



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

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

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

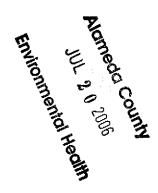
Re: Fifth Dual Phase Extraction Event Report

Former USA Service Station No. 57

10700 MacArthur Boulevard

Oakland, California

Dear Mr. Chan:



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

SITE BACKGROUND

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

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

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

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

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

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

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

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

Mr. Barney Chan, ACHCSA Fifth Dual Phase Extraction Event Report Former USA Station 57, Oakland, CA Page 3

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

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

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

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

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

DUAL PHASE EXTRACTION EVENT

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

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

Mr. Barney Chan, ACHCSA Fifth Dual Phase Extraction Event Report Former USA Station 57, Oakland, CA Page 4

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

Dual Phase Extraction Equipment

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

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

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

Dual Phase Extraction Procedure

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

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

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

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

Laboratory Analytical Methods

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

DPE Event Results

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

- An applied vacuum in the range of 20 to 24.5 "Hg produced influent soil vapor flow rates in the range of 21.9 to 56.2 cfm, and an average groundwater extraction rate of 0.30 gpm. A total of 7,400 gallons of extracted groundwater were treated using the carbon vessels and discharged to the sanitary sewer.
- Groundwater elevations at wells S-1, S-2, MW-3, MW-6, and MW-8 decreased during the DPE event, while the groundwater elevation at well MW-7 did not exhibit a noticeable increase or decrease. Groundwater elevation contour maps for depth to water measurements taken prior to the DPE event (May 1, 2006) and during the DPE event (May 16 and 22, 2006) are presented in Figures 3, 4, and 5, respectively.
- The highest decrease in groundwater elevation of approximately 2.11 feet was observed at well MW-3, located approximately 15 feet from the nearest extraction

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

- TPHG and benzene concentrations in the influent air samples were reported in the ranges of 37 milligrams per cubic meter [mg/m³] to 180 mg/m³, and 0.31 mg/m³ to 5.4 mg/m³, respectively. MTBE was not reported in any of the three influent air samples collected during this event.
- Based on influent soil vapor flow rates and concentrations, approximately 5.43 pounds of TPHG were extracted in vapor phase during this DPE event. A total of approximately 50.9 pounds of TPHG in vapor phase has been removed from the subsurface as a result of five DPE events (Table 4).
- TPHG and benzene concentrations in the influent water samples appear to have declined during the DPE event. TPHG and benzene concentrations in the influent water sample collected on the first day of the DPE event were reported at 990 micrograms per liter (µg/L) and 170 µg/L, respectively. The TPHG and benzene concentrations in the influent water sample collected on the last day of the DPE event were reported at 290 µg/L and 19 µg/L. The MTBE concentrations in the influent water samples appear to have increased during this DPE event from 12 µg/L (first day) to 20 µg/L (last day).
- Based on groundwater extraction rates and influent concentrations, approximately 0.027 pounds of TPHG was removed from the subsurface in aqueous phase during this DPE event. A total of approximately 0.296 pounds of TPHG has been removed in aqueous phase from the subsurface as a result of the five DPE events (Table 4).

DISCUSSION

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

LIMITATIONS

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

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Kiran Nagaraju Staff Engineer owri S. Kowtha, P.E.

Project Manager

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

cc:

Mr. Charles Miller, USA Gasoline Corporation

Mr. Ken Phares, Jay-Phares Corporation

Mr. Peter McIntyre, AEI Consultants

Mr. Robert Cave, Bay Area Air Quality Management District

Documentation

TABLE 1 **DPE EVENT FIELD OBSERVATION SUMMARY**

5th DPE Event - May 2006

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

	Hour	TE	Appl	Air	Totalizer	GW	Inf	Oper				Dep	th to W	/ater, f	eet bo	s and	Induce	ed Vac	uum, '	'WC			
Date	Meter		Vac	Flow ¹	Reading	Ext Rate	PID	Temp	S	-1	S	-2	MV	V-3		MW-6			MW-7			MW-8	
	Reading	days	"Hg	cfm	gallons	gpm	ppmv	deg F	DTW	DD	DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
5/1/06 9:30			Beş	gin fifth	DPE even	- it using w	ells EX	-1, EX-2	, EX-3,	, and E	X-4. Ho	ur Met	ter Reac	ling = 3	3,758.	Γotalize	r read	ing = 10	07,790	gallon	s		
5/1/06 9:30	3,758.00	0.00	24.50	29.5	107,790		12	1,451	9.43		11.37		7.84		0.00	11.00		0.00	8.41		0.00	11.16	
5/3/06 5:30	3,826.80	2.87	24.00	21.9	110,790	0.73	15	1,479	9.55	0.12	11.04	-0.33	8.85	1.01	0.00	11.05	0.05	0.00	8.37	-0.04	0.01	11.04	-0.12
5/8/06 6:00	3,923.20	6.88	22.00	26.1	112,920	0.37	17	1,450	9.58	0.15			9.51	1.67	0.00	11.08		0.00	8.35			11.46	
5/16/06 5:30	4,006.80	10.37	Upo		the DPE wn at 17:3																		kely
5/16/06 5:30	4,006.80	10.37	21.00	56.2	5.2 113,780 0.17 50 1,460 9.63 0.20 11.47 0.10 9.95 2.11 0.00 11.28 0.28 0.00 8.43 0.02 0.00 11.86											0.70							
5/22/06 5:30	4,150.40	16.35	21.00	38.8	114,830	0.12	43	1,460	9.54	0.11	11.39	0.02	9.85	2.01	0.00	11.10	0.10	0.00	8.39	-0.02	0.00	11.88	0.72
5/25/06 5:30	4,190.20	18.01	Upo	n arriva shutdo	l the DPE wn at 21:1	system wa 8 hrs on 5	as obser 5/23/06.	ved to be The DPI	non-op E syster	erating n syster	due to ; n was re	generate	or malfu d at 5:30	nction. Ohrs or	Based 5/25/0	on the	hour m trouble	eter rea shootin	dings, t g the ge	the DPI enerator	∃ syster r malfu	n was li nction.	kely
5/25/06 5:30	4,190.20	18.01	20.00	48.4	115,090	0.11	20	1,452	NM		NM		NM		NM	NM		NM	NM		NM	NM	
5/25/06 6:40	4,191.10	18.05			•			Dis	continu	ie fifth l	DPE eve	ent. Tot	alizer re	ading =	115,19	90 gallo	ns				•		
Average			22.08	36.79		0.30	26.2	1459	9.55	0.15	11.34	-0.04	9.20	1.70	0.00	11.10	0.13	0.00	8.39	-0.03	0.00	11.48	0.40
Distance to N	learest Ex	tractio	n Well,	feet					2	20	. 2	7	1	5		75			33			62	
Screening In	terval : El	X-1=EX	ζ-2=EX-	3=EX-4	= 5 to 25 f	eet bgs		•	20	- 40	20	- 40	24 -	- 44		10 - 40.	5		10 - 40)		10 - 35	5
Notes:			- 11 11																				
TE - Time Els	apsed calc	ulated a	s differe	nce of h	our meter	readings,	days	cfm - cu	bic feet	t per mi	nute		Temp -	Tempe	erature								
Appl - Applie	ed .							Inf - Inf	luent				deg F -	degree	Farenh	eit							
Oper - Opera	ting							DD - Dr	awdow	'n			PID - P	hoto Ic	nizatio	n Detec	tor						

Vac - Vacuum

bgs - below ground surface

ppmv - parts per million by volume

DTW - depth to groundwater

gpm - gallons per minute

NM - Not measured

WC - Inches water column

"Hg - Inches Mercury

-- = Not applicable

Ext. - Extraction

GW Ext - Groundwater Extraction

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

GW Ext Rate = Difference of Totalizer Readings, gallons

flow rate = velocity X area of pipe (e.g.: flow rate = 600 feet per minute X 0.05 sq.ft)

TABLE 2 SOIL VAPOR ANALYTICAL RESULTS 5th DPE Event - May 2006

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

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

Notes

All air sample values reported in milligrams per cubic meter (mg/m³)

TPHG = Total petroleum hydrocarbons as gasoline (Gasoline Range Organics [GRO] C4-C13)

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary butyl alcohol

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

DIPE = Di-isopropyl ether

Analytical Laboratory

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

Analytical Methods

TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual

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

TABLE 3 GROUNDWATER ANALYTICAL RESULTS 5th DPE Event - May 2006

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

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

Notes:

All water sample values reported in micrograms per liter (µg/L)

TPHG = Total petroleum hydrocarbons as gasoline (Gasoline Range Organics [GRO] C4-C13)

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

Analytical Laboratory

Alpha Analytical, Inc. (ELAP #2019)

Analytical Methods

TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual

BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by

EPA Method SW8260B

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

TABLE 4 PETROLEUM HYDROCARBON MASS EXTRACTION SUMMARY 5th DPE Event - May 2006

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

a Flancad		MILLE	nt Concentr	ation	Soil Va	por Extracti	ion Rate	(TPHG) I	Removed
e Elapsed	Flowrate		(mg/m ³)			(lbs/day)		Period ¹	Total
(days)	(cfm)	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs
n mass remo	ved during the	previous I	OPE events		-			45.469	45.469
	29.5	37	5.4	<0.15	0.10	0.01	<0.0004		
6.88	26.1	37	0.31	<0.15	0.09	0.00	< 0.0003	0.629	46.098
11.16	48.4	180	1.1	<0.15	0.77	0.005	< 0.001	4.801	50.900
	Volume of groundwater	Influe		ation				Rem	
- 1	extracted ² ,				Ť				MTBE
(days)	gallons	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs
n mass remo	oved during the	previous I	OPE events				,	0.26809	0.01280
-	18	990	170	12	0.00015	0.000026	0.000002	0.26824	0.01280
6.88	5,130	110	0.61	0.61	0.02355	0.00365	0.00027	0.29178	0.01307
11.16	2,270	290	19	20	0.00379	0.00019	0.00020	0.29557	0.01327
r (<u>(</u> r	e Elapsed (days) n mass remo	n mass removed during the 29.5 6.88 26.1 11.16 48.4 Volume of groundwater e Elapsed (days) n mass removed during the - 18 6.88 5,130	1.16	Volume of groundwater extracted ² , gallons TPHG Benzene Influent Concentration	Volume of groundwater extracted ² , gallons TPHG Benzene MTBE	Note	Normal Provious DPE events Provious DPE events	The mass removed during the previous DPE events 29.5 37 5.4 <0.15 0.10 0.01 <0.0004	The mass removed during the previous DPE events 45.469

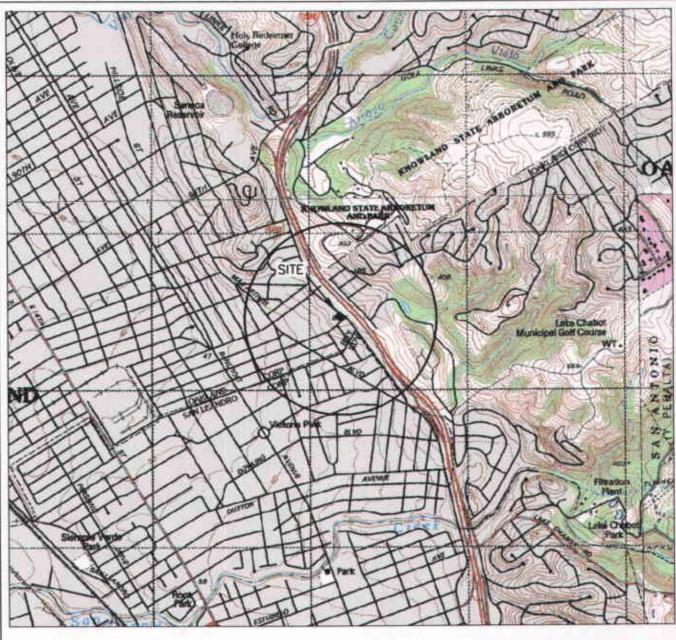
Sample Calculations

Ext. Rate from = $\frac{40.3 \text{ cu ft x}}{\text{min}}$ $\frac{690 \text{ mg}}{\text{cu meter}}$ $\frac{\text{lb}}{453,593 \text{ mg}}$ $\frac{\text{x 1,440 min}}{\text{day}}$ $\frac{\text{x cu meter}}{35.314 \text{ cu ft}}$ = $\frac{2.47 \text{ lbs/day}}{\text{lbs/day}}$

Mass removed = concentration (μ g/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

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



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



QUADRANGLE LOCATION





SCALE 1:24,000

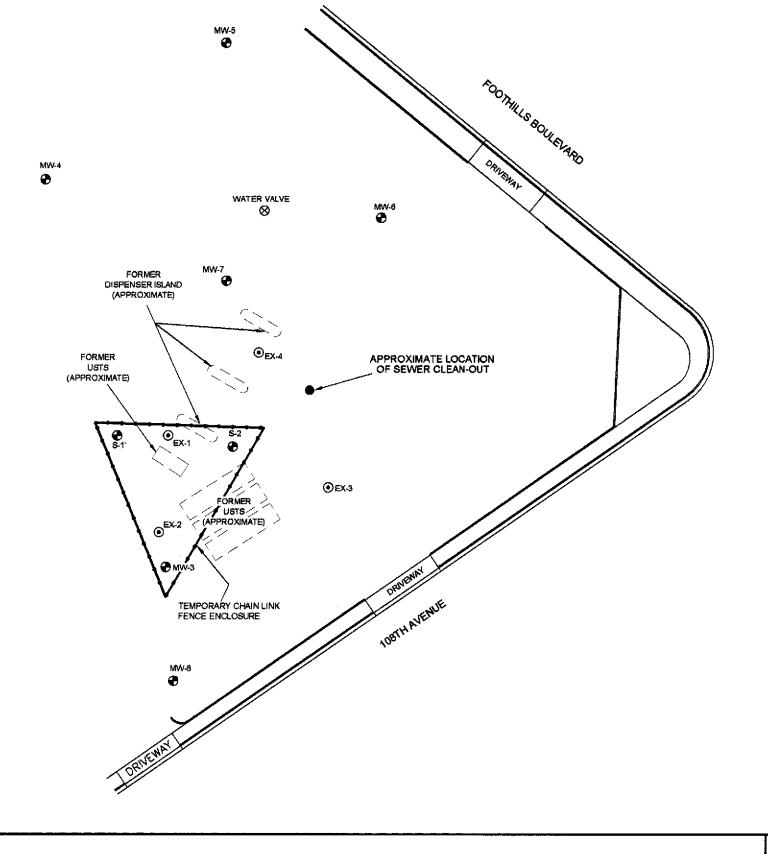
STRATUS ENVIRONMENTAL, INC.

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

1

PROJECT NO. 2007-0057-01

USENET Custom. 1887



MW-1 MONITORING WELL LOCATION

⊗ WATER VALVE LOCATION

APPROXIMATE SEWER CLEAN-OUT LOCATION

40 FT

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

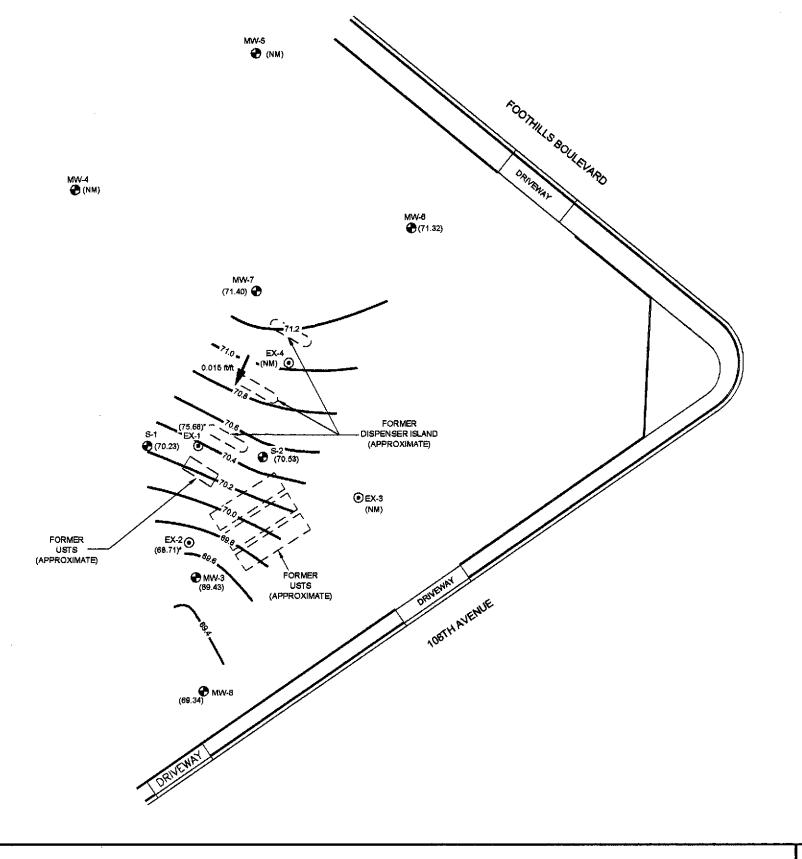
SITE PLAN

FIGURE 2

PROJECT NO. 2007-0057-01

STRATUS ENVIRONMENTAL, INC.

HORZ. SCALE



MW-3 MONITORING WELL LOCATION EX-1 EXTRACTION WELL LOCATION

GROUND WATER ELEVATION IN FEET

RELATIVE TO MEAN SEA LEVEL

INFERRED DIRECTION OF GROUND WATER FLOW

(NM) NOT MEASURED

WELLS MEASURED: 5/01/08

* NOT USED FOR CONTOURING

STRATUS ENVIRONMENTAL, INC.

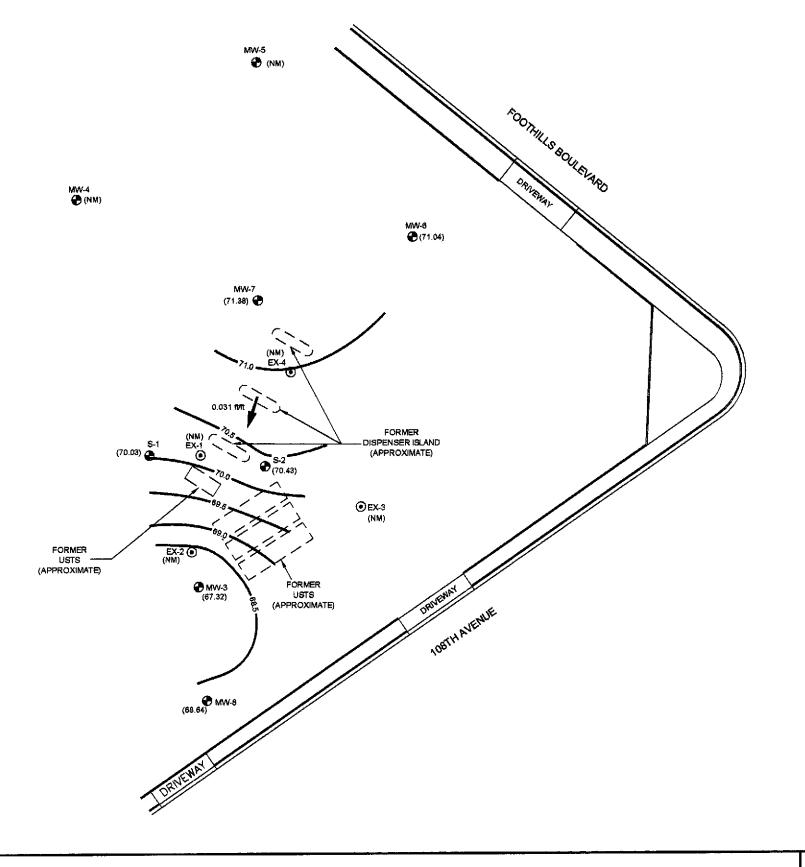


FORMER USA SERVICE STATION NO. 57 10700 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP FOR 5/01/06

FIGURE 3

PROJECT NO. 2007-0057-01



MW-3 MONITORING WELL LOCATION

● EX-1 EXTRACTION WELL LOCATION

(70.03) GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL

INFERRED DIRECTION OF GROUND WATER FLOW

(NM) NOT MEASURED

WELLS MEASURED: 5/16/06

STRATUS ENVIRONMENTAL, INC.

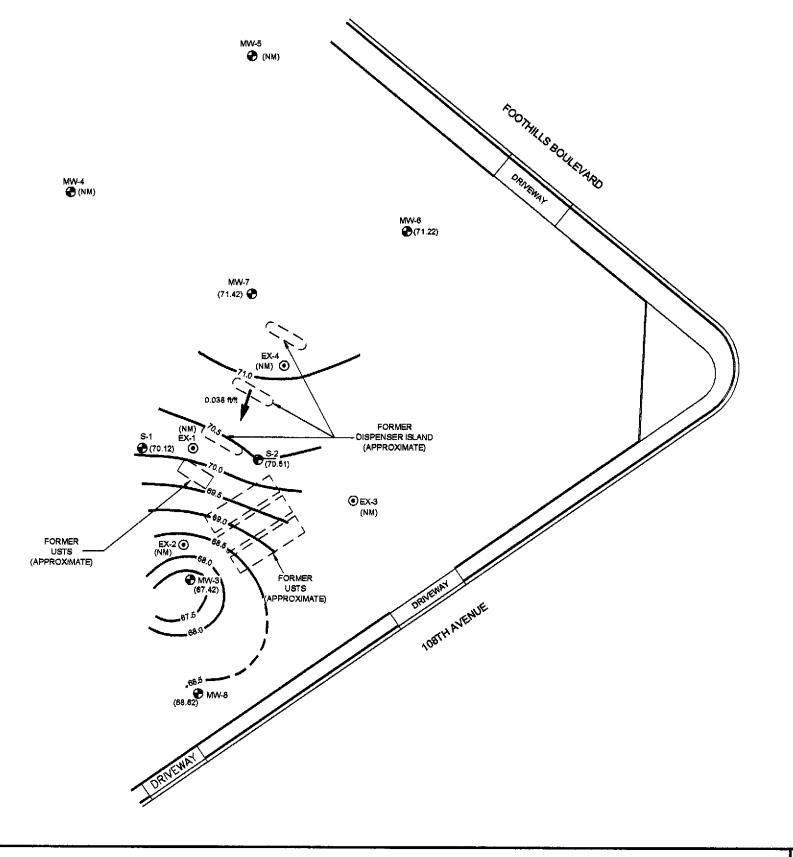


FORMER USA SERVICE STATION NO. 57 10700 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP FOR 5/16/06 FIGURE

Δ

PROJECT NO. 2007-0057-01



♠ MW-3 MONITORING WELL LOCATION

(70.12) GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL

70.0 ----- WATER TABLE CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL

INFERRED DIRECTION OF GROUND WATER FLOW

(NM) NOT MEASURED

WELLS MEASURED: 5/22/06

40 FT
HORZ. SCALE

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

GROUNDWATER ELEVATION CONTOUR MAP FOR 5/22/06 FIGURE 5

PROJECT NO. 2007-0057-01

STRATUS ENVIRONMENTAL, INC.

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\	N (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	<i>l</i> -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 I	Jp Test ι	ısing wel	I S-2, DT	W =20.2	26 feet	bgs and	I 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	МИ	NM	NM	NM	NM	NM	NM	NM	NM	МИ	NM
7/6/2004 10:00	01:30	NM	NM	42,120		23.0	NM	0.35	NM	NM	NM	МИ	NM -	NM	NM	NM	МИ	NM	NM	NM	МИ	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	0		70		10)0
Screening Interval		20 - 4	0 (S-2)						20 - 40		_	24 - 44		10 - 4	10.5	10 -	40		10 - 40,5	j	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 2 DPE TEST USING WELL S-1

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

	TE	Appl	Air	Totalizer	GW	Inf	Oper			Ìr	nduced	Vacuun	n ("WC)	&/or DT	W (feet	bgs) D	ata in O	bservat	ion Wel	ls		
Date & Time		Vac	Flow	Reading	Ext Rate	PID	Temp.		S-2			MW-3		MV	V-4	M۱	V -5		MW-7		MV	N-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	MM	NM	42,820	NM	ММ	МИ	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	МИ	NM	NM	NM	NM	NM	NM	NM
7/7/2004 8:00	00:55	24.00	87	42,890		0.6	1,456	+4.4	25.35	-4.73	0.0	15.70	0.00	12.25	-0.01	18.06	-0.01	0.0	18.38	0.00	19.55	0.00
7/7/2004 9:00	01:55	24.00	87	42,960	0.61	0.0	1,457	+0.2	22.16	-7.92	0.0	15.70	0.00	12.25	-0.01	18.07	0.00	0.0	18.38	0.00	19.55	0.00
7/7/2004 9:05	02:00									Disc	ontinu	e Test o	n S-1									
Distance to Extra	ction Wel	I 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
Temp - Temperature "Hg - Inches Mercury
deg F - degree Farenheit bgs - below ground surface

Ext. - Extraction NM - Not measured

TABLE 3 DPE TEST USING WELL MW-3

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

	TE	Appl	Air	Totalizer	GW	Inf	Oper				Indu	ed Vacu	ıum ("W	(C) &/or D	TW (fee	t bgs) D	ata in O	bservat	ion Wells	.		
Date & Time		Vac	Flow	Reading	Ext Rate	PID	Temp		S-1			S-2		MW	-4	MW	<i>l</i> -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	NM	42,960		NM	NM	NM	NM		NM	22.16		12.26	-	18.07		МИ	18.38	ļ	19.55	МИ
7/7/2004 10:00	00:35	24.50	87	42,960		0.0	1,450	0.0	NM		NM	NM		NM		NM		NM	ММ		NM	NM
7/7/2004 10:30	01:05	25.50	87	42,960		0.0	1,447	0.0	19.38		+0.6	21.00	-1.16	12.25	0.00	18.06	-0.01	0.0	18.36	-0.02	19.53	-0.02
7/7/2004 11:30	02:05	26.00	87	42,960		0.0	1,456	0.0	19.11	-0.27	+0.2	20.91	-1.25	12.25	0.00	18.06	-0.01	0.0	18.35	-0.03	19.53	-0.02
7/7/2004 11:35	02:10					Discont	inue test	on MV	V-3						·							
Distance to Extrac	tion Well	MW-3							60			60		17	0	22	<u>:</u> 0		120		5	0
Screening Interval		24-44 (MW-3)						20 - 40			20 - 40		10 - 4	0.5	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 lonization 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

	ΤE	Appl	Air	Totalizer	GW	Inf	Oper												
Date & Time		Vac	Flow	Reading	Ext Rate	PID	Temp	M۷	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 I	MW-3								
7 <i>/</i> 7/2004 11:35	0.00	NM	NM	42,960	NM	NM	NM	12.25	+-	18.06		NM	DRY	NM	18.35		NM	19.53	
7/8/2004 6:15	18:40	22.25	87	44,610	1.47	4.0	1,460	12.25	0.00	18.11	0.05	0.0	DRY	0.0	18.63	0.28	0.0	19.70	0.17
7/9/2004 6:00	42:25	23.00	86	46,960	0.92	2.3	1,440	12.33	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	ıe DPE	Test. E)PE uni	it hour	meter	reading	= 1,29	7.7		
Distance to Nearest	Extraction	Well						1	10	17	70	1	10		70			50	
Screening Interval								10 -	40.5	10	- 40	10 -	40.5		10 - 40.5	i		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 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	ЕТВЕ	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	NA
07/08/04	1030	Effluent	Water	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
07/19/04	0623	Effluent	Water	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0	NA	NA
07/19/04	0630	influent	Water	<50	<0.50	<0.50	<0.50	0.52	3.7	56	<1.0	<1.0	<1.0	NA	NA
07/27/04	1118	Effluent	Water	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0	NA	NA

All water sample values reported in micrograms per liter (µg/L)

TPHG = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary armyl 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

	Test Well		Influe	ent Concer		Extra	Soil Vapor	from	(TPHG)	tive Mass Removed
Date	ID	Flowrate	ŧ	(mg/m			ells (lbs/d:		Period ¹	Total
		(cfm)	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs
07/06/04	S-2	87.0	660	2.1	1.0	5.16	0.01	0.01	5.16	5.16
07/07/04	S-1	87.0	<12	<0.12	0.29	<0.09	<0.001	0.002	0.01	5.17
07/07/04	MW-3	87.0	<12	<0.12	0.13	<0.09	<0.001	0.001	0.01	5.18
07/19/04	S-1, S-2, MW-3	86.0	88	0.26	0.25	0.68	0.002	0.002	8.16	13.34
·		Volume of							Cumula	itive Mass
	Test Well	groundwater	Influe	ent Concer	itration	Mass	Extracted	l from	(TPHG)	Removed
Date	ID	extracted ² ,		(μg/L)		grou	ındwater (lbs)	Period	Total
		gallons	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs
							İ			
07/06/04	S-2	80	2,200	13	66	0.001	0.00001	0.00004	0.001	0.001
07/08/04	S-1, S-2, MW-3	2,490	<100	< 0.50	16	<0.002	<0.00001	0.0003	0.012	0.014
07/19/04	S-1, S-2, MW-3	21,710	<50	<0.50	4	<0.01	<0.0001	0.001	0.008	0.015
Sample Cal	culations			<u> </u>						
Ext. Rate fr		40 cu ft x	8,400 mg	1b	<u>x 1,440 m</u>	<u>iin</u>	x cu meter	<u>c</u>		
Wells (vapo	or)	min	cu meter	453593 mg	day		35.314 cu	ft		
, ,	=	30.21 <u>lbs/day</u>								
Mass remo from groun		entration (μg/L)) x gallons	extracted	x (2.2046	x 10- ⁹)(lb.	/mg) / 0.26	6418 (gal/I	-)	
between	estimates between the sampling even estimated based or	nts were used	·				-	l (operation	nal uptime)
	verage groundwat	er extraction ra	te of 0.63	gpm and th	ne average	concentrat	tions, the m	ass extrac	tion rate fo	or
is calculate Mass remo	_	= concentrat	tion (ug/L)) w gwara ao	flosmate (mm) v (2	2046 v 10	_ ⁹ \(lb/ma\	/0.26418	(gal/L)
groundwate		* 60 (min.			mowrate (gpm) X (2.	∠∪40 A IV	- Minail	, U.ZU410	(gar L)
b. Garantan	TPHG =		lbs/day	au _j j						
	•		-							
	Benzene =	0.0001	lbs/day							

TABLE 2 DPE EVENT FIELD OBSERVATION SUMMARY 2nd DPE Event - June/July 2005

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

	Hour	TE	Appl	Air	Totalizer	GW	Inf	Oper													
Date	Meter		Vac	Flow	Reading	Ext Rate	PID	Temp	M۷	٧-4	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			Begin	n June/July	2005 DP	E Event,	Using W	Vells 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	l I-Ir. Meter	58,050							I	Disconti	nue DP	E Event						
Distance to	o Nearest	Extraction	n Well			•			1	10	11	70	1	10			70			50	
Screening	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

NM - Not measured

Ext. - Extraction

TABLE 3 SOIL VAPOR ANALYTICAL RESULTS 2nd DPE Event - June/July 2005

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

Sample Date	Sample Time	Sample ID	TPHG	Benzene	Toluene	Ethyl- benzene	Total Xylenes	МТВЕ	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
					,				

<u>Notes</u>

Analytical Laboratory

All air sample values reported in milligrams per cubic meter (mg/m³)

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

TPHG = Total petroleum hydrocarbons as gasoline

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

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)

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	TAME
06/06/05	11:34	Influent	590	11	3.8	6.1	33	62	140	<1.0	<1.0	<1.0
06/07/05	09:41	MID (Fluent)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
06/07/05	09:39	EFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
06/28/05	06:08	Influent	<50	<0.50	<0.50	<0.50	<0.50	2.6	52	<1.0	<1.0	<1.0
06/28/05	06:04	Mid GAC	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
06/28/05	06:00	Effluent	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
07/01/05	05:46	INF	<50	<0.50	<0.50	<0.50	<0.50	2.2	64	<1.0	<1.0	<1.0
07/01/05	05:54	GAC-1	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
07/01/05	05:58	EFF	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0

All water sample values reported in micrograms per liter (µg/L)

TPHG = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

Analytical Laboratory

Alpha Analytical, Inc. (ELAP #2019)

Analytical Methods

TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual

BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by

EPA Method SW8260B

TABLE 5 PETROLEUM HYDROCARBON MASS EXTRACTION SUMMARY 2nd DPE Event June/July 2005

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

			Influe	nt Concentr	ation	Extr	Soil Vapor action Rate		Cumulat (TPHG)	ive Mass Removed
Date	Time Elapsed	Flowrate		(mg/m ³)		V	Vells (lbs/da	y)	Period ¹	Total
	(days)	(cfm)	TPHG	Benzene	МТВЕ	TPHG	Benzene	MTBE	lbs	lbs
Petroleum hydro	carbon mass remo	oved during first	DPE event	conducted d	uring July	2004			13.34	13.34
06/06/05	- 1	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
		Volume of groundwater	Influe	nt Concentr	ation		s Extracted		Rem	ive Mass oved
Date		groundwater extracted ² ,		(μ g/L)	I .	gro	undwater (l	lbs)	Rem TPHG	oved MTBE
Date		groundwater	Influe TPHG		ation MTBE				Rem	oved
	carbon mass remo	groundwater extracted ² , gallons	TPHG	(μg/L) Benzene	МТВЕ	gro TPHG	undwater (l	lbs)	Rem TPHG	oved MTBE
	carbon mass remo	groundwater extracted ² , gallons	TPHG	(μg/L) Benzene	МТВЕ	gro TPHG	undwater (l	lbs)	Rem TPHG lbs	oved MTBE lbs
Petroleum hydro	carbon mass remo - 18.48	groundwater extracted ² , gallons eved during first	TPHG DPE event	(μg/L) Benzene conducted d	MTBE	gro TPHG 2004	oundwater (l Benzene	bs) MTBE	Rem TPHG lbs 0.015	oved MTBE lbs 0.00149
Petroleum hydrod 06/06/05	-	groundwater extracted ² , gallons oved during first	TPHG DPE event	(μg/L) Benzene conducted d	MTBE uring July	gro TPHG 2004 0.00028	Benzene 0.00001	MTBE 0.00003	Rem TPHG lbs 0.015 0.01528	oved MTBE lbs 0.00149 0.00152

Sample Calculations

Ext. Rate from = Wells (vapor)

40 cu ft x min

8,400 mg lb 2 cu meter 453,593 mg

<u>x 1,440 min</u>

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)

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.

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

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

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					et bgs	and Ind	luced V	acuum		
Date	Meter		Vac	Flow	Reading	Ext Rate	PID	Temp		V-4	MV			MW-6	· · · · · ·		8-WM	
	Reading	days	"Hg	cfm	gallons	gpm	ppmv	deg F	DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
8/29/05 5:30				_	or to start o				8.71		12.90		0.00	DRY		0.00	16.75	
8/29/05 7:00	Ве	gin Thir	d DPE E	vent, Us	ing Wells	S-1, S-2,		and MW Totalizer				r Meter	Readi	ng Prior	to Test	Start u	p = 435.	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	
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 ol	oserved i	on-fun	ctional d	ue to lov	v propar	ne		
9/6/05 9:15	System re	tem re-started after propane delivery. Based on hour meter readings for 8/31/5 at 0500 hrs & 9/6/5 at 0600 hrs, the DPE system was likely shutdown on 9/5/05 at 23:14 hrs 0.10 7.69 18.00 62.5 51,850 2.67 16.1 1,447 NM																
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 betweer 4 hrs. Sin	ı 9/13/0:	5 5:30 a	nd 9/16/	55 5 :00	the DP	E system	ı was lik	ely shut	down on	9/13/05
Distance to Ne	arest Ext	raction '	Well						8	6	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	5		10 - 35	
Notes: TE - Time Elar	osed calcu	lated as d	lifference	of hour	neter readi	ings, days		cfm - cu	bic feet	per mim	ute	Temp -	Temper	ature		•		
Appl - Applied	[Inf - Infl	uent			deg F -	degree !	Farenhei	t			
Oper - Operatii	ng							DD - Dr	awdowi	1		PID - F	hoto Io	nization l	Detector			
Vac - Vacuum								bgs - bel	low grou	ınd surfa	ace	ppmv -	parts pe	er millio	n by voli	ume		
DTW - depth to	o groundw	ater						gpm - ga	allons pe	er minut	e	NM - 1	Not mea	sured				
" WC - Inches	water colu	ımn						"Hg - In					ot applic					
Ext Extractio	m							¹ Flow r			•							
GW Ext - Grou GW Ext Rate =				idings, g	allons			flow rate	e = velo	city X ar	ea of pip	e (e.g.:	flow ra	te = 994	l feet per	r minute	: X 0.05 s	q.ft)

TABLE 2 SOIL VAPOR ANALYTICAL RESULTS 3rd DPE Event - August/September 2005

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

Sample Date	Sample Time	Sample ID	ТРНС	Benzene	Toluene	Ethyl- benzene	Total Xylenes	МТВЕ	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	TPHG	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

Time Elapsed				ation	Sou Va	por Extracti	on Rate	(11110)	Removed
Time Frahsed	Flowrate		(mg/m^3)			(lbs/day)		Period ¹	Total
(days)	(cfm)	TPHG	Benzene	MTBE	TPHG	Benzene	MTBE	lbs	lbs
rbon mass remo	ved during the p	revious DF	E events					19.789	19.789
-	48.8	<15	0.59	0.41	< 0.065	0.003	0.002		
7.69	62.5	<15	<0.15	<0.15	<0.083	<0.001	<0.001	<0.570	19.789
6.67	40.4	<15	0. 1 9	<0.15	<0.054	0.001	< 0.001	<0.458	19.789
	Volume of groundwater	Influe	nt Concentr	ation	Mas	s Extracted	from		
Time Elapsed	extracted ² ,		(µg/L)		gro	undwater (l	bs)	TPHG	MTBE
(days)	gallons	TPHG	Benzene	мтве	TPHG	Benzene	MTBE	lbs	lbs
irbon mass remo	ved during the p	revious DF	E events					0.09682	0.00965
-	160	55	3.3	17	0.00007	0.000004	0.00002	0.09689	0.00967
7.69	29,110	<50	<0.50	4.7	0.01275	0.00046	0.00264	0.10965	0.01231
6.67	23,170	<50	< 0.50	2.6	<0.00967	<0.00010	0.00071	0.10965	0.01231
E .		67	< 0.50	2.3	0.00112	<0.00001	0.00005	0.11076	0.01231
,	rbon mass remo - 7.69 6.67 Time Elapsed (days) rbon mass remo - 7.69	rbon mass removed during the p - 48.8 7.69 62.5 6.67 40.4 Volume of groundwater extracted ² , gallons rbon mass removed during the p - 160 7.69 29,110	Volume of groundwater extracted during the previous DF	Volume of groundwater Concentrate	Volume of groundwater extracted ² , gallons TPHG Benzene MTBE	A	A	A	19.789

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 <u>x cu meter</u> 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)

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

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

TABLE 1 DPE EVENT FIELD OBSERVATION SUMMARY 4th DPE Event - February/March 2006

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

	Hour	TE	Appl	Air	Totalizer	GW	Inf	Oper				Dep	th to W	ater, f	eet bo	s and	Induce	d Vac	uum, '	'WC			
Date	Meter		Vac	Flow	Reading	Ext Rate	PID	Temp	s	-1	s	-2	MV	V-3		MW-6			MW-7			MW-8	
	Reading	days	"Hg	cfm	gallons	gpm	ppmv	deg F	DTW	DD	DTW	DD	DTW	DD	Vac	DTW	DD	Vac	DTW	DD	Vac	DTW	DD
2/20/06 5:30			Begir	ı fourth	DPE ever	nt using v	vells EX	-1, EX-2	2, EX-3	, and E	Х-4. Н	our Me	ter Rea	ding =	3,086.:	3. Total	izer re:	ading =	= 94,450) gallo	ns		
2/20/06 5:30	3,086.30	0.00	20.00	40.3	94,450		360	1,460	14.47		16.61		10.79		NM				13.74		NM	13.82	
2/24/06 5:15	3,161.30	3.13	System	observe	d non-fun	ctional an	d re-star	ted by re	setting	power s	supply.	Based o 0830		meter re	adings	, the DI	PE syste	em was	likely	shutdov	vn on 2	/23/06 a	iround
2/24/06 5:15	3,161.30	3.13	18.50	50.6	98,740	0.95	150	1,462	14.45	-0.02	16.53	-0.08	11.82	1.03	0.00	15.64	-0.06	0.00	13.65	-0.09	0.00	14.29	0.47
3/3/06 7:00	3,262.40	7.34	23.00	29.0	100,540	0.30	212	1,451	14.20	-0.27	16.30	-0.31	11.55	0.76	0.00	15.10	-0.60	0.10	13.26	-0.48	0.00	14.38	0.56
3/9/06 6:30	3,403.10	13.20	23.00	22.4	103,490	0.35	150	1,470	13.97	-0.50	16.00	-0.61	11.47	0.68	0.00	14.49	-1.21	3.03	13.11	-0.63	3.05	13.69	-0.13
3/16/06 5:30	3,566.70	20.02	23.00	25.5	105,780	0.23	68	1,457	13.61	-0.86	15.60	-1.01	11.15	0.36	0.00	14.15	-1.55	0.00	12.55	-1.19	3.15	13.03	-0.79
3/24/06 5:00	3,752.80	27.77	23.00	30.5	107,790	0.18	35	1,459	13.10	-1.37	14.68	-1.93	10.73	-0.06	0.03	13.82	-1.88	0.05	11.99	-1.75	0.00	12.83	-0.99
3/24/06 5:30									Di	scontin	ue fourtl	h DPE e	event.										
Average			21.75	33.04		0.40	162.5	1,460	13.97	-0.60	15.95	-0.79	11.25	0.55	0.01	14.82	-1.06	0.64	13.05	-0.83	1.24	13.67	-0.18
Distance to N	earest Ex	raction	Well, fo	eet	·				2	20	2	7	1	5		75			33			62	:
Screening Int	erval : EX	-1=EX-	2=EX-3	=EX-4=	5 to 25 fe	et bgs			20	- 40	20	- 40	24 -	- 44		10 - 40.	5		10 - 40	,		10 - 35	;
Notas:																							

Notes:

TE - Time Elapsed calculated as difference of hour meter readings, days cfm - cubic feet per minute

Temp - Temperature

Appl - Applied

Inf - Influent

deg F - degree Farenheit

Oper - Operating

DD - Drawdown

PID - Photo Ionization Detector

Vac - Vacuum

bgs - below ground surface

ppmv - parts per million by volume

DTW - depth to groundwater

gpm - gallons per minute

NM - Not measured

" WC - Inches water column

"Hg - Inches Mercury

-- = Not applicable

Ext. - Extraction

GW Ext - Groundwater Extraction

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

GW Ext Rate = Difference of Totalizer Readings, gallons

flow rate = velocity X area of pipe (e.g.: flow rate = 994 feet per minute X 0.05 sq.ft)

TABLE 2 SOIL VAPOR ANALYTICAL RESULTS 4th DPE Event - February/March 2006

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

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

Notes

All air sample values reported in milligrams per cubic meter (mg/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 below laboratory reporting limits in all samples.

TABLE 3 GROUNDWATER ANALYTICAL RESULTS 4th DPE Event - February/March 2006

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

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

All water sample values reported in micrograms per liter (µg/L)

TPHG = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

Analytical Laboratory

Alpha Analytical, Inc. (ELAP #2019)

Analytical Methods

TPHG analyzed by EPA Method SW8015B/DHS LUFT Manual

BTEX, MTBE, TBA, DIPE, ETBE, & TAME analyzed by

EPA Method SW8260B

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

TABLE 4 PETROLEUM HYDROCARBON MASS EXTRACTION SUMMARY 4th DPE Event February/March 2006

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

		Flowrate	Influent Concentration (mg/m³)			Soil Vapor Extraction Rate (lbs/day)			Cumulative Mass (TPHG) Removed	
Date	Time Elapsed								Period ¹	Total
	(days)	(cfm)	TPHG	Benzene	МТВЕ	TPHG	Benzene	МТВЕ	lbs	lbs
Petroleum hydrocarbon mass removed during the previous DPE events									19.789	19.789
02/20/06		40.3	690	8.3	<0.60	2.47	0.03	< 0.002		
03/03/06	7.34	29.0	480	8.6	0.29	1.24	0.02	0.001	13.608	33.397
03/09/06	5.86	22.4	320	2.0	<0.30	0.64	0.004	< 0.001	5.495	38.892
03/24/06	14.57	30.5	98	0.39	<0.15	0.27	0.001	< 0.0004	6.578	45.469
	Volume of					Man E desided from			Cumulative Mass Removed	
		groundwater extracted ² ,	Influent Concentration			Mass Extracted from			кет ТРНС	MTBE
Date	Time Elapsed			(μg/L)	T		oundwater (l	MTBE	lbs	
	(days)	gallons	TPHG	Benzene	MTBE	TPHG	Benzene	IVII DEL I		lbs
					1,11,01	11110	Betteene			
Petroleum hydro	ocarbon mass remo	oved during the p			i				0.11076	0.01231
Petroleum hydro 02/20/06		oved during the p			2.7	0.00152	0.000026	0.000001		
-		1	revious DI	E events	ı				0.11076	0.01231
02/20/06	ocarbon mass remo	48	revious DI 3,800	E events	2.7	0.00152	0.000026	0.000001	0.11076 0.11228	0.01231 0.01231
02/20/06 03/03/06	carbon mass remo	48 6,090	revious DI 3,800 1,100	E events 65 96	2.7 10.0	0.00152 0.12451	0.000026 0.00409	0.000001 0.00032	0.11076 0.11228 0.23679	0.01231 0.01231 0.01263
02/20/06 03/03/06 03/09/06	- 7.34 5.86	48 6,090 2,950	revious DI 3,800 1,100 510	PE events 65 96 3.1	2.7 10.0 1.1	0.00152 0.12451 0.01982	0.000026 0.00409 0.00122	0.000001 0.00032 0.00014	0.11076 0.11228 0.23679 0.25661	0.01231 0.01231 0.01263 0.01277

Sample Calculations

Ext. Rate from = $\frac{40.3 \text{ cu ft x}}{\text{min}}$ $\frac{690 \text{ mg}}{\text{cu meter}}$ $\frac{1b}{\text{s}}$ $\frac{x 1,440 \text{ min}}{\text{day}}$ $\frac{x \text{ cu meter}}{35.314 \text{ cu ft}}$

= 2.47 <u>lbs/day</u>

Mass removed = concentration (μ g/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

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

APPENDIX B

FIELD DATA SHEETS

Site Nan Address Former USA Service Station No. 57 -

Date

Test Operators

5-100

Equipment Model and Serial Nos.

200TCAT M1294

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

10700 McArthur Boulevard

CHILL-Marky

PID Model

Min KAR Zoos

3"steel

	1											
Date & Time	Hour Meter Reading	Applied Vacuum	Inf Air Flow Rate	Dilution Air Flow Rate	Sys Inf Air Flow Rate	TO CHILLOI	Influent Air	Control	Effluent Air	Influent	Effluen	Comments/Notes
	hrs	***C	COM COM	cfm	cfm	(DPE unit) gallons	Ī	Temp	Temp	PID	PID	Comments/Notes
Measure DTW	in all the m	onltoring w				est and also ti	deg F	deg F	deg F	ppmv	ppmv	to each extraction well. Measure DTW in all
	•	7	vells after o	completion	of all the te	ests. Record l	our meter	reading of	the generate	or at the stin	ger depth art and at	to each extraction well. Measure DTW in all the end
5-1.00 0930 5-300	3758-0	24.5	600	Ø	•	107790	רון	1451	250	12	0	USA57W INF 1028 \ K
1570	3826.8	24	445	0-	_	110790	100	1479	276	15	B	USAS7 A \$05/974/ 1045 0
5-8104	2447 -	2		· _	`				<u> </u>		· .	15457 A 945 EFF 1040)
0600	3923,2	22	531	8	 ,	112920)08	1450	272	17	X	USASW EFF a28 5.4.06
5-16-06	4006.8	21	1144	A		112780	מכו	141 -	277			USH W CHI 1 0632
	stem					113780 L OSS		1460	277	50		USA 57 A 845 INF 35-8106
01	1 FU1						2000 0	, CA	jene se	-1 Pu	<u> </u>	V9457 W INF 0445
											, .	
5.22.06	4150.4	21	790	0		114830	117	1460	275	43	\$	
5/2 2001	11.0										·	
	4190.2		785	9			108	1452	235	20	(./	645 510 che to Gen 1000 611 - 10460
7	1191.1	10	545	-013	conve	c+, pr	spane	@ 80%				USH 57 WIMIF - 0635 USH 57 WIMID - 0639
April	4191.1					115190			<u> </u>			92.00 pt 1862 GAC - 0766
								-				· •

Site N.

& Former USA Service Station No. 57

Address

10700 McArthur Boulevard

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

Test Operators CHILL Monty

		1		Wellhea	d/Induce	d Vacuu	m ("WC) & Dep	th to Wat	er (feet	bgs)			
Date & Time	S-1	S-2	MW-3	M	W-4	MV	N -6	M	W-7	M	IW-8	EX-1	EX-Z	Comments/Notes
	DTW	DTW	DTW	Vac	DTW	Vac	DTW	Vac	DTW	Vac	DTW	DTW	DTW	
Measure DTV	V in all th	ne monitor head m	ing wells odification	prior to n. Meas	commend ure the st	ement of inger dep	f test and th to eacl	also the n extracti	total depti on well. N	of test v Jeasure	wells. Meas DTW in all	sure depth I monitorin	to water be g after shu	efore and after installation of the wo
	9.43		7.84	,	m	4	11.00	4	8.41	197	11.16	2.04	T	The
5.4.01	9.55	11.04	8.89	<u>\</u>		0 -	11.07	0	8.37	Ol	11.04	PPE	DPE.	EX-1
5800								<u>.</u>						母长
0410	9.58	11.42	9.51	N	m	<i>b</i>	11.08	P	8.35	8	11.46	DPF	DPE	
h. V. Ala									E					
0530	9.63	11.47	9-45	N/	m	₽.	11.28	2	8.43	82	11.80	שוקנו	DPE	
22.00		-		•										
0530	9,54	11.39	9,85	N	M	8	11.10	9	8.39	8	11.88	DPE	PPE	
										•				
	· · · · · · · · · · · · · · · · · · ·			· 										
						<u>-</u> -								

APPENDIX C

CHAIN-OF-CUSTODY DOCUMENTATION



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



MAY 1 5 2006

ANALYTICAL REPORT

Attn: Gowri Kowtha

Phone: (530) 676-6001 Fax: (530) 676-6005

Date Received: 05/02/06

Job#:

USA 57

3330 Cameron Park Drive

Cameron Park, CA 956828861

Stratus Environmental

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-P (GRO)	ND	15 mg/m ³	05/01/06	05/02/06
USA 57A SYS EFF	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m ³	05/01/06	05/02/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m ³	05/01/06	05/02/06
STR06050247-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m ³	05/01/06	05/02/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m ³	05/01/06	05/02/06
	Веплепе	ND	0.15 mg/m ³	05/01/06	05/02/06
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m ³	05/01/06	05/02/06
	Toluene	ND	0.15 mg/m ³	05/01/06	05/02/06
	Ethylbenzene	ND	0.15 mg/m ³	05/01/06	05/02/06
	m,p-Xylene	ND	0.15 mg/m ³	05/01/06	05/02/06
	o-Xylene	ND	0.15 mg/m ³	05/01/06	05/02/06

Gasoline Range Organics (GRO) C4-C13

Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.10 inches of mercury.

ND = Not Detected

Roger Scholl Kandy Saulner

Walter Findens

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

5/2/06

Report Date



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

Date: 04-May-06	ary Report Worl							
Method Blank	Type MBLK Test Code: EPA Method SW8015B/DHS LUFT Mar							anual
file ID: 06050208.D			В	atch ID: MS15A	0502	В	Analysis Date:	05/02/2006 10:21
ample ID: MBLK M\$15A0502B	Units: mg/m³		Run ID: MSD_15_060502		2A Prep I		Prep Date:	05/02/2006
nalyte	Result	PQL	SpkVal	SpkRefVal %F	REC	LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
PH-P (GRO)	ND	10)					
urr: 1,2-Dichloroethane-d4	2.22		2	1	11	76	127	
urr: Toluene-d8	2.02		2	10	01	84	113	
urr: 4-Bromofluorobenzene	1.84		2	9	92	79	119	
aboratory Control Spike	Type LCS Test Code: EPA Method SW8015B/DHS LUFT Manual							
ile ID: 06050205.D			В	atch ID: MS15A	0502	В	Analysis Date:	05/02/2006 09:14
ample ID: GLCS MS15A0502B	Units : mg/ i	m³	Run ID: M	SD_15_060502	A		Prep Date:	05/02/2006
nalyte	Result	PQL	SpkVal	SpkRefVal %R	REC I	LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
PH-P (GRO)	414	10	400	10	03	78	127	
urr: 1,2-Dichloroethane-d4	11.1		10	1′	11	76	127	
urr: Toluene-d8	10		10	10	00	84	113	
urr: 4-Bromofluorobenzene	9.38		10	9	14	79	119	

omments:

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



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

Date: 04-May-06								
vIethod Blank		Туре М	BLK Te	st Code: EPA Me	thod SW	8260B		
File ID: 06050208.D			Ba	tch ID: MS15A050)2A	Analysis Dat	te: 05/02/2006 10:21	
Sample ID: MBLK MS15A0502A	Units : mg/	m³ F	Run ID: MS	D_15 060502A		Prep Date:	05/02/2006	
nalyte	Result	PQL			LowLim	•	efVal %RPD(Limit) Qual	
ertiary Butyl Alcohol (TBA)	ND	5				<u>*</u>		
fethyl tert-butyl ether (MTBE)	ND	0.1						
i-isopropyl Ether (DIPE)	ND	0.2						
thyl Tertiary Butyl Ether (ETBE)	ND	0.2						
lenzene	ND	0.1						
ertiary Amyl Methyl Ether (TAME)	ND	0.2						
oluene	ND	0.1						
ithylbenzene	ND	0.1						
ı,p-Xylene	ND	0.1						
-Xylene	ND	0.1						
urr: 1,2-Dichloroethane-d4	2.22		2	111	76	127		
um: Toluene-d8	2.02		2	101	84	113		
urr: 4-Bromofluorobenzene	1.84		2	92	79	119		
aboratory Control Spike		Type LC	S Tes	st Code: EPA Met	hod SW8	3260B		
ïle ID: 06050204.D			Bat	ch ID: MS15A050	2 A	Analysis Date	e: 05/02/2006 08:51	
ample ID: LCS MS15A0502A	Units : mg/	m³ F	Run ID: MS	D_15_060502A		Prep Date:	05/02/2006	
nalyte	Result	PQL	SpkVal S	SpkRefVal %REC	LowLimi	it HighLimit RPDRe	efVal %RPD(Limit) Qual	
enzene	9.75	0.1	10	98	81	122		
oluene	9.94	0.1	. 10	99	80	120		
thylbenzene	10.2	0.1	10	102	80	120		
ı,p-Xylene	10.7	0.1	10	107	80	129		
-Xylene	11	0.1	10	110	80	12 9		
urr: 1,2-Dichloroethane-d4	10.7		10	107	76	127		
urr: Toluene-d8	9.75		10	98	84	113		
urr: 4-Bromofluorobenzene	9.35		10	94	79	119		

omments:

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

Alpha Analytical, Inc.Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client: 5/2/2006

Date of Notice: 5/2/2006 9:46:50 AM

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

Client Name: Stratus Environmental	Project ID: USA 5	7	
Project Manager: Gowri Kowtha	Client's EMail: gkowth Client's Phone: (530)	_	
Work Order Number: STR06050247	Date Received: 5/2/20		Client's FAX: (530) 676-6005 Received by: Latricia Edrosa
Cha	in of Custody (COC) Inf	<u>ormation</u>	
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> </u>	Sample Receipt Informa	<u>ition</u>	
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	NA°C
Water - VOA vials have zero headspace / no bubbles?	Yes 🗌	☐ No	No VOA vials submitted 🗹
Sample labels checked for correct preservation?	Yes 🗹	☐ No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes 🗌	☐ No	N/A ☑
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: Chain split into two seperate work orders due	to different TAT's.		

D:0:	Informa		
Billing	Intoma	tio	m.
			.,

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

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

WorkOrder: STR06050247

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

RUJHI Page:

02-May-06

EDD Required: Yes

NA°C

Sampled by : C. Hill

Cooler Temp Samples Received

Date Printed 02-May-06

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

EMail: gkowtha@stratusinc.net

Gowri Kowtha

PO:

Client's COC #: 08423

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

Alpha Samala ID	Client	C	ollection	No. of	3		
Sample ID	Sample ID	Matrix		ORG	SUB	TAT	PWS#
STR06050247-01A	USA 57A SYS EFF	AR	05/01/06 10:40	1	0	1	

Requested Tests TPH/P_A VOC_A GAS-N/C BTEX/OXY

Sample Remarks

TEDLAR

Comments:

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

Logged in by:

Print Name

Company

Alpha Analytical, Inc.

Date/Time

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

Address 530 Commun 12 DZ City, State, Zip Common 142 Phone Number 53 67 LR24 Fax 5300000000 Client Name USH 57 Address	P.O. # Job		Analyses Req	ruired / 904
City, State, Zip Tute (med	PWS # DWR	*	1 / 2 / / /	
Time Date Matrix Office Use Sampled by HICC See Key Only Below Lab ID Number	Report Attention October	Total and type of Containers		
04577 B97 3 USA 040 1 07 STR06050247-01 USA	57A 545 EFF	1-7 +	4	REMARKS Stroland TH 24 Hil TH
DITIONAL INSTRUCTIONS:		<u> </u>		
quished by E.F. F.	Print Name MGamo	Strifer	Company	Date Time 5-126 1300
ved by Salicia Edina la	tricia Edrosa	Alpha		5-100 1300
AQ - Aqueous SO - Soil WA - Waste OT - Oti Samples are discarded 60 days after results are reported unless above samples is applicable only to those samples received by the		,		5/2/06 9:48





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

ANALYTICAL REPORT

MAY 1 5 2006

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861 Attn: Gowri Kowtha

Phone: (530) 676-6001 Fax: (530) 676-6005

Date Received: 05/02/06

Job#: USA 57

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

	Parameter	Concentration	Reporting	Date	Date
			Limit	Sampled	Analyzed
Client ID:	TPH-P (GRO)	37	15 mg/m ³	05/01/06	05/04/06
USA 57A SYS INF	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m ³	05/01/06	05/04/06
Lab ID:	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m ³	05/01/06	05/04/06
STR06050250-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m ³	05/01/06	05/04/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m ³	05/01/06	05/04/06
	Benzene	5.4	0.15 mg/m ³	05/01/06	05/04/06
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m ³	05/01/06	05/04/06
	Toluene	2.3	0.15 mg/m ³	05/01/06	05/04/06
	Ethylbenzene	0.58	0.15 mg/m ³	05/01/06	05/04/06
	m,p-Xylene	1.9	0.15 mg/m³	05/01/06	05/04/06
	o-Xylene	0.35	0.15 mg/m ³	05/01/06	05/04/06

Gasoline Range Organics (GRO) C4-C13

Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.10 inches of mercury.

ND = Not Detected

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

5/9/06

Report Date



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

Date: 09-May-06	y Report			Work Order: 06050250			
Viethod Blank File ID: 06050407.D Sample ID: MBLK MS15A0504B Snalyte	Units : mg/ Result	Type M 'm³ PQL	Bar Run ID: M	est Code: EPA Met atch ID: MS15A050 SD_15_060504A SpkRefVal %REC	4B	Analysis Da Prep Date:	Manual te: 05/04/2006 10:15 05/04/2006 tefVal %RPD(Limit) Qua
PH-P (GRO) urr: 1,2-Dichloroethane-d4 urr: Toluene-d8 urr: 4-Bromofluorobenzene	ND 2.4 2.02 1.93	10		120 101 97	76 84 79	127 113 119	
aboratory Control Spike ile ID: 06050405.D ample ID: GLCS MS15A0504B nalyte	Units : mg/ Result	Type L m³ PQL	Ba Run ID: M	est Code: EPA Met atch ID: MS15A050 SD_15_060504A SpkRefVal %REC	4B	Analysis Dat Prep Date:	Manuai e: 05/04/2006 09:31 05/04/2006 efVai %RPD(Limit) Qua
PH-P (GRO) urr: 1,2-Dichloroethane-d4 urr: Toluene-d8 urr: 4-Bromofluorobenzene	426 11.7 9.9 9.58	10		107 117 99 96	78 76 84 79	127 127 113 119	

omments:

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



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

Date: <u>09-May-</u> 06		Work Order: 06050250						
Aethod Blank		Туре М	BLK	Test Code: EPA	Meth	od SW8	260B	
File ID: 06050407.D			E	Batch ID: MS15	A0504	A	Analysis Date:	05/04/2006 10:15
sample ID: MBLK MS15A0504A	Units : mg/	m³	Run ID: N	ASD_15_06050	4A		Prep Date:	05/04/2006
nalyte	Result	PQL				LowLimit		Val %RPD(Limit) Qual
ertiary Butyl Alcohol (TBA)	ND	5						**
1ethyl tert-butyl ether (MTBE)	ND	0.1						
Pi-isopropyl Ether (DIPE)	ND	0.2						
thyl Tertiary Butyl Ether (ETBE)	ND	0.2						
tenzene	ND	0.1						
ertiary Amyl Methyl Ether (TAME)	ND	0.2						
oluene	ND	0.1						
İthylbenzene	ND	0.1						
ı,p-Xylene	ND	0.1						
-Xylene	ND	0.1						
urr: 1,2-Dichloroethane-d4	2.4		2	!	120	76	127	
urr: Toluene-d8	2.02		2		101	84	113	
urr: 4-Bromofluorobenzene	1.93		2		97	79	119	
aboratory Control Spike		Type LC	25 1	est Code: EPA	Metho	od SW8	260B	
ile ID: 06050404.D			E	Batch ID: MS15/	A0504/	4	Analysis Date:	05/04/2006 09:08
ample ID: LCS MS15A0504A	Units: mg/	m³ l	Run ID: N	ISD_15_060504	4A		Prep Date:	05/04/2006
nalyte	Result	PQL	SpkVal	SpkRefVal_%	REC L	owLimit	HighLimit RPDRef\	/al %RPD(Limit) Qual
enzene	9.5	0.1	10	1	95	81	122	
oluene	9.7	0.1	10)	97	80	120	
thylbenzene	10	0.1	10	1	100	80	120	
ı,p-Xylene	10.6	0.1	10	1	106	80	129	
-Xylene	10.8	0.1	10	1	108	80	129	
urr: 1,2-Dichloroethane-d4	11.6		10	1	116	76	127	
urr: Toluene-d8	9.48		10	!	95	84	113	
urr: 4-Bromofluorobenzene	9.47		10	. !	95	79	119	

omments:

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

Alpha Analytical, Inc.Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client: 5/10/2006

Date of Notice: 5/2/2006 10:56:07 A

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

Client Name: Stratus Environmental	Project ID : USA	57					
Project Manager: Gowri Kowtha	Client's EMail: gkov		nc.net				
Work Order Number: STR06050250	Client's Phone: (530) Date Received: 5/2/2		Client's FAX: (530) 676-6005 Received by: Latricia Edrosa				
Ch	ain of Custody (COC) In	<u> </u>	Nootived by, Edition Editor				
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 Inform	ation					
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					
	ervation and Hold Time) (HT) Informa	tion				
All samples received within holding time?	Yes 🗸	☐ No	Coaler Temperature				
Container/Temp Blank temperature in compliance (0-6°C)?	Yes 🔽	☐ No	NA °C				
Water - VOA vials have zero headspace / no bubbles?	Yes 🗌	☐ No	No VOA vials submitted 🔽				
Sample labels checked for correct preservation?	Yes 🗹	☐ No					
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes 🗌	□ No	N/A ✓				
Anal	ytical Requirement Info	ormation					
Anai		✓ No					
Are non-Standard or Modified methods requested?	Yes L	⊻ No					

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: STR06050250

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

Client:

Stratus Environmental

3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha CC Report:

Job: USA 57

PO:

TEL: (530) 676-6001

FAX: (530) 676-6005

EMail: gkowtha@stratusinc.net

Gowri Kowtha

Client's COC #: 08423

EDD Required: Yes

Sampled by : C. Hill

Cooler Temp NA °C

Samples Received

Date Printed

QC Level: S3

Alpha

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

Client Collection No. of Battles Sample ID Sample ID Matrix Date ORG STR06050250-01A USA 57A SYS AR 05/01/06

INF

10:45

TAT PWS#

SUB

TPH/P_A VOC_A

GAS-N/C BTEX/OXY Requested Tests

02-May-06

02-May-06

Sample Remarks

TEDLAR

Comments:

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

Logged in by:

Print Name

Company

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.

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

Name	<u>)tuntu</u> 53300	S ENU	DZ	_		255 Gle	ndale Avenu	e. Suite 21			-	age#.		1	of	f		•
City State	7in/2/4	Comern Ph were 142 WAY WO 4 Fax 530	V			Sparks, Phone	Nevada <mark>8</mark> 94 (775) 355-10	31-5778 44	İ		<u> </u>	age #		- /	01	'	-	
Phone Nu	mber 5	676 WY Fay 53	01/7/11	Tues 5			5) 355-0406	77			А	nalyse	s Re	auire	d		· 37.	425
Client Nan	ne U 514	157	100		P.O. #		Job #			<u> </u>							indi ee	a desa to
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Sampled Sar	npled Below	Lab 1D Number			Sample Descri	ntion	 	containers ** See below	/(X)	141	′ /					/		
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	•	- AVV IIOC - OC Carded 60 days after rocu	Waste	OT - Other		**: L-I	_iter V-\	/oa S-Soil	l Jar	O-Or	bo T	-Tediar	£	3-Brass	s F	P-Plastic	OT-Oth	ier

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.



APHS

MAY 1 5 2006

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: 05/02/06

Job#:

USA 57

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

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

Gasoline Range Organics (GRO) C4-C13

Reported in micrograms per liter, per client request.

V = Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

loger Scholl Kundg Stanbur

Dalter Hirehow

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



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

VOC Sample Preservation Report

Work Order: STR06050249

Project: USA 57

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

5/9/06 Report Date



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

Date: 09-May-06		QC S	ummai	y Repo	rt				Work Order 06050249
Method Blank		Type (MBLK T	est Code:	РА Ма	thod SWS	MASE/DUG	LUCT	
File ID: D:\HPCHEM\MS09\DATA\06050	4\06050413.D			atch ID: MS					
Sample ID: MBLK MS09W0504B	Units : µg/L			ISD_09_060		7V4D			: 05/04/2006 15:19
∖nalyte	Result	PQL						Date:	05/04/2006
PH-P (GRO)	ND			Spkkerva	%KE	LOWLIM	t HighLimi	t RPDRei	Mal %RPD(Limit) Qu
Surr: 1,2-Dichloroethane-d4	9.65	5(-						
Surr: Toluene-d8	10.9		10 10		97	76	127		
urr: 4-Bromofluorobenzene	10.2		10		109	84	113		
aboratory Control Spike	10.2	Time .			102	79	119		
ile ID: D:\HPCHEM\M\$09\DATA\060504	1100000144 B	Type L		est Code: E					
ample ID: GLCS MS09W0504B				atch ID: MS		04B	Analy	sis Date:	05/04/2006 14:32
	Units : µg/L		Run ID: M	SD_09_060	504A		Prep	Date:	05/04/2006
nalyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRef	Val %RPD(Limit) Qua
PH-P (GRO)	344	50	400	·	86	78	127		
urr: 1,2-Dichloroethane-d4	9.8		10		98	76	127		
urr: Toluene-d8	10.8		10		108	84	113		
urr: 4-Bromofluorobenzene	10.2		10		102	79	119		
ample Matrix Spike		Type M	IS Te	est Code: El	PA Met	hod SW80	015B/DHS	LUET M:	anual
ile ID: D:\HPCHEM\MS09\DATA\060504	\06050420.D			tch ID: MS					05/04/2006 18:03
ample ID: 06050251-02AGS	Units : µg/L			SD_09_060			Prep I		05/04/2006
nalyte	Result	PQL				Low imit			/al %RPD(Limit) Qua
PH-P (GRO)	1910	250	2000	0	95	70		IN DITEIN	vai 76NFD(Lilliit) Qua
ırr: 1,2-Dichloroethane-d4	50.5		50	Ū	101	76	139 127		
ırr: Toluene-d8	53.4		50		107	84	113		
ırr: 4-Bromofluorobenzene	51		50		102	79	119		
ımple Matrix Spike Duplicate	-	Type Mi	SD Te	st Code: EF	Δ Meti	nod SW80		HET Mo	
ie ID: D:\HPCHEM\MS09\DATA\060504\	06050421.D	•		tch iD: MS0					
ample ID: 06050251-02AGSD	Units : µg/L			D_09_0605		70			05/04/2006 18:27
nalyte	_	PQL				Louis louis	Prep E		05/04/2006
H-P (GRO)	1920	250							al %RPD(Limit) Qual
ırr: 1,2-Dichloroethane-d4	1920	∠50	2000	0	96	70	139	1906	0.8(12)
rr: Toluene-d8	53.2		50 50		100	76	127		
ırr: 4-Bromofluorobenzene	51.3		50 50		106	84	113		
			50		103	79	119		
mments:							 		

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

sported 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: 09-May-06			QC S	umma	ry Repo	ort	-			
Method Bl			Type N	ABLK .	Γest Code:	EPA M	ethod SW	8260B	<u> </u>	00030249
File ID: D:\H	PCHEM\MS09\DATA\060504	\06050413.D			Batch ID: M:				lveie Date	e: 05/04/2006 15:19
3ample ID:	MBLK MS09W0504A	Units : µg/L			ISD_09_06		JU-7A			
∖nalyte		Result	PQL				A 1 . 1 .	•	Date:	05/04/2006
	l Alcohol (TBA)				Spkreiva	al %RE	C LOWLIM	it HighLim	it RPDRe	efVal %RPD(Limit) Qu
/lethyl tert-bi	utyl ether (MTBE)	ND ND	10							
)i-isopropyl E	Ether (DIPE)	ND	0.5							
ithyl Tertiary	Butyl Ether (ETBE)	ND	1							
lenzene		ND	0.5							
ertiary Amyl	Methyl Ether (TAME)	ND	1							
oluene		ND	0.5							
ithylbenzene	•	ND	0.5							
1,p-Xylene -Xylene		ND	0.5							
	nloroethane-d4	ND	0.5							
urr: Toluene	rys	9.65		10		97	76	127		
	ofluorobenzene	10.9 10.2		10		109		113		
		10.2		10		102	79	119		<u> </u>
aboratory	Control Spike		Type Lo		est Code: E			260B		
	PCHEM\MS09\DATA\060504\	06050412.D		В	atch ID: MS	09W05	04A	Analy	sis Date	: 05/04/2006 14:55
ample ID:	LCS MS09W0504A	Units : µg/L		Run ID: M	SD_09_060)504A			Date:	05/04/2006
nalyte		Result	PQL				C LowLimi	•		Val %RPD(Limit) Qua
enzene	·	8.87	0.5	10	-	89				var sara D(cirilit) Gua
oluene		10.4	0.5	10		104	81 80	122 120		
thylbenzene		9.98	0.5	10		99.8	80	120		
ı,p-Xylene		11.1	0.5	10		111	80	129		
-Xylene		10.1	0.5	10		101	80	129		
urr: 1,2-Dichi urr: Toluene-	loroethane-d4	10.2		10		102	76	127		
	-uo fluorobenzene	10.6		10		106	84	113		
		10		10		100	79	119		
ample Mat	trix Spike CHEM\MS09\DATA\060504\(Type MS		st Code: E			260B		
ample ID:	06050251-02AMS				itch ID: MS i		04A	Алаіу	sis Date:	05/04/2006 17:17
•	00030251-02AMS	Units : µg/L			SD_09_060			Prep i		05/04/2006
nalyte		Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRef	Val %RPD(Limit) Qual
enzene		41.6	1.3	50	0	83	74	125		
bluene Ihylbenzene		49	1.3	50	0	98	76	120		
,p-Xylene		46.9	1.3	50	0	94	77	124		
Xylene		51.7 48.1	1.3	50	0	103	73	130		
	oroethane-d4	52.4	1.3	50	0	96	74	131		
urr: Toluene⊣	d8	52.7		50 50		105	76	127		
ırr: 4-Bromof	fluorobenzene	49.5		50		105 99	84 79	113 119		
mole Mat	rix Spike Duplicate		ype MS		et Coder El					
le ID: D:\HP(CHEMIMS09\DATA\060504\0	16050419 D	ype ma		st Code: EF tch ID: MS 0					
ample ID:	06050251-02AMSD	Units : µg/L	_				14A			05/04/2006 17:40
nalyte	TOTAL OF BUILD		PQL		D_09_0605			Prep [05/04/2006
nzene	· · · · · · · · · · · · · · · · · · ·							HighLimit .	RPDRef\	/al %RPD(Limit) Qual
luene		43.5 51.2	1.3	50	0	87	74	125	41.61	,
nylbenzene		51.2 49	1.3	50	0	102	76	120	48.97	- (· - /
p-Xylene		49 54.1	1.3	50	0	98	77 72	124	46.91	
Kylene		50.3	1.3 1.3	50 50	0	108	73	130	51.74	
	proethane-d4	52.7	1.0	50 50	Ü	101 105	74 76	131	48.1	4.4(13)
rr: Toluene-d	18	52.7		50		105	76 84	127 113		
rr: 4-Bromofl	uorobenzene	49.6		50		99	79	119		
mmenter							19	119		

mments:

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

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

Sample Receipt Checklist

Date Report is due to Client: 5/10/2006

Date of Notice: 5/2/2006 10:51:40 A

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

Client Name: Stratus Environmental Project ID: **USA 57** Client's EMail: gkowtha@stratusinc.net Project Manager: Gowri Kowtha Client's Phone: (530) 676-6001 Client's FAX: (530) 676-6005 Work Order Number: STR06050249 Date Received: 5/2/2006 Received by: Latricia Edrosa Chain of Custody (COC) Information Carrier name: FedEx Yes 🗹 Chain of custody present? ☐ No Yes 🗸 ☐ No Custody seals intact on shippping container/cooler? Not Present Yes 🗌 ☐ No Custody seals intact on sample bottles? Not Present Yes 🔽 ☐ No 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 🗹 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? SEM None 🗹 Other (see comments) Sub Contract Lab Used: Sample Receipt Information Yes 🗹 Not Present Shipping container/cooler in good condition? Yes 🔽 ☐ No Samples in proper container/bottle? Yes 🔽 ☐ No Sample containers intact? □ No Yes 🗹 Sufficient sample volume for indicated test? Sample Preservation and Hold Time (HT) Information ☐ No Yes 🗸 All samples received within holding time? Cooler Temperature ... No Yes 🔽 4°C Container/Temp Blank temperature in compliance (0-6°C)? Yes 🗸 No VOA vials submitted Water - VOA vials have zero headspace / no bubbles? Yes 🗸 No Sample labels checked for correct preservation? Yes 🗌 □ No **~** N/A TOC Water - pH acceptable upon receipt (H2SO4 pH<2)? Analytical Requirement Information Yes 🗌 ✓ No Are non-Standard or Modified methods requested? Yes 🗌 ✓ No If YES: see the Chain of Custody (COC) Are there client specific Project requirements? Comments:

Billing Information:

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

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

Page: 1 of 1

WorkOrder: STR06050249

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

Client:

Stratus Environmental

3330 Cameron Park Drive Suite 550

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha CC Report:

TEL: (530) 676-6001

FAX: (530) 676-6005

PO:

Collection No. of Bottles

ORG

Job: USA 57

EMail: gkowtha@stratusinc.net

Gowri Kowtha

Client's COC #: none

VOC_W

EDD Required : Yes

Sampled by : C. Hill

Cooler Temp 4°C

Samples Received 02-May-06

Date Printed 02-May-06

QC Level: S3

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

Alpha Client Sample ID Sample ID STR06050249-01A USA 57W INF + AQ 05/01/06

Matrix Date

10:28

SUB TAT

TPH/P_W PWS#

BTEX/OXY

Sample Remarks

Comments:

Security scals intact. Frozen ice. Send copy of receipt checklist with final report.

Logged in by:

Print Name

Requested Tests

Company

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.

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

Name 37 Mayers ENV Address 3330 Cunem Pt DK City, State, Zip Lamen PK Phone Number 530 676 6000 Fax 530676 60005	255 Glenda Sparks, Ne	analytical, Inc. ale Avenue, Suite 21 vada 89431-5778 5) 355-1044 355-0406	Samples Collected AZ CA ID OR Analyses F	d From Which State? NV WA OTHER Page # / of / Required
Client Name USH 5 7 Address	P.O. # Jo	Db #	12/2///	Required QC Level?
Time Date Sampled Sampled Sampled Sampled Below Lab ID Number	Report Attenden	TAT Filed containers Tag Filered See below		Giobal ID #REMARKS
1	W INK	5ts 5v x		
ADDITIONAL INSTRUCTIONS:				
Received by A	Print Name Misiano Picia Edvoso	Stata alpi Alp	Company Ma	5100 1300 5100 1300 5100 1300 5 2 00 10:52
Key: AQ - Aqueous SO - Soil WA - Waste OT - Othe OTE: Samples are discarded 60 days after results are reported unless of	er **: L-Liter other arrangements are made. H	V-Voa S-Soil Jar	O-Orbo T-Tediar	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.



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: 05/05/06 MAY 1 5 2006

Job#:

USA 57

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

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

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

Roger Scholl

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

> 5/5/06 Report Date

⋈



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

VOC Sample Preservation Report

Work Order: STR06050523

Project: USA 57

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

5/5/06
Report Date



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

The File D: D: The	Date: 08-May-06			QC Si	ummai	y Repo	rt		-		Work Order 06050523
Sample ID: MBLK MS09W0505A				Type M	IBLK 7	est Code: I	EPA M	ethod SW	B260B		00030323
Sample D: MBLK MS09W0505A Prep Date: Prop Date: MS09U05000 Prep Date: MS09U05000 MS09U0500	File ID: D:\H	PCHEM\MS09\DATA\060505	i\06050506.D							veic Doto	05/05/0006 40.50
Visalyte Result POL SpkVall SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Obstraction of SpkVall femer (LTBC) ND 10 SpkVall SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limit) Queen to SpkVall femer (LTBC) Visal SpkRerVall %REC LowLimit High-Limit RPDRerVall %RPD(Limi								JUJA			
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Nispangery Ether (DIPE) ND 1 1 1 1 1 1 1 1 1	Aethyl tert-hu	th/lether/MTRE\									
tithyl Tertiary Butyl Ether (ETBE) ND)i-isopropyl E	Ether (DIPE)									
Genzale ND	:thyl Tertiary	Butyl Ether (ETBE)									
Section No	lenzene										
thybenzene ND 0.5 1.0		Methyl Ether (TAME)	ND .								
1,p-Xylene	_			0.5							
Xylene											
Surr 1,2-Dichloroethane-d4											
### Tolluene-d8 10.6		iloroethane-d4		0.5	40						
ABDITION 100 79 119 113	urr: Toluene	-d8									
Jaboratory Control Spike Type LCS Test Code: EPA Method SW828BB Figure 10: Di-HPCHEMIMS09/DATA\066505\06050504.D O5/05/2006 10:11 ample ID: LCS MS09W0505A Units: µg/L Result Run ID: MSD_09_060505A Analysis Date: 05/05/2006 10:11 05/05/2006 10:11 enzene 8.97 0.5 10 90 81 122 Prep Date: 05/05/2006 %RED (Limit) Que thybbenzene 10.1 0.5 10 90 81 122 Prep Date: 05/05/2006 %RED (Limit) Que Lybene 10.1 0.5 10 103 80 120 Prep Date: 05/05/2006 %RED (Limit) Que Lybene 10.1 0.5 10 104 80 120 Prep Date: 05/05/2006 %RED (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que Male (Limit) Que					_						
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thylbenzene	oluene										
ID-Nylene	•										
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ample Matrix Spike Type MS Test Code: EPA Method SW8260B alle ID: D:\HPCHEM\MS09\DATA\060505\06050508.D Type MS Test Code: EPA Method SW8260B Analysis Date: 05/05/2006 11:45 ample ID: 06050331-01AMS Units: µg/L nalyte Result PQL PQL PQL PQL PQL PQL PQL PQL PQL PQL											
Batch D: D:HPCHEM\MS09\DATA\060505\06050508.D Batch D: MS09\W0505A Prep Date: 05/05/2006 11:45 malyte Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) Quadratic Qu				Tyne MS		et Code: El					·
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thylbenzene											
Sp. Sp.	thylbenzene										
Sylene	•					_					
Signature 1,2-Dichloroethane-d4						_					
Signature Sign				•		•					
Type MSD Test Code: EPA Method SW8260B Batch ID: MS09W0505A Analysis Date: 05/05/2006 12:09							104	84			
Batch ID: MS09W0505A			48.6								
Post Post	ample Mat	rix Spike Duplicate	· 	Type MS	D Te	st Code: EF	'A Meti	hod SW82	60B		
Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) Qual denzene 44.5 1.3 50 0 89 74 125 46.43 4.2(13) 50 0 104 76 120 53.76 3.1(13) 50 50.6 1.3 50 0 101 77 124 52.12 3.0(13) 50.4 50.6 55.7 1.3 50 0 101 77 124 52.12 3.0(13) 50.4 50.6 50.6 1.3 50 0 101 77 124 52.12 3.0(13) 50.4 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6								5A	Analys	is Date:	05/05/2006 12:09
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irr: Toluene-d8 52.3 50 105 84 113		proethane-d4		1.3		Ü				53.55	3.7(13)
Irr. 4-Bromoflygrobenzene	ırr: Toluene-c	18									
	ırr: 4-Bromofl	uorobenzene	49.1		50		98	79	119		

omments:

ilculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated lines 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-May-06			oc s	ummar	v Repo	rt			Work Order: 06050523
Method Blank			Type N					015B/DHS LUFT	·
	HEM\MS09\DATA\060505\				atch ID: MS		05B	Analysis Da	ite: 05/05/2006 10:58
	MBLK MS09W0505B	Units : µg/L		Run ID: M	SD_09_060	505A		Prep Date:	05/05/2006
Analyte		Result	PQL	SpkVal	SpkRefVa	%REC	LowLimi	it HighLimit RPDF	RefVal %RPD(Limit) Qua
TPH-P (GRO)		ND	50						
Surr: 1,2-Dichlore		10.2		10		102	76	127	
Surr: Toluene-d8 Surr: 4-Bromoflue		10.6		10		106	84	113	
Sun. 4-Bromonu	probenzene	10		10		100	79	119	
Laboratory Co			Type L	CS T	est Code: E	PA Met	hod SW8	015B/DHS LUFT	Manuai
	IEM\MS09\DATA\060505\/			В	atch ID: MS	09W05	05B	Analysis Da	te: 05/05/2006 10:34
	BLCS MS09W0505B	Units : µg/L		Run ID: M:	SD_09_060	505A		Prep Date:	05/05/2006
Analyte		Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	t HighLimit RPDR	lefVal %RPD(Limit) Qual
TPH-P (GRO)		380	50			95	78	127	
Surr. 1,2-Dichlord		10.3		10		103	76	127	
Surr: Toluene-d8		10.5		10		105	84	113	
Surr: 4-Bromofluc	probenzene	10.1		10		101	79	119	
Sample Matrix	Spike		Туре М	S Te	est Code: El	PA Met	hod SW8	015B/DHS LUFT	Manuai
	EM/MS09/DATA/060505/0	6050510.D		Ba	atch ID: MS(9W050)5B	Analysis Dat	e: 05/05/2006 12:32
	6050331-01AGS	Units : μg/L		Run ID: MS	3D_09_060	505A		Prep Date:	05/05/2006
Analyte		Result	PQL				LowLimit	•	efVal %RPD(Limit) Qual
TPH-P (GRO)		1950	250	2000	0		70	139	orter form D(Zmin) Quar
Surr. 1,2-Dichloro	ethane-d4	50.7		50	Ū	101	76	127	
Surr: Toluene-d8	_	52.8		50		106	84	113	
Surr: 4-Bromofluo	robenzene	51.2		50		102	79	119	
Sample Matrix	Spike Duplicate	-	Туре М	SD Te	st Code: EF	A Meti	nod SW80	15B/DHS LUFT	Wanual
	EM\MS09\DATA\060505\0	6050511.D			tch ID: MS0				e: 05/05/2006 12:56
Sample ID: 06	6050331-01AGSD	Units : µg/L	1	Run ID: MS	SD_09_0605	05A		Prep Date:	05/05/2006
<u>Analyte</u>		Result	PQL				LowLimit		efVal %RPD(Limit) Qual
TPH-P (GRO)		2040	250	2000	0	102	70	139 19	
Surr: 1,2-Dichloro	ethane-d4	50.5		50	U	101	76	127	54 4.1(12)
Surr: Toluene-d8		52.9		50		106	84	113	
Surr: 4-Bromofluor	robenzene	51.6		50		103	79	119	

Comments:

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

Reported in micrograms per liter, per client request.

Alpha Analytical, Inc.Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

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

Date of Notice: 5/5/2006 9:17:15 AM

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

Client Name: Stratus Environmental	Project ID: USA	57						
Project Manager: Gowri Kowtha	Client's EMail: gkow Client's Phone: (530)	_	Usinc.net Client's FAX: (530) 676-6005					
Work Order Number: STR06050523	006							
Cha	nin of Custody (COC) In	formation						
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	$ \mathbf{V} $				
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 o	omments)				
	Sample Receipt Inform	ation_						
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 V	OA 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 t	he Chain of Custody (COC)				
Comments :								

Billing Information:

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

Page: 1 of 1

WorkOrder: STR06050523

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

Client:

Stratus Environmental

3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha CC Report :

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

Job: USA 57

TEL: (530) 676-6001

FAX: (530) 676-6005

EMail: gkowtha@stratusinc.net

PO:

Client's COC #: 07939

Sampled by : C. Hill Cooler Temp 4°C

EDD Required : Yes

Samples Received 05-May-06

Date Printed 05-May-06

Alpha Sample ID

QC Level: S3

Client

Sample ID STR06050523-01A USA 57 W EFF AQ

Collection No. of Bottles Matrix Date

05/04/06 06:28

ORG

Gowri Kowtha

TPH/P W VOC_W GAS-C BTEX/OXY

С

Requested Tests

Sample Remarks

Comments:

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

Logged in by:

Signature

Company

Date/Time

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.

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

Addres	Number 5300 Name 54	1200 M	Fax <i>530()</i>	11 4004	P.O. #		5) 355-10 355-0406	31-5778 MA		\[\]		Page Analy	# /ses Re	equired	_ of	<u>/</u> / 0793
Time Sampled	Date Matrix' Sampled See Key	Office Use Only	Sampled W H11 Number -0523-01	U54 Bu	Phone # Report Attention Co Sample Descrip EFF W CACI	Fa	ve #	Total and type containers "See below 5-V	ol A	4+5000	۲ <u>۲</u>					REMARKS HRTHT
	DNAL INSTI															
Relinquished by Relinquished by Received by	Taxu A	Mas e	lu -	CHICC Lisa BR Tashu	J		3	Frate ALPHA	>	Compa		<u> </u>			Date 4°C 4°C	Time 13/5 13/5
Relinquished by Received by *Key: AQ - Aqu	Hoove) - Soil	NA - Waste			Scal	A							1	5/06	1



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MAY 2 2 2006

ANALYTICAL REPORT

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861

Attn: Gowri Kowtha Phone: (530) 676-6001

(530) 676-6005 Date Received: 05/05/06

USA 57 Job#:

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

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID:	TPH-P (GRO)	ND	50 μg/L	05/04/06	05/08/06
USA 57 W GAC 1	Tertiary Butyl Alcohol (TBA)	ND	l0 μg/L	05/04/06	05/08/06
Lab ID:	Methyl tert-butyl ether (MTBE)	ND	0.50 μg/L	05/04/06	05/08/06
STR06050524-01A	Di-isopropyl Ether (DIPE)	ND	1.0 μg/L	05/04/06	05/08/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 μg/L	05/04/06	05/08/06
	Benzene	ND	0.50 μg/L	05/04/06	05/08/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 μg/L	05/04/06	05/08/06
·	Toluene	ND	0.50 μg/L	05/04/06	05/08/06
	Ethylbenzene	ND	0.50 μg/L	05/04/06	05/08/06
	m,p-Xylene	ND	0.50 μg/L	05/04/06	05/08/06
	o-Xylene	ND	0.50 μg/L	05/04/06	05/08/06

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

> Roger Scholl Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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

5/12/06

Report Date



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

VOC Sample Preservation Report

Work Order: STR06050524

Project: USA 57

Alpha's Sample ID	Clientle Courte III		· · · · · · · · · · · · · · · · · · ·	
Thomas Sample 1D	Client's Sample ID	Matrix	pH	
06050524-01A	USA 57 W GAC 1	Aqueous	4	

5/12/06 Report Date



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Date: 16-Mav-06		OC S	ummar	y Repoi	t				Work Order: 06050524
Method Blank File ID: D:\HPCHEM\MS09\DATA\060508\0 Sample ID: MBLK MS09W0508B)6050806.D Units : μg/L	Type M	В	est Code: E atch ID: MS SD_09_060	09W05		015B/DHS LU Analysis Prep Da	Date:	anual 05/08/2006 13:34 05/08/2006
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimi	t HighLimit Rf	DRef	Val %RPD(Limit) Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 10.5 10.2 9.85	50			105 102 99	76 84 79	127 113 119		
Laboratory Control Spike		Type L	CS To	est Code: El	PA Met	hod SW8	015B/DHS LU	FT Ma	anual
File ID: D:\HPCHEM\MS09\DATA\060508\0	6050805.D		Ва	atch ID: MS()9W05	08B	Analysis	Date:	05/08/2006 13:11
Sample ID: GLCS MS09W0508B	Units : µg/L		Run ID: M	SD_09_060	A80		Prep Dat		05/08/2006
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RF	'DRef	Val %RPD(Limit) Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	430 10.8 10.2 9.82	50	400 10 10 10		108 108 102 98	78 76 84 79	127 127 113 119		· •
Sample Matrix Spike		Туре М	S Te	st Code: EF	A Met	hod SW8(015B/DHS LU	FT Ma	mual
File ID: D:\HPCHEM\MS09\DATA\060508\00	6050809.D	7 1		tch ID: MS0					05/08/2006 14:43
Sample ID: 06050350-01AGS	Units : µg/L		Run ID: MS	SD_09_0605	A80		Prep Dat		05/08/2006
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RP	DRef\	/al %RPD(Limit) Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2010 51.3 51.5 51	250	2000 50 50 50	0	100 103 103 102	70 76 84 79	139 127 113 119		·
Sample Matrix Spike Duplicate		Туре М	SD Te	st Code: EP	A Meti	nod SW80	15B/DHS LUI	FT Ma	nual
File ID: D:\HPCHEM\MS09\DATA\060508\06	6050810.D			tch ID: MS0					05/08/2006 15:06
Sample ID: 06050350-01AGSD	Units : µg/L		Run ID: MS	D_09_0605	A80		Prep Date	∋:	05/08/2006
Analyte	Result	PQL	SpkVal	SpkRefVal_	%REC	LowLimit	HighLimit RP	DRefV	al %RPD(Limit) Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2030 51.3 52.1 50.8	250	2000 50 50 50	0	101 103 104 102	70 76 84 79	139 127 113 119	2006	1.1(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: 16-May-06			QC Su	ımmaı	ry Repo	rt			Work Order: 06050524
Method Bla	ınk		Type Mi	BLK 1	Test Code: E	PA Me	thod SW8	260B	
	 PCHEM\MS09\DATA\060508\	\06050806.D	7,6		Batch ID: MS		-		: 05/08/2006 13:34
Sample ID:	MBLK MS09W0508A	Units : µg/L	ı		ISD_09_06(OUA	Prep Date:	05/08/2006
Analyte	MEER MOOSTFOODA							•	
		Result	PQL	Spkval	SpkRetva	I %HEC	LOWLIMI	t HighLimit RPDRe	Val %RPD(Limit) Qual
	Alcohol (TBA)	ND	10						
	tyl ether (MTBE)	ND	0.5						
Di-isopropyl E		ND	1						
	Butyl Ether (ETBE)	ND	_ 1						
Benzene	Markhad Cabou (Tabet)	ND	0.5						
Toluene	Methyl Ether (TAME)	ND	1						
Ethylbenzene		ND ND	0.5						
m,p-Xylene		ND	0.5						
o-Xylene		ND ND	0.5						
Surr: 1,2-Dichl	loroethane-d4	10.5	0.5	10		105	70	107	
Surr: Toluene-		10.2		10 10		105 102	76	127	
	fluorobenzene	9.85		10		99	84 79	113 119	
		0.00							
	Control Spike		Type LC	S T	est Code: E	PA Met	thod SW8	260B	
File ID: D:\HP	CHEM\MS09\DATA\060508\	.06050804.D		В	atch ID: MS	09W050	08A	Analysis Date:	05/08/2006 12:49
Sample ID:	LCS MS09W0508A	Units : µg/L	F	Run ID: M	SD_09_060	508A		Prep Date:	05/08/2006
Analyte		Result	PQL				LowLimit	HighLimit BPDRef	Val %RPD(Limit) Qual
Tertiary Butyl	Alcohol (TBA)	100							721 70711 2 (211111) 2221
	tyl ether (MTBE)	9.62	5 0.5	100 10		100 96	50 62	156 138	
Di-isopropyl Et		10.3	0.5	10			62 67		
	Butyl Ether (ETBE)	10.3	i	10		103 103	72	143 137	
Benzene		9.5	0.5	10		95	72 81	122	
	Methyl Ether (TAME)	10.4	1	10		104	71	139	
Toluene	, , , , , , , , , , , , , , , , , , , ,	10.4	0.5	10		104	80	120	
Ethylbenzene		10.1	0.5	10		101	80	120	
m.p-Xylene		11	0.5	10		110	80	129	
o-Xylene		10.4	0.5	10		104	80	129	
Surr: 1,2-Dichl	oroethane-d4	11		10		110	76	127	
Surr: Toluene-	d8	10.1		10		101	84	113	
Surr: 4-Bromot	fluorobenzene	9.75		10		98	79	119	
Sample Met	wie Cuil-		Type MC		ant Carles E	DA Mad	L CVI/O/	-	
Sample Mat	TIX SPIKE CHEM\MS09\DATA\060508\(Type MS		est Code: E			•	
					atch ID: MS)8A	· ·	05/08/2006 13:57
Sample ID:	06050350-01AMS	Units : µg/L	F	tun ID: M	SD_09_060	508A		Prep Date:	05/08/2006
Analyte		Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
Tertiary Butyl A	Alcohol (TBA)	565	25	500	0	113	58	159	
Methyl tert-but	yl ether (MTBE)	60.8	1.3	50	11.54		59	145	
Di-isopropyl Et	her (DIPE)	50.3	2.5	50	0		67	143	
Ethyl Tertiary 8	Butyl Ether (ETBE)	50.9	2.5	50	0	102	72	139	
Benzene		46	1.3	50	0	92	74	125	
	Methyl Ether (TAME)	51.2	2.5	50	0	102	70	143	
Toluene		50.9	1.3	50	0	102	76	120	
Ethylbenzene		48.9	1.3	50	0	98	77	124	
m,p-Xylene		54	1.3	50	0	108	73	130	
o-Xylene		50.5	1.3	50	0	101	74	131	
Surr: 1,2-Dichle		54.5		50		109	76	127	
Surr: Toluene-		51.4		50		103	84	113	
Surr: 4-Bromof	luorobenzene	49		50		98	79	119	



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Sample Matrix Spike Duplicate Type MSD Test Code: EPA Method SW3260B File ID: D:\HPCHEM\MS09\DATA\060508\06050808.D Batch ID: MS09\W0508A Analysis Date: 05/08/2006 14:19 Sample ID: 06050350-01AMSD Units: μg/L Run ID: MSD_09_060508A Prep Date: 05/08/2006 05/08/2006 Analyte Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) %RPD(Limit) Tertiary Butyl Alcohol (TBA) 523 25 500 0 105 58 159 564.6 7.7(28) Methyl tert-butyl ether (MTBE) 59.7 1.3 50 11.54 96 59 145 60.8 1.8(21) Di-isopropyl Ether (DIPE) 49.7 2.5 50 0 99 67 143 50.26 1.1(16) Benzene 45.3 1.3 50 0 101 72 139 50.88 1.1(18) Benzene 45.3 1.3 50 0 102 70 143 51.17 0.2(19) Toluene 50.5 1.3 50 0 101 7	Date: 16-May-06	OC Summary Report								
Sample ID: 06050350-01AMSD Units : µg/L Run ID: MSD_09_060508A Prep Date: 05/08/2006			Туре М	SD T	est Code: E	PA Me	thod SW8	260B		
Analyte Result PQL SpkVal SpkRefVal %REC LowLimit HighLimit RPDRefVal %RPD(Limit) Tertiary Butyl Alcohol (TBA) 523 25 500 0 105 58 159 564.6 7.7(28) Methyl tert-butyl ether (MTBE) 59.7 1.3 50 11.54 96 59 145 60.8 1.8(21) Di-isopropyl Ether (DIPE) 49.7 2.5 50 0 99 67 143 50.26 1.1(16) Ethyl Tertiary Butyl Ether (ETBE) 50.4 2.5 50 0 101 72 139 50.88 1.1(18) Benzene 45.3 1.3 50 0 91 74 125 45.97 1.4(13) Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m,p-Xylene 50.8 1.3 50 0 99.9 74 131 50.53 1.2(13)	File ID: D:\HPCHEM\MS09\DATA\060508	\06050808.D		В	atch ID: MS	09W05	A80	Analys	is Date: 0	5/08/2006 14:19
Tertiary Butyl Alcohol (TBA) 523 25 500 0 105 58 159 564.6 7.7(28) Methyl tert-butyl ether (MTBE) 59.7 1.3 50 11.54 96 59 145 60.8 1.8(21) Di-isopropyl Ether (DIPE) 49.7 2.5 50 0 99 67 143 50.26 1.1(16) Ethyl Tertiary Butyl Ether (ETBE) 50.4 2.5 50 0 101 72 139 50.88 1.1(18) Benzene 45.3 1.3 50 0 91 74 125 45.97 1.4(13) Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 50.5 1.3 50 0 97 77 124 48.91 0.7(13) m,p-Xylene 53.8 1.3 50 0 99.9 74 131 50.53 1.2(13)	Sample ID: 06050350-01AMSD	Units : μ g/ L	F	Run ID: M	SD_09_060	508A		Prep D	ate: 0 4	5/08/2006
Methyl tert-butyl ether (MTBE) 59.7 1.3 50 11.54 96 59 145 60.8 1.8(21) Di-isopropyl Ether (DIPE) 49.7 2.5 50 0 99 67 143 50.26 1.1(16) Ethyl Tertiary Butyl Ether (ETBE) 50.4 2.5 50 0 101 72 139 50.88 1.1(18) Benzene 45.3 1.3 50 0 91 74 125 45.97 1.4(13) Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 102 70 143 51.17 0.2(19) Toluene 50.5 1.3 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m.p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit F	RPDRefVal	I %RPD(Limit) Qual
Methyl tert-butyl ether (MTBE) 59.7 1.3 50 11.54 96 59 145 60.8 1.8(21) Di-isopropyl Ether (DIPE) 49.7 2.5 50 0 99 67 143 50.26 1.1(16) Ethyl Tertiary Butyl Ether (ETBE) 50.4 2.5 50 0 101 72 139 50.88 1.1(18) Benzene 45.3 1.3 50 0 91 74 125 45.97 1.4(13) Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 102 70 143 51.17 0.2(19) Toluene 50.5 1.3 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m.p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Tertiary Butyl Alcohol (TBA)	523	25	500	0	105	58	159	564.6	7.7(28)
Di-isopropyl Ether (DIPE) 49.7 2.5 50 0 99 67 143 50.26 1.1(16) Ethyl Tertiary Butyl Ether (ETBE) 50.4 2.5 50 0 101 72 139 50.88 1.1(18) Benzene 45.3 1.3 50 0 91 74 125 45.97 1.4(13) Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 102 70 143 51.17 0.2(19) Toluene 50.5 1.3 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m.p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Methyl tert-butyl ether (MTBE)	59.7	1.3	50	11.54	96	59	145		, ,
Ethyl Tertiary Butyl Ether (ETBE) 50.4 2.5 50 0 101 72 139 50.88 1.1(18) Benzene 45.3 1.3 50 0 91 74 125 45.97 1.4(13) Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 102 70 143 51.17 0.2(19) Toluene 50.5 1.3 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m.p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Di-isopropyl Ether (DIPE)	49.7	2.5	50	0	99	67	143	50.26	
Benzene 45.3 1.3 50 0 91 74 125 45.97 1.4(13) Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 102 70 143 51.17 0.2(19) Toluene 50.5 1.3 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m.p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Ethyl Tertiary Butyl Ether (ETBE)	50.4			Ō	101	72			
Tertiary Amyl Methyl Ether (TAME) 51.1 2.5 50 0 102 70 143 51.17 0.2(19) Toluene 50.5 1.3 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m,p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Benzene	45.3			ō		74			• •
Toluene 50.5 1.3 50 0 101 76 120 50.94 0.9(13) Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m.p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Tertiary Amyl Methyl Ether (TAME)	51,1			ō	-				
Ethylbenzene 48.6 1.3 50 0 97 77 124 48.91 0.7(13) m.p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Toluene	50.5			ō					
m,p-Xylene 53.8 1.3 50 0 108 73 130 53.96 0.2(14) o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	Ethylbenzene	48.6			ō					
o-Xylene 50 1.3 50 0 99.9 74 131 50.53 1.2(13)	m,p-Xylene	53.8			ō					
A second to the	o-Xylene				ō					
	Surr: 1,2-Dichloroethane-d4	53.4		50	Ť	107	76	127	33100	
Surr. Toluene-d8 51 50 102 84 113	Surr: Toluene-d8			-						
Surr: 4-Bromofluorobenzene 48.7 50 97 79 119	Surr: 4-Bromofluorobenzene									

Comments:

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

Alpha Analytical, Inc. Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client: 5/15/2006

Date of Notice: 5/5/2006 9:31:41 AM

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

Client Name: Stratus Environmental	Project ID: USA	57					
Project Manager: Gowri Kowtha	Client's EMail: gkowl Client's Phone: (530)	•	sinc.net Client's FAX: (530) 676-6005				
Work Order Number: STR06050524	Date Received: 5/5/20		Received by: Tasha Pascal				
Chair	n of Custody (COC) In	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	ation					
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 Preser	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 ☑				
Analy	tical Requirement Info	ormation					
Are non-Standard or Modified methods requested ?	Yes 🗌	✓ No					
Are there client specific Project requirements?	Yes 🗌	☑ No	If YES : see the Chain of Custody (COC)				
Comments :							

Billing Information:

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha

3330 Cameron Park Drive

Stratus Environmental

Job: USA 57

PO:

CC Report :

Client:

Client's COC #: 07939

Page: 1 of 1

WorkOrder: STR06050524

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

EDD Required: Yes

Sampled by : C. Hill

4°C

Cooler Temp

Samples Received 05-May-06

Date Printed 05-May-06

QC Level: S3

Suite 550

= 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 PWS# Sample Remarks STR06050524-01A USA 57 W AQ 05/04/06 6 GAS-C BTEX/OXY GAC 1 06:32

Comments:

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

Signature

Logged in by:

Print Name

Company

Alpha Analytical, Inc.

Date/Time

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

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)

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

Name Strayus ENU Address 3536 Cameron Ph DR City, State, Zip Cameron Ph Phone Number 536 UTG UCC Client Name 54 57 Address	P.O. # Job #	nue, Suite 21 0431-5778 1044	Page #	of	07939
Time Date Sampled See Key Below Lab ID Number OLZY 5 W AU STRO6050524-0 USA 9	Phone # Fax # Report Attention Course Sample Description	**See below / / / See			REMARKS THT
ADDITIONAL INSTRUCTIONS:					
Possible to the state of the st	Print Name CC BRylos Shu Pas(al	Strates ALPHA ANAL ALPHA ANAL	iotcal	5.406 5-406	Time 13/5 13/5
(ey: AQ - Aqueous SO - Soil WA - Waste OT - C	Other **: L-Liter V-V	√oa S-Soil Jar O-O	Jrho T-Todlar B.D		

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.



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FILE COPY

ANALYTICAL REPORT

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861

Attn: Gowri Kowtha Phone: (530) 676-6001 JUN 1 0 2006

Fax:

(530) 676-6005

Date Received: 05/09/06

Job#: USA57

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

	Parameter	Concentration	Reporting	Date	Date
Client ID:			Limit	Sampled	Analyzed
	TPH-P (GRO)	110	50 μg/L	05/08/06	05/12/06
USA 57 W INF Lab ID :	Tertiary Butyl Alcohol (TBA)	29	10 μg/L	05/08/06	05/12/06
	Methyl tert-butyl ether (MTBE)	0.61	0.50 μg/L	05/08/06	05/12/06
STR06051040-01A	Di-isopropyl Ether (DIPE)	ND	1.0 μg/L	05/08/06	05/12/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 μg/L	05/08/06	05/12/06
	Benzene	0.61	0.50 μg/L	05/08/06	05/12/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 μg/L	05/08/06	05/12/06
	Toluene	ND	0.50 μg/L	05/08/06	05/12/06
	Ethylbenzene	0.66	0.50 μg/L	05/08/06	05/12/06
	m,p-Xylene	7.7	0.50 μg/L	05/08/06	05/12/06
	o-Xylene	3.4	0.50 μg/L 0.50 μg/L	05/08/06	05/12/06

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

Roger Scholl

Roger L. Schoil, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • • Waker Hinchman, Quality Assurance Officer

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

5/16/06 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: STR06051040

Project: USA57

06061040.014	m.L.I	Matrix	Client's Sample ID	Alpha's Sample ID
USA 57 W INF Aqueous 2	pH 2		USA 57 W INF	06051040-01A

5/16/06 Report Date



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Date: 20-May-06		QC S	umma	ry Repo	rt				Work Order: 06051040
Method Blank File ID: D:\MSDCHEM\MS12\DATA\06051	2\06051206.D	Туре		Fest Code: E			3015B/DHS LU		
Sample ID: MBLK MS12W0512B Analyte	Units : µg/L Result	PQL	Run ID: N	ISD_12_060)512A		Prep Dat	te:	05/12/2006 13:19 05/12/2006 Val_%RPD(Limit) Qua
PH-P (GRO)	ND	5	<u> </u>	<u> </u>	7011	2 COASTUIL	t riightiint Kr	DREI	var 76RPD(LIMIT) Qua
Surr: 1,2-Dichloroethane-d4	11.2	•	10		112	76	127		
Gurr: Toluene-d8	9.45		10		95	84	113		
urr: 4-Bromofluorobenzene	9.05		10		91	79	119		
Laboratory Control Spike		Type L	CS T	est Code: E	PA Me	thod SW8	015B/DHS LU	FT Ma	anual
File ID: D:\MSDCHEM\MS12\DATA\06051;			В	atch ID: MS	1 2W 05	12B	Analysis	Date:	05/12/2006 12:37
ample ID: GLCS MS12W0512B	Units : µg/L		Run ID: M	SD_12_060	512A		Prep Date	e:	05/12/2006
nalyte	Result	PQL				LowLimit			Val %RPD(Limit) Qua
PH-P (GRO)	422	50			105	78	127		your D(Zirine) Qua
urr: 1,2-Dichloroethane-d4	11.2	-	10		112	76	127		
urr: Toluene-d8	9.38		10		94	84	113		
urr: 4-Bromofluorobenzene	9.32		10		93	79	119		
ample Matrix Spike		Type MS Test Code: EPA Method SW8015B/DHS LUFT Manual							inual
ile ID: D:\MSDCHEM\MS12\DATA\060512	106051221.D		Ва	atch ID: MS	12W05	12B	Analysis [Date:	05/12/2006 18:33
ample iD: 06051040-01AGS	Units : µg/L		Run ID: MS	SD_12_060	512A		Prep Date		05/12/2006
nalyte	Result	PQL				LawLimit		-	/al %RPD(Limit) Qual
PH-P (GRO)	2190	250		108.4		70	139	211010	al /ort D(Elliat) Qual
ırr: 1,2-Dichloroethane-d4	56.3		50	100.4	113	76	127		
urr: Toluene-d8	47.1		50		94	84	113		
urr: 4-Bromofluorobenzene	47		50		94	79	119		
ample Matrix Spike Duplicate		Туре М	SD Te	st Code: EF	A Meti	nod SW80	15B/DHS LUF	T Ma	nual
le ID: D:\MSDCHEM\MS12\DATA\060512			Ba	tch ID: MS1	2W051	28	Analysis E	ate:	05/12/2006 18:54
ample ID: 06051040-01AGSD	Units : µg/L		Run ID: MS	D_12_0605	12A		Prep Date		05/12/2006
nalyte	Result	PQL				LowLimit			al %RPD(Limit) Qual
PH-P (GRO)	2170	250	2000	108.4	103	70			
rr: 1,2-Dichloroethane-d4	56.2	200	50	100,4	112	76	139	2193	1.2(12)
ırr: Toluene-d8	47.3		50		95	84	113		
irr: 4-Bromofluorobenzene	46.7		50		93	79	119		
omments:							118		

alculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated the significant figures of the significant figures.

eported in micrograms per liter, per client request.



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Date: 20-May-06			QC S	umma	ry Repo	ort			 	Work Orde
Method Bla	ank		Type N	MBLK	Test Code:	ЕРА М	ethod SM	8260P		06051040
File ID: D:\MS	SDCHEM\MS12\DATA\0605	12\06051206.D			Batch ID: M				luala Data	
3ample ID:	MBLK MS12W0512A	Units : µg/L					SIZA			05/12/2006 13:19
\nalyte		Result	PQL		MSD_12_06				Date:	05/12/2006
ertiary Rutyl	Alcohol (TBA)				SpkRefVa	al %RE	C LowLim	it HighLim	it RPDRef	√al_%RPD(Limit) Qu
/lethyl tert-but	tyl ether (MTBE)	ND ND	10							
)i-isopropyl E	ther (DIPE)	ND ND	0.5 1							
thyl Tertiary	Butyl Ether (ETBE)	ND	1							
}enzene	•	ND	0.5							
ertiary Amyl	Methyl Ether (TAME)	ND	1							
'oluene :thylbenzene		ND	0.5							
nyiberizerie 1,p-Xylene		ND	0.5							
-Xylene		ND	0.5							
	loroethane-d4	ND 11.2	0.5							
urr: Toluene-	-d8	9.45		10 10		112	76	127		
urr: 4-Bromot	fluorobenzene	9.05		10		95 91	84 79	113 119		
aboratory	Control Spike		Type Lo		rest Code: E				······	
ile ID: D:\MS	DCHEM\MS12\DATA\06051	2\06051205.D			Batch ID: MS				rain Datas	05/40/0000 40 40
ample ID:	LCS MS12W0512A	Units : µg/L	1		ISD_12_060		140		_	05/12/2006 12:58
nalyte		Result	PQL							05/12/2006
enzene						%REC	LowLimit	t HighLimit	RPDRefV	al %RPD(Limit) Qua
oluene		9.99 9.82	0.5	10		99.9	81	122		
hylbenzene		10,6	0.5 0.5	10		98	80	120		
p-Xylene		10.8	0.5	10 10		106	80	120		
Xylene		9.99	0.5	10		108 99.9	80 80	129		
urr: 1,2-Dichle	proethane-d4	10.9		10		109	76	129 127		
urr: Toluene-c		9.82		10		98	84	113		
	luorobenzene	9.45		10		95	79	119		
ample Matr	rix Spike	•	Type MS	5 T	est Code: El	PA Met	hod SW82	260B	•	
	DCHEM\MS12\DATA\060512			Ba	atch ID: MS	12W051	12A	Analys	sis Date: (05/12/2006 17:51
ample ID:	06051040-01AMS	Units : µg/L	F	Run ID: M:	SD_12_060	512A		Prep [_	5/12/2006
nalyte		Result	PQL				LowLimit			il %RPD(Limit) Qual
nzene		49	1.3	50	0.61	97	74	125		ii isi baqeiinte) Quei
luene		47.2	1.3	50	0.01	94	7 4 76	120		
hylbenzene p-Xylene		51.6	1.3	50	0.66	102	77	124		
χviene Xviene		59.4	1.3	50	7.74	103	73	130		
ırr: 1,2-Dichlo	roethane-d4	51.7	1.3	50	3.36	97	74	131		
ırr: Toluene-d	8	55.8 47.9		50		112	76	127		
ırr: 4-Bromoflu		47.5		50 50		96 95	84	113		
mple Matr	ix Spike Duplicate	7	ype MS		est Code: EF		79	119		
e ID: D:\MSD	CHEM\MS12\DATA\060512	\06051220.D	,,,		tch ID: MS1				in Data - A	
	06051040-01AMSD	Units : µg/L	R		D_12_0605		ZM.			5/12/2006 18:12
alyte		• •	PQL				القلمسة المدرما	Prep D	vate: 05	5/12/2006
nzene		48.8					_			%RPD(Limit) Qual
luene		46.6 47.2	1.3 1.3	50 50	0.61	96	74 76	125	49.02	0.4(13)
rylbenzene		51.7	1.3	50 50	0 0.66	94 102	76 77	120	47.24	0.1(13)
o-Xylene		59.5	1.3	50 50	7.74	104	77 73	124 130	51.62 59.39	0.1(13)
(ylene		51.6	1.3	50	3.36	96	73 74	131	59.39 51.67	0.3(14) 0.2(13)
4 A P	netnano-d4	55.5		50					01.07	0.2(13)
гг: 1,2-Dichlor	3			ŲÜ		111	76	127		
гт: 1,2-Dichlor гт: Toluene-d8 rr: 4-Bromoflu	3	48 47.6		50 50		96	76 84	127		

omments:

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

Alpha Analytical, Inc. Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

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

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

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

Client Name: Stratus Environmental	Project ID: USA	N57	
Project Manager: Gowri Kowtha	Client's EMail: gko		nc.net
Work Order Number: STR06051040	Client's Phone: (530 Date Received: 5/9/:		Client's FAX: (530) 676-6005 Received by: Latricia Edrosa
Cha	in of Custody (COC) I	nformation	The sylvation Editor
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	NOT TOO IT
Chain of custody agrees with sample labels?	Yes 🔽		
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)
S	ample Receipt Inform		Cutal (see comments)
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 Presei	rvation and Hold Time	(HT) Informa	tion
ll samples received within holding time?	Yes 🗹	☐ No	
container/Temp Blank temperature in compliance (0-6°C)?	Yes 🗹	☐ No	Cooler Temperature 4°C
Vater - VOA vials have zero headspace / no bubbles?	Yes 🗹	☐ No	No VOA vials submitted
ample labels checked for correct preservation?	Yes 🔽	□ No	_
OC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes		N/A ☑
Analyt	tical Requirement Info	rmation	
re non-Standard or Modified methods requested?	Yes 🗌	☑ No	
re there client specific Project requirements ?	Yes 🗌	✓ No	If YES : see the Chain of Custody (COC)
omments: Recieved 5/9 kept cold and secure until login or		·	

Billing Information	ormation :
---------------------	------------

CHAIN-OF-CUSTODY RECORD

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

Alpha Analytical, Inc.

Page: 1 of 1

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

WorkOrder: STR06051040

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

Client:

Stratus Environmental 3330 Cameron Park Drive Suite 550

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha CC Report:

Job: USA57

PO:

TEL: (530) 676-6001

FAX: (530) 676-6005

EMail: gkowtha@stratusinc.net

Gowri Kowtha

EDD Required: Yes

Sampled by : C Hill

4°C

Cooler Temp

Samples Received 09-May-06

Date Printed 10-May-06

QC Level: S3

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

Alpha Sample ID	Client Sample ID	Collection Matrix Date			AT PWS#	TPH/P_W	VOC_W	Requested Tests
STR06051040-01/	USA 57 W INF	AQ 05/08/06 06:45	5	0	6	GAS-C	BTEX/OXY_	Sample Remarks

Client's COC #: 8386

Comments:

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

Logged in by:

Signature lasa

Print Name

JDSQ

Company

Alpha Analytical, Inc.

Date/Time

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 Structus EWV Address 3336 Current Ptz VIZ City, State, Zip Current Ptr Phone Number 530074 6004 Fax 530674 6004	255 Glend Sparks, N	Analytical, Inc. Jale Avenue, Suite 21 evada 89431-5778	AZ CA Y	NV WA	Page # of
Phone Number 530070 6004 Fax 530670 6005	Phone (7' Fax (775)	75) 355-1044 355-0406	1 <i>1</i>	s Required	8386
Client Name USA 57	P.O. #	Job #	1 1 1 1		
Address	EMail Address		-/ 3/		flequired QC Level?
City, State, Ziper Fland		ax #	イダ/り/ / /		/ I II III IV
Time Date Sampled Sampled See Key Only Below Lab ID Number	Report Attention OUV N C	Total and type of containers	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	////	Global ID #
CLUS TO AC STROLOSIDUD-DI USA 57	Sample Description				REMARKS
10 06 10 51 KO6051040-01 10217 37	WINF	51P 5-V 3	7 7		
ADDITIONAL INSTRUCTIONS:					
ADDITIONAL INSTRUCTIONS:					
		·			
Relinquished by Signature	Print Name		Company		Date Time
CALL CHILL		Strute	5	5-8	8-06 1045
Received by Mile Cuts	deno	Aldra		5 45	500 1015
Reprinquished by	,				7013
Received by Relinquished by	ricia Ednos	a Alp	ha	5/9	9/06 11:30
Received by				· ·	<u> </u>
Key: AQ - Aqueous SO - Soil WA - Waste OT - Oth	er **: L-Lit	ter V-Voa S-Soil Ja	ar 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.



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FILE COPY

ANALYTICAL REPORT

Stratus Environmental 3330 Cameron Park Drive

Attn: Gowri Kowtha Phone: (530) 676-6001 JUN 1 0 2005

Cameron Park, CA 956828861

(530) 676-6005

Date Received: 05/09/06

Job#: **USA 57**

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

	Parameter	Concentration	Reporting	Date	Date
Client ID:	TRUE DAGGE		Limit	Sampled	Analyzed
USA57 A SYS INF	TPH-P (GRO)	37	15 mg/m³	05/08/06	05/15/06
Lab ID:	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m ³	05/08/06	05/15/06
	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m ³	05/08/06	05/15/06
STR06050943-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m ³	05/08/06	05/15/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m ³	05/08/06	05/15/06
	Benzene	0.31	0.15 mg/m ³	05/08/06	05/15/06
	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	05/08/06	05/15/06
	Toluene	0.25	0.15 mg/m ³	05/08/06	
	Ethylbenzene	0.49	0.15 mg/m ³		05/15/06
	m,p-Xylene	2.3	_	05/08/06	05/15/06
	o-Xylene	0.43	0.15 mg/m ³	05/08/06	05/15/06
	V	0.43	0.15 mg/m ³	05/08/06	05/15/06

Gasoline Range Organics (GRO) C4-C13

Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.07 inches of mercury.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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

5/16/06

Report Date



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

Date: 20-May-06		QC S	ummai	y Report			Work Order: 06050943
Method Blank File ID: 06051510.D Sample ID: MBLK MS15A0515B Analyte	Units : mg/ Result	Type N m³ PQL	Run ID: M	atch ID: MS15A05 I SD_15_060515A	15B	Prep Date:	
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 2.14 2.05 1.82	10		107 103 91	76 84 79	127 113 119	vect of State States
Laboratory Control Spike File ID: 06051505.D Sample ID: GLCS MS15A0515B Analyte	Units : mg/ r Result	Type Li m³ PQL	В Run ID: м	atch ID: MS15A051 SD_15_060515A	5B	015B/DHS LUFT M Analysis Date Prep Date:	lanual : 05/15/2006 09:39 05/15/2006 Val %RPD(Limit) Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	413 11.4 10 9.42	10	400 10 10 10	103 114 100 94	78 76 84 79	127 127 113 119	

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



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Date: 20-May-06		QC Su	mmary F	eport			Work Order: 06050943
Method Blank File ID: 06051510.D Sample ID: MBLK MS15A0515A Analyte	Units : mg / Result	Type Mi 'm³ F PQL	Batch Run ID: MSD_		5A	Analysis Date: Prep Date:	05/15/2006 11:30 05/15/2006 Val %RPD(Limit) Qual
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 o-Xylene Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND ND ND ND ND ND ND ND ND 2.14 2.05 1.82	5 0.1 0.2 0.2 0.1 0.2 0.1 0.1 0.1	2 2 2 2	107 103 91	76 84 79	127 113 119	vai 76KPD(Limit) Quai
Laboratory Control Spike File ID: 06051504.D Sample ID: LCS MS15A0515A Analyte Benzene Toluene	Units : mg/ r Result 9.33	PQL 0.1	Batch I un ID: MSD_1 SpkVal SpkI 10	RefVal %REC 93	LowLimi 81	Analysis Date: Prep Date:	05/15/2006 09:16 05/15/2006 al %RPD(Limit) Qual
Ethylbenzene m,p-Xylene o-Xylene Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	9.68 10.2 10.7 11.3 11.1 9.62 9.3	0.1 0.1 0.1 0.1	10 10 10 10 10 10 10	97 102 107 113 111 96 93	80 80 80 80 76 84 79	120 120 129 129 127 113 119	

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.

Alpha Analytical, Inc.Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

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

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

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

Client Name: Stratus Environmental	Project ID: USA	57						
Project Manager: Gowri Kowtha	Client's EMail: gkowt							
Work Order Number: STR06050943	Client's Phone: (530) Date Received: 5/9/20		Client's FAX: (530) 676-6005 Received by: Latricia Edrosa					
Cha	in of Custody (COC) In	formation	20002					
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)					
5	Sample Receipt Informa							
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						
Container/Temp Blank temperature in compliance (0-6°C)?	Yes 🗹	☐ No	Cooler Temperature NA°C					
Water - VOA vials have zero headspace / no bubbles?	Yes 🗌	□ No	No VOA vials submitted ✓					
Sample labels checked for correct preservation?	Yes 🗹	☐ No						
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes	□ No	N/A 🗹					
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 :								

Billing	Information	
---------	-------------	--

Client:

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

Page: 1 of 1

WorkOrder: STR06050943

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

EDD Required: Yes

Sampled by : C. Hill

Cooler Temp

Date Printed

Stratus Environmental 3330 Cameron Park Drive

Suite 550

STR06050943-01A

Cameron Park, CA 95682-8861

Report Attention: Gowri Kowtha

CC Report :

Job: USA 57

TEL: (530) 676-6001

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

Gowri Kowtha

PO:

Client's COC #: 8385

NA °C

Samples Received 09-May-06

09-May-06

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

Alpha

USA57 A SYS

INF

Client Collection No. of Bottles Sample ID Sample ID Matrix Date

AR

ORG SUB TAT PW\$# 05/08/06 6 06:30

Requested Tests TPH/P_A VOC_A GAS-N/C BTEX/OXY

Sample Remarks

TEDLAR

Comments:

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

Logged in by:

Signature

Print Name

Company Alpha Analytical, Inc.

Date/Time

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.

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

Name Strutus ENV Address 3330 Campum Ph DIZ City, State, Zip Campum Ph Phone Number 570676 6004 Fax 530676 6006	255 Glendale Sparks, Neva Phone (775)	alytical, Inc. Avenue, Suite 21 da 89431-5778 355-1044	Samples Collected Fr. AZ CA NV ID OR OTH	om Which State?WAof
Address SA 57	P.O. # Job	5-0406	Analyses Requ	uired / 0395
Time Sampled See Key Only Below Lab ID Number STRO-50943-01 USA 5	Phone # Fax #	Total and type of containers Total and type of containers "See below	X SOX S	Required QC Level? I II III IV EDD / EDF? YES NO Global ID # REMARKS
ADDITIONAL INSTRUCTIONS:				
Received by Received by Received by Received by Received by Relinquished by Relinquished by	Print Name Licia Edvosa	Strutes Appr	Company	Date Time 5-8-06 1245 5-806 1245
Received by Key: AQ - Aqueous SO - Soil WA - Waste OT - Other OTE: Samples are discarded 60 days after results are reported unless of the above samples is applicable only to those samples received by the		V-Voa S-Soil Jar (O-Orbo T-Tedlar B-Brass	S P-Plastic OT-Other

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 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: Kiran Nagaraju Phone: (530) 676-6004 Fax: (530) 676-6005

Date Received: 05/26/06

Job#:

2007-0057-01/USA 57

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

	Parameter	Concentration	Reporting	Date	Date
			Limit	Sampled	Analyzed
Client ID :	TPH-P (GRO)	180	15 mg/m³	05/25/06	05/30/06
USA57ASysInf	Tertiary Butyl Alcohol (TBA)	ND	7.5 mg/m³	05/25/06	05/30/06
Lab ID:	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m ³	05/25/06	05/30/06
STR06052651-01A	Di-isopropyl Ether (DIPE)	ND	0.30 mg/m ³	05/25/06	05/30/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	0.30 mg/m ³	05/25/06	05/30/06
	Benzene	1.1	0.15 mg/m ³	05/25/06	05/30/06
•	Tertiary Amyl Methyl Ether (TAME)	ND	0.30 mg/m³	05/25/06	05/30/06
	Toluene	0.22	0.15 mg/m ³	05/25/06	05/30/06
	Ethylbenzene	0.32	0.15 mg/m ³	05/25/06	05/30/06
	m,p-Xylene	0.58	0.15 mg/m ³	05/25/06	05/30/06
	o-Xylene	ND	0.15 mg/m³	05/25/06	05/30/06

Gasoline Range Organics (GRO) C4-C13

Note: Concentrations of air in a Tedlar Bag are at 21 degrees Celsius and 25.34 inches of mercury.

Roger Scholl

ND = Not Detected

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

6/5/06

Report Date



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

Date: 06-Jun-06		QC S	ummai	y Report	t			Work Order: 06052651
Method Blank		lanual						
File ID: C:\HPCHEM\MS07\DATA\060530\060	53009.D			Batch ID: MS0				: 05/30/2006 11:04
Sample ID: MBLK MS07A0530B	Units : mg/	m³	Run ID: N	ISD_07_0605	30A		Prep Date:	05/30/2006
Analyte	Result	PQL				LowLimit	•	Val %RPD(Limit) Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4	ND 2.32	10			116	76	127	
Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	1.92 1.88		2		96 94	84 79	113 119	
Laboratory Control Spike	Type LCS Test Code: EPA Method SW8015B/DHS LUFT Manual							
File ID: C:\HPCHEM\MS07\DATA\060530\0609				atch ID: MS07				05/30/2006 08:53
	Units: mg/	m³	Run ID: M	SD_07_0605	30A		Prep Date:	05/30/2006
Analyte	Result	PQL	SpkVal	SpkRefVal %	%REC	LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	404 12.2	10	400 10		101 122	78 76	127 127	, ,
Surr: 4-Bromofluorobenzene	9.4 9.66		10 10		94 97	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.



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Date: 		QC St	ımma	ry Repo	rt			Work Order: 06052651
Method Blank		Type M	BLK	Test Code: E	PA Met	hod SW8	260B	·· ·
File ID: C:\HPCHEM\MS07\DATA\060530\	06053009.D		ı	Batch ID: MS	07A053	0A	Analysis Date:	05/30/2006 11:04
Sample ID: MBLK MS07A0530A	Units : mg/	ím³		MSD_07_060			Prep Date:	05/30/2006
Analyte	Result	PQL				LowLimi	•	Val %RPD(Limit) Qual
			Opkve	Opkiterva	701120	COWLINI	t trigitalilit to Dixer	vai 70141 D(Limit) Quai
Tertiary Butyl Alcohol (TBA) Methyl tert-butyl ether (MTBE)	ND	5						
	ND	0.1						
Di-isopropyl Ether (DIPE)	ND	0.2						
Ethyl Tertiary Butyl Ether (ETBE)	ND	0.2						
Benzene	ND	0.1						
Tertiary Amyl Methyl Ether (TAME)	ND	0.2						
Toluene	ND	0.1						
Ethylbenzene	ND	0.1						
m,p-Xylene	ND	0.1						
o-Xylene	ND	0.1						
Surr: 1,2-Dichloroethane-d4	2.32		2		116	76	127	
Surr: Toluene-d8	1.92		2	-	96	84	113	
Surr: 4-Bromofluorobenzene	1.88	_	2		94	79	119	
Laboratory Control Spike		Type LC	cs T	Test Code: E	PA Meti	hod SW8	260B	
File ID: C:\HPCHEM\MS07\DATA\060530\(06053003.D	·	E	atch ID: MS	07 A 053()A	Analysis Date:	05/30/2006 08:31
Sample ID: LCS MS07A0530A	Units : mg/	m³ i		ISD_07_060			Prep Date:	05/30/2006
Analyte	Result	PQL				LowLimit	HighLimit RPDRef	Val %RPD(Limit) Qual
Benzene	9.81	0.1	10		98	81	122	***
Toluene	10.1	0.1	10		101	80	120	
Ethylbenzene	9.57	0.1	10		96	80	120	
m,p-Xylene	9.61	0.1	10		96	80	129	
o-Xylene	9.6	0.1	10		96	80	129	
Surr: 1,2-Dichloroethane-d4	12.6		10		126	76	127	
Surr: Toluene-d8	9.68		10		97	84	113	
Surr: 4-Bromofluorobenzene	9.53		10		95	79	119	

Comments:

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

Alpha Analytical, Inc. Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client: 6/6/2006

Date of Notice: 5/26/2006 9:38:20 A

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

Client Name: Stratus Environmental	Project ID: 2007-0	0057-01/USA	57
Project Manager: Kiran Nagaraju	Client's EMail: knagar Client's Phone: (530) 6		nc.net Client's FAX: (530) 676-6005
Work Order Number: STR06052651	Date Received: 5/26/20		Received by: Tara Dickinson
Chali	n of Custody (COC) Infe	<u>ormation</u>	
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)
<u>s</u>	ample Receipt Informa	<u>ıtion</u>	
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	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 ☑
Analy	tical Requirement Infor	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: One day added to TAT due to holiday.			

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: STR06052651

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

Client:

Stratus Environmental 3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

Kiran Nagaraju TEL: (530) 676-6004

FAX: (530) 676-6005

knagaraju@stratusinc.net

EDD Required: Yes

Sampled by: MW Morgan

Report Attention: Kiran Nagaraju

2007-0057-01/USA 57

PO:

Client's COC #: 13442

Cooler Temp n/a °C

Samples Received 26-May-06

Date Printed 26-May-06

QC Level: S3

CC Report :

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

								-	Requested 1	Tests		
Alpha	Client	Collection	No. of	Bottles	;		TPH/P_A	VOC_A				
Sample ID	Sample ID	Matrix Date	ORG	SUB	TAT	PWS#			,			Sample Remarks
STR06052651-01A	USA27ASYSIN F	AR 05/25/06 06:20	1	0	6		GAS-N/C	BTEX/OXY				Tedlar

Comments:

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

Logged in by:

≪Signature

Print Name

Company Alpha Analytical, Inc. Date/Time

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 Frotus Env. Inc. Address 3330 Carmeron Park Dr. # City, State, Zip Carmeron Park, Cit 956 Phone Number 530576 6004 Fax 530 676 6	\$50 \$12.	Alpha Analytic 255 Glendale Avenus Sparks, Nevada 894 Phone (775) 355-10 Fax (775) 355-0406	e, Suite 21 31-5778	Sam AZ_ ID_	CA_ OR	eted From NV OTHER		te? Page # _ /_ of _ (
Client Name USA 57 Address 10700 MacArthur Blvd City, State, Zip Oakland, CA Time Date Matrix* Office Use Sampled by Marray Sampled Sampled See Key Onty Mw Movas	P.O. # EMail Address Phone #	Fax#	Total and type of containers	TOTAL SOLD STATES	Souis			
Selow Lab ID Number OLSO FACE OT STYLUDS 2105)-O U	Tanable Bosonption	TAT Filer			\(\frac{\fir}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac}\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}\frac{\frac{\fra			REMARKS
ADDITIONAL INSTRUCTIONS: Relinquished by Received by Received by Received by Received by Received by Received by Received by Received by	Print Name Martin W. LISA BRYGE Taug Dicking	0	A	Comp Fra Frs KDMA			Date 5/25/0 S-25-0	10:30
Relinquisted by Received by Key: AQ - Aqueous SO - Soil WA - Waste	OT - Other		Voa S-Soil	Jar o-or	•	ar B-Bra	5 210	·

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.



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FILE COPY

ANALYTICAL REPORT

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861

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

Job#;

2007-0057-01/USA 57

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

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

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

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

6/5/06 Report Date



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	
06052603-01A	USA57Wlnf	Aqueous	2	
06052603-02A	USA57WMid	Aqueous	2	

6/5/06 Report Date



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

Date: 06-Jun-06		QC S	lummar	y Repo	rt				Work Order: 06052603
Method Blank	······································	Туре І	MBLK T	est Code: E	PA Met	hod SW8	015B/DHS LU	FT Ma	anuai
File ID: D:\MSDCHEM\MS	12\DATA\060531\06053136.E)		atch ID: MS					05/31/2006 20:36
Sample ID: MBLK MS	12W0531D Units : այ	a/L		ISD_12_060			Prep Date		05/31/2006
Analyte	Result	_				LowLimi	•		√al %RPD(Limit) Qual
TPH-P (GRO)	ND	51			70.120		e i iigiiciiiii i	Dittor	var sura B(Elistit) Qual
Surr: 1,2-Dichloroethane-d-		O.	10		102	76	127		
Surr: Toluene-d8	9.69		10		97	84	113		
Surr: 4-Bromofluorobenzer	ne10.2		10		102	79	119		
Laboratory Control Sp		Type I	.cs T	est Code: E	PA Met	hod SW8	015B/DHS LUI	FT Ma	nual
	12\DATA\060531\06053135.D)	В	atch ID: MS	12W053	31D	Analysis (Date:	05/31/2006 20:14
Sample ID: GLCS MS	1 2W0531D Units : μ զ	g/L	Run ID: M	SD_12_060	531B		Prep Date	9:	05/31/2006
Analyte	Result	PQL				LowLimit	HighLimit RPI	DRef\	/al %RPD(Limit) Qual
TPH-P (GRO)	83.7	5(21	78	127		L50
Surr: 1,2-Dichloroethane-d4	4 17.5		10		175	76	127		\$55
Surr: Toluene-d8	8.76		10		88	84	113		•
Surr: 4-Bromofluorobenzen	e 8.82		10		88	79	119		
Sample Matrix Spike		Type 1	IS T	est Code: El	PA Met	hod SW80	015B/DHS LUF	T Ma	nuai
File ID: D:\MSDCHEM\MS	12\DATA\060531\06053149.D	1	В	atch ID: MS1	1 2W 053	1 D	Analysis [Date:	06/01/2006 01:09
Sample ID: 06052603-6	D2AGS Units : μg	J/L	Run ID: M:	SD_12_060	531B		Prep Date		06/01/2006
Analyte	Result	PQL				LowLimit	HighLimit RPI) DRefv	/al %RPD(Limit) Qual
TPH-P (GRO)	2060	250			103	70	139		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Surr: 1,2-Dichloroethane-d4	53		50	_	106	76	127		
Surr: Toluene-d8	48.5		50		97	84	113		
Surr: 4-Bromofluorobenzen	e 50.9		50		102	79	119		
Sample Matrix Spike D		Type N	ISD Te	est Code: EF	A Meth	nod SW80	15B/DHS LUF	T Ma	nual
	12\DATA\060531\06053150.D		Ва	atch ID: MS1	2W053	1D	Analysis D	Date:	06/01/2006 01:30
Sample ID: 06052603-0	D2AGSD Units: μg	/L	Run ID: MS	SD_12_0605	31B		Prep Date	: (06/01/2006
Analyte	Result	PQL				LowLimit	HighLimit RPD	Ref√	al %RPD(Limit) Qual
TPH-P (GRO)	2000	250		_	99.8	70		2060	3.1(12)
Surr: 1,2-Dichloroethane-d4			50	_	105	76	127		(/
Sum: Toluene-d8	48.5		50		97	84	113		
Surr: 4-Bromofluorobenzene	€ 51.4		50		103	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.

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

355 = Surrogate recovery was above laboratory acceptance limits.

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: 06-Jun-06			QC S	ummai	ry Repo	rt				Work Ord 0605260
Method Bla	nk		Type N	IBLK 7	est Code: I	PA Ma	thod SW	260B		
	SDCHEM\MS12\DATA\06053	. , , , , , ,		Batch ID: MS				veie Data	· 05/94/9006 90-90	
Sample ID:	MBLK MS12W0531C	Units : μg/L			ISD_12_06		- I - I			05/31/2006 20:36
Analyte		Result	PQL				نسا استا	•	Date:	05/31/2006
Tertiary Butyl	Alcohol (TRA)				Spkreiva	1 MREC	LOWLIM	t HighLimi	RPDRet	Val %RPD(Limit) C
	tyl ether (MTBE)	ND ND	10 0.5							
Di-isopropyl E		ND	0.5							
Ethyl Tertiary	Butyl Ether (ETBE)	ND	1							
Benzene		ND	0.5							
	Methyl Ether (TAME)	ND	1							
Toluene Ethylbenzene		ND	0.5							
m,p-Xylene		ND ND	0.5							
o-Xylene		ND	0.5 0.5							
Surr: 1,2-Dichi	oroethane-d4	10.2	0.5	10		102	76	127		
Surr: Toluene-	d8	9.69		10		97	84	113		
Surr: 4-Bromo	fluorobenzene	10.2		10		102	79	119		
	Control Spike		Type LO	cs T	est Code: E	PA Met	hod SW8	260B		,
	DCHEM\MS12\DATA\060531	\06053133.D			atch ID: MS				sis Date:	05/31/2006 19:32
Sample ID:	LCS MS12W0531C	Units : µg/L	İ		SD_12_060			Prep		05/31/2006
Analyte		Result	PQL				Low imit	•		val %RPD(Limit) Q
Benzene		9.34	0.5	10					THE BITCH	VOI TOTAL DESTINA
Toluene		9.47	0.5	10		93 95	81 80	122 120		
Ethylbenzene		10.1	0.5	10		101	80	120		
m.p-Xylene		10.2	0.5	10		102	80	129		
o-Xylene		9.4	0.5	10		94	80	129		
Surr: 1,2-Dichte Surr: Toluene-c		10.6		10		106	76	127		
Surr: 4-Bromof		9.92 10.3		10		99	84	113		
				10		103	79	119		·
Sample Mati			Type M:		est Code: E					
	DCHEM\MS12\DATA\060531				atch ID: MS		1C	Analys	sis Date:	06/01/2006 00:27
Sample ID:	06052603-02AMS	Units : µg/L			SD_12_060:			Prep [06/01/2006
Analyte		Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRef√	/al %RPD(Limit) Qu
Benzene		49.2	1.3	50	0	98	74	125		
Toluene Ethylbenzene		49.1	1.3	50	0	98	76	120		
m,p-Xylene		52.6 52.8	1.3 1.3	50 50	0	105	77 73	124		
o-Xylene		47.9	1.3	50 50	0	106 96	73 74	130 131		
Surr: 1,2-Dichlo		54.5		50	U	109	7 4 76	127		
Surr: Toluene-d		49.2		50		98	84	113		
Surr: 4-Bromofl	uorobenzene	52.1		50		104	79	119		
Sample Matrix Spike Duplicate Type MSD Test Code: EPA Method SW8260B										
File ID: D:\MS[DCHEM\MS12\DATA\060531\	06053148.D		_	tch ID: MS1				is Date:	06/01/2006 00:48
Sample ID:	06052603-02AMSD	Units : µg/L	F		D_12_0605			Ргер С		06/01/2006
Analyte		Result	PQL				LowLimit			al %RPD(Limit) Qu
3enzene	······································	46.3	1.3	50	0	93	74	125	49.21	<u> </u>
Foluene		46.4	1.3	50	Ö	93	76	120	49.1	5.7(13)
Ethylbenzene		49.7	1.3	50	Ō	99	77	124	52.56	` '
n,p-Xylene		49.7	1.3	50	0	99	73	130	52.76	6.1(14)
p-Xylene Surr: 1,2-Dichlo	roethana.d4	45.3	1.3	50	0	91	74	131	47.88	5.6(13)
Surr: Toluene-d		53.1 49.4		50 50		106	76	127		
Surr: 4-Bromoft	_	49.4 52.2		50 50		99 104	84 79	113 119		
						,,,,		113		

Comments:

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

Alpha Analytical, Inc.Phone: (775) 355-1044 FAX: (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client: 6/6/2006

Date of Notice: 5/26/2006 1:04:14 P

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

Client Name: Stratus Environmental	Project ID: 2007-	0057-01/USA	57								
Project Manager: Kiran Nagaraju	Client's EMail: knags	-									
Work Order Number: STR06052603	Client's Phone: (530) Date Received: 5/26/2		Client's FAX: (530) 676-6005 Received by: Elizabeth Sauvageau								
Chain of Custody (COC) Information											
Carrier name: FedEx											
Chain of custody present ?	Yes 🗹	☐ No									
Custody seals intact on shippping container/cooler ?	Yes 🗹	☐ No	Not Present								
Custody seals intact on sample bottles?	Yes 🗌	☐ No	Not Present								
Chain of custody signed when relinquished and received?	Yes 🗹	☐ No									
Chain of custody agrees with sample labels?	Yes 🗹	□ No									
Sample ID noted by Client on COC ?	Yes 🗹	□ No									
Date and time of collection noted by Client on COC?	Yes 🗹	☐ No									
Samplers's name noted on COC ?	Yes 🗹	□ No									
Internal Chain of Custody (COC) requested ?	Yes 🗌	✓ No									
Sub Contract Lab Used :	None 🗹	SEM	Other (see comments)								
Sample Receipt Information											
Shipping container/cooler in good condition?	Yes 🗹	☐ No	Not Present								
Samples in proper container/bottle?	Yes 🗹	☐ No									
Sample containers intact?	Yes 🗹	□ No									
Sufficient sample volume for indicated test?	Yes 🗹	□ No									
Sample Prese	ervation and Hold Time	(HT) Informa	<u>ition</u>								
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	vtical Requirement Info	ormation									
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 :	1										
······································											

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: STR06052603

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

Client:

Stratus Environmental

3330 Cameron Park Drive Suite 550

Cameron Park, CA 95682-8861

Report Attention: Kiran Nagaraju

TEL: (530) 676-6004

Kiran Nagaraju

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

Job: 2007-0057-01/USA 57

EDD Required: Yes

Sampled by : M.W. Morgan

Cooler Temp

Samples Received

Date Printed

CC Report :

PO:

Client's COC #: 13443

4°C

26-May-06

26-May-06

QC Level: \$3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alaba	.										
Alpha Sample ID	Client Sample ID	Col Matrix [llection Date	No. of	f Bottles SUB	S TAT	PWS#	TPH/P_W	VOC_W		Sample Remarks
STR06052603-01A		AQ 05/	/25/06)6:35	5	0	6	Ţ	GAS-C	BTEX/OXY_		Sample Remarks
STR06052603-02A	USA57WMID	1	/25/06 06:39	5	0	6		GAS-C	BTEX/OXY_		1

Comments:

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

Logged in by:

Signature

Print Name

Company

Date/Time

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 That US Address 3330 Cameron Park Dr. #550 City, State, Zip Cameron Park CA 95682 Phone Number 5206766004 Fax 5306766005	Alpha Analy 255 Glendale Ave Sparks, Nevada 8 Phone (775) 355	nue, Suite 21 19431-5778 1044	emples Collected From CA NV OR OTHE	WA R Pag	ge#of
Client Name USA 57	Fax (775) 355-04	——————————————————————————————————————	Analyses Require	ed /	13443
Address 10700 MacArthur Blud City, State, Zip Oakland, CA	EMail Address Phone # Fax #	7-0057-01		/ / Req	juired QC Level?
Time Date Sampled Samp	Report Attention Report Attention Sample Description	Total and type of containers ** See below		Global ID #_	F? YES NO
0635 76404 AQ STROGO52603-01 USA5- 0639 7564 AQ -02 USA5	7WNF 5 7WMID 5	5-V X X 5-V X Y	+ + -	ical Sample Re	
ADDITIONAL INSTRUCTIONS:			Frozen Ice? Temperature	(ES)	NO _ °C
Relinquished by	Print Name	Cor	mpany	Date	Time
Received by Relinquished by	tin W. Morgan a Bryles	Strate ALPHA	15	5-25-06	1020 1030
Received by Received by Received by	wageau	alpha		5-26-06	1305
Key: AQ - Aqueous SO - Soil WA - Waste OT - Oth	per **: L-Liter	V-Voa S-Soil Jar O-C	Orbo T-Tedlar 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.