



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:

Nov 17 2005

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,

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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

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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.

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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/m³) and 0.41 mg/m³, 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/m³).
- 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 owri S. Kowtha, P.E.

Attachments:

cc:

Table 1 DPE Event Field Observation Summary

Table 2 Soil Vapor Analytical ResultsTable 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

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

	Hour	TE	Appl	Air	Totalizer	GW	Inf -	Oper		Dept	h to Wa	ater, fe	et bgs	and Ind	uced V	/acuum	ı, "WC	
Date	Meter		Vac	Flow	Reading	Ext Rate	PID	Temp	M۷	N-4	MV	V-5		MW-6			MW-8	
	Reading	days	"Hg	cfm	gallons	gpm	ppmv	deg F	DTW	DD	DTW	DO	Vac	DTW	DD	Vac	DTW	DD
8/29/05 5:30	F	Baseline i	measuren	nents pri	or to start o	f third D	PE event		8.71		12.90		0.00	DRY		0.00	16.75	
8/29/05 7:00	Ве	gin Thir	d DPE E	lvent, Us	sing Wells	S-1, S-2,		and MW Otalizer				r Metei	Readir	ig Prior	to Test	Start u	p = 435.6	6.
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	1
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			S	ystem ob	served r	ion-fund	ctional d	ue to lov	w propai	ne		
9/6/05 9:15	System re	19.10 7.65 NM NM 51,690 2.63 System observed non-functional due to stem re-started after propane delivery. Based on hour meter readings for 8/31/5 at 0500 hrs & 9/6/5 at 0600 hrs, the I 9/5/05 at 23:14 hrs														ı was lik	ely shute	down on
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	reading	observed s between l hrs. Sin	ı 9/13/0	5 5:30 a	nd 9/16/	05 5:00,	the DP	E system	was lik	ely shut	down on	9/13/05
Distance to No	earest Ext	raction \	Well		•				8	36	9	9		70			48	
Screening Inte	erval, feet	bgs : S-	1=20-40	, S-2=20	-40, MW-3	3=24-44,	& MW-7	=10-40	10 -	40.5	10	- 40		10 - 40.	5		10 - 35	
Notes:																	3.5	

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

Photo Ionization Detector

ppmv - parts per million by volume

NM - Not measured

-= Not applicable

anemometer at 3" diameter -
3.g.: flow ref flow rate = velocity X area of pipe (e.g.: flow rate = 994 feet per minute X 0.05 sq.ft)

¹ Flow rate measured using a digital anemometer at 3" diameter steel pipe;

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	ТРНС	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	ТВА
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/m³)

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/m³).

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	ТРНG	Benzene	Toluene	Ethyl- benzene	Total Xylenes	мтве	ТВА	DIPE	ЕТВЕ	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

	***************************************		Influe	nt Concentr	ation	Soil Va	por Extract	ion Rate	Cumulat (TPHG)	ive Mass Removed
Date	Time Elapsed	Flowrate		(mg/m ³)			(lbs/day)		Period ¹	Total
	(days)	(cfm)	TPHG	Benzene	МТВЕ	TPHG	Benzene	MTBE	lbs	lbs
Petroleum hydro	ocarbon mass remo	oved during the p	revious DI	PE 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
		Volume of groundwater	Influe	nt Concenti	ation	Mas	s Extracted	from	Cumulat Rem	ive Mass oved
Date	Time Elapsed	extracted ² ,		(µg/L)		gro	undwater (lbs)	TPHG	MTBE
	(days)	gallons	TPHG	Benzene	МТВЕ	TPHG	Benzene	MTBE	lbs	lbs
Petroleum hydro	ocarbon mass remo	oved during the p	revious Di	PE 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 Calcula	<u>tions</u>		n 100							

Ext. Rate from = $\frac{40 \text{ cu ft x}}{\text{min}}$ $\frac{8,400 \text{ mg}}{\text{cu meter}}$ $\frac{\text{lb}}{\text{x 1,440 min}}$ $\frac{\text{x cu meter}}{\text{35,314 cu ft}}$

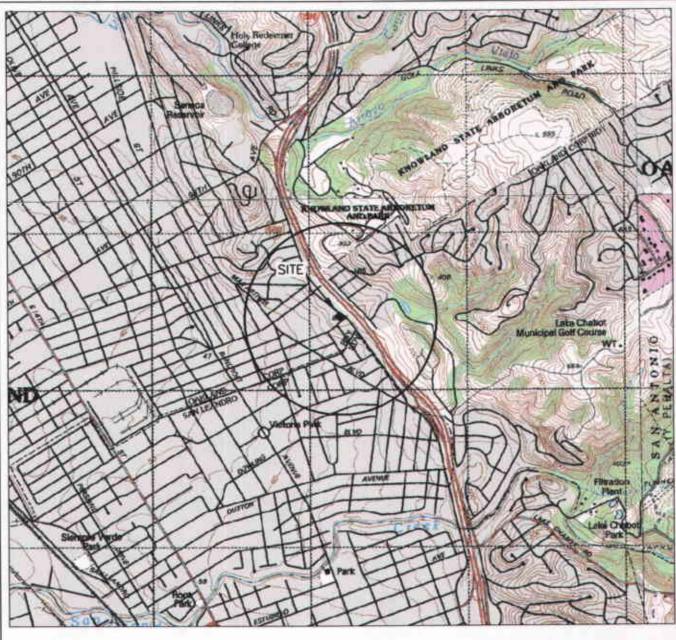
30.21 lbs/day

Mass removed = concentration (μg/L) x gallons extracted x (2.2046 x 10⁻⁹)(lb/mg) / 0.26418 (gal/L) from groundwater

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



QUADRANGLE LOCATION





SCALE 1:24,000

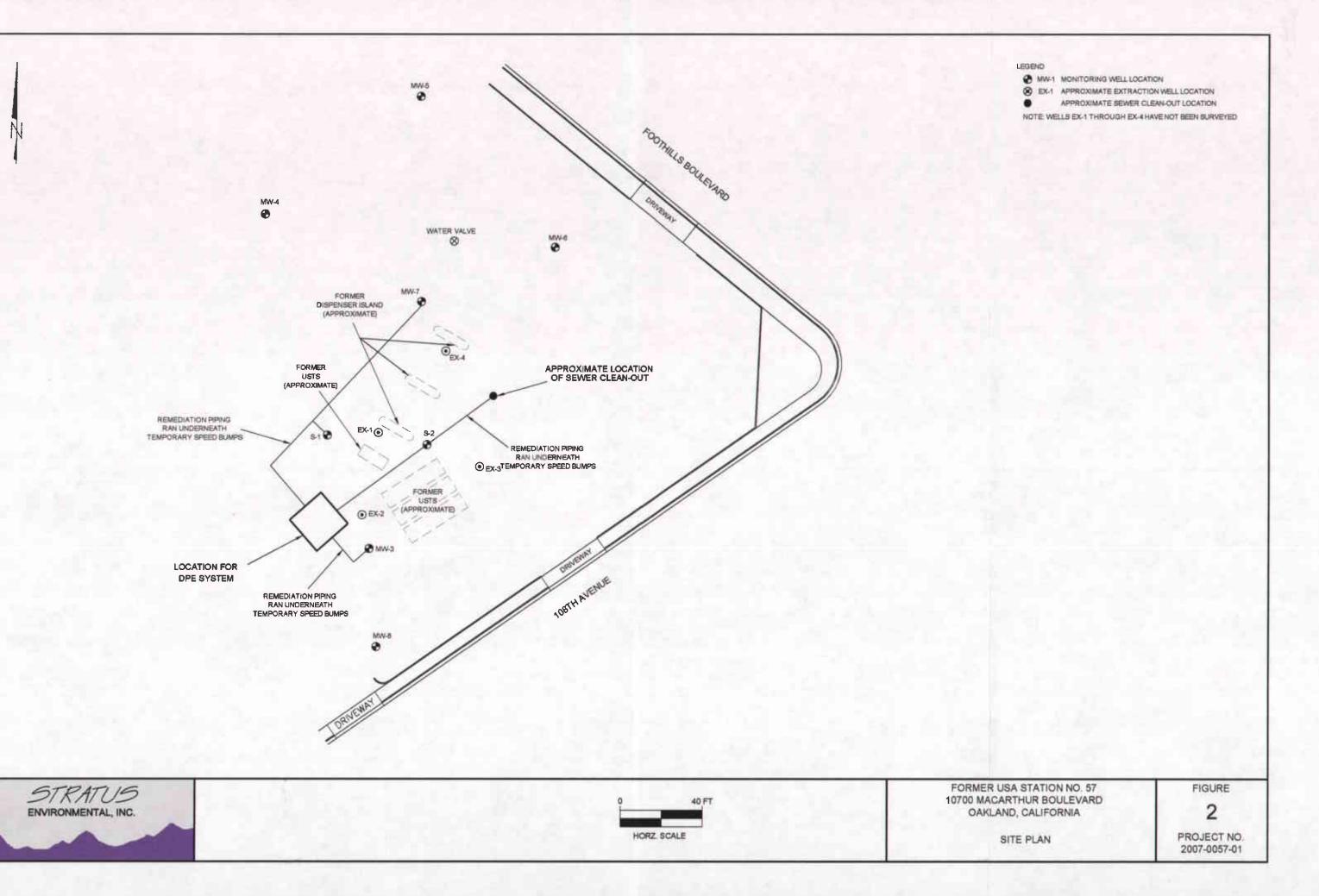
STRATUS ENVIRONMENTAL, INC.

FORMER USA SERVICE STATION NO. 57 10700 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA SITE LOCATION MAP **FIGURE**

1

PROJECT NO. 2007-0057-01

USENET Conference Like



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

	TE	Appl	Air	Totalizer	GW	Inf	Oper			In	duced	Vacuun	1 ("WC)	&/or DT	W (feet	bgs) Dat	a in Obs	ervatio	n Wells			
Date & Time		Vac	Flow	Reading	Ext Rate	PID	Temp		S-1			MW-3		MW	-4	MV	V-5		MW-7		MV	V-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 ι	ısing we	II S-2, DT	W =20.	26 feet	bgs and	DPE u	nit hour	meter r	eading =	839.6					
7/6/2004 9:00	00:30	25.50	87	42,120		2.9	1,450	NM	NM	МИ	NM	NM	МИ	NM	МИ	МИ	NM	NM	NM	NM	NM	NM
7/6/2004 10:00	01:30	NM	NM	42,120		23.0	NM	0.35	NM	NM	ММ	NM	NM	NM	NM	МИ	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									Disco	ntinue	Test on	S-2									
Distance to Extrac	tion Well	S-2							50			60		13	5	17	70		70		10	00
Screening Interval		20 - 4	0 (S-2)						20 - 40			24 - 44		10 - 4	40.5	10 -	40		10 - 40.5	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 "Hg - Inches Mercury

Temp - Temperature

bgs - below ground surface

deg F - degree Farenheit

NM - Not measured

Ext. - Extraction

TABLE 2 DPE TEST USING WELL S-1

Former USA Station No. 57 10700 MacArthur Boulevard Oakland, California

	TE	Appl	Air	Totalizer	GW	Inf	Oper			- Ir	duced	Vacuun	n ("WC)	&/or DT	W (feet	bgs) Da	ata in Ol	servat	ion Wel	ls		
Date & Time		Vac	Flow	Reading	Ext Rate	PID	Temp.		S-2			MW-3		MV	V-4	MV	V-5		MW-7		MV	V-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									Star	t Up Te	st usin	g Well S	i-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	ММ	МИ	МИ	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		•	A			•	•		Disc	ontinu	e Test o	n S-1									
Distance to Extra	ction Wel	l S-1							50			60		11	0	1:	70		80		10	05
Screening Interva	ıl	20 - 40	(S-1)						20 - 40			24 - 44		10 -	40,5	10	- 40		10 - 40.	5	10 -	- 35

Notes:

TE - Time Elapsed, hours: minutes

cfm - cubic feet per minute

Appl - Applied

Inf - Influent

Oper - Operating

DD - Drawdown

Vac - Vacuum

GW Ext - Groundwater Extraction

DTW - depth to groundwater

PID - Photo Ionization Detector

" WC - Inches water column

All induced vacuum measured in observation wells were in "WC

ppmv - parts per million by volume

gpm - gallons per minute
"Hg - Inches Mercury

Temp - Temperature deg F - degree Farenheit

bgs - below ground surface

Ext. - Extraction

NM - Not measured

TABLE 3 DPE TEST USING WELL MW-3

Former USA Station No. 57 10700 MacArthur Boulevard Oakland, California

	TE	Appl	Air	Totalizer	GW	Inf	Oper				Indu	ced Vacu	ıum ("W	(C) &/or E	TW (fee	et bgs) D	ata in O	bservat	ion Wells	3		
Date & Time		Vac	Flow	Reading	Ext Rate	PID	Temp		S -1			S-2		MW	I-4	MV	/ -5		MW-7		MV	V-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 us	ing Well	MW-3									
7/7/2004 9:25	0.00	NM	МИ	42,960		NM	ИМ	МИ	NM		NM	22.16		12.26	~**	18.07		МИ	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	МИ		NM		МИ	-	МИ	NM		МИ	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								V-3													
Distance to Extrac	tion Well	MW-3							60			60		17	0	22	20		120		5	0
Screening Interval		24-44 (MW-3)						20 - 40			20 - 40		10 - 4	10.5	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

	TE	Appl	Air	Totalizer	GW	Inf	Oper												
Date & Time		Vac	Flow	Reading	Ext Rate	PID	Temp	М۷	V-4	MV	V-5	MV	V-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							S	tart Test	on S-1,	S-2 and	WW-3								
7 <i>l</i> 7 <i>l</i> 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	80.0	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			Dis	continu	ie DPE	Test. D	PE uni	t hour	meter	reading	= 1,29	7.7		
Distance to Nearest	nce to Nearest Extraction Well									1	70	1	10		70			50	
Screening Interval										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

Ext. - Extraction

deg F - degree Farenheit

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	ТРНС	Benzene	Toluene	Ethyl- benzene	Total Xylenes	МТВЕ
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/m³)

Analytical Laboratory

Alpha Analytical, Inc. (ELAP #2019)

TPHG = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

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	мтве	ТВА	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
													L <u>.</u>		

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

Dete	Test Well	Flowrate	Influe	ent Concer (mg/m		Extra	Soil Vapor	from		tive Mass Removed				
Date	ID		TDIIC			""	elis (lbs/d:							
		(cfm)	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs				
								0.01	5.16	. 1.c				
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				
									Cumula	tive Mass				
	Test Well	Volume of	Influe	ent Concer	tration	Mass	Extracted	l from		Removed				
Date	ID	groundwater extracted ² ,		μg/L)			ındwater (Period	Total				
Date		ì	lbs	lbs										
		gallons	TPHG	Benzene	MTBE	TPHG	Benzene							
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		<100	<0.50	16	<0.002	<0.00001		0.012	0.014				
07/19/04	S-1, S-2, MW-3	1	<50	<0.50	4	<0.01	< 0.0001	0.001	0.008	0.015				
07,12,01	2,52,		20	3.23	•	.,,,,								
Sample Cal	leulations			<u> </u>				·						
Ext. Rate fr		40 cu ft x	8,400 mg	lb	x 1,440 m	<u>iin</u>	x cu mete	<u>r</u>						
Wells (vapo	or)	min	cu meter	453593 m <u>լ</u>	day		35.314 cu	ft						
` *		30.21 <u>lbs/day</u>												
					<i></i>	10 95 91								
_		entration (µg/L) x gallons	s extracted	x (2.2046	x 10-^)(1b	/mg) / 0.26	5418 (gal/L	J)					
Mass removed = concentration (μg/L) x gallons extracted x (2.2046 x 10-9)(lb/mg) / 0.26418 (gal/L) from groundwater														
	rom groundwater													
from groun	estimates between		dates, ave	rage mass	extraction	rate and ti	me elapsec	i (operation	nal uptime))				
from ground For mass between	estimates between	nts were used	·	_				l (operation	nal uptime))				
from ground For mass between	estimates between	nts were used	·	_				l (operation	nal uptime))				
from ground For mass between Volume 6	estimates between	nts were used 1 flow totalizer	measurem	nents taken	on the san	mpling day	s							
from ground For mass between Volume of Based on artistical to calculate	estimates between the sampling ever estimated based or verage groundwate d using:	nts were used a flow totalizer er extraction ra	measurent te of 0.63	ents taken	on the san	npling day	s ions, the n	nass extrac	tion rate fo	r				
from ground For mass between Volume of Based on artistical Wass remove	e estimates between the sampling even estimated based or verage groundwate dusing:	nts were used 1 flow totalizer er extraction ra = concentrat	measurente of 0.63 tion (µg/L)	nents taken gpm and th	on the san	npling day	s ions, the n	nass extrac		r				
For mass between Volume 6 Based on a sis calculate Mass remo	e estimates between the sampling ever estimated based or verage groundwate d using: wed from er (lbs/day)	nts were used a flow totalizer er extraction ra = concentrat * 60 (min	measurem te of 0.63 tion (µg/L) s/hr)*24 (l	nents taken gpm and th	on the san	npling day	s ions, the n	nass extrac	tion rate fo	r				
For mass between Volume 6 Based on a sis calculate Mass remo	e estimates between the sampling even estimated based or verage groundwate dusing:	nts were used n flow totalizer er extraction ra = concentrat * 60 (min	measurente of 0.63 tion (µg/L)	nents taken gpm and th	on the san	npling day	s ions, the n	nass extrac	tion rate fo	r				

TABLE 2 DPE EVENT FIELD OBSERVATION SUMMARY

2nd DPE Event - June/July 2005

Former USA Station No. 57 10700 MacArthur Boulevard Oakland, California

	Hour	TE	Appl	Air	Totalizer	GW	Inf	Oper					-								
Date	Meter		Vac	Flow	Reading	Ext Rate	PID	Temp	MV	V-4	MV	V-5		MW-6			MW-7			MW-8	
	Reading	days	"Hg	cfm	gallons	gpm	ppmv	deg F	DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
06/06/05			Begi	n June/July	2005 DP	E Event,	Using W	ells S-1,	S-2, an	d MW-	3 for Ex	traction	ı; Hour	Meter I	Reading	Prior t	o Test S	tart 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							J	Disconti	nue DP	E Event	,					_
Distance t	o Nearest	Extractio	n Well						1	10	1	70	1	10			70			50	
Screening	creening Interval								10 -	40.5	10	- 40	10 -	40.5			10 - 40.5	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

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

Page 1 of 1

NM - Not measured

Ext. - Extraction

STRATUS

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	ТРНС	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	ТВА
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/m³)

TPHG = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary butyl alcohol

Analytical Methods

ETBE = Ethyl tertiary butyl ether

TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual (Alpha) & by 8260B (STL)

Analytical Laboratory

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

* = Analyzed by Severn Trent Laboratories (STL [ELAP #2496])

TAME = Tertiary amyl methyl ether

BTEX, MTBE, TBA, DIPE, TAME, and ETBE analyzed by EPA Method SW8260B

DIPE = Di-isopropyl ether

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

NA = Not Analyzed

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	трнс	Benzene	Toluene	Ethyl- benzene	Total Xylenes	МТВЕ	ТВА	DIPE	ЕТВЕ	ТАМЕ
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

			Soil Vapor Influent Concentration Extraction Rate 1					Cumulative Mas (TPHG) Remove			
Date	Time Elapsed	Flowrate		(mg/m ³)		, v	Vells (lbs/da	y)	Period ¹	Total	
	(days)	(cfm)	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs	
Petroleum hydro	carbon mass remo	ved during first	DPE event	conducted d	uring 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	Influe	ent Concentr	ation		s Extracted		Cumulative Mass Removed TPHG MTBE		
Date		extracted ² , gallons	TPHG	(µg/L) Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs	
Petroleum hydro	carbon mass remo	oved during first	DPE event	conducted d	uring 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	
	I	l					-0.0000 A	0.0000	0.00.00	0.00000	
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)

40 cu ft x min 8,400 mg lb x 1,440 min cu meter 453,593 mg day

x cu meter 35.314 cu ft

30.21 lbs/day

Mass removed from groundwater = concentration (μ g/L) x gallons extracted x (2.2046 x 10-9)(lb/mg) / 0.26418 (gal/L)

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

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.

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

APPENDIX B FIELD DATA SHEETS

Site Name & Former USA Service Station No. 57 Equipment Model Date M1294 200TCAT and Serial Nos. Address 10700 McArthur Boulevard Min: RAE 2000 PID Model Test Well ID S-1, S-2, MW-3, and MW-7 Effluent Hour Influent Inf Air Sys Inf Flow Control Influent | Effluent Air Applied Meter Air Flow Air Flow Air Flow totalizer Comments/Notes Temp Temp Rate Rate Rate (DPE unit) Temp PID PID Vacuum Date & Time Reading \mathcal{F}_{cfm} gallons deg F deg F deg F ppmv ppmy cfm cfm hrs 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. 512 9her 8-2900 435.6 0700 ซี เร็ 133 1458 320 8 200 437,0 1330 3-31-05 19500 11/2/29340 311 3 126 11456 480,7 77 9/6/05 545 off- no propane 51690 619.1 0000 0915 В 1250 1447 430 131 16,1 51850 18 82 1015 620,1 9-9-05 685.7 4. ,24 80 1450 256 61390 8

Site Name & Former USA Service Station No. 57

Address

10700 McArthur Boulevard

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



Date 8-29-05
Test Operators CHILL

Wellhead/Induced Vacuum ("WC) & Depth to Water (feet bgs) Comments/Notes MW-6 MW-8 MW-4 MW-5 MW-3 MW-7 S-1 S-2 Date & Time DTW Vac DTW DTW DTW Vac Vac Vac Vac Vac 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. well head modification. Measure the stinger depth to each extraction well. Measure DTW in all monitoring after shutting down. Ð 47.8 7150 7150 >150 150 17.21 8.73 13.18 15.58 190 33,70 5.2 17,26 18.68 8.99 13.61 19.0 7150 1

Site Name & Address	Former USA 10700 McAr	Service Sta	ation No. 57 ard			Dat Frank O	e perators	9713 CHIL	L		Equipme and Seria	nt Model al Nos.	MIN RUE ZOW
Test Well ID				-	TOWN						PID Mod	leI	MIN. KME ZOURD
Date & Time	hrs	Applied Vacuum "WC	Inf Air Flow Rate cfm	Dilution Air Flow Rate cfm	Air Flow Rate 3'cfm	Flow totalizer (DPE unit) gallons	deg F	Temp	Effluent Air Temp deg F	PID ppmv	Effluent PID ppmv		Comments/Notes
		all	wells after		of all the	test and also tests. Record	hour mete	er reading o	f the genera		start and a	it the end.	extraction well. Measure DTW in
0530	750,2	16	160		30319	75020	119	1457	315	2.0			1: 0545 ters Tar 19620
91605	5x5	ka	Do	PLEN	Au	Flo	フロン						GACIOGEZ EFF-0622
	#13	UT	ligh	Wa	TEN	Trans	Pun	PB	HD			9707	test
7	7961					77310				'			

Site Name & Former USA Service Station No. 57

Address

10700 McArthur Boulevard

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



Date 9-13-05Test Operators 2HILC

		Wellhead/Induced Vacuum ("WC) & Depth to Water (feet bgs)												
Date & Time	S-1	S-2	MW-3	MW-7	M.	W-6	M	W-8	MW-4	MW-5				Comments/Notes
	Vac	Vac	Vac	Vac	Vac	DTW	Vac	DTW	DTW	DTW				·
	W in all w	the monite vell head r	oring wel nodificat	Is prior to ion. Mea	o commo	encement stinger de	of test a pth to e	nd also th	e total de tiou well	pth of te . Measur	st wells. M	feasure de all monit	pth to water	er before and after installation of the shutting down.
0530		7150	i			18,67		19,03	9.14	13.78	1			
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APPENDIX C

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION



Alpha Analytical, Inc.

FILE COPY

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

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	Date	Date
			Limit	Sampled	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/m ³	08/29/05	09/01/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m^3	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	$0.15 \text{ mg/m}^{\text{s}}$	08/29/05	09/01/05
	o-Xylene	ND	0.15 mg/m^3	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 Kandy Saulur

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

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 Sı	Work Order: 05083004				
Method Blank		Type M				015B/DHS LUFT Ma	
File ID: C:\HPCHEM\MS06\DATA\050901\05			_	atch ID: MS06A09)1B	•	09/01/2005 17:07
Sample ID: MBLK MS06A0901B	Units : mg/			SD_06_050901B		Prep Date:	09/01/2005
Analyte	Result	PQL	Spkvai	SpkHerval %HE	LOWLIMI	t HighLimit RPDHet	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	ND 1.97	10	2	99	76	127	
Surr: 4-Bromofluorobenzene	2 2.21	- J.,	2 2	100 111	84 79	113 119	
Laboratory Control Spike		Type Lo	S T	est Code: EPA Me	thod SW8	015B/DHS LUFT Ma	nual
File ID: C:\HPCHEM\MS06\DATA\050901\05	i090105.D		Ba	atch ID: MS06A090)1B	Analysis Date:	09/01/2005 09:22
Sample ID: GLCS MS06A0901B	Units : mg/	m³	Run ID: MS	SD_06_050901B		Prep Date:	09/01/2005
Analyte	Result	PQL	SpkVal	SpkRefVal %RE0	LowLimit	t HighLimit RPDRef	Val %RPD(Limit) Qual
TPH Purgeable	379	10	400	95	78	127	
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	9.22		10	92	76	127	
Surr: 4-Bromofluorobenzene	10.4 10.3		10 10	104 103	84 79	113 119	

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		OC Su	Work Order: 05083004				
Method Blank		Type MI	BLK T	est Code: EPA	Method S	W8260B	
File ID: C:\HPCHEM\MS06\DATA\050901	1\05090126.D		В	atch ID: MS06A	0901A	Analysis Date	: 09/01/2005 17:07
Sample ID: MBLK MS06A0901A	Units : mg/m	3	Run ID: M	SD_06_050901	В	Prep Date:	09/01/2005
Analyte	Result	PQL	SpkVal	SpkRefVal %F	REC LowL	imit HighLimit RPDRe	fVal %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	ç	99 76	127	
Surr: Toluene-d8	2		2	1	00 84	113	
Surr: 4-Bromofluorobenzene	2.21		2	1	11 79	119	
Laboratory Control Spike		Type LC	S To	est Code: EPA	Method S	W8260B	
File ID: C:\HPCHEM\MS06\DATA\050901	\05090104.D		Ва	atch ID: MS06A	0901A	Analysis Date:	09/01/2005 09:00
Sample ID: LCS MS06A0901A	Units : mg/m	3	Run ID: MS	SD_06_050901	В	Prep Date:	09/01/2005
Analyte	Result	PQL	SpkVal	SpkRefVal %F	REC LowL	imit HighLimit RPDRef	Wal %RPD(Limit) Qual
Benzene	10.6	0.1	10	1:	06 81	122	
Toluene	10.7	0.1	10	1	07 80	120	
Ethylbenzene	10.3	0.1	10		03 80		
m,p-Xylene	11	0.1	10		10 80		
o-Xylene	11.2	0.1	10	1	12 80	129	
Occurs A A District and the contract	_ <u> </u>	• • •	: -	•			

Comments:

Surr: Toluene-d8

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

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.

10

10

10

76

84

79

88

101

104

127

113

119

8.78

10.1

10.4

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(Client's Phone: (530) 61	-	net Client's FAX: (530) 676-6005							
Work Order Number: STR05083004	Date Received: 8/30/20		Received by: Stephanie Sifuentes							
<u>Chai</u>	n of Custody (COC) Info	rmation								
Carrier name <u>FedEx</u>										
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 Prese	ervation and Hold Time (HT) Informa	tion							
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 tabels checked for correct preservation?	Yes 🗹	□ No								
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes	☐ No	N/A 🗹							
Anal	ytical Requirement Infor	mation								
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.									

CHAIN-OF-CUSTODY RECORD

CA

Page: 1 of 1

Alpha Analytical, Inc.

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

<u>Steve Carter</u> TEL: (530) 676-6008

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

Job: USA 57

PO:

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

Requested Tests Alpha Client Collection No. of Bottles TPH/P_A VOC_A Sample ID Sample ID Matrix Date ORG SUB TAT PWS# STR05083004-01A Sample Remarks USA57 A SYS AR 08/29/05 0 6 GAS-N/C BTEX/OXY INF 09:01

Client's COC#: 09543

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		
Received by:	3 7 7 7	A Section 1	2 THE HAIR	Company	Date/Time
		man the Sales of t		Alpha Analytical, Inc.	
		,			
NOTE O				<u></u>	

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

Phone Client i	Numbe Name	15A	10004	Ph. Pk. Fax 5506	76 6000	P.O. #	Phone (Fax (778	5) 355-0			<u> </u>			Ana	alyse 	s Red	quire	d		0.9	5 (
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FILE COPY

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

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	Date	Date
			Limit	Sampled	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/m^3	08/29/05	08/30/05
Lab ID:	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m^3	08/29/05	08/30/05
STR05083003-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m^3	08/29/05	08/30/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m^3	08/29/05	08/30/05
	Benzene	ND	0.15 mg/m^3	08/29/05	08/30/05
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m^3	08/29/05	08/30/05
	Toluene	ND	0.15 mg/m^3	08/29/05	08/30/05
	Ethylbenzene	ND	0.15 mg/m^3	08/29/05	08/30/05
	m,p-Xylene	ND	0.15 mg/m ³	08/29/05	08/30/05
	o-Xylene	ND	0.15 mg/m^3	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 L. Scholl, Ph.D., Laboratory Director · Randy Gardner, Laboratory Manager · · Walter Hinchman, Quality Assurance Office

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

8/30/05

Report Date



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

Date: 09-Sep-05		OC Summary Report						
Method Blank File ID: C:\HPCHEM\MS07\DATA\050830\05 Sample ID: MBLK MS07S0830B	6083021.D Units : mg/	Type M	В	est Code: EP atch ID: MS0: SD_07_0508	7A083		015B/DHS LUFT M Analysis Date Prep Date:	anual : 08/30/2005 15:42 08/30/2005
Analyte	Result	PQL	SpkVal	SpkRefVal 9	%REC	LowLimit	HighLimit RPDRe	fVal %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 1.99 1.96 1.8	10	2 2 2		100 98 90	76 84 79	127 113 119	
Laboratory Control Spike File ID: C:\HPCHEM\MS07\DATA\050830\05	083003.D	Type LC		est Code: EP		-	15B/DHS LUFT M Analysis Date	anual 08/30/2005 08:57
Sample ID: GLCS MS07A0830B	Units : mg/	m³	Run ID: MS	SD_07_0508:	30B		Prep Date:	08/30/2005
Analyte	Result	PQL	SpkVal	SpkRefVal 9	%REC	LowLimit	HighLimit RPDRet	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	406 10.6 9.14 9.5	10	400 10 10 10		102 10 6 91 95	78 76 84 79	127 127 113 119	·····

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.



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 St	ımmaı	ry Repo	rt			Work Order: 05083003
Method Blank File ID: C:\HPCHEM\MS07\DATA\050830\050 Sample ID: MBLK MS07S0830A		Type M	E	Test Code: E	07A083			08/30/2005 15:42 08/30/2005
Analyte	Units : mg/r Result	PQL		ISD_07_050 L SokBefVal		Low/Limit		Val %RPD(Limit) Qual
Tertiary Butyl Alcohol (TBA)	ND	1	Оркта	opidiciva	781112.0	LOWEITH	Tilgazinii Til Ditor	Var zora D(Cirrin) Goar
Methyl tert-butyl ether (MTBE)	ND	0.1						
Di-isopropyl Ether (DIPE)	ND	0.1						
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 LC	s 1	Γest Code: Ε	PA Meti	nod SW82	60B	
File ID: C:\HPCHEM\MS07\DATA\050830\050	83002.D	21		Batch ID: MS				08/30/2005 08:34
Sample ID: LCS MS07A0830A		S 1					-	08/30/2005
	Units : mg/n			ISD_07_050			Prep Date:	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRef	/al %RPD(Limit) Qual
Benzene	11.3	0.1	10)	113	81	122	
Toluene	10.6	0.1	10	1	106	80	120	
Ethylbenzene	10.4	0.1	10	1	104	80	120	

Comments:

m,p-Xylene

Surr: Toluene-d8

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

o-Xylene

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.

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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 :		
Project Manager: Steve Carter	Client's EMail: scarter(Client's Phone; (530) 63	_	Client's FAX: (530) 676-6005
Work Order Number: STR05083003	Date Received: 8/30/20		Received by: Stephanie Sifuentes
Chair	n of Custody (COC) Info	rmation	
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)
<u>s</u>	ample Receipt Informat	tion	
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 Prese	rvation and Hold Time (HT) informa	ition
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 🗹
Analy	tical Requirement Infor	mation	
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.		

HUUII:

Billing Information:	

CHAIN-OF-CUSTODY RECORD

Page: 1 of 1

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

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

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

Client:

Stratus Environmental 3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

CC Report:

Report Attention: Steve Carter

Job:

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

Steve Carter

EDD Required: Yes

Sampled by : C. Hill

WorkOrder: STR05083003

Cooler Temp: 4 °C Date Printed:

30-Aug-05

PO:

Client's COC #: 09543

QC Level: S3

= Final Rpt, MBLK, LC\$, MS/MSD With Surrogates

								Requested Tests	
Alpha	Client	Co	llection	No. of	Bottles			TPH/P_A VOC_A	
Sample ID	Sample ID	Matrix	Date	ORG	SUB	TAT	PWS#	Sample Rema	ırks
STR05083003-01A	USA57 A SYS EFF		/29/05 09:05	1	0	1		GAS-N/C BTEX/OXY	

Comments:

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

ŗ	Signature	Print Name	Company	Date/Time
Received by:	The your Services	2.3640-	Alpha Analytical, Inc.	W 37
	4)			

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:	Alpha	Analytical, Inc.	Sample:	s Collected From	Which State?	
Name Strutus	255 Gle	ndale Avenue, Suite 21	ID —	CA NV NV OTHER	WA R	e# / of] -
Address 3330 Chino on Pt DR City, State, Zip Cumerun Ptz		Nevada 89431-5778 (775) 355-1044				
Phone Number 380 476 6004 Fax 530 676 6005	Fax (77	(5) 355-0406	<i>) </i>	Analyses Require	ed /	09543
1 (/211 2 /	P.O. #	Job #	[A]		, , , , , , , , , , , , , , , , , , , 	uired QC Level?
Address	EMail Address		<i>─</i> /¾"/ ५/		1 1 1	II III IV
City, State, Zip On Klass Sampled by Conference of the Conference	Phone #	Fax #	\&\\\\.\\		' / /	7 YES NO
Time Date Sampled Sampled See Key Only	Report Allention Stew	Total and type of containers		/ / / /	Global ID #_	
Below Lab ID Number	Sample Description	TAT Filtered ** See below	1 2	<u>' </u>	REI	MARKS
	ASYS INF	54 1-7	4 4		Hucke	al THE
0405 OF STROSTS 3003 - 01 USH 57	A SYS EFF	24 1-7	NY		244	
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ADDITIONAL INSTRUCTIONS:						
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Relinquished by	<u> </u>		<u> </u>			
Received by	<u></u>				1	
		<u> </u>				
Key: AQ - Aqueous SO - Soil WA - Waste OT - Otl	ner **: L-	Liter V-Voa S-Soil	Jar O-Orbo	T-Tedlar B-Bra	ss 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.



FILE COPY

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

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/m ³	09/06/05	09/13/05
Lab ID;	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m^3	09/06/05	09/13/05
STR05090705-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m^3	09/06/05	09/13/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m ³	09/06/05	09/13/05
	Benzene	ND	0.15 mg/m ³	09/06/05	09/13/05
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m^3	09/06/05	09/13/05
	Toluene	ND	0.15 mg/m^3	09/06/05	09/13/05
	Ethylbenzene	ND	0.15 mg/m ³	09/06/05	09/13/05
	m,p-Xylene	ND	0.15 mg/m^3	09/06/05	09/13/05
	o-Xylene	ND	0.15 mg/m^3	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

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



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

Date: 22-Sep-05	J	QC Sı	ımmar	y Report			Work Order: 05090705
Method Blank File ID: C:\HPCHEM\MS06\DATA\050912\05		Type: M	В	est Code: EPA Met atch ID: MS06A091		Analysis Date	09/13/2005 02:02
Sample ID: MBLK MS06A0912B Analyte	Units : mg/r Result	PQL n,		SD_06_050912B SpkRefVal %REC	LowLimit	Prep Date: HighLimit RPDRe	09/13/2005 Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 1.92 1.97 2.09	10	2 2 2	96 99 105	76 84 79	127 113 119	
Laboratory Control Spike File ID: C:\HPCHEM\MS06\DATA\050912\05 Sample ID: GLCS MS06A0912B	091242.D Units : mg/r	Type: Lα	Ba Run ID: M \$	est Code: EPA Met atch ID: MS06A091 BD_06_050912B	2B	Analysis Date Prep Date:	09/13/2005 01:18 09/13/2005
Analyte	Result	PQL	SpkVal	SpkRefVal %REC	LowLimit	HighLimit RPDRe	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	395 9.65 10.2 10.4	10	400 10 10 10	99 97 102 104	78 76 84 79	127 127 113 119	

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.



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 Su	mmar	y Report			Work Order: 05090705
Method Blank		Type: M	BLK T	est Code: EPA Me	thod SW	3260B	
File ID: C:\HPCHEM\MS06\DATA\050912\	\05091244.D		В	atch ID: MS06A09	12A	Analysis Date:	09/13/2005 02:02
Sample ID: MBLK MS06A0912A	Units : mg/	m ³	Run ID∗M	SD 06 050912B		Prep Date:	09/13/2005
Analyte	Result	PQL			≏ LowLim	•	Val %RPD(Limit) Qual
			Sprvai	Spkreival /6/KL	5 LOWLIII	III HIGHLIIIII IXI DIXE	vai /bist D(Lillin) Quai
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: LC	s T	est Code: EPA Me	thod SW8	3260B	
File ID: C:\HPCHEM\MS06\DATA\050912\	05091239.D	2,	В	atch ID: MS06A09	12A	Analysis Date:	09/13/2005 00:11
Sample ID: LCS MS06A0912A	Units : mg/ı	m³ F	Run ID: M	SD_06_050912B		Prep Date:	09/13/2005
Analyte	Result	PQL	SpkVal	SpkRefVal %RE	LowLim	it HighLimit RPDRef	Val %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-Xvlene	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	

Comments:

Surr: 4-Bromofluorobenzene

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.

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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	-	057-01/USA				
Project Manager: Kiran Nagaraju	Client's EMail: knagar Client's Phone: (530) 6		nc.net Client's FAX: (530) 676-6005			
Work Order Number: STR05090705	Date Received: 9/7/200		Received by: Stephanie Sifuentes			
Cha	in of Custody (COC) Info	ormation				
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 ✓	□ ѕем	Other (see comments)			
	Sample Receipt Informa	tion_				
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 Pres	servation and Hold Time	(HT) Informa	ition			
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 ☑			
Ana	lytical Requirement Info	rmation				
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

Page: 1 of 1

Alpha Analytical, Inc.

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

WorkOrder: STR05090705

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

Client:

Stratus Environmental 3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

Report Attention: Kiran Nagaraju CC Report:

EMail knagaraju@stratusinc.net

TEL: (530) 676-6005

FAX: (530) 676-6005

PO:

Job: 2007-0057-01/USA 57

Kiran Nagaraju

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

Requested Tests Alpha Client Collection No. of Bottles VOC_A TPH/P A Sample ID Sample ID Matrix Date ORG SUB TAT PWS# Sample Remarks STR05090705-01A Sys Inf Air AR 09/06/05 0 6 GAS-N/C BTEX/OXY 10:30

Comments:

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

	Signature	Print Name C	ompany	Date/Time
Received by:	A Comment of the Comm	C. AND ELECTIVE Alpha A	Analytical, Inc.	

Billing Information: Name Strutus Environmental, Inc	255 Glend		cal, Inc. ie. Suite 21		42		CA	-	. MA		WA		
777					ID		OR	!	OT	HFR	WA	Pac	re#of
Address 3330 Cameron Park Dr. #550		evada 89	131-5778						<u> </u>				/c //
City, State, Zip Carrey on Park, CA 95682	Phone (7 Fax (775				1		Δns	alved	s Rar	quired	4	/	6829
Phone Number 530 676 6004 Fax 530 676 6005	Fax (775	335-040	·		/		7 11 10	ary 50	J 1100	quiro	,	- /	Mark Ball Blood and
Client Name USA 57		Job#	2057 01		/ J			Π	/	/	1	Rec	uired QC Level?
Address	EMail Address	2001	0057-01	\dashv	X) /			' /	' /			
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City, State, Zip Cakland CA	j			1,	X	N						EDD/ED	F? YES NO
The Matthy, I Office use I sampled by A	Report Attention Kiran Kageraj.		Total and type of	of []	₽) [i	A STORY			/			Clobal ID #	
Sampled Sampled See Key Below Lab ID Number	Sample Description	TAT F	containers eld ** See below	18	\ \ \	<i>[]</i>	/	/		/	/		MARKS
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Received by													
*Key: AQ - Aqueous SO - Soil WA - Waste OT	Other ": L-	Liter	V-Voa S-S	oil Jar	O	-Orbo	1	-Tedla	ır	B-Bras	ss	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.



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



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	Date	Date
			Limit	Sampled	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/m^3	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/m^3	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/m^3	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 L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Office Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date



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

Date: 27-Sep-05	OC Summary Report										
Method Blank		Type: MI	BLK T	est Code: EPA Met	nod SW8	015B/DHS LUFT N	lanual				
File ID: C:\HPCHEM\MS06\DATA\050915\	05091542.D		В	atch ID: MS06A091	5B	Analysis Date	e: 09/16/2005 01:30				
Sample ID: MBLK MS06A0915B	Units : mg/r	n³ l	Run ID: M	SD_06_050615A		Prep Date:	09/16/2005				
Analyte	Result	PQL	SpkVal	SpkRefVal %REC	LowLimit	HighLimit RPDRe	efVal %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: LC	S To	est Code: EPA Meti	nod SW80	015B/DHS LUFT N	lanual				
File ID: C:\HPCHEM\MS06\DATA\050915\	05091540.D		Ва	atch ID: MS06A091	5B	Analysis Date	: 09/16/2005 00:46				
Sample ID: GLCS MS06A0915B	Units : mg/r	n³ i	Run ID: MS	SD_06_050615A		Prep Date:	09/16/2005				
Analyte	Result	PQL	SpkVal	SpkRefVal %REC	LowLimit	: HighLimit RPDRe	efVal %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.



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Date: 27-Sep-05		QC Su	ımmaı	y Repo	rt			Work Order: 05091402
Method Blank File ID: C:\HPCHEM\MS06\DATA\050915		Type: M	 E	Test Code: E	06A091			09/16/2005 01:30 09/16/2005
Sample ID: MBLK MS06A0915A	Units : mg/n			ISD_06_050		Lavel insit	•	/al %RPD(Limit) Quat
Analyte	Result	PQL	Бркуа	Spkkerva	%KEC	LOWLITHIL	rightimit Kroker	vai /orr-D(Lillill) Quai
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: LC	s T	est Code: E	PA Meti	nod SW82	60B	
File ID: C:\HPCHEM\MS06\DATA\050915	\05091537.D	•	Е	Batch ID: MS	06A091	5A	Analysis Date:	09/15/2005 23:39
Sample ID: LCS MS06A0915A	Units : mg/n	n³ F	Run ID: N	ISD_06_050	615A		Prep Date:	09/15/2005
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRef	/al %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	
CO L.OHIDHOU COUNTON								

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												
Project Manager: Gowri Kowtha	Client's EMail: gkowtha@stratu Client's Phone: (530) 676-6001	Inc.net 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	0											
Samplers's name noted on COC?	Yes 🗹 🗌 No												
Internal Chain of Custody (COC) requested ?	Yes 🗌 · 💆 No												
Sub Contract Lab Used :	None 🗹 🗌 SE	M 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 Pres	ervation and Hold Time (HT) Info	rmation											
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 🗹											
Ana	lytical Requirement Information												
Are non-Standard or Modified methods requested ?	Yes 🗌 🔽 No	1											
Are there client specific Project requirements ?	Yes 🗌 🗹 No	If YES : see the Chain of Custody (COC)											
Comments : Air/Tedlar													

Billing	Information	
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CHAIN-OF-CUSTODY RECORD

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Page: 1 of 1

Alpha Analytical, Inc.

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

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

Client:

Stratus Environmental 3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha

PO:

Job: USA 57

TEL: (530) 676-6001

FAX: (530) 676-6005

EMail gkowtha@stratusinc.net

Gowri Kowtha

EDD Required: Yes

Sampled by : C. Hill

WorkOrder: STR05091402

Cooler Temp:

Date Printed: 4 °C

14-Sep-05

QC Level: \$3

CC Report:

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

								Requested Tests	
Alpha	Client	Collection	No. of Bo	ttles		TPH/P_A	VOC_A		
Sample ID	Sample ID	Matrix Date	ORG S	UB TAT	PWS#				Sample Remarks
STR05091402-01A	USA 57 A SYS INF	AR 09/13/05 05:45	1	0 6		GAS-N/C	BTEX/OXY		Tedlar

Client's COC #: 09547

Comments:

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

	Signature	Print Name	Company	Date/Time
Received by:	where the many was a second	A The same of the	Alpha Analytical, Inc.	Maria de la companya della companya della companya della companya de la companya della companya
			·	

Billing Information:	Alpha	Analy	tica	l. Inc.		Sá	imple -	s Co	lleci	ted F	rom	Whic	h State?	
Name	255 Glen	dale Ave	nue,	Suite 21		A. ID		OR	<u> </u>	NV OT	HER	WA		e# / of 1
City State 7 in C 11 Me 14 in PC	Sparks, N Phone (7	Vevada 8	19431	-5778	-	<i>;</i> =				<u> </u>	nen.	<u></u>		e # _ / _ 0i <u>·</u>
Billing Information: Name 5 Tru 7 5 ENV Address 3330 Camerum PR City, State, Zip Camerum PR Phone Number 52 t 76 brog Fax 530 676 brown	Fax (775							Ana	alyse	s Re	quire	4		09547
Client Name USA 57	P.O. #	Job#	•			1 51	7		7	7	7	7		
Address	EMail Address				/	186	'w/		<i>'</i> /	/ /	/ /	/ /	/ Heq	uired QC Level
City, State, Zip Cat Lud	Phone #	Fax#	-		-/;		\X						/ /	II III IV
Time Dale Matrix Office Use Sampled by > HIL	Report Attention Coucus			Total and type of			5/						Global ID #	7 YES NO
Sampled Sampled Below Lab ID Number	Sample Description	TAT ,	Field Filtered	containers ** See below	11	1/2	/ /	/	/	/	/	/	<u> </u>	MARKS
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ADDITIONAL INSTRUCTIONS:			ľ]					·
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Signature	Print Name													
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Received by			 									<u> </u>		
Key: AQ - Aqueous SO - Soil WA - Waste OT - O	her **: L-L	iter	V-Vo	a S-Soil	l Jar	0-	Orbo	T-	Tedlar	E	3-Bras	s	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.





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

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	Date	Date
			Limit	Sampled	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	$0.50~\mu g/L$	08/29/05	08/31/05
	m,p-Xylene	2.3	$0.50~\mu g/L$	08/29/05	08/31/05
	o-Xylene	1.0	$0.50~\mu g/L$	08/29/05	08/31/05

Reported in micrograms per liter, per client request.

ND = Not Detected

Roger Scholl Kandy Saulan

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



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	рН	
05083006-01A	USA 57 W INF	Aqueous	2	

9/7/05



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

Date: 13-Sep-05	(OC Su	ımmar	y Repoi	t		<u> </u>	Work Order: 05083006
Method Blank		Туре М	BLK T	est Code: E	PA Met	hod SW80	015B/DHS LUFT N	fanual
File ID: D:\MSDCHEM\MS12\DATA\050830	\05083040.D		В	atch ID: MS	1 2W 083	80 D	Analysis Date	e: 08/30/2005 22:53
Sample ID: MBLK MS12W0830D	Units : µg/L		Run ID: M	SD 12 050	830D		Prep Date:	08/30/2005
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRe	efVal %RPD(Limit) Qual
TPH Purgeable	ND	50		· <u>·</u>				
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 Lo	CS T	est Code: E	PA Met	hod SW80)15B/DHS LUFT N	lanual
File ID: D:\MSDCHEM\MS12\DATA\050830	\05083039.D		В	atch ID: MS	12W083	OD CO	Analysis Date	: 08/30/2005 22:31
Sample ID: GLCS MS12W0830D	Units : µg/L		Run ID: M:	SD_12_050	830D		Prep Date:	08/30/2005
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRe	efVal %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		Туре м	S To	est Code: El	PA Meti	nod SW80	15B/DHS LUFT N	lanuai
File ID: D:\MSDCHEM\MS12\DATA\050830	\05083043.D		Ba	atch ID: MS1	2W083	0D	Analysis Date	: 08/30/2005 23:59
Sample ID: 05083006-01AGS	Units : µg/L		Run ID: MS	SD_12_050	330D		Prep Date:	08/30/2005
Analyte	Result	PQL				LowLimit	HighLimit RPDRe	rVal %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 M	SD Te	est Code: El	PA Meti	nod SW80	15B/DHS LUFT N	lanual
File ID: D:\MSDCHEM\MS12\DATA\050830	\05083044.D		Ba	atch ID: MS1	2W083	0D	Analysis Date	: 08/31/2005 00:21
Sample ID: 05083006-01AGSD	Units : µg/L		Run ID: MS	SD_12_0501	30D		Prep Date:	08/31/2005
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRe	fVal %RPD(Limit) Qual
TPH Purgeable	2110	250	2000	55.46	103	70	139 204	49 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				· · · · · · · · · · · · · · · · · · ·				

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.



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 St	ımmar	y Repoi	rt .				Work Order: 05083006
Method Blank File ID: D:\MSD	k CHEM\MS12\DATA\05083	0\05083040.D	Type Mi		est Code: E				sis Date:	08/30/2005 22:53
Sample ID:	MBLK MS12W0830C	Units : µg/L		Run ID: M	SD_12_050	830D		Prep	Date:	08/30/2005
Analyte		Result	PQL				LowLimit	HighLimit	RPDRef\	/al %RPD(Limit) Qua
Tertiary Butyl Ald	cohol (TBA)	ND	10	<u> </u>	··-					, ,
Methyl tert-butyl	ether (MTBE)	ND	0.5							
Di-isopropyl Ethe		ND	1							
	ityl Ether (ETBE)	ND	1							
Benzene		ND	0.5							
Tertiary Amyi Me Toluene	ethyl Ether (TAME)	ND	1							
Ethylbenzene		ND ND	0.5							
m,p-Xylene		ND ND	0.5 0.5							
o-Xviene		ND	0.5							
Surr: 1,2-Dichlor	oethane-d4	10.2	0.5	10		102	76	127		
Surr: Toluene-d8		9.67		10		97	84	113		
Surr: 4-Bromoflu	orobenzene	9.67		10		97	79	119		
Laboratory C			Туре LC	S T	est Code: Ei	PA Met	hod SW82	260B		
File ID: D:\MSD	CHEM\MS12\DATA\05083	0\05083037.D		В	atch ID: MS 1	12W083	30C	Analys	sis Date:	08/30/2005 21:49
Sample ID:	LCS MS12W0830C	Units : µg/L	i	Run ID: MS	SD_12_050	30D		Prep [Date:	08/30/2005
Analyte		Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRef\	/al %RPD(Limit) Qua
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-Dichlor Surr: Toluene-d8		10.1		10		101	76	127		
Surr: 4-Bromoflu		9.78 9.73		10 10		98 97	84 79	113 119		
Sample Matri	ix Spike		Type MS		est Code: El		hod SW82			
	CHEM\MS12\DATA\050836	0\05083041.D		Ва	atch ID: MS1	2W083	OC	Analys	sis Date:	08/30/2005 23:15
	05083006-01AMS	Units : µg/L	1		SD_12_050			Prep [08/30/2005
Analyte		Result	PQL				LowLimit			al %RPD(Limit) Qual
Benzene	· .	60	1.3	50		113	74	125		, ,
Toluene		53.3	1.3	50	0.20		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-Dichlore		51.9		50		104	76	127		
Surr: Toluene-d8 Surr: 4-Bromoflu		47.9		50		96	84	113		
Suri. 4-Diomond	Olobelizelle	49.2		50		98	79	119		
	x Spike Duplicate		Type MS	SD Te	est Code: El	PA Meti	hod SW82	60B		
	CHEM\MS12\DATA\050830	0\05083042.D		Ba	atch ID: MS1	2W083	OC	Analys	sis Date:	08/30/2005 23:37
Sample ID:	05083006-01AMSD	Units : µg/L	F	Run ID: MS	SD_12_0508	30D		Prep D	Date:	08/30/2005
Analyte		Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefV	al %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	
Ethylbenzene		53.4	1.3	50	0.68	106	77	124	55.01	
m,p-Xylene		55.7	1.3	50	2.3	107	73	130	57.61	
o-Xylene		56	1.3	50	1.04	110	74	131	57.97	3.5(13)
Surr: 1,2-Dichlore Surr: Toluene-d8		52.6		50		105	76	127		
Surr: 1-Bromoflu		47.5 49.5		50 50		95 99	84 79	113 119		
								118		
Comments:										

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@ Client's Phone: (530) 67	-	net Client's FAX: (530) 676-6005								
Work Order Number: STR05083006	Date Received: 8/30/200		Received by: Stephanie Sifuentes								
<u>Chai</u>	n of Custody (COC) Info	rmation									
Carrier name <u>FedEx</u>											
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 Prese	rvation and Hold Time (HT) Informa	tion								
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 🗹								
Anal	tical Requirement Inform	mation									
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 STR05	083005.										

Billing	Information	
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CHAIN-OF-CUSTODY RECORD

CA

Page: 1 of 1

Alpha Analytical, Inc.

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

Report D

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

4 °C

Client:

Stratus Environmental
3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

CC Report :

Report Attention: Steve Carter

Job: USA 57

TEL: (530) 676-6008

FAX: (530) 676-6005

EMail scarter@stratusinc.net

Steve Carter

PO:

EDD Required: Yes

Sampled by: C. Hill

Cooler Temp :

WorkOrder: STR05083006

Date Printed: 30-Aug-05

QC Level: S3

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Collection Matrix Date	No, of ORG	Bottles	TAT	PWS#	TPH/P_W	VOC_W	Requested Tests
STR05083006-01A	USA 57 W INF	AQ 08/29/05 09:30	5	0	6		GAS-C	BTEX/OXY_	Sample Remarks

Client's COC #: 09544

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	Сотрану	Datc/Time
Received by:	- The second with the second	3.5 (4) (5) (1)	Alpha Analytical, Inc.	<u> </u>

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

City, Sta Phone I	ate, Zip Number	2 KM	wires win orlo beer	/X.	5306	76 M	70 G			Sparks, N Phone (7 Fax (775	775) 35:	5-104	4				An	alvse	s Red	uire	d		Page #	
Client I	lame r	1514	57		77			P.O. #			Job#			<u></u>	4	/ı -	, 	7	,	7			0	<u>9</u>
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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.

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FILE GOPY

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

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	$0.50~\mu g/L$	08/29/05	08/30/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 μg/L	08/29/05	08/30/05
	Toluene	ND	$0.50~\mu g/L$	08/29/05	08/30/05
	Ethylbenzene	ND	$0.50~\mu g/L$	08/29/05	08/30/05
	m,p-Xylene	ND	$0.50~\mu g/L$	08/29/05	08/30/05
	o-Xylene	ND	$0.50 \mu\mathrm{g/L}$	08/29/05	08/30/05

Reported in micrograms per liter, per client request.

ND = Not Detected

loger Scholl Kandy Soulun Wal

Sacramento, CA + (916) 366-9089 / Las Vegas, NV + (702) 281-4848 / info@alpha-analytical.com

8/30/05 Report Date



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	pН	
05083005-01A	USA57 W EFF	Aqueous	2	

8/30/05

Report Date



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

Date : 09-Sep-05	(OC S	ummar	y Repor	rt				Work Order: 05083005
Method Blank File ID: D:\MSDCHEM\MS12\DATA\050830 Sample ID: MBLK MS12\W0830B	\05083010.D Units: µg/L	Type N	В	est Code: E atch ID: MS SD_12_050	12W08			sis Date:	nual 08/30/2005 12:14 08/30/2005
Analyte	Result	PQL				LowLimit	: HighLimit	RPDRef\	/al %RPD(Limit) Qual
TPH Purgeable	ND	50		···			<u> </u>		
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 L	CS T	est Code: E	PA Met	hod SW80)15B/DHS L	.UFT Ma	nual
File ID: D:\MSDCHEM\MS12\DATA\050830	\05083009.D		В	atch ID: MS	12W083	30B	Analys	is Date:	08/30/2005 11:53
Sample ID: GLCS MS12W0830B	Units : µg/L		Run ID: M:	SD_12_050	830B		Prep D	Date:	08/30/2005
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit I	RPDRef\	at %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 M	S T	est Code: El	PA Meti	hod SW80	15B/DHS L	.UFT Mai	nual
File ID: D:\MSDCHEM\MS12\DATA\050830	05083014.D	,,		atch ID: MS	12W083	10B	Analys	is Date:	08/30/2005 13:40
Sample ID: 05083005-01AGS	Units : µg/L		Run ID: MS	SD_12_050	B30B		Prep D		08/30/2005
Analyte	Result	PQL				LowLimit	•		al %RPD(Limit) Qual
TPH Purgeable	2150	250	· · · · · · · · · · · · · · · · · · ·	0		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		Туре М	SD Te	est Code: El	PA Meti	nod SW80	15B/DHS L	.UFT Mai	nual
File ID: D:\MSDCHEM\MS12\DATA\050830\	05083015.D	٠.		atch ID: MS1	2W083	ОВ	Analys	is Date:	08/30/2005 14:01
Sample ID: 05083005-01AGSD	Units : µg/L			SD_12_0508			Prep D		08/30/2005
Analyte	Result	PQL				LowLimit	•		al %RPD(Limit) Qual
TPH Purgeable	2050	250	2000	0		70	139	2146	4.5(12)
Surr: 1,2-Dichloroethane-d4	51.5		50	•	103	76	127	3	···= ·
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.



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Policy D-MMSTD D-MM	Date: 09-Sep-05		(OC St	ımmar	y Repo	rt				Work Ore 0508300
Sample Dr. MBLK MS12W0830A Dr. Seyut Pol Seyut SpkReifVal %REC LowLimit HighLimit RPD-eff M30/2005		· 		Туре М	BLK T	est Code: E	PA Met	hod SW8	260B		
Sample Dr. MBLK MS12W0830A Units : µg/L Pole Dr. Spkval SpkRefival %REC LowLimit HighLimit RPD-etval %RPD(Limit) to	File ID: D:\MSDCHE	M\MS12\DATA\050830\i	05083010.D		В	atch ID: MS	12W08	30A	Analy	sis Date:	08/30/2005 12:14
Analyte	_										
Method M			_ : -						•		
Methyl terhe (MTBE) ND 1			Hesuit	PUL	Бркуал	Spкнетva	%HEC	LOWLIMI	HighLimit	HPDHei	vai %HPD(LIMit) (
Di-isopropi/ Ether (IPIPE) ND 1			ND	10							
Ethyl Tertiary Burly Ether (ETBE) ND 1		• •		0.5							
Benzane		•									
Tertiary Armyl Methyl Ether (TAME) MD 1.5 Ethylbenzene ND 0.5 Ethylbenzene ND 0.5 Ethylbenzene ND 0.5 D.		ther (ETBE)									
Toluene		Esta a Cara Nama									
Ethylbenzene		Ether (TAME)									
MD ND ND ND ND ND ND ND											
0-Xylene ND 0 0.5 Surr: 12-Dichloroethane-d3 9.6 10 96 84 113 Surr: 12-Dichloroethane-d3 9.6 10 96 84 113 Surr: 12-Dichloroethane-d3 9.72 10 10 96 84 113 Surr: 12-Dichloroethane-d3 9.72 10 97 79 113 Sample ID: CS MS12W0830A Units: μg/L Result ID: MS12W0830A Dollar: μg/L Result ID: MS12W0830A D	•										
Surr: 12-Dichloroethane-d4											
Surr: Toluene-dB	-	ane-d4		0.5	10		104	76	107		
Surr: 4-Bromoffuorobenzene 9,72	•	and an									
File D: \(\text{D: NMSD CHEMMS12DATA\(0.508308\) Units: \(\mu_{pl}\) Result \(\		enzene									
Sample ID: LCS MS12W0830A Units: µg/L Result PQL Spk/val SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Laboratory Conti	rol Spike		Type LC	S T	est Code: E	PA Met	hod SW82	260B		
Sample ID: LCS MS12W0830A Units: µg/L Result PQL Spk/val SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) (Spk/val) SpkRefVal %REC	File ID: D:\MSDCHE	M\MS12\DATA\050830\0	5083008.D		В	atch ID: MS	12W083	IOA	Analys	sis Date:	08/30/2005 11:32
Analyte	_			1					•		
Benzene								Low limit	•		
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 0-Xylene 10.5 0.5 10 104 80 129 0-Xylene 10.6 96 84 113 0-Xylene 10.7 0-Xylene 10.8 9.63 0-Xylene 10.9 96 84 113 0-Xylene 10.9 0-Xylene 10.						Opin tor var	~~~~~~~~			THE DITION	TOTAL POLITING C
Ethylbenzene 10.1 0.5 10 101 80 120 m.p-Xylene 10.4 0.5 10 104 80 129 c O-Xylene 10.4 0.5 10 104 80 129 c O-Xylene 10.4 0.5 10 104 80 129 c Surr: 1,2-Dichloroethane-d4 10.3 10 103 76 127 c Surr: 1,2-Dichloroethane-d4 10.3 10 96 84 113 c Surr: 4-Bromofluorobenzene 9.75 10 98 79 119 c Sample Matrix Spike											
m,p-Xylene					_						
C-Xylene 10.4 10.3 10 104 80 129	•				_						
Surr: 1,2-Dichloroethane-d4 10.3 below of the properties of t											
Surr: Toluene-d8	•	ane-d4		0.5							
Sumple Matrix Spike Type MS Test Code: EPA Method SW8260B File ID: D:MSDCHEM\MS12\DATA\050830\05083012.D Batch ID: MS12\W083\0A Analysis Date: 08/30/2005 12:57 Sample ID: 05083005-01AMS Units: μg/L Result PQL SpkVal SpkRelVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) Companies 08/30/2005 12:57											
File	Surr: 4-Bromofluorobe	enzene									
File ID: D:WSDCHEMMS12\DATA\05083012.D Sample ID: 05083005-01AMS Units: \(\mu g/L\) Result PQL Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) 0	Sample Matrix Sr	sike		Type MS	s To	est Code: E	PA Meti	nod SW82	160B		
Sample D: 05083005-01AMS Units : µg/L Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) 0			5083012 D							sis Date:	08/30/2005 12:57
Analyte Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) Quality 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 C-Xylene 54.7 1.3 50 0 109 74 131 Surr: 1,2-Dichloroethane-d4 51.8 50 104 76 127 Surr: 4-Bromofluorobenzene 49.7 50 96 84 113 Surr: 4-Bromofluorobenzene 49.7 Test Code: EPA Method SW8260B File ID: D:WSDCHEM\MS12\DATA\050830\05083013.D Batch ID: MSD12\W0830A Analysis Date: 08/30/2005 Sample ID: 05083005-01AMSD Units: µg/L Result D: MSD12\U09980B Prep Date: 08/30/2005								· · ·	-		
Benzene	•	2003-0 I AINI 3							•		
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:\text{MSDCHEMMS12\DATA\050830\05083013.D} Sample ID: 05083005-01AMSD Units: \text{\text{\text{pg/L}}} Result PQL SpkVal SpkRefVal \text{\		·	Hesult	PQL	SpkVal	SpkHefVal	%REC	LowLimit	HighLimit	RPDRefv	al %RPD(Limit) (
Ethylbenzene 52.9 1.3 50 0 106 77 124 m,p-Xylene 54.5 1.3 50 0 109 73 130 0-Xylene 54.5 1.3 50 0 109 74 131 Surr: 1,2-Dichloroethane-d4 51.8 50 104 76 127 Surr: 1,2-Dichloroethane-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:WSDCHEM\MS12\DATA\050830\05083013.D Batch ID: MSD_12_050830B Prep Date: 08/30/2005 13:18 Sample ID: 05083005-01AMSD Units: \mug/L Run ID: MSD_12_050830B Prep Date: 08/30/2005 13:18 Senzene 56.7 1.3 50 0 113 74 124 55.19 2.8(13) Toluene 55.1 1.3 50 0 106 76 119 51.82 2.4(13) m,p-Xylene 56.6 1.3 50 0 112 73 130 54.54 2.6(14) o-Xylene 56.6 1.3 50 0 112 73 131 54.74 3.3(13) Surr: 1,2-Dichloroethane-d4 50.9 50 102 76 127			55.2	1.3	50	0	110	74	125		
m,p-Xylene					50	0	104		120		
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\050\050830\050\050830\050\050830\050830\050830\050\050830\050830\050830\050\050830\050830\050\050830\050\05083	•					0			124		
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\050\050830\050\050830\050\050830\0508\0508						-					
Surr: Toluene-d8 Surr: 4-Bromofluorobenzene 48.1 49.7 50 96 84 113 99 79 119 Sample Matrix Spike Duplicate File ID: D:WSDCHEM\MS12\DATA\050830\05083\05		no dá		1.3		0					
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\050\050830\050\050830\050\050\050\050830\050\050\050\050\050\050\050\050\050\0		#II C -04						-			
Sample Matrix Spike Duplicate Type MSD Test Code: EPA Method SW8260B File ID: D:\MSDCHEM\MS12\DATA\050830\05083013.D Batch ID: MS12\W0830A Analysis Date: 08/30/2005 13:18 Sample ID: 05083005-01AMSD Units: \mug/L Run ID: MSD_12_050830B Prep Date: 08/30/2005 08/30/2005 Analyte Result PQL SpkVal SpkRefVal REC LowLimit HighLimit RPDRefVal RPD(Limit) C 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)		enzene									
File ID: D:WSDCHEM\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) Company Company 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			70.1								·
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) Company Company Company 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				Type MS							
Analyte Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) Q 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				_				UA			
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		SUUS-UTAMSD						I moved from "	•		
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					•	•					• •
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											
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											
0-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: 1,2-Dichloroethane-d4 50.9 50 102 76 127											
Communication and Communicatio	•	ne-d4		1.3		0				54.74	3.3(13)
Surr: Toluene-d8 48.1 50 96 84 113	Surr: Toluene-d8	u 10 UT									
Surr: 10luene-a8 48.1 50 96 84 113 Surr: 4-Bromofluorobenzene 49 50 98 79 119		enzene									
Commonto.						···································		1 3	110		

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							
Chair	n of Custody (COC) Information							
Carrier name <u>FedEx</u>								
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 Prese	ervation 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 viais 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 🗷							
Anal	ytical 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 STR05	5083006.							

Billing Information:

HUSH!

CHAIN-OF-CUSTODY RECORD

Page: 1 of 1

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

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

WorkOrder: STR05083005

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

4°C

Client:

Stratus Environmental 3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

Report Attention: Steve Carter

CC Report:

Job: PO:

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

Steve Carter

TEL: (530) 676-6008

Client's COC #: 09544

EDD Required: Yes

Sampled by: C.Hill

Cooler Temp:

Date Printed:

30-Aug-05

QC Level: S3

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha	Client	Callantian	M cm				Request	ed Tests	
Sample ID	Sample ID		No. of Bottles		TPH/P_W	VOC_W			
STR05083005-01A	<u>'</u>		OKG SUB	TAT PWS#	<u></u>				Sample Remarks
31703063005-012	USA57 W EFF	AQ 08/29/05 09:35	5 0	1	GAS-C	BTEX/OXY_			
			<u> </u>	I I	· · · · · · · · · · · · · · · · · · ·				

Comments:

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

Received by:	Signature	Print Name	Сотрапу	Date/Time
Received by:	The transfer that we have the second of the	2.5 (F) & 11 (S)	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 EWU Address 3330 Consum Pt DR City, State, Zip Cameran Pt Phone Number 530 676 600 frax 530676 600			I	d From Which State? NV WA DTHER Pag	ge # / of /
Client Name USA 57	P.O. # Job		Analyses F	_, <u>_</u>	09544 quired QC Level?
City, State, Zip Cork Care Time Rote Matrix' Office Use Sampled by 21/1/	EMail Address Phone # Fax	×#		/ / / / '	II III IV
Time Sampled See Key Below Chick Conly Lab ID Number Only Lab ID Number Only Lab ID Number	Report Altention State Sample Description	TAT Filled "See below"	15	Global ID #	EMARKS
0939 \ AC \ USH 57	WEFF	*M 5-V X 24 5-V 人	8	34 W	wel THT
ADDITIONAL INSTRUCTIONS:					
Relinquished by Relinquished by Relinquished by	Print Name (3 tou Face	Company	Date 82109 82905	Time 1230 1230
Paceived by 1 / /	ELLERRES	63 C P H-		No page	, 1, 05
Received by Key: AQ - Aqueous SO - Soil WA - Waste OT - Oth	er **: 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.



FILE COPY

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

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	Date	Date
		Limit	Sampled	Analyzed
TPH Purgeable	ND	50 μg/L	09/06/05	09/08/05
Tertiary Butyl Alcohol (TBA)	61	10 μg/L	09/06/05	09/08/05
Methyl tert-butyl ether (MTBE)	4.7	0.50 μg/L	09/06/05	09/08/05
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 Arnyl 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
	TPH Purgeable Tertiary Butyl Alcohol (TBA) Methyl tert-butyl ether (MTBE) Di-isopropyl Ether (DIPE) Ethyl Tertiary Butyl Ether (ETBE) Benzene Tertiary Amyl Methyl Ether (TAME) Toluene Ethylbenzene m,p-Xylene	TPH Purgeable ND Tertiary Butyl Alcohol (TBA) 61 Methyl tert-butyl ether (MTBE) 4.7 Di-isopropyl Ether (DIPE) ND Ethyl Tertiary Butyl Ether (ETBE) ND Benzene ND Tertiary Arnyl Methyl Ether (TAME) ND Toluene ND Ethylbenzene ND m,p-Xylene ND	TPH Purgeable ND 50 μg/L Tertiary Butyl Alcohol (TBA) 6! 10 μg/L Methyl tert-butyl ether (MTBE) 4.7 0.50 μg/L Di-isopropyl Ether (DIPE) ND 1.0 μg/L Ethyl Tertiary Butyl Ether (ETBE) ND 1.0 μg/L Benzene ND 0.50 μg/L Tertiary Arnyl Methyl Ether (TAME) ND 1.0 μg/L Toluene ND 0.50 μg/L Ethylbenzene ND 0.50 μg/L m.p-Xylene ND 0.50 μg/L	TPH Purgeable ND 50 μg/L 09/06/05 Tertiary Butyl Alcohol (TBA) 61 10 μg/L 09/06/05 Methyl tert-butyl ether (MTBE) 4.7 0.50 μg/L 09/06/05 Di-isopropyl Ether (DIPE) ND 1.0 μg/L 09/06/05 Ethyl Tertiary Butyl Ether (ETBE) ND 1.0 μg/L 09/06/05 Benzene ND 0.50 μg/L 09/06/05 Tertiary Armyl Methyl Ether (TAME) ND 1.0 μg/L 09/06/05 Toluene ND 0.50 μg/L 09/06/05 Ethylbenzene ND 0.50 μg/L 09/06/05 m.p-Xylene ND 0.50 μg/L 09/06/05

Reported in micrograms per liter, per client request.

ND = Not Detected

Roger Scholl Kandy Soulan

Walter Windows Office

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@aipha-analytical.com

Report Date



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

VOC Sample Preservation Report

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

9/14/05

Report Date



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

Date: 22-Sep-05		OC Summary Report							Work Order: 05090706
Method Bla	n.k CHEM\MS10\DATA\050908\0:	5090834.D	Type: MI		est Code: EPA atch ID: MS10			15B/DHS LUFT M Analysis Date	anual : 09/08/2005 19:46
Sample ID:	MBLK MS10W0908D	Units : µg/L	1	Run ID: MS	SD_10_05090	8B		Prep Date:	09/08/2005
Analyte		Result	PQL	SpkVal	SpkRefVal %	6REC	LowLimit	HighLimit RPDRe	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichl Surr: Toluene- Surr: 4-Bromot	oroethane-d4 d8	ND 9.03 9.9 9.37	50	10 10 10		90 99 94	76 84 79	127 113 119	
Laboratory	Control Spike		Type: LC	S Te	est Code: EPA	A Meth	nod SW80	15B/DHS LUFT M	anual
	CHEM\MS10\DATA\050908\05	5090830.D		Ва	atch ID: MS10	W090	8D	Analysis Date:	09/08/2005 18:20
Sample ID:	GLCS MS10W0908D	Units : µg/L	ı	Run ID: MS	SD_10_05090	8B		Prep Date:	09/08/2005
Analyte		Result	PQL	SpkVal	SpkRefVal %	REC	LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichl Surr: Toluene- Surr: 4-Bromo	oroethane-d4 d8	424 9.52 10.1 9.47	50	400 10 10 10		106 95 101 95	78 76 84 79	127 127 113 119	
Sample Mat	riv Cnika		Туре: М	S Te	est Code: EPA	\ Meti	 nod SW80	15B/DHS LUFT M	anual
	.11x	5090845.D	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		atch ID: MS10				09/08/2005 23:41
Sample ID:	05090630-02AGS	Units : µg/L	1	Run ID: MS	SD_10_05090	88		Prep Date:	09/08/2005
Analyte		Result	PQL	SpkVal	SpkRefVal %	6REC	LowLimît	HighLimit RPDRef	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichl Surr: Toluene- Surr: 4-Bromo	oroethane-d4 d8	2040 46.2 51.4 47.7	250	2000 50 50 50	_	102 92 103 95	70 76 84 79	139 127 113 119	
Sample Mat	rix Spike Duplicate		Type: MS	SD Te	est Code: EPA	\ Meti	10d SW80	15B/DHS LUFT M	anual
	CHEM\MS10\DATA\050908\0	5090846.D	,,		atch ID: MS10	W090	8D	Analysis Date:	09/09/2005 00:02
Sample ID:	05090630-02AGSD	Units : µg/L	I	Run ID: MS	SD_10_05090	8B		Prep Date:	09/09/2005
Analyte		Result	PQL	SpkVal	SpkRefVal %	6REC	LowLimit	HighLimit RPDRet	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichl Surr: Toluene- Surr: 4-Bromot	oroethane-d4 d8	2050 44.3 50.4 48.2	250	2000 50 50 50	_	102 89 101 96	70 76 84 79	139 204 127 113 119	0 0.5(12)

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.



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

Date: 22-Sep-05	OC Summary Report						Work Order: 05090706	
Method Blank		Туре: МЕ	Type: MBLK Test Code: EPA Method SW8260B					
File ID: D:\HPCHEM\MS10\DATA\050908\05090834	l.D		Ва	atch ID: MS1	0W090	8C	Analysis Da	ite: 09/08/2005 19:46
Sample ID: MBLK MS10W0908C Units	: μg/L	F	Run ID: M	SD_10_0509	108B		Prep Date:	09/08/2005
Analyte Re	sult	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDF	RefVal %RPD(Limit) Qual
Tertiary Butyl Alcohol (TBA) ND		10	<u> </u>				· · · - · · ·	
Methyl tert-butyl ether (MTBE) ND		0.5						
Di-isopropyl Ether (DIPE) ND		1						
Ethyl Tertiary Butyl Ether (ETBE) ND		1						
Benzene ND Tertiary Amyl Methyl Ether (TAME) ND		0.5 1						
Toluene ND		0.5						
Ethylbenzene ND		0.5						
m,p-Xylene ND		0.5						
o-Xylene ND		0.5						
·	9.03		10		90 99	76 84	127 113	
	9.9 9.3 7		10 10		94	79	119	
Catt. 1 Distributed September 1								
Laboratory Control Spike			_	est Code: EF			260B	
File ID: D:\HPCHEM\MS10\DATA\050908\05090833	.D			atch ID: MS1		8C	Analysis Da	ite: 09/08/2005 19:25
Sample ID: LCS MS10W0908C Units	:∶µg/L	F		SD_10_0509			Prep Date:	09/08/2005
Analyte Re	sult	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDF	RefVal %RPD(Limit) Qual
Benzene 1	0.6	0.5	10		106	81	122	
	1.3	0.5	10		113	80	120	
	1.5	0.5	10		115	80	120	
••	1.7 1.3	0.5 0.5	10 10		117 113	80 80	129 129	
	8.8	0.5	10		88	76	127	
•	0.3		10		103	84	113	
Surr: 4-Bromofluorobenzene 9	.63		10		96	79	119	
Sample Matrix Spike		Type: MS	Te	est Code: EF	A Meth	nod SW82	260B	
File ID: D:\HPCHEM\MS10\DATA\050908\05090843				atch ID: MS1	0W090	8C	Analysis Da	te: 09/08/2005 22:58
Sample ID: 05090630-02AMS Units	: µg/L	F		SD_10_0509			Prep Date:	09/08/2005
•	sult	PQL				LowLimit	-	RefVal %RPD(Limit) Qual
· · · · · · · · · · · · · · · · · · ·	4.8	1.3	50	0	110	74	125	
	7.6	1.3	50	ŏ	115	76	120	
	6.8	1.3	50	Ō	114	77	124	
m,p-Xylene	58	1.3	50	0	116	73	130	
·	i7.8	1.3	50 50	0	116 96	74 76	131	
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 5	48 1.7		50 50		103	76 84	127 113	
	8.6		50		97	79	119	
		T					COD	
Sample Matrix Spike Duplicate		Type: MS		est Code: EF				00/00/0005 00:40
File ID: D:\HPCHEM\MS10\DATA\050908\05090844		_		atch ID: MS1		8C	-	te: 09/08/2005 23:19
·	∷ µg/L			SD_10_0509			Prep Date:	09/08/2005
	sult	PQL						RefVal %RPD(Limit) Qual
	2.3	1.3	50	0	105	74 76		4.78 4.6(13)
	5.1 4.3	1.3 1.3	50 50	0	110 109	76 77		7.58 4.4(13) 6.8 4.5(13)
	14.3 15.5	1.3	50 50	0	111	77		7.95 4.3(14)
o-Xylene	56	1.3	50	0	112	74		7.8 3.1(13)
	6.4		50		93	76	127	
Surr: Toluene-d8	52		50		104	84	113	
Surr: 4-Bromofluorobenzene 4	8.7		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					
Project Manager: Kiran Nagaraju	Client's EMail: knagaraju@ Client's Phone: (530) 676-6	-	inc.net Client's FAX: (530) 676-6005			
Work Order Number: \$TR05090706	Date Received: 9/7/2005		Received by: Stephanie Sifuentes			
Cha	ain of Custody (COC) Informa	tion	•			
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	and the control of th			
Sample containers intact?	Yes 🗹	No				
Sufficient sample volume for indicated test?	Yes 🗹	No				
Sample Pres	servation and Hold Time (HT	Informa	ation			
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 ☑			
Ana	lytical Requirement Informa	ion				
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-OF-CUSTODY RECORD

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

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

Kiran Nagaraju

TEL: (530) 676-6005 FAX: (530) 676-6005

EMail knagaraju@stratusinc.net

Cameron Park, CA 95682-8861 Report Attention: Kiran Nagaraju

Stratus Environmental

3330 Cameron Park Drive

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

Client's COC #: 6830

Page: 1 of 1

WorkOrder: STR05090706

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

EDD Required: Yes

Sampled by: MW Morgan

Cooler Temp: 4 °C

Date Printed: 07-Sep-05

QC Level: S3

CC Report:

Suite 550

Client:

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

41L										Request	ed Tests	 		
Alpha	Client		Collection	No. of	Bottles	3		TPH/P_W	VOC_W		· <u></u>	T	1	
Sample ID	Sample ID	Matrix	Date	ORG	SUB	TAT	PWS#			İ				Sample Remarks
STR05090706-01A	Inf Water	AQ	09/06/05 10:36	6	0	6		GAS-C	BTEX/OXY C					
										 		 <u> </u>	<u>, </u>	'

Comments:

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

Particular	Signature	Print Name	Company	Date/Time
Received by:	- Carlotte Committee Commi		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 Strates Environmental Inc. Address 3330 Cameron Pack DC#55	Alpha An 255 Glendaie Sparks Neva	alytical, Inc. Avenue, Suite 21 da 89431-5778	Samples Co AZ CA ID OR	llected From N × NV OTHER	Which State? WA Pa	ge#
Phone Number 530 676 6004 Fax 530 676 6005	Priorie (775)	355-1044		alyses Require		6830
Client Name USA 57 Address 10700 MacArtho-Blud. City, State, Zip October Cand CA Time Date Matrix' Office Use Sampled by	Phone # Fax	#			/ / / /	quired QC Level? II III IV
Sampled Sampled See Key Below Lab ID Number	Sample Description	Total and type of containers AT Filtered ** See below		/ / /	Global ID #	EMARKS
1034 Yelos AQ 10	C 11 1		××			
ADDITIONAL INSTRUCTIONS:						
Signature	Print Name					
Relinquished by	artin Morgan	5	Company		9/6/05	7ime 1305
	maiano	alpha	analytical:	Tro.	09/06/05	
Received by		I de la companya de l	<i>i</i>			
Relinquished by Received by						
*Key: AQ - Aqueous SO - Soil WA - Waste OT NOTE: Samples are discarded 60 days after results are reported of the above samples is applicable only to those samples received	- Other **: L-Liter nless other arrangements are made. H	V-Voa S-Soil	be returned to client or d	Tedlar B-Bras	texpense. The rer	OT-Other port for the analysis



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

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	Date	Date
			Limit	Sampled	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
ab ID :	Methyl tert-butyl ether (MTBE)	2.6	0.50 μg/L	09/13/05	09/15/05
TR05091405-01A	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
lient ID:	TPH Purgeable	ND	50 μg/L	09/13/05	09/15/05
SA 57 W GACI	Tertiary Butyl Alcohol (TBA)	ND	10 μg/L	09/13/05	09/15/05
ab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 μg/L	09/13/05	09/15/05
TR05091405-02A	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
lient ID :	TPH Purgeable	ND	50 μg/L	09/13/05	09/15/05
SA 57 W EFF	Tertiary Butyl Alcohol (TBA)	ND	10 μg/L	09/13/05	09/15/05
ab ID :	Methyl tert-butyl ether (MTBE)	ND	$0.50~\mu g/L$	09/13/05	09/15/05
TR05091405-03A	Di-isopropyl Ether (DIPE)	ND	1.0 μ g/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 μ g/L	09/13/05	09/15/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 μ g/ 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



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Reported in micrograms per liter, per client request.

ND = Not Detected

Roger Scholl Kandy Saulner Walter Hinchman, Quality Assurance Officer

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



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: STR05091405

Project: USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pН	
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



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 St	ımmar	y Repor	t			Work Order: 05091405
Method Blank File ID: D:\HPCHEM\MS10\DATA\050915\05	091506.D	Type: Mi		est Code: EP atch ID: MS1			•	anual : 09/15/2005 12:42
Sample ID: MBLK MS10W0915B	Units : µg/L			SD_10_0509			Prep Date:	09/15/2005
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRe	Val %RPD(Limit) Qual
TPH Purgeable Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	ND 9.71 10.3	50	10 10		97 103	76 84	127 113	
Surr: 4-Bromofluorobenzene	9.46		10		95	79	119	
Laboratory Control Spike		Type: LC	S Te	est Code: EP	A Meti	hod SW80	15B/DHS LUFT M	anual
File ID: D:\HPCHEM\MS10\DATA\050915\05	091504.D		Ва	atch ID: MS1	DW091	15B	Analysis Date:	09/15/2005 11:59
Sample ID: GLCS MS10W0915B	Units : µg/L	1	Run ID: MS	SD_10_0509	15A		Prep Date:	09/15/2005
Analyte	Result	PQL	SpkVal	SpkRefVal 1	%REC	LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
TPH Purgeable	379	50	400	•	95	78	127	
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	10.3 10		10 10		103 100	76 84	127 113	
Surr: 4-Bromofluorobenzene	9.39		10		94	79	119	
Sample Matrix Spike		Type: MS	s Te	est Code: EP	A Meti	hod SW80	15B/DHS LUFT M	anual
File ID: D:\HPCHEM\MS10\DATA\050915\05	091511.D	.,,,		atch ID: MS1				09/15/2005 14:47
Sample ID: 05091405-03AGS	Units : µg/L	1	Run ID: MS	SD_10_0509	15A		Prep Date:	09/15/2005
Analyte	Result	PQL	SpkVal	SpkRefVal '	%REC	LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
TPH Purgeable	2180	250	2000	0	109	70	139	
Surr: 1,2-Dichloroethane-d4	44.1		50		88 102	76 84	127 113	
Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	51 47.9		50 50		96	79	119	
		Type: MS	en Ta	set Code: ED	A Moti	had SW80	15B/DHS LUFT Ma	anual
Sample Matrix Spike Duplicate File ID: D:\HPCHEM\MS10\DATA\050915\05	001512 D	rype. IV		atch ID: MS1				09/15/2005 15:08
Sample ID: 05091405-03AGSD	Units : µg/L	1		SD_10_0509		V D	Prep Date:	09/15/2005
Analyte	Result	PQL .				LowLimit	•	Val %RPD(Limit) Qual
TPH Purgeable	2180	250	2000	0	109	70	139 217	
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.



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Date: 27-Sep-05		(OC Su	ımmar	y Repoi	rt				Work Order: 05091405
Method Blan	nk		Type: MI	BLK T	est Code: E	PA Meti	hod SW82	.60B		
	CHEM\MS10\DATA\050915\0	5091506.D		В	atch ID: MS	10W091	5A	Analy	sis Date:	09/15/2005 12:42
Sample ID:	MBLK MS10W0915A	Units : μg/L			SD_10_050			Prep		09/15/2005
	MBEK M310440313A						فأحصنا ليحمله	•		
Analyte		Result	PQL	Spkvai	Spkkervar	76REC	LOWLINII	HIGHLINIA	Krukeit	/al %RPD(Limit) Qual
Tertiary Butyl A		ND	10							
	/I ether (MTBE)	ND	0.5							
Di-isopropyl Etl		ND	1							
Benzene	Butyl Ether (ETBE)	ND ND	1 0.5							
	lethyl Ether (TAME)	ND ND	0.5							
Toluene	TOBIST EBIOT (TAME)	ND	0.5							
Ethylbenzene		ND	0.5							
m,p-Xγlene		ND	0.5							
o-Xylene		ND	0.5							
Surr: 1,2-Dichle	proethane-d4	9.71		10		97	76	127		
Surr: Toluene-c		10.3		10		103	84	113		
Surr: 4-Bromoff	luorobenzene	9.46		10		95	79	119		
Laboratory	Control Spike		Type: LC	S Te	est Code: E	PA Meti	nod SW82	60B		
File ID: D:\HPC	CHEM\MS10\DATA\050915\0	5091507.D		Ва	atch ID: MS	10W091	5A	Analy	sis Date:	09/15/2005 13:03
Sample ID:	LCS MS10W0915A	Units : µg/L	1	Run ID: MS	SD 10_050	915A		Prep	Date:	09/15/2005
Analyte		Result	PQL				LowLimit	HighLimit	RPDRef\	/al %RPD(Limit) Qual
						99	81	122		
Benzene		9.93 10.6	0.5 0.5	10 10		106	80	120		
Toluene 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-Dichio	proethane-d4	9.14		10		91	76	127		
Surr: Toluene-o		10.4		10		104	84	113		
Surr: 4-Bromoff	luorobenzene	9.81		10		98	79	119		
Sample Mat	rix Snike		Type: MS	S Te	est Code: E	PA Meth	nod SW82	60B		
	CHEM\MS10\DATA\050915\0	5091509.D		Ba	atch ID: MS	10W091	5A	Analy	sis Date:	09/15/2005 14:03
Sample ID:	05091405-03AMS	Units : µg/L			SD_10_050			Prep l		09/15/2005
•	03031403-03/1113	Result	PQL .				Lovel imit	•		al %RPD(Limit) Qual
Analyte				 			·		IVI- DIVELA	ai 7814 D(Eillit) Quai
Benzene		52	1.3	50	0		74	125		
Toluene		57.6	1.3	50	0		76	120		
Ethylbenzene		59.1	1.3 1.3	50	0	118 121	77 73	124 130		
m,p-Xylene o-Xylene		60.6 58.7	1.3	50 50	0		73 74	131		
Surr: 1,2-Dichlo	methane-d4	47.4	1.5	50	U	95	76	127		
Surr: Toluene-o		52.7		50		105	84	113		
Surr: 4-Bromofl		48.2		50		96	79	119		
			Type: MS	en T	est Code: El	DA Moth	and SIM83	ENR		
•	rix Spike Duplicate	E004E40 D	rype. Mis		atch ID: MS:				eie Doto:	09/15/2005 14:25
	CHEM\MS10\DATA\050915\0						ЭA	•		
Sample ID:	05091405-03AMSD	Units : µg/L			SD_10_0509			Prep I		09/15/2005
Analyte		Result	PQL							/al %RPD(Limit) Qual
Benzene		51.2	1.3	50	0		74 76	124	52.04 57.6	• •
Toluene		56.9	1.3	50 50	0	11 4 118	76 77	119 12 4	57.6 59.11	1.2(13) 0.0(13)
Ethylbenzene		59.1 61	1.3 1.3	50 50	0	122	73	130	60.58	· ·
m,p-Xylene o-Xylene		58.6	1.3	50 50	0		74	131	58.68	
Surr: 1,2-Dichlo	proethane-d4	43.8	1.5	50	Ů	88	76	127	30.00	
Surr: Toluene-c		52.3		50		105	84	113		
Surr: 4-Bromofl		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 5									
Project Manager: Gowri Kowtha	Client's EMail: gkowth Client's Phone: (530) 6	_	c.net Client's FAX: (530) 676-6005							
Work Order Number: STR05091405	Date Received: 9/14/20		Received by: Stephanie Sifuentes							
Cha	in of Custody (COC) Info	ormation								
Carrier name <u>FedEx</u>										
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 Pres	ervation and Hold Time	(HT) Informa	tion							
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 ✓							
Anal	ytical Requirement Info	rmation								
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	,
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CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc. WorkOrder: STR05091405

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

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

Gowri Kowtha

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

EDD Required: Yes

Sampled by: C. Hill

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

Cooler Temp: Date Printed: 4°C 14-Sep-05

Page: 1 of 1

Client:

Stratus Environmental 3330 Cameron Park Drive Suite 550

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha

CC Report:

Job: USA 57

PO:

Client's COC #: 09548

QC Level: S3

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

										Requ	ested Tests				
Alpha Sample ID	Client Sample ID		Collection		-		D1440 /r	TPH/P_W	VOC_W						
Sample ID	Sample ID	mauri	x Date	ORG	SUB	TAT	PWS#		<u> </u>						Sample Remarks
STR05091405-01A	USA 57 W INF	AQ	09/13/05 06:20	5	0	6		GAS-C	BTEX/OXY_						
STR05091405-02A	USA 57 W GACI	AQ	09/13/05 06:22	5	0	6	į	GAS-C	BTEX/OXY_			<u> </u>	<u> </u>	<u> </u>	
STR05091405-03A	USA 57 W EFF	AQ	09/13/05 06:25	5	0	6		GAS-C	BTEX/OXY_C			<u> </u>	Ì		

Comments:

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

	Signature	Print Name	Company	Date/Time
Received by:	- C	P. S. PART TO	Alpha Analytical, Inc.	
	<u> </u>			

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					Alpha	Analy	ytica	ıl, Inc.		Sa: AZ	mple	s Co. CA	ilect ≍	ed Fi NV	rom i	Which wa	nich State? VA Page # of						
Name	<u>フル</u> 。マチ	317	Cumery	on Pa					255 Glei					ID		OR		OTI	HER		Pag	ge#	of /
City Ct	ata Zia	11 . 11	۱۰ د دی. د.۱	7 h _					Sparks, Phone (7		
Phone	Numbe	1522 (7 b 607 h	Fax <u>ら</u> ろ	067	6005	(0)	Fax (77				ノ	/		Ana	alyses	s Rec	uired	l		095	48
Client	Name (15A	57				P.O. #			Job#			/	3	/	/		7	7		Red	quired QC	Level?
Addres	55						EMail Ad	ddress					/J.	χ_{χ}	$\gamma/$	- /		/		/	- 1	, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
City, S	ate, Zip	Dak	land				Phone #			Fax#		·· · ·····			*						/	## PF? YES	
Time	Date	Matrix.	Office Use Only	Sampled b	CHI	'U	Report Att	ention (5/76	vvi'			Total and type of containers	了还	2/3	۱)/	/					1		
j	Sampled	Below		ID Number	_		Sample D	Description		TAT	Field Filtered	** See below	/r	10)	/	/ /	/ .	/	/ ,	/		EMARKS	
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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.





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

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	Date	Date
			Limit	Sampled	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 μ g/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	$0.50~\mu g/L$	09/16/05	09/20/05

Reported in micrograms per liter, per client request.

ND = Not Detected

Roger Scholl Kandy Soulus Walter Hinds

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@aipha-analytical.com



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

	<u> </u>	<u> </u>		
Alpha's Sample ID	Client's Sample ID	Matrix	pН	
05091904-01A	USA 57 W INF	Aqueous	2	

9/26/05



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

Date: 29-Sep-05	OC Summary Report												
Method Blank		Type: M	BLK T	K Test Code; EPA Method SW8015B/DHS LUFT Manual									
File ID: 05092008.D			В	atch ID: MS	08W092	20B	Analysis Date	: 09/20/2005 14:56					
Sample ID: MBLK MS08W0920B	Units : µg/L		Run ID: M:	SD 08 050	920A		Prep Date:	09/20/2005					
Analyte	Result	PQL				LowLimit		fVal %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			Ba	atch ID: MS I	08W092	20 B	Analysis Date	: 09/20/2005 14:33					
Sample ID: GLCS MS08W0920B	Units : µg/L		Run ID: M	SD_08_050	920A		Prep Date:	09/20/2005					
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRe	fVal %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: M	S Te	est Code: E	PA Met	hod SW80	15B/DHS LUFT M	anual					
File ID: 05092011.D			Ва	atch ID: MS	08W092	20B	Analysis Date:	: 09/20/2005 16:04					
Sample ID: 05091904-01AGS	Units : µg/L	1	Run ID: MS	SD_08_0509	920A		Prep Date:	09/20/2005					
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRe	fVal %RPD(Limit) Qual					
TPH Purgeable	2540	250	2000	66.97		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: MS	SD Te	est Code: E l	PA Meti	hod SW80	15B/DHS LUFT M	anual					
File ID: 05092012.D			Ba	atch ID: MS(08W092	20B	Analysis Date:	: 09/20/2005 16:27					
Sample ID: 05091904-01AGSD	Units : µg/L	1	Run ID: M \$	SD_08_0509	920A		Prep Date:	09/20/2005					
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRet	fVal %RPD(Limit) Qual					
TPH Purgeable	2440	250	2000	66.97	118	70	139 253	6 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.



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Date: 29-Sep-05		QC Sı	ımmar	y Repo	rt			Work Order: 05091904
Method Blank File ID: 05092008.D		Туре: М		est Code: E				e: 09/20/2005 14:56
Sample ID: MBLK MS08W0920A	Units : µg/L		Run ID: M	SD_08_050	920A		Prep Date:	09/20/2005
Analyte	Result	PQL		. –		LowLimi	t HiahLimit RPDR	efVal %RPD(Limit) Qua
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) Toluene	ND	1						
Ethylbenzene	ND ND	0.5 0.5						
m,p-Xylene	ND	0.5						
o-Xylene	ND	0.5						
Surr: 1,2-Dichloroethane-d4	9.15	0.0	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: LC	S T	est Code: E	PA Met	hod SW8	260B	
File ID: 05092006.D			B	atch ID: MS	08W092	20A	Analysis Date	e: 09/20/2005 13:04
Sample ID: LCS MS08W0920A	Units : µg/L		Run ID: M:	SD_08_050	920A		Prep Date:	09/20/2005
Analyte	Result	PQL				LowLimit	HighLimit RPDR	efVal %RPD(Limit) Qua
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 Surr: Toluene-d8	9.71		10		97	76	127	
Surr: 4-Bromofluorobenzene	10.2 9.4		10 10		102 94	84 79	113 119	
	- 0.4		10	•	34		119	
Sample Matrix Spike		Type: MS	5 Te	est Code: E	PA Met	hod SW82	260B	
File ID: 05092009.D			Ba	atch ID: MS	08W092	20A	Analysis Date	:: 09/20/2005 15:18
Sample ID: 05091904-01AMS	Units : µg/L	1	Run ID: MS	SD_08_050	920A		Prep Date:	09/20/2005
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRe	fVal %RPD(Limit) Qual
Benzene	58.1	1.3	50	0	116	74	125	
Toluene	58.4	1.3	50	ō	117	76	120	
Ethylbenzene	60.1	1.3	50	0	120	77	124	
m,p-Xylene	55.6	1.3	50	2.36		73	130	
o-Xylene Surr: 1,2-Dichloroethane-d4	54.2	1.3	50	1.43	106	74	131	
Surr: Toluene-d8	50.9 50.1		50		102	76	127	
Surr: 4-Bromofluorobenzene	46		50 50		100 92	84 79	113 119	
Sample Matrix Spike Duplicate		Type: MS		est Code: El				
File ID: 05092010.D				atch ID: MS(: 09/20/2005 15:41
Sample ID: 05091904-01AMSD	Units : µg/L	i		SD_08_050			Prep Date:	09/20/2005
Analyte	Result	PQL .				Lowl imit	•	fVal %RPD(Limit) Qual
Benzene	55.6	1.3	50	0	111	74	124 58.	
Toluene	54.2	1.3	50	0	108	74 76	119 58.	
Ethylbenzene	55.9	1.3	50	0	112	77	124 60.	
m,p-Xylene	51.3	1.3	50	2.36		73	130 55	- •
o-Xylene	49.9	1.3	50	1.43	97	74	131 54	
Surr: 1,2-Dichloroethane-d4	50.8		50		102	76	127	
Surr: Taluene-d8 Surr: 4-Bromofluorobenzene	50		50		100	84	113	
	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: gkow Client's Phone: (530)	_	c.net Client's FAX: (530) 676-6005					
Work Order Number: STR05091904	Date Received: 9/17/			eived by: Stephanie Sifuentes				
Chai	n of Custody (COC) Ir	formation						
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)				
<u>s</u>	ample Receipt Inform	nation_		_				
Shipping container/cooler in good condition?	Yes 🗹	∐ No	Not Present	u .				
Samples in proper container/bottle?	Yes 🗹	☐ No		one a whole .				
Sample containers intact?	Yes 🗹	☐ No						
Sufficient sample volume for indicated test?	Yes 🗹	☐ No		•				
Sample Prese	rvation and Hold Time	e (HT) Informa	tion					
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 \	/OA vials submitted				
Sample labels checked for correct preservation?	Yes 🗹	☐ No						
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes 🗌	☐ No	N/A 🗹					
Analy	tical Requirement Inf	<u>ormation</u>						
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 :								
	*							

Dilling miormation :	Billing	Information	:
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CHAIN-OF-CUSTODY RECORD

Page: 1 of 1

Alpha Analytical, Inc.

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

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:

Job: USA 57

TEL: (530) 676-6001

FAX: (530) 676-6005

PO:

EMail gkowtha@stratusinc.net

Gowri Kowtha

Client's COC #: 09553

EDD Required: Yes

Sampled by : C. Hill

Cooler Temp: 4 °C

WorkOrder: STR05091904

Date Printed: 19-Sep-05

QC Level: S3

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

				Requested Tests	
Alpha	Client	Collection	No. of Bottles	TPH/P_W VOC_W	
Sample ID	Sample ID	Matrix Date	ORG SUB TAT PW	Sa	ample 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:		And the state of t	Alpha Analytical, Inc.	

Billin Name Addres	g Into	rmatio みなり 330	on: ENCanera	v r Ph I	To best		Alpha 255 Gler Sparks,	ndale Av Nevada	enue, 89431	Suite 21 -5778		Sai AZ ID	nple:	S Col CA OR	llect	ed F NV OT	rom HER	Whic: WA	h State? 	e#_[]
City, Si Phone	ate, Zip _i Number	<u>Civile</u> 5700	era F	<u>'H</u> Fax 5306	176005	A.C.A.	Phone (Fax (77			1				Ana	ilyses	s Red	quired	t		09553
Client	Name 2	1514	57		·· - ·	P.O. #		Job #				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7	7	/	/	/ /	/ /	Req	uired QC Level?
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City, S	late, Zip	OAH	duel			Phone #		Fax#		•		ح / ﴿	V)						FOO / FO	F7 YES NO
Time	Date Sampled	Matrix*	Office Use Only	Sampled by	IICL	Report Attention	oce u c			Total and type of containers	of 1/2			/					1	
l`	<u>L</u> .	Below		ID Number		Sample Description			Field Filtered	** See below		(~)				_	<u> </u>	/	- AE	MARKS
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*Key: A	ιQ - Aqι	eous	SO - Soil	I WA - Wa	aste OT - O	ther	**: L	-Liter	٧-٧	oa S-So	oil Jar	0-6	Orbo	T-	Tedlar	•	B-Bras	55	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.