date Printed: **14-Sep-05**

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
STR05091402-01A	USA 57 A SYS INF	AR	09/13/05 05:45	1	0	6		GAS-N/C	BTEX/OXY							Tedlar

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

	Signature	Print Name	Company	Date/Time
Received by:			Alpha Analytical, Inc.	

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
City, State, Zip Cameron 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

09547

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

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
0545	9/13/05	OT		USA57 A SYS INF	Std		1-T	X	X						

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	91305	0930
Received by	[signature]	[illegible]	Alpha	91305	0930
Relinquished by					
Received by					
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: Steve Carter
Phone: (530) 676-6008
Fax: (530) 676-6005
Date Received : 08/30/05

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 Purgeable	55	50 µg/L	08/29/05	08/31/05
USA 57 W INF	Tertiary Butyl Alcohol (TBA)	160	10 µg/L	08/29/05	08/31/05
Lab ID :	Methyl tert-butyl ether (MTBE)	17	0.50 µg/L	08/29/05	08/31/05
STR05083006-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	08/29/05	08/31/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	08/29/05	08/31/05
	Benzene	3.3	0.50 µg/L	08/29/05	08/31/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/29/05	08/31/05
	Toluene	ND	0.50 µg/L	08/29/05	08/31/05
	Ethylbenzene	0.68	0.50 µg/L	08/29/05	08/31/05
	m,p-Xylene	2.3	0.50 µg/L	08/29/05	08/31/05
	o-Xylene	1.0	0.50 µg/L	08/29/05	08/31/05

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

9/7/05
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: STR05083006 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05083006-01A	USA 57 W INF	Aqueous	2

9/7/05
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: *13-Sep-05*

QC Summary Report

Work Order: 05083006

Method Blank

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083040.D** Batch ID: **MS12W0830D** Analysis Date: **08/30/2005 22:53**

Sample ID: **MBLK MS12W0830D** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	50								
Surr: 1,2-Dichloroethane-d4	10.2		10		102	76	127			
Surr: Toluene-d8	9.67		10		97	84	113			
Surr: 4-Bromofluorobenzene	9.67		10		97	79	119			

Laboratory Control Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083039.D** Batch ID: **MS12W0830D** Analysis Date: **08/30/2005 22:31**

Sample ID: **GLCS MS12W0830D** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	346	50	400		86	78	127			
Surr: 1,2-Dichloroethane-d4	10.2		10		102	76	127			
Surr: Toluene-d8	9.57		10		96	84	113			
Surr: 4-Bromofluorobenzene	9.68		10		97	79	119			

Sample Matrix Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083043.D** Batch ID: **MS12W0830D** Analysis Date: **08/30/2005 23:59**

Sample ID: **05083006-01AGS** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2050	250	2000	55.46	99.7	70	139			
Surr: 1,2-Dichloroethane-d4	52.2		50		104	76	127			
Surr: Toluene-d8	47.7		50		95	84	113			
Surr: 4-Bromofluorobenzene	48.7		50		97	79	119			

Sample Matrix Spike Duplicate

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083044.D** Batch ID: **MS12W0830D** Analysis Date: **08/31/2005 00:21**

Sample ID: **05083006-01AGSD** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/31/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2110	250	2000	55.46	103	70	139	2049	3.0(12)	
Surr: 1,2-Dichloroethane-d4	52.2		50		104	76	127			
Surr: Toluene-d8	47.6		50		95	84	113			
Surr: 4-Bromofluorobenzene	48.5		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.

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: 13-Sep-05

QC Summary Report

Work Order: 05083006

Method Blank

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083040.D** Batch ID: **MS12W0830C** Analysis Date: **08/30/2005 22:53**

Sample ID: **MBLK MS12W0830C** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/30/2005**

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	9.67		10		97	84	113			
Surr: 4-Bromofluorobenzene	9.67		10		97	79	119			

Laboratory Control Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083037.D** Batch ID: **MS12W0830C** Analysis Date: **08/30/2005 21:49**

Sample ID: **LCS MS12W0830C** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	11.1	0.5	10		111	81	122			
Toluene	10.6	0.5	10		106	80	120			
Ethylbenzene	10.8	0.5	10		108	80	120			
m,p-Xylene	11	0.5	10		110	80	129			
o-Xylene	11.3	0.5	10		113	80	129			
Surr: 1,2-Dichloroethane-d4	10.1		10		101	76	127			
Surr: Toluene-d8	9.78		10		98	84	113			
Surr: 4-Bromofluorobenzene	9.73		10		97	79	119			

Sample Matrix Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083041.D** Batch ID: **MS12W0830C** Analysis Date: **08/30/2005 23:15**

Sample ID: **05083006-01AMS** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	60	1.3	50	3.28	113	74	125			
Toluene	53.3	1.3	50	0	107	76	120			
Ethylbenzene	55	1.3	50	0.68	109	77	124			
m,p-Xylene	57.6	1.3	50	2.3	111	73	130			
o-Xylene	58	1.3	50	1.04	114	74	131			
Surr: 1,2-Dichloroethane-d4	51.9		50		104	76	127			
Surr: Toluene-d8	47.9		50		96	84	113			
Surr: 4-Bromofluorobenzene	49.2		50		98	79	119			

Sample Matrix Spike Duplicate

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083042.D** Batch ID: **MS12W0830C** Analysis Date: **08/30/2005 23:37**

Sample ID: **05083006-01AMSD** Units : **µg/L** Run ID: **MSD_12_050830D** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	58.8	1.3	50	3.28	111	74	124	59.95	2.0(13)	
Toluene	51.5	1.3	50	0	103	76	119	53.26	3.3(13)	
Ethylbenzene	53.4	1.3	50	0.68	106	77	124	55.01	2.9(13)	
m,p-Xylene	55.7	1.3	50	2.3	107	73	130	57.61	3.3(14)	
o-Xylene	56	1.3	50	1.04	110	74	131	57.97	3.5(13)	
Surr: 1,2-Dichloroethane-d4	52.6		50		105	76	127			
Surr: Toluene-d8	47.5		50		95	84	113			
Surr: 4-Bromofluorobenzene	49.5		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 : **9/8/2005** Date of Notice : **8/30/2005 10:55:31**

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: **Steve Carter**	Client's EMail: **scarter@stratusinc.net**	
	Client's Phone: **(530) 676-6008**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR05083006**	Date Received: **8/30/2005**	Received by: Stephanie Sifuentes

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 : Chain split due to ASAP TAT, see w/o STR05083005.

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 : STR05083006

Report Due By : 5:00 PM On : 08-Sep-05

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

Report Attention : Steve Carter
CC Report :

Steve Carter
TEL : (530) 676-6008
FAX : (530) 676-6005
EMail scarter@stratusinc.net

Job : USA 57
PO :

Client's COC # : 09544

EDD Required : **Yes**

Sampled by : C. Hill

Cooler Temp : 4 °C

Date Printed: **30-Aug-05**

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
STR05083006-01A	USA 57 W INF	AQ	08/29/05 09:30	5	0	6		GAS-C	BTEX/OXY_C							

Comments: Chain split due to ASAP TAT, see w/o STR05083005. Secuirty seals intact, frozen ice. Send copy of receipt checklist with final report ;

	Signature	Print Name	Company	Date/Time
Received by:			Alpha Analytical, Inc.	

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 JACOBS ENV
Address 3330 Cameron Park DR
City, State, Zip Cameron 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

AZ ___ CA ✓ NV ___ WA ___
ID ___ OR ___ OTHER ___ Page # 1 of 1

09544

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

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # ___

Sampled by CHILL Report Attention Steve

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 OXY 2	REMARKS
0930	8/29/05	AQ		USA 57 W INF	Std		5-V	X	X	Standard TAT
0935	1	AQ		USA 57 W EFF	24		5-V	X	X	24 HR TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHILL	Stantec	8/29/05	1230
Received by		Mike Hollomon	Stantec	8/29/05	1230
Relinquished by					
Received by					
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: Steve Carter
Phone: (530) 676-6008
Fax: (530) 676-6005
Date Received : 08/30/05

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 Purgeable	ND	50 µg/L	08/29/05	08/30/05
USA57 W EFF	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	08/29/05	08/30/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	08/29/05	08/30/05
STR05083005-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	08/29/05	08/30/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	08/29/05	08/30/05
	Benzene	ND	0.50 µg/L	08/29/05	08/30/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/29/05	08/30/05
	Toluene	ND	0.50 µg/L	08/29/05	08/30/05
	Ethylbenzene	ND	0.50 µg/L	08/29/05	08/30/05
	m,p-Xylene	ND	0.50 µg/L	08/29/05	08/30/05
	o-Xylene	ND	0.50 µg/L	08/29/05	08/30/05

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

RS
8/30/05
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: STR05083005 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05083005-01A	USA57 W EFF	Aqueous	2

8/30/05

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-Sep-05*

QC Summary Report

Work Order: 05083005

Method Blank

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083010.D** Batch ID: **MS12W0830B** Analysis Date: **08/30/2005 12:14**

Sample ID: **MBLK MS12W0830B** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	50								
Surr: 1,2-Dichloroethane-d4	10.4		10		104	76	127			
Surr: Toluene-d8	9.6		10		96	84	113			
Surr: 4-Bromofluorobenzene	9.72		10		97	79	119			

Laboratory Control Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083009.D** Batch ID: **MS12W0830B** Analysis Date: **08/30/2005 11:53**

Sample ID: **GLCS MS12W0830B** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	385	50	400		96	78	127			
Surr: 1,2-Dichloroethane-d4	10.6		10		106	76	127			
Surr: Toluene-d8	9.56		10		96	84	113			
Surr: 4-Bromofluorobenzene	9.77		10		98	79	119			

Sample Matrix Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083014.D** Batch ID: **MS12W0830B** Analysis Date: **08/30/2005 13:40**

Sample ID: **05083005-01AGS** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2150	250	2000	0	107	70	139			
Surr: 1,2-Dichloroethane-d4	53.2		50		106	76	127			
Surr: Toluene-d8	48		50		96	84	113			
Surr: 4-Bromofluorobenzene	48.3		50		97	79	119			

Sample Matrix Spike Duplicate

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083015.D** Batch ID: **MS12W0830B** Analysis Date: **08/30/2005 14:01**

Sample ID: **05083005-01AGSD** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2050	250	2000	0	103	70	139	2146	4.5(12)	
Surr: 1,2-Dichloroethane-d4	51.5		50		103	76	127			
Surr: Toluene-d8	48.1		50		96	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.

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-Sep-05*

QC Summary Report

Work Order: 05083005

Method Blank

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083010.D** Batch ID: **MS12W0830A** Analysis Date: **08/30/2005 12:14**

Sample ID: **MBLK MS12W0830A** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

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	10.4		10		104	76	127			
Surr: Toluene-d8	9.6		10		96	84	113			
Surr: 4-Bromofluorobenzene	9.72		10		97	79	119			

Laboratory Control Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083008.D** Batch ID: **MS12W0830A** Analysis Date: **08/30/2005 11:32**

Sample ID: **LCS MS12W0830A** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	10.4	0.5	10		104	81	122			
Toluene	9.85	0.5	10		99	80	120			
Ethylbenzene	10.1	0.5	10		101	80	120			
m,p-Xylene	10.4	0.5	10		104	80	129			
o-Xylene	10.4	0.5	10		104	80	129			
Surr: 1,2-Dichloroethane-d4	10.3		10		103	76	127			
Surr: Toluene-d8	9.63		10		96	84	113			
Surr: 4-Bromofluorobenzene	9.75		10		98	79	119			

Sample Matrix Spike

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083012.D** Batch ID: **MS12W0830A** Analysis Date: **08/30/2005 12:57**

Sample ID: **05083005-01AMS** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	55.2	1.3	50	0	110	74	125			
Toluene	51.8	1.3	50	0	104	76	120			
Ethylbenzene	52.9	1.3	50	0	106	77	124			
m,p-Xylene	54.5	1.3	50	0	109	73	130			
o-Xylene	54.7	1.3	50	0	109	74	131			
Surr: 1,2-Dichloroethane-d4	51.8		50		104	76	127			
Surr: Toluene-d8	48.1		50		96	84	113			
Surr: 4-Bromofluorobenzene	49.7		50		99	79	119			

Sample Matrix Spike Duplicate

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

File ID: **D:\MSDCHEM\MS12\DATA\050830\05083013.D** Batch ID: **MS12W0830A** Analysis Date: **08/30/2005 13:18**

Sample ID: **05083005-01AMSD** Units : **µg/L** Run ID: **MSD_12_050830B** Prep Date: **08/30/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	56.7	1.3	50	0	113	74	124	55.19	2.8(13)	
Toluene	53.1	1.3	50	0	106	76	119	51.82	2.4(13)	
Ethylbenzene	55.1	1.3	50	0	110	77	124	52.86	4.2(13)	
m,p-Xylene	56	1.3	50	0	112	73	130	54.54	2.6(14)	
o-Xylene	56.6	1.3	50	0	113	74	131	54.74	3.3(13)	
Surr: 1,2-Dichloroethane-d4	50.9		50		102	76	127			
Surr: Toluene-d8	48.1		50		96	84	113			
Surr: 4-Bromofluorobenzene	49		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.

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

Sample Receipt Checklist

Date Report is due to Client : **8/30/2005** Date of Notice : **8/30/2005 10:14:26**

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 :	
Project Manager: **Steve Carter**	Client's EMail: **scarter@stratusinc.net**	
	Client's Phone: **(530) 676-6008**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR05083005**	Date Received: **8/30/2005**	Received by: Stephanie Sifuentes

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 : Chain split due to ASAP TAT, see w/o STR05083006.

Billing Information :

RUSH!

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 : STR05083005

Report Due By : 5:00 PM On : 30-Aug-05

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

Report Attention : Steve Carter
CC Report :

Steve Carter
TEL : (530) 676-6008
FAX : (530) 676-6005
EMail scarter@stratusinc.net

Job :
PO :

Client's COC # : 09544

EDD Required : **Yes**

Sampled by : C.Hill

Cooler Temp : 4 °C

Date Printed: **30-Aug-05**

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
STR05083005-01A	USA57 W EFF	AQ	08/29/05 09:35	5	0	1		GAS-C	BTEX/OXY_C							

Comments: Chain split due to ASAP TAT, see w/o STR05083006. Secuirty seals intact, frozen ice. Send copy of receipt checklist with final report :

	Signature	Print Name	Company	Date/Time
Received by:			**Alpha Analytical, Inc.**	

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 EWC
Address 3330 Cameron Pk DR
City, State, Zip Cameron 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

Analyses Required

09544

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

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
0930	829 05	AQ	[illegible]	USA 57 W INF	Std		5-V	X	X	Standard TAT
0935	|	AQ	[illegible]	USA 57 W EFF	24		5-V	X	X	24 HR TAT

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	82905	1230
Received by	[signature]	Mike [illegible]	Alpha	82905	1230
Relinquished by					
Received by	[signature]	S. [illegible]	ALPHA	[illegible]	[illegible]
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) 676-6005
Fax: (530) 676-6005
Date Received : 09/07/05

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 Purgeable	ND	50 µg/L	09/06/05	09/08/05
Inf Water	Tertiary Butyl Alcohol (TBA)	61	10 µg/L	09/06/05	09/08/05
Lab ID :	Methyl tert-butyl ether (MTBE)	4.7	0.50 µg/L	09/06/05	09/08/05
STR05090706-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/06/05	09/08/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/06/05	09/08/05
	Benzene	ND	0.50 µg/L	09/06/05	09/08/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/06/05	09/08/05
	Toluene	ND	0.50 µg/L	09/06/05	09/08/05
	Ethylbenzene	ND	0.50 µg/L	09/06/05	09/08/05
	m,p-Xylene	ND	0.50 µg/L	09/06/05	09/08/05
	o-Xylene	ND	0.50 µg/L	09/06/05	09/08/05

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

9/14/05
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: STR05090706 **Project:** 2007-0057-01/USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05090706-01A	Inf Water	Aqueous	2

9/14/05
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: *22-Sep-05*

QC Summary Report

Work Order: 05090706

Method Blank

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

File ID: **D:\HPCHEM\MS10\DATA\050908\05090834.D** Batch ID: **MS10W0908D** Analysis Date: **09/08/2005 19:46**

Sample ID: **MBLK MS10W0908D** Units : µg/L Run ID: **MSD_10_050908B** Prep Date: **09/08/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	50								
Surr: 1,2-Dichloroethane-d4	9.03		10		90	76	127			
Surr: Toluene-d8	9.9		10		99	84	113			
Surr: 4-Bromofluorobenzene	9.37		10		94	79	119			

Laboratory Control Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050908\05090830.D** Batch ID: **MS10W0908D** Analysis Date: **09/08/2005 18:20**

Sample ID: **GLCS MS10W0908D** Units : µg/L Run ID: **MSD_10_050908B** Prep Date: **09/08/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	424	50	400		106	78	127			
Surr: 1,2-Dichloroethane-d4	9.52		10		95	76	127			
Surr: Toluene-d8	10.1		10		101	84	113			
Surr: 4-Bromofluorobenzene	9.47		10		95	79	119			

Sample Matrix Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050908\05090845.D** Batch ID: **MS10W0908D** Analysis Date: **09/08/2005 23:41**

Sample ID: **05090630-02AGS** Units : µg/L Run ID: **MSD_10_050908B** Prep Date: **09/08/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2040	250	2000	0	102	70	139			
Surr: 1,2-Dichloroethane-d4	46.2		50		92	76	127			
Surr: Toluene-d8	51.4		50		103	84	113			
Surr: 4-Bromofluorobenzene	47.7		50		95	79	119			

Sample Matrix Spike Duplicate

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

File ID: **D:\HPCHEM\MS10\DATA\050908\05090846.D** Batch ID: **MS10W0908D** Analysis Date: **09/09/2005 00:02**

Sample ID: **05090630-02AGSD** Units : µg/L Run ID: **MSD_10_050908B** Prep Date: **09/09/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2050	250	2000	0	102	70	139	2040	0.5(12)	
Surr: 1,2-Dichloroethane-d4	44.3		50		89	76	127			
Surr: Toluene-d8	50.4		50		101	84	113			
Surr: 4-Bromofluorobenzene	48.2		50		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.

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: *22-Sep-05*

QC Summary Report

Work Order: 05090706

Method Blank

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

File ID: **D:\HPCHEM\MS10\DATA\050908\05090834.D** Batch ID: **MS10W0908C** Analysis Date: **09/08/2005 19:46**

Sample ID: **MBLK MS10W0908C** Units : **µg/L** Run ID: **MSD_10_050908B** Prep Date: **09/08/2005**

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	9.03		10		90	76	127			
Surr: Toluene-d8	9.9		10		99	84	113			
Surr: 4-Bromofluorobenzene	9.37		10		94	79	119			

Laboratory Control Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050908\05090833.D** Batch ID: **MS10W0908C** Analysis Date: **09/08/2005 19:25**

Sample ID: **LCS MS10W0908C** Units : **µg/L** Run ID: **MSD_10_050908B** Prep Date: **09/08/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	10.6	0.5	10		106	81	122			
Toluene	11.3	0.5	10		113	80	120			
Ethylbenzene	11.5	0.5	10		115	80	120			
m,p-Xylene	11.7	0.5	10		117	80	129			
o-Xylene	11.3	0.5	10		113	80	129			
Surr: 1,2-Dichloroethane-d4	8.8		10		88	76	127			
Surr: Toluene-d8	10.3		10		103	84	113			
Surr: 4-Bromofluorobenzene	9.63		10		96	79	119			

Sample Matrix Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050908\05090843.D** Batch ID: **MS10W0908C** Analysis Date: **09/08/2005 22:58**

Sample ID: **05090630-02AMS** Units : **µg/L** Run ID: **MSD_10_050908B** Prep Date: **09/08/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	54.8	1.3	50	0	110	74	125			
Toluene	57.6	1.3	50	0	115	76	120			
Ethylbenzene	56.8	1.3	50	0	114	77	124			
m,p-Xylene	58	1.3	50	0	116	73	130			
o-Xylene	57.8	1.3	50	0	116	74	131			
Surr: 1,2-Dichloroethane-d4	48		50		96	76	127			
Surr: Toluene-d8	51.7		50		103	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\MS10\DATA\050908\05090844.D** Batch ID: **MS10W0908C** Analysis Date: **09/08/2005 23:19**

Sample ID: **05090630-02AMSD** Units : **µg/L** Run ID: **MSD_10_050908B** Prep Date: **09/08/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	52.3	1.3	50	0	105	74	124	54.78	4.6(13)	
Toluene	55.1	1.3	50	0	110	76	119	57.58	4.4(13)	
Ethylbenzene	54.3	1.3	50	0	109	77	124	56.8	4.5(13)	
m,p-Xylene	55.5	1.3	50	0	111	73	130	57.95	4.3(14)	
o-Xylene	56	1.3	50	0	112	74	131	57.8	3.1(13)	
Surr: 1,2-Dichloroethane-d4	46.4		50		93	76	127			
Surr: Toluene-d8	52		50		104	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 : **9/15/2005** Date of Notice : **9/7/2005 1:55:58 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) 676-6005**	Client's FAX: **(530) 676-6005**
Work Order Number: **STR05090706**	Date Received: **9/7/2005**	Received by: Stephanie Sifuentes

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 :

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 : STR05090706

Report Due By : 5:00 PM On : 15-Sep-05

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

Kiran Nagaraju
TEL : (530) 676-6005
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 # : 6830

Cooler Temp : 4 °C

Date Printed: **07-Sep-05**

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
STR05090706-01A	Inf Water	AQ	09/06/05 10:36	6	0	6		GAS-C	BTEX/OXY_C							

Comments: Security seals, frozen ice. Send copy of receipt checklist with final report :

	Signature	Print Name	Company	Date/Time
Received by:			Alpha Analytical, Inc.	

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 Strata's Environmental, 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 ___

Client Name	P.O. #	Job #
USA 57		2007-0057-01
Address	**EMail Address**	
10700 MacArthur Blvd.		
City, State, Zip	**Phone #**	**Fax #**
Oakland, CA		

Analyses Required: BTEX, TPHg, 5 Oxy's

6830

Required QC Level? I II III IV

EDD / EDF? YES X NO ___

Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sampled by: MW Morgan	Report Attention: Kiran Nagaraja — Sample Description	TAT	Field Filtered	Total and type of containers ** See below	BTEX, TPHg	5 Oxy's	REMARKS
1030	9/6/05	AQ			Inf Water	5		6-V	X	X	

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		Martin Morgan	Strata	9/6/05	1305
Received by	Eliana M. Fruciano	E. Fruciano	Alpha Analytical Inc	09/06/05	1305
Relinquished by					
Received by					
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 : 09/14/05

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 Purgeable	ND	50 µg/L	09/13/05	09/15/05
USA 57 W INF	Tertiary Butyl Alcohol (TBA)	29	10 µg/L	09/13/05	09/15/05
Lab ID :	Methyl tert-butyl ether (MTBE)	2.6	0.50 µg/L	09/13/05	09/15/05
STR05091405-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/13/05	09/15/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/13/05	09/15/05
	Benzene	ND	0.50 µg/L	09/13/05	09/15/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/13/05	09/15/05
	Toluene	ND	0.50 µg/L	09/13/05	09/15/05
	Ethylbenzene	ND	0.50 µg/L	09/13/05	09/15/05
	m,p-Xylene	ND	0.50 µg/L	09/13/05	09/15/05
	o-Xylene	ND	0.50 µg/L	09/13/05	09/15/05
Client ID :	TPH Purgeable	ND	50 µg/L	09/13/05	09/15/05
USA 57 W GACI	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	09/13/05	09/15/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	09/13/05	09/15/05
STR05091405-02A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/13/05	09/15/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/13/05	09/15/05
	Benzene	ND	0.50 µg/L	09/13/05	09/15/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/13/05	09/15/05
	Toluene	ND	0.50 µg/L	09/13/05	09/15/05
	Ethylbenzene	ND	0.50 µg/L	09/13/05	09/15/05
	m,p-Xylene	ND	0.50 µg/L	09/13/05	09/15/05
	o-Xylene	ND	0.50 µg/L	09/13/05	09/15/05
Client ID :	TPH Purgeable	ND	50 µg/L	09/13/05	09/15/05
USA 57 W EFF	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	09/13/05	09/15/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	09/13/05	09/15/05
STR05091405-03A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/13/05	09/15/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/13/05	09/15/05
	Benzene	ND	0.50 µg/L	09/13/05	09/15/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/13/05	09/15/05
	Toluene	ND	0.50 µg/L	09/13/05	09/15/05
	Ethylbenzene	ND	0.50 µg/L	09/13/05	09/15/05
	m,p-Xylene	ND	0.50 µg/L	09/13/05	09/15/05
	o-Xylene	ND	0.50 µg/L	09/13/05	09/15/05

Alpha Analytical, Inc.

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

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

9/21/05

Report Date

Alpha Analytical, Inc.

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

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VOC Sample Preservation Report

Work Order: STR05091405 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05091405-01A	USA 57 W INF	Aqueous	2
05091405-02A	USA 57 W GACI	Aqueous	2
05091405-03A	USA 57 W EFF	Aqueous	2

9/21/05

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: 27-Sep-05

QC Summary Report

Work Order: 05091405

Method Blank

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091506.D** Batch ID: **MS10W0915B** Analysis Date: **09/15/2005 12:42**

Sample ID: **MBLK MS10W0915B** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	50								
Surr: 1,2-Dichloroethane-d4	9.71		10		97	76	127			
Surr: Toluene-d8	10.3		10		103	84	113			
Surr: 4-Bromofluorobenzene	9.46		10		95	79	119			

Laboratory Control Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091504.D** Batch ID: **MS10W0915B** Analysis Date: **09/15/2005 11:59**

Sample ID: **GLCS MS10W0915B** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	379	50	400		95	78	127			
Surr: 1,2-Dichloroethane-d4	10.3		10		103	76	127			
Surr: Toluene-d8	10		10		100	84	113			
Surr: 4-Bromofluorobenzene	9.39		10		94	79	119			

Sample Matrix Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091511.D** Batch ID: **MS10W0915B** Analysis Date: **09/15/2005 14:47**

Sample ID: **05091405-03AGS** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2180	250	2000	0	109	70	139			
Surr: 1,2-Dichloroethane-d4	44.1		50		88	76	127			
Surr: Toluene-d8	51		50		102	84	113			
Surr: 4-Bromofluorobenzene	47.9		50		96	79	119			

Sample Matrix Spike Duplicate

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091512.D** Batch ID: **MS10W0915B** Analysis Date: **09/15/2005 15:08**

Sample ID: **05091405-03AGSD** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2180	250	2000	0	109	70	139	2178	0.2(12)	
Surr: 1,2-Dichloroethane-d4	45.7		50		91	76	127			
Surr: Toluene-d8	51.4		50		103	84	113			
Surr: 4-Bromofluorobenzene	47.2		50		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.

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: 27-Sep-05

QC Summary Report

Work Order: 05091405

Method Blank

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091506.D** Batch ID: **MS10W0915A** Analysis Date: **09/15/2005 12:42**

Sample ID: **MBLK MS10W0915A** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

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	9.71		10		97	76	127			
Surr: Toluene-d8	10.3		10		103	84	113			
Surr: 4-Bromofluorobenzene	9.46		10		95	79	119			

Laboratory Control Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091507.D** Batch ID: **MS10W0915A** Analysis Date: **09/15/2005 13:03**

Sample ID: **LCS MS10W0915A** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.93	0.5	10		99	81	122			
Toluene	10.6	0.5	10		106	80	120			
Ethylbenzene	11.2	0.5	10		112	80	120			
m,p-Xylene	11.3	0.5	10		113	80	129			
o-Xylene	10.8	0.5	10		108	80	129			
Surr: 1,2-Dichloroethane-d4	9.14		10		91	76	127			
Surr: Toluene-d8	10.4		10		104	84	113			
Surr: 4-Bromofluorobenzene	9.81		10		98	79	119			

Sample Matrix Spike

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091509.D** Batch ID: **MS10W0915A** Analysis Date: **09/15/2005 14:03**

Sample ID: **05091405-03AMS** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	52	1.3	50	0	104	74	125			
Toluene	57.6	1.3	50	0	115	76	120			
Ethylbenzene	59.1	1.3	50	0	118	77	124			
m,p-Xylene	60.6	1.3	50	0	121	73	130			
o-Xylene	58.7	1.3	50	0	117	74	131			
Surr: 1,2-Dichloroethane-d4	47.4		50		95	76	127			
Surr: Toluene-d8	52.7		50		105	84	113			
Surr: 4-Bromofluorobenzene	48.2		50		96	79	119			

Sample Matrix Spike Duplicate

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

File ID: **D:\HPCHEM\MS10\DATA\050915\05091510.D** Batch ID: **MS10W0915A** Analysis Date: **09/15/2005 14:25**

Sample ID: **05091405-03AMSD** Units : **µg/L** Run ID: **MSD_10_050915A** Prep Date: **09/15/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	51.2	1.3	50	0	102	74	124	52.04	1.7(13)	
Toluene	56.9	1.3	50	0	114	76	119	57.6	1.2(13)	
Ethylbenzene	59.1	1.3	50	0	118	77	124	59.11	0.0(13)	
m,p-Xylene	61	1.3	50	0	122	73	130	60.58	0.6(14)	
o-Xylene	58.6	1.3	50	0	117	74	131	58.68	0.2(13)	
Surr: 1,2-Dichloroethane-d4	43.8		50		88	76	127			
Surr: Toluene-d8	52.3		50		105	84	113			
Surr: 4-Bromofluorobenzene	47.9		50		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.

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

Sample Receipt Checklist

Date Report is due to Client : **9/22/2005** Date of Notice : **9/14/2005 1:45:38 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: **STR05091405**	Date Received: **9/14/2005**	Received by: Stephanie Sifuentes

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 : STR05091405

Report Due By : 5:00 PM On : 22-Sep-05

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

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

EDD Required : Yes

Sampled by : C. Hill

Report Attention : Gowri Kowtha
CC Report :

Job : USA 57
PO :

Client's COC # : 09548

Cooler Temp : 4 °C

Date Printed: **14-Sep-05**

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
STR05091405-01A	USA 57 W INF	AQ	09/13/05 06:20	5	0	6		GAS-C	BTEX/OXY_C							
STR05091405-02A	USA 57 W GACI	AQ	09/13/05 06:22	5	0	6		GAS-C	BTEX/OXY_C							
STR05091405-03A	USA 57 W EFF	AQ	09/13/05 06:25	5	0	6		GAS-C	BTEX/OXY_C							

Comments: Security seasl intact, frozen ice. Send copy of receipt checklist with final report :

	Signature	Print Name	Company	Date/Time
Received by:			Alpha Analytical, Inc.	

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
City, State, Zip Cameron 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

09548

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

Analyses Required: TPHG 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 BTEX	5 OXYS							REMARKS
0620	9/13	AQ		USA57 W INF	STD			X	X							
0622	|	AQ		USA 57 W GAC 1	STD			X	X							
0625	|	AQ		USA 57 W EFF	STD			X	X							

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHILL	Stratus	91305	0930
Received by	[signature]	Mike Gibson	Alpha	91305	0930
Relinquished by					
Received by					
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 : 09/17/05

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 Purgeable	67	50 µg/L	09/16/05	09/20/05
USA 57 W INF	Tertiary Butyl Alcohol (TBA)	25	10 µg/L	09/16/05	09/20/05
Lab ID :	Methyl tert-butyl ether (MTBE)	2.3	0.50 µg/L	09/16/05	09/20/05
STR05091904-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/16/05	09/20/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/16/05	09/20/05
	Benzene	ND	0.50 µg/L	09/16/05	09/20/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/16/05	09/20/05
	Toluene	ND	0.50 µg/L	09/16/05	09/20/05
	Ethylbenzene	ND	0.50 µg/L	09/16/05	09/20/05
	m,p-Xylene	2.4	0.50 µg/L	09/16/05	09/20/05
	o-Xylene	1.4	0.50 µg/L	09/16/05	09/20/05

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

9/26/05
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: STR05091904 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05091904-01A	USA 57 W INF	Aqueous	2

9/26/05

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: *29-Sep-05*

QC Summary Report

Work Order: 05091904

Method Blank

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

File ID: **05092008.D** Batch ID: **MS08W0920B** Analysis Date: **09/20/2005 14:56**

Sample ID: **MBLK MS08W0920B** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	50								
Surr: 1,2-Dichloroethane-d4	9.15		10		92	76	127			
Surr: Toluene-d8	10.4		10		104	84	113			
Surr: 4-Bromofluorobenzene	10.3		10		103	79	119			

Laboratory Control Spike

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

File ID: **05092007.D** Batch ID: **MS08W0920B** Analysis Date: **09/20/2005 14:33**

Sample ID: **GLCS MS08W0920B** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	354	50	400		89	78	127			
Surr: 1,2-Dichloroethane-d4	8.27		10		83	76	127			
Surr: Toluene-d8	10		10		100	84	113			
Surr: 4-Bromofluorobenzene	10.6		10		106	79	119			

Sample Matrix Spike

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

File ID: **05092011.D** Batch ID: **MS08W0920B** Analysis Date: **09/20/2005 16:04**

Sample ID: **05091904-01AGS** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2540	250	2000	66.97	123	70	139			
Surr: 1,2-Dichloroethane-d4	48		50		96	76	127			
Surr: Toluene-d8	46		50		92	84	113			
Surr: 4-Bromofluorobenzene	50.1		50		100	79	119			

Sample Matrix Spike Duplicate

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

File ID: **05092012.D** Batch ID: **MS08W0920B** Analysis Date: **09/20/2005 16:27**

Sample ID: **05091904-01AGSD** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2440	250	2000	66.97	118	70	139	2536	4.0(12)	
Surr: 1,2-Dichloroethane-d4	47.4		50		95	76	127			
Surr: Toluene-d8	46.9		50		94	84	113			
Surr: 4-Bromofluorobenzene	49.4		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.

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: *29-Sep-05*

QC Summary Report

Work Order: 05091904

Method Blank

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

File ID: **05092008.D** Batch ID: **MS08W0920A** Analysis Date: **09/20/2005 14:56**

Sample ID: **MBLK MS08W0920A** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

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	9.15		10		92	76	127			
Surr: Toluene-d8	10.4		10		104	84	113			
Surr: 4-Bromofluorobenzene	10.3		10		103	79	119			

Laboratory Control Spike

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

File ID: **05092006.D** Batch ID: **MS08W0920A** Analysis Date: **09/20/2005 13:04**

Sample ID: **LCS MS08W0920A** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.97	0.5	10		99.7	81	122			
Toluene	9.85	0.5	10		99	80	120			
Ethylbenzene	10.3	0.5	10		103	80	120			
m,p-Xylene	9.24	0.5	10		92	80	129			
o-Xylene	9	0.5	10		90	80	129			
Surr: 1,2-Dichloroethane-d4	9.71		10		97	76	127			
Surr: Toluene-d8	10.2		10		102	84	113			
Surr: 4-Bromofluorobenzene	9.4		10		94	79	119			

Sample Matrix Spike

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

File ID: **05092009.D** Batch ID: **MS08W0920A** Analysis Date: **09/20/2005 15:18**

Sample ID: **05091904-01AMS** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	58.1	1.3	50	0	116	74	125			
Toluene	58.4	1.3	50	0	117	76	120			
Ethylbenzene	60.1	1.3	50	0	120	77	124			
m,p-Xylene	55.6	1.3	50	2.36	106	73	130			
o-Xylene	54.2	1.3	50	1.43	106	74	131			
Surr: 1,2-Dichloroethane-d4	50.9		50		102	76	127			
Surr: Toluene-d8	50.1		50		100	84	113			
Surr: 4-Bromofluorobenzene	46		50		92	79	119			

Sample Matrix Spike Duplicate

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

File ID: **05092010.D** Batch ID: **MS08W0920A** Analysis Date: **09/20/2005 15:41**

Sample ID: **05091904-01AMSD** Units : **µg/L** Run ID: **MSD_08_050920A** Prep Date: **09/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	55.6	1.3	50	0	111	74	124	58.08	4.3(13)	
Toluene	54.2	1.3	50	0	108	76	119	58.44	7.6(13)	
Ethylbenzene	55.9	1.3	50	0	112	77	124	60.13	7.4(13)	
m,p-Xylene	51.3	1.3	50	2.36	98	73	130	55.6	8.1(14)	
o-Xylene	49.9	1.3	50	1.43	97	74	131	54.2	8.3(13)	
Surr: 1,2-Dichloroethane-d4	50.8		50		102	76	127			
Surr: Toluene-d8	50		50		100	84	113			
Surr: 4-Bromofluorobenzene	46.9		50		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 : **9/27/2005** Date of Notice : **9/19/2005 2:24:07 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: **STR05091904**	Date Received: **9/17/2005**	Received by: Stephanie Sifuentes

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 :

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 : STR05091904

Report Due By : 5:00 PM On : 27-Sep-05

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
FAX : (530) 676-6005
EMail gkowtha@stratusinc.net

Job : USA 57
PO :

Client's COC # : 09553

EDD Required : Yes

Sampled by : C. Hill

Cooler Temp : 4 °C

Date Printed: 19-Sep-05

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
STR05091904-01A	USA 57 W INF	AQ	09/16/05 05:32	5	0	6		GAS-C	BTEX/OXY_C							

Comments: Security seals, frozen ice. Saturday delivery, samples kept in secured area @ 4'c until log in 9-19-05. Send copy of receipt checklist with final report :

	Signature	Print Name	Company	Date/Time
Received by:			Alpha Analytical, Inc.	

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 ___

09553

Client Name USA 57	P.O. #	Job #
Address	EMail Address	
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	TAT	Field Filtered	Total and type of containers ** See below	TPHg/BTEX	5 OXYS
0930	9/16/05	AQ		USA 57 W INF	5D		5-V	Y	Y

Analyses Required

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	Stratus	9/16/05	1030
Received by		Lisa Bryla	ALPHA	9/16/05	1030
Relinquished by					
Received by					
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.