RECEIVED
By Alameda County Environmental Health at 2:25 pm, Mar 10, 2015

Mr. Keith Nowell
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Grimit Auto Repair and Service, 1970 Seminary Boulevard, Oakland, California (Fuel Leak Case No. RO0000413)

Dear Mr. Nowell,

Stratus Environmental, Inc. (Stratus) has recently prepared a report entitled *Remediation Status Report, Fourth Quarter 2014* on my behalf. The report was prepared in regards to Alameda County Fuel Leak Case No. RO0000413, for Grimit Auto Repair and Service, 1970 Seminary Boulevard, Oakland, California.

I have reviewed a copy of this report, sent to me by representatives of Stratus, and "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge."

If you have any questions, please contact me via electronic mail at peggy.h.garcia@sbcglobal.net, or my daughter Angel LaMarca at angelcpt@gmail.com.

Sincerely,

Peggy Garcia, Trustee

Ms. Peggy Garcia, Trustee, Grimit Family Trust

cc: Angel LaMarca

STRATUS
ENVIRONMENTAL, INC.

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

March 9, 2015
Project No. 2090-1970-01

Mr. Keith Nowell
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Remediation Status Report
Fourth Quarter 2014
Former Grimit Auto Repair and Service
1970 Seminary Boulevard, Oakland, California
Fuel Leak Case No. RO0000413

Dear Mr. Nowell:

Stratus Environmental, Inc. (Stratus) is submitting the attached report, on behalf of the Grimit Family Trust, for the Former Grimit Auto Repair and Service underground storage tank fuel leak case located at 1970 Seminary Boulevard, Oakland, California. This report presents a summary of remediation activities completed during the fourth quarter 2014. This report has been prepared in compliance with ACEHD and California Regional Water Quality Control Board (CRWQCB) requirements for underground storage tank (UST) investigations.

If you have any questions regarding this report, please contact Scott Bittinger at (530) 676-2062 or via email at sbittinger@stratusinc.net.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Scott G. Bittinger, P.G.
Project Manager

PROFESSIONAL GEOLOGIST
Scott G. Bittinger
No. 7477
STATE OF CALIFORNIA

Gowri S. Kowtha, P.E.
Principal Engineer

Attachment: Remediation Status Report, Fourth Quarter 2014

cc: Ms. Peggy Garcia, Trustee, Grimit Family Trust *(email: peggy.h.garcia@sbcglobal.net)*
Ms. Angel LaMarca *(email: angelcpt@gmail.com)*
Ms. Cherie McCaulou, California Regional Water Quality Control Board *(via GeoTracker)*

Date March 9, 2015

GRIMIT AUTO REPAIR & SERVICE
REMEDIATION STATUS REPORT

Facility Address:	1970 Seminary Boulevard, Oakland, California
Consulting Co. / Contact Person:	Stratus Environmental, Inc. / Scott Bittinger, P.G.
Consultant Project No:	2090-1970-01
Primary Agency/Regulatory ID No:	Mr. Keith Nowell, Alameda County Environmental Health Department (ACEHD), Fuel Leak Case No. RO0000413

WORK PERFORMED THIS PERIOD (Fourth Quarter 2014):

1. The first phase of remediation at the subject site, intended to remove contaminant mass using dual phase extraction (DPE) technology, was initiated. During the fourth quarter 2014 Stratus conducted seven site visits to perform routine operation and maintenance (O&M) of the DPE system and to collect samples needed to evaluate system performance and contaminant destruction efficiency. Operation and maintenance summary of the field data, analytical results and the extraction and emission rates for the system is summarized in Tables 1 through 6.

WORK PROPOSED FOR NEXT PERIOD (First Quarter 2015):

1. Continue full-time continuous operation of the DPE system during the first quarter 2015. Stratus will visit the site at least twice each month to verify system operation, conduct routine O&M of the DPE system to optimize system operation and gauge system effectiveness, and collect groundwater and soil vapor samples for permit compliance.

2. Stratus will conduct first quarter 2015 groundwater monitoring and sampling activities at the site as part of the semi-annual groundwater monitoring and sampling plan.

Current Phase of Project:	CAP/REM
Frequency of Groundwater Monitoring:	All monitoring wells = Semi-annually (1st & 3rd quarters)
Frequency of Groundwater Sampling:	All monitoring wells = Semi-annually (1st & 3rd quarters)

SOIL VAPOR EXTRACTION PORTION OF DPE SYSTEM – PERFORMANCE SUMMARY:

Equipment Inventory:	Enviro Supply 250 cfm thermal/catalytic oxidizer; 20-hp LRP
Operating Mode:	Thermal (continuous)
BAAQMD Permit Nos.:	PTO Plant No. 22351
Influent GRO Conc. End of Period (lab):	150 mg/m^3 (11/20/14)
Influent Benzene Conc. End of Period (lab):	<0.20 mg/m^3 (11/20/14)
Influent MTBE Conc. End of Period (lab):	<0.20 mg/m^3 (11/20/14)
Average Flow Rate:	130.9 acfm (between 12/18/14 and 12/29/14)
Average Applied Vacuum:	11.3 inches Hg (between 12/18/14 and 12/29/14)
GRO Destroyed this Period:	N/A
Operating Hours this Period:	260 hrs. (between 12/18/14 and 12/29/14)
Percent Time Operational (average):	100% (between 12/18/14 and 12/29/14)

Number of Shutdowns: 0

GROUNDWATER EXTRACTION PORTION OF DPE SYSTEM – PERFORMANCE SUMMARY:

Equipment Inventory:	Two 2,000-lb. activated carbon vessels
Operating Mode:	Continuous (start-up on 12/18/14)
CDPWD Sewer Discharge Permit No.:	62203411
GRO Concentration End of Period (lab):	130 µg/L (system influent) (12/19/14)
Benzene Concentration End of Period (lab):	1.9 µg/L (system influent) (12/19/14)
MTBE Concentration End of Period (lab):	<0.50 µg/L (system influent) (12/19/14)
Average Groundwater Extraction Rate:	1.06 gpm (average between 11/18/14 and 12/19/14)
GRO extracted this period:	0.001 lbs (between 11/18/14 to 12/19/14)
Groundwater Discharged this Period:	1,340 gallons (between 11/18/14 to 12/19/14)

DUAL-PHASE EXTRACTION AND GROUNDWATER TREATMENT REMEDIATION SYSTEM

System Description

The remediation system installed at the site is a dual-phase extraction (DPE) portable trailer mounted system that is connected to four 4-inch diameter extraction wells (EX-1, EX-2, EX-3 and EX-6) by above ground conveyance piping. The SVE portion of the DPE system consists of a 250 cubic feet per minute (cfm) thermal/catalytic oxidizer, a 20-horsepower (hp) liquid ring pump, a knockout tank, and a 2-hp transfer pump. The GWE&T portion of the DPE system consists of a centrifugal pump, particulate filters, and two 2,000-pound granular activated virgin coconut shell carbon (GAC) vessels installed in series. Soil vapor and groundwater are simultaneously extracted from the subsurface by applying high vacuum on down-well stingers installed within the extraction wells using the liquid ring blower. The combined extraction air/water stream is separated into the vapor and liquid phases in a primary knockout tank.

The vapor portion of the separated stream is abated using the thermal oxidizer prior to discharge to atmosphere under a permit to operate (PTO) issued by Bay Area Air Quality Management District (BAAQMD) (PTO Plant No. 22351). The SVE portion of the system has a built-in hour meter used to determine the operational uptime. Sample ports (system-influent and effluent) have been installed to collect vapor samples for laboratory testing; results are used to estimate the destruction efficiency of the oxidizer. The groundwater portion of the separated stream is routed to the holding tank, treated via the GAC vessels, and discharged to the sanitary sewer under a permit issued by East Bay Municipal Utility District (EBMUD) (No. 62203411). Extraction of groundwater from the wells is controlled by level switches in the primary holding tank. A flow totalizer, installed after the two GAC vessels, is used to record the volume of groundwater that is discharged to the sanitary sewer.

System Operation and Maintenance – Fourth Quarter 2014

During the fourth quarter 2014, Stratus visited the site seven times (November 18, 20, 21, and 25, and December 18, 19 and 29, 2014) to verify system operation, conduct routine O&M of the system, to collect groundwater and soil vapor samples for permit compliance, to optimize system operation, and to gauge system effectiveness. The system was initially started on November 18, 2014 and was operated temporarily in order to generate sufficient groundwater to collect a representative effluent groundwater sample to confirm permit compliance and approval from EBMUD. Upon approval to discharge, Stratus began continuous operation of the DPE system on December 18, 2014. An operational summary of the system is summarized in Table 1 and 2. Soil vapor and groundwater analytical results including the extraction and emission rates of the remediation system are summarized in Tables 3 through Table 6.

Field data sheets are included as Appendix A and copies of laboratory analytical reports and chain-of-

custody documentation are included as Appendix B. Analytical results of remediation vapor/water samples been uploaded to SWRCB's GeoTracker database and documentation of these uploads are included as Appendix C.

After operating the DPE equipment for approximately one hour in late November 2014, the equipment was re-started for continuous operation on December 18, 2014. Between re-starting of the system on December 18, 2014 until December 29, 2014, the remediation system operated for approximately 260 hours (uptime of approximately 100% during this period), at an average flow rate of approximately 130.9 acfm at an average applied vacuum of approximately 11.3 inches of mercury ("Hg). DPE was performed using wells EX-1, EX-2, EX-3 and EX-6 for extraction. Approximately 1,340 gallons of groundwater were extracted and treated between November 18 and December 19, 2014.

System influent and effluent vapor samples were collected from the SVE portion of the system on November 20, 2014. Analytical results of influent vapor samples indicated the presence of GRO, ethyl benzene, total xylenes, n-propylbenzene, and 1,2,4-Trimethylbenzene. The influent GRO concentration was reported at 150 mg/m^3 and benzene and MTBE concentrations were reported below laboratory detection limits. Contaminant mass removal rates will be provided at a later date, in a separate report once more data is available. During the reporting period, the SVE component of the remediation system operated in compliance with BAAQMD permit requirements.

Influent, mid-fluent, and effluent groundwater samples were collected from the GWE&T portion of the system on November 25 and December 19, 2014. Analytical results indicate influent GRO concentrations increased from 75 µg/L to 130 µg/L. Influent benzene concentrations also increased from below detection limits (less than 1.0 µg/L) to 1.9 µg/L. Influent MTBE concentrations were observed below laboratory detection limits. Due to the short duration of the systems operational hours from the time the system started for continuous operation and end of the quarter, minimum GRO was extracted in the dissolved phase. During the reporting period, the GWE&T component of the remediation system operated in compliance with CDPWD sewer discharge permit requirements.

Stratus will continue to operate the DPE system during the first quarter 2015. We anticipate conducting the next groundwater monitoring and sampling event at the site in March 2015. Data from this event will, in part, be used to evaluate remedial performance.

ATTACHMENTS:

- Table 1 Operational Uptime and Flow Summary
- Table 2 Vacuum and Depth to Water Summary
- Table 3 SVE Component – Analytical Results and Flowrates
- Table 4 SVE Component – Extraction and Emission Rates
- Table 5a Groundwater Extraction Component – Groundwater Analytical Data Summary
- Table 5b Groundwater Extraction Component – Groundwater Analytical Data Summary
- Table 6 Groundwater Extraction Component – Operational Performance and Mass Removal Summary
- Figure 1 Site Location Map
- Figure 2 Site Plan
- Figure 3 Process Flow Diagram
- Appendix A Field Data Sheets
- Appendix B Laboratory Analytical Reports and Chain-of-Custody Documentation
- Appendix C GeoTracker Electronic Submittal Information

TABLE 1
REMEDIATION PILOT TEST
OPERATIONAL UPTIME AND FLOW SUMMARY
Grimit Auto, 1970 Seminary Ave, Oakland, California

Date & Time	Notes	Hour Meter Reading	Applied Vac	Area	Sys Inf Temp	Sys Inf Air Velocity	Sys Inf Air Flowrate	Control Temp	Effluent Air Temp	Area	Dilution Air Temp	Dilution Air Velocity	Dilution Air Flowrate	PID	
														Sys Inf	Eff
			"Hg	ft^2	°F	fpm	acfm	°F	°F	ft^2	°F	fpm	acfm	ppmv	ppmv
11/18/14 8:30	1	15,631.0	--	0.0873	--	--	--	--	--	--	--	--	--	--	--
11/20/14 8:00		15,631.9	15.0	0.0873	78	1,500	130.9	1450	1002	0.0218	65	2504	55	30	3.6
11/20/14 10:00		15,632.1	10.5	0.0873	95	1,500	130.9	1543	1253	0.0218	72	2222	48	410	2.9
11/20/14 11:00		15,632.1	10.0	0.0873	80	1,500	130.9	1554	1285	0.0218	60	2260	49	35	2.3
11/20/14 12:00		15,632.1	10.0	0.0873	80	1,500	130.9	1559	1311	0.0218	67	2186	48	40	2.1
11/21/14 7:00		15,632.1	10.0	0.0873	90	1,500	130.9	1537	1368	0.0218	65	2140	47	20	2.0
11/25/14 10:10	2	15,632.0	10.0	0.0873	90	1,500	130.9	1450	1224	0.0218	--	--	--	58	2.1
12/18/14 7:30	3	0.0	13.5	0.0873	92	1,500	130.9	1484	--	0.0218	64	2503	55	8	1.2
12/19/14 7:00		20.0	13.0	0.0873	90	1,500	130.9	1492	1305	0.0218	61	2910	63	100	1.2
12/29/14 7:15		260.0	7.5	0.0873	82	1,500	130.9	1500	1430	0.0218	--	--	--	10	1.3
Average			11		86	1,500	130.9	1508	1272		65	2389	52	79	2.1

Legend / Key:

Vac = Vacuum
"Hg = inches mercury
ft^2 = square feet
Temp = temperature
°F = Fahrenheit
Inf = Influent
-- = not applicable/ not measured
fpm = feet per minute
acfm = actual cubic feet per minute
ppmv = parts per million by volume
PID = Photoionization Detector
Sys Inf = System Influent (includes dilution air)
Eff = Effluent

Sample Calculation:

air flow = area of pipe (0.0491 ft^2) × air velocity (fpm) = flowrate (acfm)

Notes:

Influent pipe diameter = 3.0 inches

1 System operating with DPE, extracting from extraction wells EX-1, EX-2, EX-3, and EX-6. Stingers placed within extraction wells at 29-feet in well EX-1 and 27-feet bgs in wells EX-2, EX-3 and EX-6.

2 System down upon departure waiting groundwater sample results and approval from EBMUD to discharge to the sanitary sewer.

3 System down upon arrival, new hour meter installed, system started for continuous operation upon departure.

TABLE 2
REMEDIATION PILOT TEST
VACUUM ("WC) AND DEPTH TO WATER (feet bgs) SUMMARY
Grimit Auto, 1970 Seminary Ave, Oakland, California

Date & Time	Notes	Induced Vacuum ("WC) &/or Depth to Water (feet bgs)					
		MW-2		MW-8		MW-4	
		"WC	feet bgs	"WC	feet bgs	"WC	feet bgs
12/18/14 7:30	1	0.02*	17.87	0.00	0.98	--	--
12/19/14 7:00		--	--	--	--	--	--
12/29/14 7:15		--	--	--	--	--	--
Average		0.02	15.32	14.55	2.07	0.04	19.29

Legend / Key:
DTW = Depth to water bgs = below ground surface
"WC = Inches of water column -- = not applicable/ not measured
* Positive pressure

Notes:
1 Stinger depth in EX-1 19 feet bgs, EX-2 18 feet bgs, EX-3 24 feet bgs, EX-6 20 feet bgs.

TABLE 3
REMEDIATION PILOT TEST
SVE COMPONENT - ANALYTICAL RESULTS AND FLOWRATES
Grimit Auto, 1970 Seminary Ave, Oakland, California

Date	Notes	Sample	Flowrate *		Influent	Vacuum	Sample	Lab Sample	Analyses (mg/m^3)									
		Time	(acfm)	(scfm)	Temp. (°F)	"Hg	Location	Number	GRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	PCE	TCE	n-Propyl benzene	1,2,4-Trimethyl benzene
11/20/14	1	11:30	130.9	128.0	80	10	ASYS INF	89712-01	**150**	<0.20	<0.20	**0.85**	**2.07**	<0.20	<0.20	<0.20	**0.46**	**1.9**
							A EFF	89712-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
12/19/14		10:04	130.9	125.7	90	13	ASYS INF	89947-01	**33**	**0.41**	**0.43**	**0.94**	**1.96**	<0.20	<0.20	<0.20	<0.20	<0.20
		10:35					A EFF	89947-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Legend / Key:

acfm = actual cubic feet per minute
scfm = standard cubic feet per minute
Temp. (°F) = temperature in degrees Fahrenheit
"Hg = inches mercury
GRO = gasoline range organics (C4-C13)
BTEX = benzene, toluene, ethylbenzene, and xylenes
MTBE = methyl tertiary butyl ether
PCE = tetrachloroethene
TCE = trichloroethene
SysInf = system influent
Eff = effluent
mg/m^3 = milligrams per cubic meter

Laboratory Analytical Methods and Facility:

GRO analyzed using EPA Method SW8015B/SW8260B
BTEX, MTBE and VOCs analyzed using EPA Method SW8260B
Pace Analytical(Formerly Kiff Analytical; ELAP # 08263CA)

* Flowrate used based on most representative field data at time of sampling.

Calculations:

Actual flow rate (acfm) is converted to standard flow rate (scfm) using the following formulas:

Pressure corrected influent flow rate = Flow was taken on positive side of blower, no pressure correction factor needed.

Temperature Corrected influent flow = Pressure corrected flow rate * {(460 R + 68deg F)/(deg F+ 460 R)}

Notes:

1 DPE extracting from extraction wells EX-1, EX-2, EX-3, and EX-6.

TABLE 4
REMEDIATION PILOT TEST
SVE COMPONENT - EXTRACTION AND EMISSION RATES
Grimit Auto, 1970 Seminary Ave, Oakland, California

Date	Notes	Influent Sample Time	Hour Meter Reading	Sys. Influent Flowrate (scfm)	Effluent Flowrate[2] (scfm)	Sys. Influent Conc. (mg/m^3)			Effluent Conc. (mg/m^3)			Extraction Rate from Wells (lbs/day)[2]			Emissions Rate to Atmosphere (lbs/day)			Destruction Removal Efficiency (%)	Cumulative GRO Removal (lbs)	
						GRO	Benzene	MTBE	GRO	Benzene	MTBE	GRO	Benzene	MTBE	GRO	Benzene	MTBE	GRO	Period	Total
11/20/14	1	11:30	15,632.1	128.0	208.0	150	<0.20	<0.20	<20	<0.20	<0.20	1.73	<0.002	<0.002	<0.37	<0.004	<0.004	78.3	0.1	0.1
12/18/14	2	10:40	0.0	125.7	205.7	33	0.41	<0.20	<20	<0.20	<0.20	0.37	0.005	<0.002	<0.37	<0.004	<0.004	--	--	0.1

Legend / Key:

acfm = actual cubic feet per minute
scfm = standard cubic feet per minute
Sys. = system
mg/m^3 = milligrams per cubic meter
Conc. = concentration
lbs/day = pounds per day
GRO = gasoline range organics
MTBE = methyl tertiary butyl ether

[1] Effluent Flow rate = System Influent flow rate + combustion air flow rate (80 cfm per manufacturer)

[2] To calculate the extraction rate, the system influent concentrations are averaged between the sampling dates for those dates that extract from the same extraction wells.

Sample Calculations:

Extraction Rate from Wells (lbs/day) = Sys Inf Flowrate (ft^3/min) x Avg. Inf Conc (mg/m^3) x (1 lb/453,593mg) x (1,440 min/day) x ($1\ m^3/35.314 ft^3$)

Destruction Removal Efficiency, % = $\frac{\text{(Extraction Rate - Emission Rate)} \times 100}{\text{Extraction Rate}}$

Notes:

1 DPE extracting from extraction wells EX-1, EX-2, EX-3, and EX-6. GRO removed is calculated based on assuming 1.1 hours of operation occurred from start of test to first sample time.

2 New hour meter installed. System operated for 1-hour during initial start-up and sampling period. System re-started for continous operation, therefore, mass removed is negligable and will be calculated after next sampling event.

TABLE 5a
REMEDIATION PILOT TEST
GROUNDWATER EXTRACTION COMPONENT - GROUNDWATER ANALYTICAL DATA SUMMARY
Grimit Auto, 1970 Seminary Ave, Oakland, California

Date	Notes	Sample Time	Sample Location	Laboratory Sample ID	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Napthalene	PCE	TCE	Vinyl chloride	1,2 DCA	Chloro benzene
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
11/25/14	1	10:35	WINF	STR14112541-01A	**75**	<1.0	<1.0	1.9	4.1	<1.0	3.6	<1.0	<1.0	<1.0	<1.0	<1.0
		10:30	WGAC1	STR14112541-02A	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
		10:25	WEFF	STR14112541-03A	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
12/19/14		7:10	WINF	STR14122242-01A	**130**	**1.9**	**2.6**	**4.0**	**9.1**	<0.5	**11**	<1.0	<1.0	<1.0	<1.0	--
		7:20	WGAC1	STR14122243-01A	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	--
		7:15	WEFF	STR14122241-01A	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	--

Legend / Key:

GRO = Gasoline Range Organics C4-C13

MTBE = Methyl tertiary butyl ether

BTEX = Benzene, toluene, ethylbenzene, xylenes

TBA = Teritiary Butyl Alcohol

µg/L = micrograms per liter

-- = Not analyzed

DRO = Diesel Range Organics C13-C22

DIPE = Di-isopropyl Ether

ETBE = Ethyl Tertiary Butyl Ether

EDB = 1,2 - Dibromoetane

1,2 DCA = 1,2 - Dichloroethane

TAME = Tertiary Amyl Methyl Ether

Analytical Methods /Laboratory:

GRO analyzed using EPA Method SW8015B/SW8260B

BTEX and MTBE analyzed using EPA Method SW8260B

Volatile Organics analyzed using EPA Method 624/SW8260

Lead analyzed using EPA Method 200.8

Alpha Analytical, Inc. (ELAP # 2019)

[1] Sample was re-analyzed to achieve a lower reporting limit.

[2] DRO concentrations may include contributions from heavier-end hydrocarbons that elute in the DRO range.

[3] Reporting limits were increased due to high concentrations of target analytes.

Notes:

1 DPE test, extracting from extraction wells EX-1, EX-2, EX-3, and EX-6.

TABLE 5b
REMEDIATION PILOT TEST
GROUNDWATER EXTRACTION COMPONENT - GROUNDWATER ANALYTICAL DATA SUMMARY
Grimit Auto, 1970 Seminary Ave, Oakland, California

Date	Notes	Sample Time	Sample Location	Laboratory Sample ID	Mercury µg/L	Cr µg/L	Fe µg/L	As µg/L	Ni µg/L	Cu µg/L	Zn µg/L	Ag µg/L	Cd µg/L	Pb µg/L
11/25/14	1	10:35	WINF	STR14112541-01A	<0.20	<10	**580**	**5.5**	<10	**26**	<100	<5.0	<2.0	<5.0
		10:30	WGAC1	STR14112541-02A	--	--	--	--	--	--	--	--	--	--
		10:25	WEFF	STR14112541-03A	<0.20	<10	<300	**25**	<10	<20	<100	<5.0	<2.0	<5.0

Legend / Key:

Cr = Chromium
Ni = Nickel
Cu = Copper
µg/L = micrograms per liter
-- = Not analyzed
Fe = Iron
As = Arsenic
Zn = Zinc
Ag = Silver
Cd = Cadmium
Pb = Lead

Analytical Methods /Laboratory:

Mercury analyzed using EPA Method 245.1
Methanol/Ethanol using EPA Method SW8260B-DI
Metals using EPA Method 200.8
Alpha Analytical, Inc. (ELAP # 2019)

Notes:

1 DPE test, extracting from extraction wells EX-1, EX-2, EX-3, and EX-6.

TABLE 6
REMEDIATION PILOT TEST
GROUNDWATER EXTRACTION COMPONENT - OPERATIONAL PERFORMANCE AND MASS REMOVAL SUMMARY
Grimit Auto, 1970 Seminary Ave, Oakland, California

Date	Notes	Sample Time	Hour Meter Reading[1]	Sewer Discharge Data				Analytical Results Influent			Mass Removed This Period[b]			Cumulative Mass Removed		
				Totalizer Reading (gallons)	Period (gallons)	Cumulative Flow (gallons)	Average Extraction Rate (gpm)[a]	GRO (µg/L)	Benzene (µg/L)	MTBE (µg/L)	GRO (lbs)	Benzene (µg/L)	MTBE (lbs)	GRO (lbs)	Benzene (µg/L)	MTBE (lbs)
11/18/14	1	8:30	15,631.0	214,690	--											
11/25/14	1	10:35	15,632.0	215,430	740	740	12.33	75	<1.0	<1.0	0.0005	0.00001	0.00001	0.0005	0.00001	0.000006
12/19/14	2	7:10	20.0	216,030	600	1,340	0.50	130	1.9	0.5	0.0007	0.00001	0.000003	0.0011	0.00002	0.000009

Legend / Key:

GRO = Gasoline Range Organics C4-C13 µg/L = micrograms per litre lbs = pounds

DRO = Diesel Range Organics C13-C22 gpm = gallons per minute -- = data not collected/not calculated

MTBE = Methyl tertiary butyl ether

TBA = Tertiary Butyl Alcohol

[a] Approximate groundwater extraction rate between sampling periods, actual extraction rate varies due to system down time.

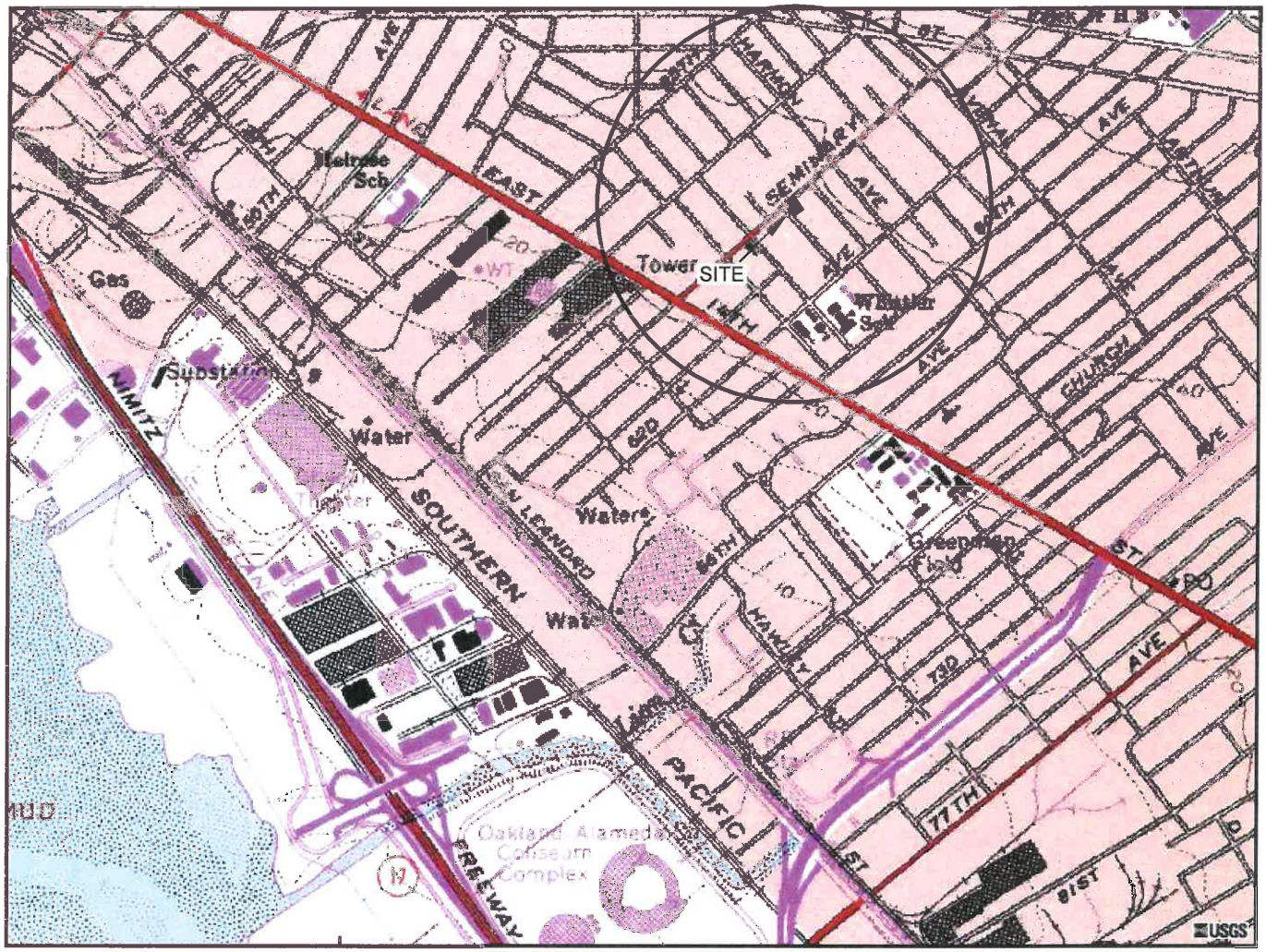
[b] Mass removed this period (pounds) = Average concentration (µg/L)[between the sample dates] x Period gallons x (2.2046×10^{-9})(lb/µg) / 0.26418 (gal/L)

[1] Hour meter readings were not taken at exact sampling times, therefore, times noted are readings obtained closest to the actual sampling times.

Notes:

1 DPE test, extracting from extraction wells EX-1, EX-2, EX-3, and EX-6.

2 New hour meter was installed, therefore, hour readings re-started at zero reading.



GENERAL NOTES:
BASE MAP FROM U.S.G.S.
OAKLAND, CA.
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 1996

N

QUADRANGLE LOCATION

0 1800 FT

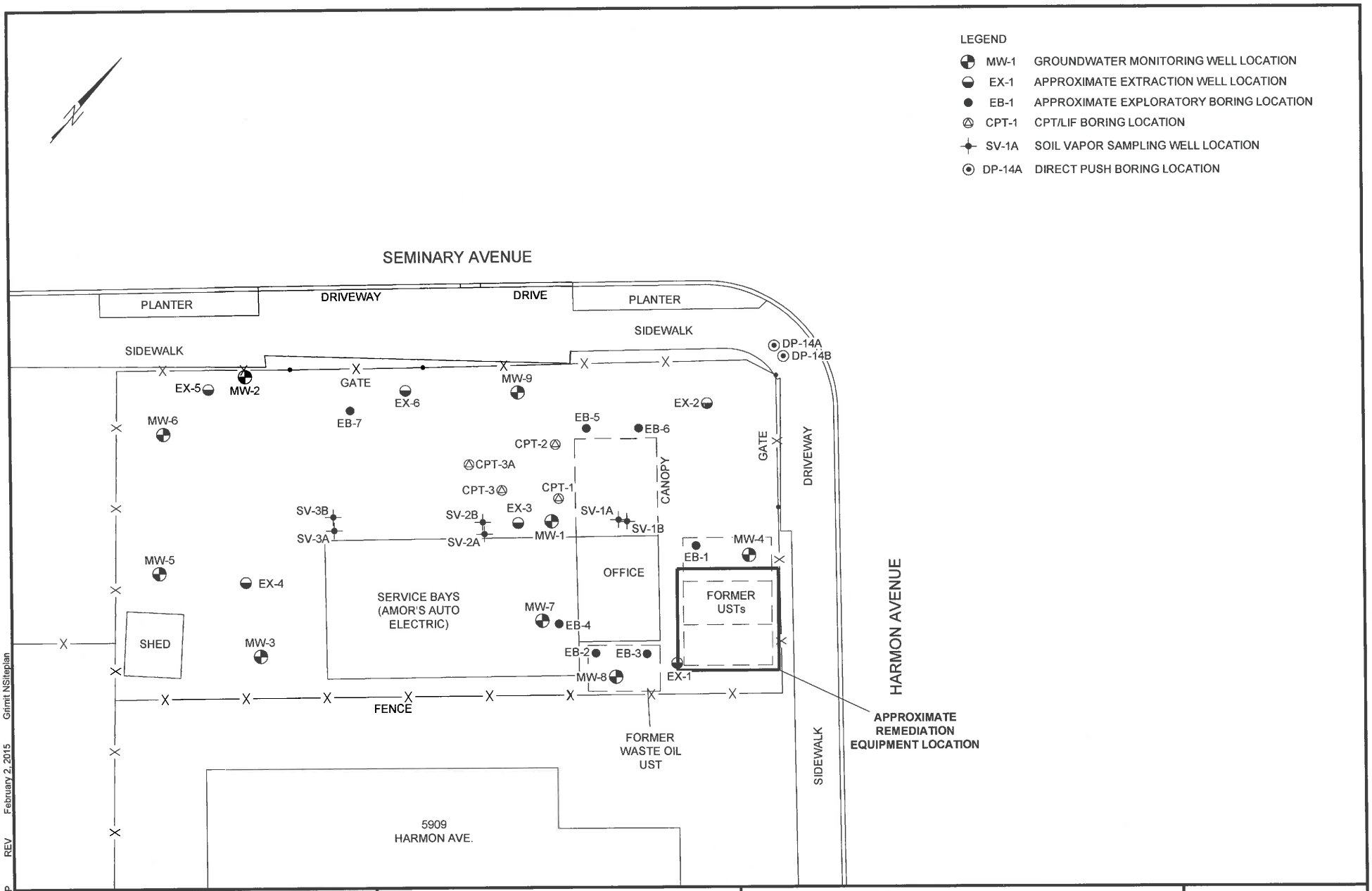
APPROXIMATE SCALE

STRATUS
ENVIRONMENTAL, INC.

FORMER GRIMIT AUTO
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE
1
PROJECT NO.
2090-1970-01



JMP REV February 2, 2015 Grimit NSiteplan Grimit Auto

STRATUS ENVIRONMENTAL, INC.

0 20 FT

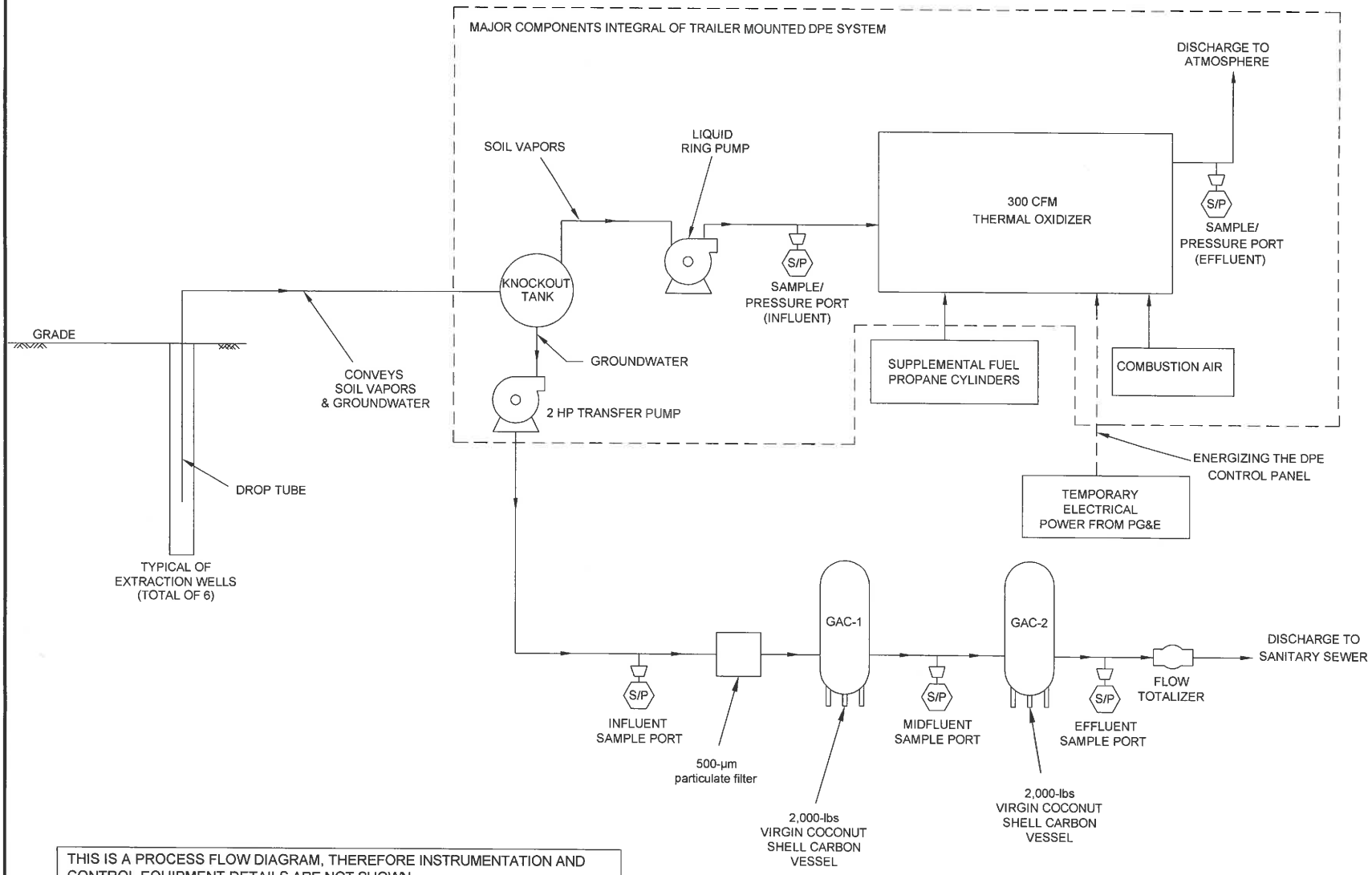
SCALE

FORMER GRIMIT AUTO
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA

SITE PLAN

FIGURE
2

PROJECT NO.
2090-1970-1



THIS IS A PROCESS FLOW DIAGRAM, THEREFORE INSTRUMENTATION AND CONTROL EQUIPMENT DETAILS ARE NOT SHOWN.
INSTRUMENT FUNCTIONS AND INTERACTIONS ARE ALSO NOT SHOWN.
EQUIPMENT SIZES ARE NOT PROPORTIONAL AND ARE NOT INDICATIVE OF FINAL SIZES.

DUAL PHASE EXTRACTION SYSTEM
NOT TO SCALE

STRATUS ENVIRONMENTAL, INC.

FORMER GRIMIT AUTO
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA

PROCESS FLOW DIAGRAM

FIGURE
3

PROJECT NO.
2090-1970-01

APPENDIX A

FIELD DATA SHEETS

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Date:	11-18-14	Technician:	CHILL
Onsite Time:	0830	Project Engineer:	Debbie
Offsite Time:	1300	Weather Conditions:	Cloudy
		Ambient Temperature:	50

System Information

System Status Upon Arrival:	Operational ☐	Non-Operational ☒		
System Status Upon Departure:	Operational ☐	Non-Operational ☒		
Electric Meter Reading:				
Hour Meter Reading:	15631	Chart Recorder Paper Replaced	☐ Yes ☒ No	
Propane Usage:			Inf pH	
Totalizer Reading on DPE Unit:	214690 Stuck		Eff pH	
		Dilution Air Pipe Diameter		
Combustion Chamber Operating Temperature:		Dilution Air Flow/Temp		

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Air Velocity, FPM				
Pipe Diameter, inches				
Air Flow Rate, cfm (<250)				
Applied Vacuum, "Hg/"WC				
Temperature, deg F				
PID Readings, ppmv				

Other Readings/Measurements

Well ID	DTW ~~Stinger Depth~~	DTP ~~% Open~~	PID	Vacuum @ Wellhead	Well ID	Depth to Water	Induced Vacuum
EX-1	23.15				MW-1		
EX-2	19.05				MW-2		
EX-3	22.19				MW-3		
EX-4					MW-4		
EX-5					MW-5		
EX-6	18.52				MW-6		
					MW-7		
					MW-8		
					MW-9		

Sock

Power up
Fill Carbons water

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
~~Eagle~~ ASYSINF		~~Eagle~~ WINF	
~~Eagle~~ AEFF		~~Eagle~~ WGAC1	
		~~Eagle~~ WEFF	

Groundwater clean up analysis required:
WInf/WEff- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
GAC-1- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
Soil vapor clean up analysis required:
AInf/AEff- GRO, BTEX and MTBE, and VOCs (including PCE, TCE, VC, and Chlorobenzene)
Additional permit requirements:
WINF/WEff- VOCs (including BTEX), Total Metals (cadmium, chromium, copper lead, nickel, zinc), and Total Mercury

Operation & Maintenance Notes
Notes:
Water Effluent Flow Rate assumed 5 gpm; max monthly discharge volume 200,000 gallons/month
Air Effluent Flow Rate <250 scfm
Groundwater shall not be discharged if sewer strength exceeds benchmark values of BTEX >5ug/L.

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8015/8260
VOCs including BTEX	Start-up only	WInf & WEff	EPA Method 624
BTEX	Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
MTBE	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
1,2-DCA	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Napthalene	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Total Mercury	Start-up only	WInf & WEff	EPA Method 245.2
Total Metals	Start-up only	WInf & WEff	EPA Method 200.7
VOCs including (PCE, TCE, and Vinylchloride)	Monthly	WInf/GAC-1/WEff	EPA Method 8260
VOCs including (PCE, TCE, Vinylchloride, chlorobenzene)	Start-up/Monthly	ASysInf/AEff	EPA Method 8260

Site Name [redacted] Grim A AVO

[redacted] 1970 Seminary Ave Oakland

Date 11/2014

Date 11-20-14 Equipment Model and Serial Nos. Matco Rehab

Operators CHILL

PID Model Honeywell

Time	Hour Meter Reading hrs	Applied Vacuum "Hg "wc	Air Velocity fpm	Sys Inf Air Flow Rate[1] FPM ~~efm~~	Sys Inf Air Temp deg F	Dilution Air Flow Rate[2] fpm/cfm	Dilution Air Temp deg F	Control Temp deg F	Effluent Air Temp deg F	System Influent PID ppmv	Effluent PID ppmv	Comments/Notes
start 11/2014	15631											Totalizer 214690
0800	15631.9	15	1500	1500	78	2504	65	1450	1002	30	3.6	214700
1000	15632.1	10.5	1500	1500	95	2272	72	1543	1253	410	2.9	214750
1100	15632.1	10	1500	1500	80	2260	60	1594	1285	35	2.3	214760
1200	15632.1	10	1500	1500	80	2186	67	1599	1311	40	2.1	214770
11-21-14			150					1537	1368			60% Propane
0700	15632.1	10	1500	1500	90	2140	65	1537	1368	20	2.0	214920 | 230

[1] Diameter of the system influent air flow pipe is 4 inches

[2] Diameter of the dilution air flow pipe is 2 inches

EX-1 29' EX2 ~~27~~ EX3 EX6

1130 Grim A Sys Inf 1026493-05

1125 Grim A Eff 1026153-20

Grimit
1970 Seminary Ave.
Oakland, California

Dual Phase Extraction and Abatement System

ORIGINAL

Date:	11/25/14	Technician:	CHILL
Onsite Time:	1010	Project Engineer:	Daddi
Offsite Time:	1050	Weather Conditions:	clear
		Ambient Temperature:	65°

System Information

System Status Upon Arrival:	Operational	☒	Non-Operational	☐
System Status Upon Departure:	Operational	☐	Non-Operational	☒
Electric Meter Reading:	NM			
Hour Meter Reading:	15632	Chart Recorder Replaced	Paper	☐ Yes
Propane Usage:	10%			☒ No
Totalizer Reading on DPE Unit:	215430	Inf pH	8.37	
		Eff pH	7.28	
		Dilution Air Pipe Diameter	2	
Combustion Chamber Operating Temperature:	1450	Dilution Air Flow/Temp		

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Air Velocity, FPM		1500		
Pipe Diameter, inches		4		
Air Flow Rate, cfm (<250)				
Applied Vacuum, "Hg/"WC	10"Hg			
Temperature, deg F		90	1224	
PID Readings, ppmv		58	2.1	

Other Readings/Measurements

Well ID	Stinger Depth	% Open	PID	Vacuum @ Wellhead	Well ID	Depth to Water	Induced Vacuum
EX-1		100			MW-1		
EX-2		100			MW-2		
EX-3		100			MW-3		
EX-4		☒			MW-4		
EX-5		☒			MW-5		
EX-6		100			MW-6		
					MW-7		
					MW-8		
					MW-9		

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
Eagle ASYSINF		~~Eagle~~ WINF	112514 1035
Eagle AEFF		~~Eagle~~ WGAC1	1030
		~~Eagle~~ WEFF	1025

Grim

Groundwater clean up analysis required:
WInf/WEff- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
GAC-1- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
Soil vapor clean up analysis required:
AInf/AEff- GRO, BTEX and MTBE, and VOCs (including PCE, TCE, VC, and Chlorobenzene)
Additional permit requirements:
WINF/WEff- VOCs (including BTEX), Total Metals (cadmium, chromium, copper lead, nickel, zinc), and Total Mercury

Operation & Maintenance Notes
Notes:
Water Effluent Flow Rate assumed 5 gpm; max monthly discharge volume 200,000 gallons/month
Air Effluent Flow Rate <250 scfm
Groundwater shall not be discharged if sewer strength exceeds benchmark values of BTEX >5ug/L.

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8015/8260
VOCs including BTEX	Start-up only	WInf & WEff	EPA Method 624
BTEX	Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
MTBE	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
1,2-DCA	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Napthalene	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Total Mercury	Start-up only	WInf & WEff	EPA Method 245.2
Total Metals	Start-up only	WInf & WEff	EPA Method 200.7
VOCs including (PCE, TCE, and Vinylchloride)	Monthly	WInf/GAC-1/WEff	EPA Method 8260
VOCs including (PCE, TCE, Vinylchloride, chlorobenzene)	Start-up/Monthly	ASysInf/AEff	EPA Method 8260

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Unit # CBA 215

Date:	12-18-14	Technician:	CHILL
Onsite Time:	0730	Project Engineer:	Debbie
Offsite Time:	1130	Weather Conditions:	Cloudy Rain
		Ambient Temperature:	50

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒

System Status Upon Departure: Operational ☒ Non-Operational ☐

Electric Meter Reading: 1420

Hour Meter Reading: 00000

Chart Recorder Paper Replaced: ☐ Yes ☒ No

Propane Usage: 85%

Totalizer Reading on DPE Unit: 215530

Inf pH: ____

Eff pH: ____

Dilution Air Pipe Diameter: 2

Combustion Chamber Operating Temperature: 1484

Dilution Air Flow/Temp: 2503/64

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Air Velocity, FPM		1500		
Pipe Diameter, inches		4		
Air Flow Rate, cfm (<250)				
Applied Vacuum, ~~"Hg~~/"WC	13.5"H6			
Temperature, deg F		92		
PID Readings, ppmv		8.0	1.2	

Other Readings/Measurements

Well ID	Stinger Depth	% Open	PID	Vacuum @ Wellhead	Well ID	Depth to Water	Induced Vacuum
EX-1	19	100			MW-1		
EX-2	18	100			MW-2	17.87	4.0z
EX-3	24	100			MW-3		
EX-4	~~0~~				MW-4		
EX-5	~~0~~				MW-5		
EX-6	20	100			MW-6		
					MW-7		
					MW-8	8.98	0
					MW-9		

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
E ASYSINF -20	12/8/14 1040	I WINF	
E AEFF 1126493-15	) 1035	I WGAC1	
		I WEFF	

Groundwater clean up analysis required:
WInf/WEff- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
GAC-1- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
Soil vapor clean up analysis required:
AInf/AEff- GRO, BTEX and MTBE, and VOCs (including PCE, TCE, VC, and Chlorobenzene)
Additional permit requirements:
WINF/WEff- VOCs (including BTEX), Total Metals (cadmium, chromium, copper lead, nickel, zinc), and Total Mercury

Operation & Maintenance Notes
Notes:
Water Effluent Flow Rate assumed 5 gpm; max monthly discharge volume 200,000 gallons/month
Air Effluent Flow Rate <250 scfm
Groundwater shall not be discharged if sewer strength exceeds benchmark values of BTEX >5ug/L.
Pump Treated water To sewer - Start system
Install New HR meter

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8015/8260
VOCs including BTEX	Start-up only	WInf & WEff	EPA Method 624
BTEX	Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
MTBE	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
1,2-DCA	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Napthalene	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Total Mercury	Start-up only	WInf & WEff	EPA Method 245.2
Total Metals	Start-up only	WInf & WEff	EPA Method 200.7
VOCs including (PCE, TCE, and Vinylchloride)	Monthly	WInf/GAC-1/WEff	EPA Method 8260
VOCs including (PCE, TCE, Vinylchloride, chlorobenzene)	Start-up/Monthly	ASysInf/AEff	EPA Method 8260

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Date: 12/9/14
Onsite Time: 0700
Offsite Time: 1000

Technician: CHILC
Project Engineer: Debbie
Weather Conditions: Rain
Ambient Temperature: 50

System Information

System Status Upon Arrival: Operational [X] Non-Operational [ ]

System Status Upon Departure: Operational [X] Non-Operational [ ]

Electric Meter Reading: 16853
Hour Meter Reading: 00020
Propane Usage: 60%
Totalizer Reading on DPE Unit: 216030 ~~000220~~
Combustion Chamber Operating Temperature: 1492

Chart Recorder Paper Replaced: [X] Yes [ ] No

Inf pH 8.01
Eff pH 7.43
Dilution Air Pipe Diameter 2
Dilution Air Flow/Temp 2910/61

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Air Velocity, FPM		1500		
Pipe Diameter, inches		4		
Air Flow Rate, cfm (<250)				
Applied Vacuum, ~~"Hg~~/"WC	13"H6			
Temperature, deg F		90	1305	
PID Readings, ppmv		100	1.2	

Other Readings/Measurements

Well ID	Stinger Depth	% Open	PID	Vacuum @ Wellhead	Well ID	Depth to Water	Induced Vacuum
EX-1	21	100			MW-1		
EX-2	19	100			MW-2		
EX-3	24	100			MW-3		
EX-4	—	~~0~~			MW-4		
EX-5	—	~~0~~			MW-5		
EX-6	20	100			MW-6		
					MW-7		
					MW-8		
					MW-9		

Ser CBA2153
200TCAT LR
3 Phase 230 volt 125 Amps
1.5 SE 601487
VM CA 1033999

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
E ASYSINF		I WINF	12/9/14 0710
E AEFF		I WGAC1	0720
		I WEFF	0715

Groundwater clean up analysis required:
WInf/WEff- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
GAC-1- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
Soil vapor clean up analysis required:
AInf/AEff- GRO, BTEX and MTBE, and VOCs (including PCE, TCE, VC, and Chlorobenzene)
Additional permit requirements:
WINF/WEff- VOCs (including BTEX), Total Metals (cadmium, chromium, copper lead, nickel, zinc), and Total Mercury

Operation & Maintenance Notes
Notes:
Water Effluent Flow Rate assumed 5 gpm; max monthly discharge volume 200,000 gallons/month
Air Effluent Flow Rate <250 scfm
Groundwater shall not be discharged if sewer strength exceeds benchmark values of BTEX >5ug/L.
Tank Removed From site straight To sewer

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8015/8260
VOCs including BTEX	Start-up only	WInf & WEff	EPA Method 624
BTEX	Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
MTBE	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
1,2-DCA	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Napthalene	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Total Mercury	Start-up only	WInf & WEff	EPA Method 245.2
Total Metals	Start-up only	WInf & WEff	EPA Method 200.7
VOCs including (PCE, TCE, and Vinylchloride)	Monthly	WInf/GAC-1/WEff	EPA Method 8260
VOCs including (PCE, TCE, Vinylchloride, chlorobenzene)	Start-up/Monthly	ASysInf/AEff	EPA Method 8260

ORIGINAL

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

Date: 12-29-14
Onsite Time: 0715
Offsite Time: 0830

Technician: CHILL
Project Engineer: Debbie
Weather Conditions: Clear
Ambient Temperature: 40

System Information

System Status Upon Arrival: Operational [X] Non-Operational [ ]

System Status Upon Departure: Operational [X] Non-Operational [ ]

Electric Meter Reading: 4331

Hour Meter Reading: 00260

Chart Recorder Paper Replaced [X] Yes [ ] No

Propane Usage: 30 0/0

Totalizer Reading on DPE Unit: 218600

Inf pH _____
Eff pH _____

Dilution Air Pipe Diameter: 2

Combustion Chamber Operating Temperature: 1500

Dilution Air Flow/Temp _____

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Air Velocity, FPM		1500		
Pipe Diameter, inches		4		
Air Flow Rate, cfm (<250)				
Applied Vacuum, "Hg/"WC	7.5"Hg			
Temperature, deg F		82	1430	
PID Readings, ppmv		10	1.3	

Other Readings/Measurements

Well ID	Stinger Depth	% Open	PID	Vacuum @ Wellhead	Well ID	Depth to Water	Induced Vacuum
EX-1	21	100			MW-1		
EX-2	19	100			MW-2		
EX-3	24	100			MW-3		
EX-4	—	0			MW-4		
EX-5	—	0			MW-5		
EX-6	20	100			MW-6		
					MW-7		
					MW-8		
					MW-9		

Grimit
1970 Seminary Ave.
Oakland, California
Dual Phase Extraction and Abatement System

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
E ASYSINF		I WINF	
E AEFF		I WGAC1	
		I WEFF	

Groundwater clean up analysis required:
WInf/WEff- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
GAC-1- GRO, BTEX, MTBE, 1,2-DCA, VOCs (including PCE, TCE, VC), and napthalene
Soil vapor clean up analysis required:
AInf/AEff- GRO, BTEX and MTBE, and VOCs (including PCE, TCE, VC, and Chlorobenzene)
Additional permit requirements:
WINF/WEff- VOCs (including BTEX), Total Metals (cadmium, chromium, copper lead, nickel, zinc), and Total Mercury

Operation & Maintenance Notes
Notes:
Water Effluent Flow Rate assumed 5 gpm; max monthly discharge volume 200,000 gallons/month
Air Effluent Flow Rate <250 scfm
Groundwater shall not be discharged if sewer strength exceeds benchmark values of BTEX >5ug/L.

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8015/8260
VOCs including BTEX	Start-up only	WInf & WEff	EPA Method 624
BTEX	Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
MTBE	Start-up/Monthly	WInf/GAC-1/WEff ASysInf/AEff	EPA Method 8260
1,2-DCA	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Napthalene	Start-up/Monthly	WInf/GAC-1/WEff	EPA Method 8260
Total Mercury	Start-up only	WInf & WEff	EPA Method 245.2
Total Metals	Start-up only	WInf & WEff	EPA Method 200.7
VOCs including (PCE, TCE, and Vinylchloride)	Monthly	WInf/GAC-1/WEff	EPA Method 8260
VOCs including (PCE, TCE, Vinylchloride, chlorobenzene)	Start-up/Monthly	ASysInf/AEff	EPA Method 8260

APPENDIX B

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pace Analytical®

Report Number : 89712
Date : 01/30/2015

Laboratory Results

Debbie Barr
Stratus Environmental, Inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682

Subject : 2 Vapor Samples
Project Name : Grimit Auto
Project Number :

Dear Ms. Barr,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the TNI 2009 standards.
Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Pace Analytical Services, Inc.
Pace Analytical Services, Inc. is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.
If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

Pace Analytical®

Report Number : 89712
Date : 01/30/2015

Subject : 2 Vapor Samples
Project Name : Grimit Auto
Project Number :

Case Narrative

The Method Reporting Limit for Vinyl Chloride has been increased due to the presence of an interfering compound for sample Grim A SYSINF.

A version of this report was previously issued on 01/28/2015. This revised version with additional results replaces that report.

Pace Analytical®

Report Number : 89712
Date : 01/30/2015

Project Name : **Grimit Auto**
Project Number :

Sample : **Grim A SYSINF** Matrix : Air Lab Number : 89712-01
Sample Date :11/20/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 15:41
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 15:41
Ethylbenzene	**0.85**	0.25	mg/m3	EPA 8260B	11/20/14 15:41
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 15:41
TPH as Gasoline	**150**	20	mg/m3	EPA 8260B	11/20/14 15:41
Vinyl Chloride	< 0.50	0.50	mg/m3	EPA 8260B	11/20/14 15:41
Trichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 15:41
Tetrachloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 15:41
Chlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 15:41
P,M-Xylene	**1.5**	0.40	mg/m3	EPA 8260B	11/20/14 15:41
O-Xylene	**0.57**	0.20	mg/m3	EPA 8260B	11/20/14 15:41
n-Propylbenzene	**0.46**	0.20	mg/m3	EPA 8260B	11/20/14 15:41
1,2,4-Trimethylbenzene	**1.9**	0.20	mg/m3	EPA 8260B	11/20/14 15:41
1,2-Dichloroethane-d4 (Surr)	98.3		% Recovery	EPA 8260B	11/20/14 15:41
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/20/14 15:41

Pace Analytical®

Report Number : 89712
Date : 01/30/2015

Project Name : **Grimit Auto**
Project Number :

Sample : **Grim A EFF** Matrix : Air Lab Number : 89712-02
Sample Date :11/20/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
Ethylbenzene	< 0.25	0.25	mg/m3	EPA 8260B	11/20/14 16:26
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	11/20/14 16:26
Vinyl Chloride	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
Trichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
Tetrachloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
Chlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
P,M-Xylene	< 0.40	0.40	mg/m3	EPA 8260B	11/20/14 16:26
O-Xylene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
n-Propylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
1,2,4-Trimethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/14 16:26
1,2-Dichloroethane-d4 (Surr)	97.4		% Recovery	EPA 8260B	11/20/14 16:26
Toluene - d8 (Surr)	95.7		% Recovery	EPA 8260B	11/20/14 16:26

Report Number : 89712

Date : 01/30/2015

QC Report : Method Blank Data

Project Name : **Grimit Auto**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Ethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	11/20/2014
1,2,4-Trimethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Chlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
O-Xylene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
P,M-Xylene	< 0.40	0.40	mg/m3	EPA 8260B	11/20/2014
Tetrachloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Trichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Vinyl Chloride	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
n-Propylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
1,2-Dichloroethane-d4 (Surr)	97.7		%	EPA 8260B	11/20/2014
Toluene - d8 (Surr)	96.6		%	EPA 8260B	11/20/2014
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Ethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	11/20/2014
1,2,4-Trimethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Chlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
O-Xylene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
P,M-Xylene	< 0.40	0.40	mg/m3	EPA 8260B	11/20/2014
Tetrachloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Trichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
Vinyl Chloride	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
n-Propylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/20/2014
1,2-Dichloroethane-d4 (Surr)	98.7		%	EPA 8260B	11/20/2014
Toluene - d8 (Surr)	102		%	EPA 8260B	11/20/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Pace Analytical Services, Inc.

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 89712

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Send Report To: Debbie
Email Address:
Company: Stantec
Address: 3330 Cameron Pk Dr
Phone Number: 5306266004
Fax Number: 5306266005
Project #:
P.O. #:
Project Name: Grimit Auto
Project Address: Oakland

Electronic Data Deliverable (EDD):
☐ CA EDF ☐ CA WriteOn ☐ WA EIM
☐ Excel ☐ EQuIS _____ (formal) ☐ Other _____
Global ID (for CA EDF use): T0600100667
EDD Deliverable To (Email Address):
Sampling Company: Stantec
Sampler Signature:
Invoice To: Stantec

Sample Identification	Sampling Date	Sampling Time	# of Containers: 40 ml VOA	Sleeve	Poly	Glass	Tedlar	# Preserved: HCl	HNO_3	None			Matrix: Water	Soil	Air	Other (specify)	TPH: ☒ Gasoline (8015)	☒ Gasoline (8260)	☐ Diesel	☐ Motor Oil	☐ Other (specify):	8260B: BTEX: Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	5 Oxygenates: MTBE	DIPE	ETBE	TAME	TBA	7 Oxygenates (5 Oxygenates plus): Ethanol	Methanol	Lead Scavengers: 1,2 DCA	1,2 EDB	Halogenated Volatile Organic Compounds (former 8010 list)	Volatile Organic Compounds Full List	524: Volatile Organics by EPA Method 524.2	Metals: Metals Group (Method: _____): ☐ CAM 17 ☐ LUFT 5	Individual Metals (list and enter method):	SHORT HOLD: ☐ Nitrate as N ☐ Ferrous Iron	☐ Nitrate as N ☐ Nitrite as NO_2	☐ Nitrate as NO_3 ☐ Nitrite as NO_2	Chromium VI by (circle one: EPA 7199 EPA 7196) EPA 7199 is the default	Other	For Lab Use Only
Grim A SysInit	112014	1130					X			X					X		X	X				X	X																							01
Grim A EFF	112014	1125					X			X					X		X	X				X	X																							02

Relinquished by (signature/affiliation): [signature] Stantec — Date & Time: 11/20/14 1330
Received by (signature/affiliation): — Date & Time:
Relinquished by (signature/affiliation): — Date & Time:
Received by (signature/affiliation): — Date & Time:
Relinquished by (signature/affiliation): — Date & Time:
Received by Kiff Analytical (signature): Michelle Spencer — Date & Time: 112014 1330

Remarks and Special Instructions (composite, filter, MS/MSD, return samples, Silica Gel, etc.):
24 HR TAT on EFF
STD on other

Turnaround Time (TAT - Circle One):
Standard 4-Day 3-Day 2-Day 1-Day Other: _____
TAT in business days. Surcharge may apply. TAT for subcontracted work may vary. Advance notice to Kiff of your sampling event is recommended or Short Hold or expedited TAT cannot be guaranteed.

Page 6 of 7

Distribution: Original - Lab; Copy - Originator
Rev: 071514

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

SRG #: 89712

Sample Receipt	Initials/Date: MAS 11/20/14	Storage Time: 1330	Sample Login	Initials/Date: MAS 11/20/14

TAT: ☐ Standard ☐ Rush ☒ Split ☐ None Method of Receipt: ☐ Courier ☒ Over-the-counter ☐ Shipped

Temp °C ☒ N/A Therm ID Time Coolant present ☐ Yes ☐ No ☐ Water ☐ Temp Excursion

For Shipments Only: Cooler Receipt Initials/Date/Time: Custody Seals ☐ N/A ☐ Intact ☐ Broken

Chain-of-Custody:	Yes	No
Is COC present?	X	
Is COC signed by relinquisher?	X	
Is COC dated by relinquisher?	X	
Is the sampler's name on the COC?	X	
Are there analyses or hold for all samples?	X	

Documented on	COC	Labels	Discrepancies:
Sample ID	X	X	
Project ID	X		
Sample Date	X	X	
Sample Time	X	X	
Does COC match project history?	☒ N/A	☐ Yes	☐ No

Samples:	N/A	Yes	No
Are sample custody seals intact?	X		
Are sample containers intact?		X	
Is preservation documented?	X		
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?	X		
Are samples within holding time?		X	
Are sample container types correct?		X	
Is there adequate sample volume?		X	

Comments: Tedlars 1026493-05 & 20. MAS 11/20/14 1332 TPH as Gasoline requested by 8015 & 8260. Per S. Forbes, SR will log it in by 8260. MAS 11/20/14 1424

Receipt Details:

Matrix	Container Type	# of Containers
AR	Tedlar	2

Requires client: Clarification ☐ Approval ☐ Notification ☒

Proceed With Analysis: ☐ YES ☐ NO Init/Date:

Client Communication:

Pace Analytical®

Report Number : 89947
Date : 12/19/2014

Laboratory Results

Debbie Barr
Stratus Environmental, Inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682

Subject : 2 Vapor Samples
Project Name : Grimit Auto
Project Number :

Dear Ms. Barr,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the TNI 2009 standards.
Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Pace Analytical Services, Inc.
Pace Analytical Services, Inc. is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.
If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

Pace Analytical®

Report Number : 89947
Date : 12/19/2014

Subject : 2 Vapor Samples
Project Name : Grimit Auto
Project Number :

Case Narrative

Naphthalene results from Tedlar bag sample containers are likely biased low.

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Report Number : 89947
Date : 12/19/2014

Sample : **Grim A SYSINF**
Project Name : **Grimit Auto**
Project Number : Lab Number : 89947-01
Matrix : Air Sample Date :12/18/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	12/18/14 18:12
TPH as Gasoline	**33**	20	mg/m3	12/18/14 18:12
Dichlorodifluoromethane	< 0.20	0.20	mg/m3	12/18/14 18:12
Chloromethane	< 0.20	0.20	mg/m3	12/18/14 18:12
Vinyl Chloride	< 0.20	0.20	mg/m3	12/18/14 18:12
Chloroethane	< 0.20	0.20	mg/m3	12/18/14 18:12
Trichlorofluoromethane	< 0.20	0.20	mg/m3	12/18/14 18:12
1,1-Dichloroethene	< 0.20	0.20	mg/m3	12/18/14 18:12
Methylene Chloride	< 2.0	2.0	mg/m3	12/18/14 18:12
trans-1,2-Dichloroethene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,1-Dichloroethane	< 0.20	0.20	mg/m3	12/18/14 18:12
2,2-Dichloropropane	< 0.20	0.20	mg/m3	12/18/14 18:12
cis-1,2-Dichloroethene	< 0.20	0.20	mg/m3	12/18/14 18:12
Chloroform	< 0.20	0.20	mg/m3	12/18/14 18:12
Bromochloromethane	< 0.20	0.20	mg/m3	12/18/14 18:12
1,1,1-Trichloroethane	< 0.20	0.20	mg/m3	12/18/14 18:12
1,1-Dichloropropene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2-Dichloroethane	< 0.20	0.20	mg/m3	12/18/14 18:12
Carbon Tetrachloride	< 0.20	0.20	mg/m3	12/18/14 18:12
Benzene	**0.41**	0.20	mg/m3	12/18/14 18:12
Trichloroethene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2-Dichloropropane	< 0.20	0.20	mg/m3	12/18/14 18:12
Bromodichloromethane	< 0.20	0.20	mg/m3	12/18/14 18:12
Dibromomethane	< 0.20	0.20	mg/m3	12/18/14 18:12
cis-1,3-Dichloropropene	< 0.20	0.20	mg/m3	12/18/14 18:12
Toluene	**0.43**	0.20	mg/m3	12/18/14 18:12
trans-1,3-Dichloropropene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,1,2-Trichloroethane	< 0.20	0.20	mg/m3	12/18/14 18:12
1,3-Dichloropropane	< 0.20	0.20	mg/m3	12/18/14 18:12
Tetrachloroethene	< 0.20	0.20	mg/m3	12/18/14 18:12
Dibromochloromethane	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2-Dibromoethane	< 0.20	0.20	mg/m3	12/18/14 18:12
Chlorobenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,1,1,2-Tetrachloroethane	< 0.20	0.20	mg/m3	12/18/14 18:12

Pace Analytical®

Report Number : 89947
Date : 12/19/2014

Sample : **Grim A SYSINF**
Project Name : **Grimit Auto**
Project Number : Lab Number : 89947-01
Matrix : Air Sample Date :12/18/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Ethylbenzene	**0.94**	0.25	mg/m3	12/18/14 18:12
P,M-Xylene	**1.5**	0.40	mg/m3	12/18/14 18:12
O-Xylene	**0.46**	0.20	mg/m3	12/18/14 18:12
Styrene	< 0.20	0.20	mg/m3	12/18/14 18:12
Isopropyl benzene	< 0.20	0.20	mg/m3	12/18/14 18:12
Bromoform	< 0.20	0.20	mg/m3	12/18/14 18:12
1,1,2,2-Tetrachloroethane	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2,3-Trichloropropane	< 0.20	0.20	mg/m3	12/18/14 18:12
n-Propylbenzene	**0.20**	0.20	mg/m3	12/18/14 18:12
Bromobenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,3,5-Trimethylbenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
2+4-Chlorotoluene	< 0.25	0.25	mg/m3	12/18/14 18:12
tert-Butylbenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2,4-Trimethylbenzene	**0.55**	0.20	mg/m3	12/18/14 18:12
sec-Butylbenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
p-Isopropyltoluene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,3-Dichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,4-Dichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
n-Butylbenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2-Dichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2-Dibromo-3-chloropropane	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2,4-Trichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
Hexachlorobutadiene	< 0.20	0.20	mg/m3	12/18/14 18:12
Naphthalene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2,3-Trichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 18:12
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	12/18/14 18:12
4-Bromofluorobenzene (Surr)	100		% Recovery	12/18/14 18:12
Toluene - d8 (Surr)	101		% Recovery	12/18/14 18:12

Pace Analytical®

Report Number : 89947
Date : 12/19/2014

Sample : **Grim A EFF**
Project Name : **Grimit Auto**
Project Number : Lab Number : 89947-02
Matrix : Air Sample Date :12/18/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	12/18/14 17:36
TPH as Gasoline	< 20	20	mg/m3	12/18/14 17:36
Dichlorodifluoromethane	< 0.20	0.20	mg/m3	12/18/14 17:36
Chloromethane	< 0.20	0.20	mg/m3	12/18/14 17:36
Vinyl Chloride	< 0.20	0.20	mg/m3	12/18/14 17:36
Chloroethane	< 0.20	0.20	mg/m3	12/18/14 17:36
Trichlorofluoromethane	< 0.20	0.20	mg/m3	12/18/14 17:36
1,1-Dichloroethene	< 0.20	0.20	mg/m3	12/18/14 17:36
Methylene Chloride	< 2.0	2.0	mg/m3	12/18/14 17:36
trans-1,2-Dichloroethene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,1-Dichloroethane	< 0.20	0.20	mg/m3	12/18/14 17:36
2,2-Dichloropropane	< 0.20	0.20	mg/m3	12/18/14 17:36
cis-1,2-Dichloroethene	< 0.20	0.20	mg/m3	12/18/14 17:36
Chloroform	< 0.20	0.20	mg/m3	12/18/14 17:36
Bromochloromethane	< 0.20	0.20	mg/m3	12/18/14 17:36
1,1,1-Trichloroethane	< 0.20	0.20	mg/m3	12/18/14 17:36
1,1-Dichloropropene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2-Dichloroethane	< 0.20	0.20	mg/m3	12/18/14 17:36
Carbon Tetrachloride	< 0.20	0.20	mg/m3	12/18/14 17:36
Benzene	< 0.20	0.20	mg/m3	12/18/14 17:36
Trichloroethene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2-Dichloropropane	< 0.20	0.20	mg/m3	12/18/14 17:36
Bromodichloromethane	< 0.20	0.20	mg/m3	12/18/14 17:36
Dibromomethane	< 0.20	0.20	mg/m3	12/18/14 17:36
cis-1,3-Dichloropropene	< 0.20	0.20	mg/m3	12/18/14 17:36
Toluene	< 0.20	0.20	mg/m3	12/18/14 17:36
trans-1,3-Dichloropropene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,1,2-Trichloroethane	< 0.20	0.20	mg/m3	12/18/14 17:36
1,3-Dichloropropane	< 0.20	0.20	mg/m3	12/18/14 17:36
Tetrachloroethene	< 0.20	0.20	mg/m3	12/18/14 17:36
Dibromochloromethane	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2-Dibromoethane	< 0.20	0.20	mg/m3	12/18/14 17:36
Chlorobenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,1,1,2-Tetrachloroethane	< 0.20	0.20	mg/m3	12/18/14 17:36

Pace Analytical®

Report Number : 89947
Date : 12/19/2014

Sample : **Grim A EFF**
Project Name : **Grimit Auto**
Project Number : Lab Number : 89947-02
Matrix : Air Sample Date :12/18/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Ethylbenzene	< 0.25	0.25	mg/m3	12/18/14 17:36
P,M-Xylene	< 0.40	0.40	mg/m3	12/18/14 17:36
O-Xylene	< 0.20	0.20	mg/m3	12/18/14 17:36
Styrene	< 0.20	0.20	mg/m3	12/18/14 17:36
Isopropyl benzene	< 0.20	0.20	mg/m3	12/18/14 17:36
Bromoform	< 0.20	0.20	mg/m3	12/18/14 17:36
1,1,2,2-Tetrachloroethane	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2,3-Trichloropropane	< 0.20	0.20	mg/m3	12/18/14 17:36
n-Propylbenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
Bromobenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,3,5-Trimethylbenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
2+4-Chlorotoluene	< 0.25	0.25	mg/m3	12/18/14 17:36
tert-Butylbenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2,4-Trimethylbenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
sec-Butylbenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
p-Isopropyltoluene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,3-Dichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,4-Dichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
n-Butylbenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2-Dichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2-Dibromo-3-chloropropane	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2,4-Trichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
Hexachlorobutadiene	< 0.20	0.20	mg/m3	12/18/14 17:36
Naphthalene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2,3-Trichlorobenzene	< 0.20	0.20	mg/m3	12/18/14 17:36
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	12/18/14 17:36
4-Bromofluorobenzene (Surr)	101		% Recovery	12/18/14 17:36
Toluene - d8 (Surr)	102		% Recovery	12/18/14 17:36

Report Number : 89947

Date : 12/19/2014

QC Report : Method Blank Data

Project Name : **Grimit Auto**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	12/18/2014
1,1,1,2-Tetrachloroethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,1,1-Trichloroethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,1,2,2-Tetrachloroethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,1,2-Trichloroethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,1-Dichloroethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,1-Dichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,1-Dichloropropene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2,3-Trichlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2,3-Trichloropropane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2,4-Trichlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2,4-Trimethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2-Dibromo-3-chloropropane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2-Dibromoethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2-Dichlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2-Dichloroethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2-Dichloropropane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,3,5-Trimethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,3-Dichlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,3-Dichloropropane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,4-Dichlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
2+4-Chlorotoluene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
2,2-Dichloropropane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Bromobenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Bromochloromethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Bromodichloromethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Bromoform	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Carbon Tetrachloride	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Chlorobenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Chloroethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Chloroform	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Chloromethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Dibromochloromethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Dibromomethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Dichlorodifluoromethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Ethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Hexachlorobutadiene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Isopropyl benzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Methylene Chloride	< 2.0	2.0	mg/m3	EPA 8260B	12/18/2014
Naphthalene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
O-Xylene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
P,M-Xylene	< 0.40	0.40	mg/m3	EPA 8260B	12/18/2014
Styrene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Tetrachloroethene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Trichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Trichlorofluoromethane	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
Vinyl Chloride	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
cis-1,2-Dichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
cis-1,3-Dichloropropene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
n-Butylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
n-Propylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
p-Isopropyltoluene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
sec-Butylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
tert-Butylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
trans-1,2-Dichloroethene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
trans-1,3-Dichloropropene	< 0.20	0.20	mg/m3	EPA 8260B	12/18/2014
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	12/18/2014
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	12/18/2014
Toluene - d8 (Surr)	101		%	EPA 8260B	12/18/2014

Pace Analytical Services, Inc.

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

89947

Page: 1 of 1

Section A Required Client Information:

Company: Stantec
Address: 3330 Cameron Pk Dr
Cameron Pk CA
Email To:
Phone: 530 676 6004 Fax: 530 676 6005
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Debbie BARR
Copy To:
Purchase Order No.:
Project Name: Grimit Auto
Project Number:

Section C Invoice Information:

Attention: Debbie
Company Name: Stantec
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: CA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: 8260 8015/8260 8260 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Grim A Sys Inf	DW	G	12/8/14	1040				1	X								X	X X X X	N	* VOCs including
2	Grim A Eff	AR	G	"	1035				1	X								X	X X X X	N	PCE, TCE, Vinyl chloride, Chlorobenzene
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
24 HR TAT on Eff	Stantec	12/8/14	1320				
STD TAT on Sys Inf							
				Pace Analytical	12/8/14	1320	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: A HILL
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 12/8/14

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

SAMPLE RECEIPT CHECKLIST

SRG #: 89947

Sample Receipt	Initials/Date: EMG 121814	Storage Time: 1320	Sample Login	Initials/Date: EMG 121814

TAT: ☐ Standard ☐ Rush ☑ Split ☐ None

Method of Receipt: ☐ Courier ☑ Over-the-counter ☐ Shipped

Temp °C	☑ N/A	Therm ID	Time	Coolant present	☐ Yes	☐ No	☐ Water	☐ Temp Excursion

For Shipments Only:	Cooler Receipt Initials/Date/Time:	Custody Seals	☐ N/A	☐ Intact	☐ Broken

Chain-of-Custody:	Yes	No
Is COC present?	✓	
Is COC signed by relinquisher?	✓	
Is COC dated by relinquisher?	✓	
Is the sampler's name on the COC?	✓	
Are there analyses or hold for all samples?	✓	

Documented on	COC	Labels	Discrepancies:
Sample ID	✓	✓	
Project ID	✓		
Sample Date	✓	✓	
Sample Time	✓	✓	
Does COC match project history?	☐ N/A	☐ Yes	☑ No

Samples:	N/A	Yes	No
Are sample custody seals intact?	✓		
Are sample containers intact?		✓	
Is preservation documented?	✓		
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?	✓		
Are samples within holding time?		✓	
Are sample container types correct?		✓	
Is there adequate sample volume?		✓	

Comments: Tedlar bags: 1026493-20, -15.
EMG 121814 1320

Receipt Details:

Matrix	Container Type	# of Containers
AR	Tedlar	02

Requires client: Clarification ☐ Approval ☐ Notification ☐

Proceed With Analysis: ☐ YES ☐ NO Init/Date:
Client Communication:

Alpha Analytical, Inc.

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: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received : 11/25/14

Job: Grimit Auto

Metals by ICPMS
EPA Method 200.8

Parameter		Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **Grim W INF**					
Lab ID : STR14112541-01A	Chromium (Cr)	ND	10 µg/L	12/01/14 14:05	12/03/14 14:29
Date Sampled 11/25/14 10:35	Iron (Fe)	580	300 µg/L	12/01/14 14:05	12/03/14 14:29
	Nickel (Ni)	ND	10 µg/L	12/01/14 14:05	12/03/14 14:29
	Copper (Cu)	26	20 µg/L	12/01/14 14:05	12/03/14 14:29
	Zinc (Zn)	ND	100 µg/L	12/01/14 14:05	12/03/14 14:29
	Arsenic (As)	5.5	5.0 µg/L	12/01/14 14:05	12/03/14 14:29
	Silver (Ag)	ND	5.0 µg/L	12/01/14 14:05	12/03/14 14:29
	Cadmium (Cd)	ND	2.0 µg/L	12/01/14 14:05	12/03/14 14:29
	Lead (Pb)	ND	5.0 µg/L	12/01/14 14:05	12/03/14 14:29
Client ID: **Grim W EFF**					
Lab ID : STR14112541-03A	Chromium (Cr)	ND	10 µg/L	12/01/14 14:05	12/03/14 14:32
Date Sampled 11/25/14 10:25	Iron (Fe)	ND	300 µg/L	12/01/14 14:05	12/03/14 14:32
	Nickel (Ni)	ND	10 µg/L	12/01/14 14:05	12/03/14 14:32
	Copper (Cu)	ND	20 µg/L	12/01/14 14:05	12/03/14 14:32
	Zinc (Zn)	ND	100 µg/L	12/01/14 14:05	12/03/14 14:32
	Arsenic (As)	25	5.0 µg/L	12/01/14 14:05	12/03/14 14:32
	Silver (Ag)	ND	5.0 µg/L	12/01/14 14:05	12/03/14 14:32
	Cadmium (Cd)	ND	2.0 µg/L	12/01/14 14:05	12/03/14 14:32
	Lead (Pb)	ND	5.0 µg/L	12/01/14 14:05	12/03/14 14:32

ND = Not Detected
Reported in micrograms per Liter, per client request.

ACLASS ACCREDITED DoD ELAP

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 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

12/4/14
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received : 11/25/14

Job: Grimit Auto

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B / SW8260B

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**Grim W INF**					
Lab ID :	STR14112541-01A	TPH-P (GRO)	75	50 µg/L	12/02/14	12/02/14
Date Sampled	11/25/14 10:35					
Client ID :	**Grim W GAC 1**					
Lab ID :	STR14112541-02A	TPH-P (GRO)	ND	50 µg/L	12/02/14	12/02/14
Date Sampled	11/25/14 10:30					
Client ID :	**Grim W EFF**					
Lab ID :	STR14112541-03A	TPH-P (GRO)	ND	50 µg/L	12/02/14	12/02/14
Date Sampled	11/25/14 10:25					

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

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

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

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861
Job: Grimit Auto

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005

Alpha Analytical Number: STR14112541-01A
Client I.D. Number: Grim W INF

Sampled: 11/25/14 10:35
Received: 11/25/14
Extracted: 12/02/14
Analyzed: 12/02/14

Volatile Organics by GC/MS
EPA Method 624/SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	Methyl tert-butyl ether (MTBE)	ND	1.0 µg/L
10	1,1-Dichloroethane	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	Benzene	ND	1.0 µg/L
16	1,2-Dichloropropane	ND	1.0 µg/L
17	Trichloroethene	ND	1.0 µg/L
18	Bromodichloromethane	ND	1.0 µg/L
19	2-Chloroethylvinylether	ND	5.0 µg/L
20	cis-1,3-Dichloropropene	ND	1.0 µg/L
21	trans-1,3-Dichloropropene	ND	1.0 µg/L
22	1,1,2-Trichloroethane	ND	1.0 µg/L
23	Toluene	ND	1.0 µg/L
24	Dibromochloromethane	ND	1.0 µg/L
25	Tetrachloroethene	ND	1.0 µg/L
26	Chlorobenzene	ND	1.0 µg/L
27	Ethylbenzene	1.9	1.0 µg/L
28	m,p-Xylene	3.1	1.0 µg/L
29	Bromoform	ND	1.0 µg/L
30	o-Xylene	1.0	1.0 µg/L
31	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
32	1,3-Dichlorobenzene	ND	1.0 µg/L
33	1,4-Dichlorobenzene	ND	1.0 µg/L
34	1,2-Dichlorobenzene	ND	1.0 µg/L
35	Naphthalene	3.6	2.0 µg/L

ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861
Job: Grimit Auto

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005

Alpha Analytical Number: STR14112541-02A
Client I.D. Number: Grim W GAC 1

Sampled: 11/25/14 10:30
Received: 11/25/14
Extracted: 12/02/14
Analyzed: 12/02/14

Volatile Organics by GC/MS
EPA Method 624/SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	Methyl tert-butyl ether (MTBE)	ND	1.0 µg/L
10	1,1-Dichloroethane	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	Benzene	ND	1.0 µg/L
16	1,2-Dichloropropane	ND	1.0 µg/L
17	Trichloroethene	ND	1.0 µg/L
18	Bromodichloromethane	ND	1.0 µg/L
19	2-Chloroethylvinylether	ND	5.0 µg/L
20	cis-1,3-Dichloropropene	ND	1.0 µg/L
21	trans-1,3-Dichloropropene	ND	1.0 µg/L
22	1,1,2-Trichloroethane	ND	1.0 µg/L
23	Toluene	ND	1.0 µg/L
24	Dibromochloromethane	ND	1.0 µg/L
25	Tetrachloroethene	ND	1.0 µg/L
26	Chlorobenzene	ND	1.0 µg/L
27	Ethylbenzene	ND	1.0 µg/L
28	m,p-Xylene	ND	1.0 µg/L
29	Bromoform	ND	1.0 µg/L
30	o-Xylene	ND	1.0 µg/L
31	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
32	1,3-Dichlorobenzene	ND	1.0 µg/L
33	1,4-Dichlorobenzene	ND	1.0 µg/L
34	1,2-Dichlorobenzene	ND	1.0 µg/L
35	Naphthalene	ND	2.0 µg/L

ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

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12/4/14
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861
Job: Grimit Auto

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005

Alpha Analytical Number: STR14112541-03A
Client I.D. Number: Grim W EFF

Sampled: 11/25/14 10:25
Received: 11/25/14
Extracted: 12/02/14
Analyzed: 12/02/14

Volatile Organics by GC/MS
EPA Method 624/SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	Methyl tert-butyl ether (MTBE)	ND	1.0 µg/L
10	1,1-Dichloroethane	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	Benzene	ND	1.0 µg/L
16	1,2-Dichloropropane	ND	1.0 µg/L
17	Trichloroethene	ND	1.0 µg/L
18	Bromodichloromethane	ND	1.0 µg/L
19	2-Chloroethylvinylether	ND	5.0 µg/L
20	cis-1,3-Dichloropropene	ND	1.0 µg/L
21	trans-1,3-Dichloropropene	ND	1.0 µg/L
22	1,1,2-Trichloroethane	ND	1.0 µg/L
23	Toluene	ND	1.0 µg/L
24	Dibromochloromethane	ND	1.0 µg/L
25	Tetrachloroethene	ND	1.0 µg/L
26	Chlorobenzene	ND	1.0 µg/L
27	Ethylbenzene	ND	1.0 µg/L
28	m,p-Xylene	ND	1.0 µg/L
29	Bromoform	ND	1.0 µg/L
30	o-Xylene	ND	1.0 µg/L
31	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
32	1,3-Dichlorobenzene	ND	1.0 µg/L
33	1,4-Dichlorobenzene	ND	1.0 µg/L
34	1,2-Dichlorobenzene	ND	1.0 µg/L
35	Naphthalene	ND	2.0 µg/L

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

12/4/14
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: STR14112541 **Job:** Grimit Auto

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14112541-01A	Grim W INF	Aqueous	2
14112541-02A	Grim W GAC 1	Aqueous	2
14112541-03A	Grim W EFF	Aqueous	7

12/4/14

Report Date

Alpha Analytical, Inc.

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

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

Date: 04-Dec-14

QC Summary Report

Work Order: 14112541

Method Blank

Type **MBLK** Test Code: **EPA Method 200.8**

File ID: **1** Batch ID: **33957** Analysis Date: **12/03/2014 13:52**

Sample ID: **MB-33957** Units : µg/L Run ID: **MANUAL_141203G** Prep Date: **12/01/2014 14:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	10								
Iron (Fe)	ND	300								
Nickel (Ni)	ND	10								
Copper (Cu)	ND	20								
Zinc (Zn)	ND	100								
Arsenic (As)	ND	5								
Silver (Ag)	ND	5								
Cadmium (Cd)	ND	2								
Lead (Pb)	ND	5								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 200.8**

File ID: **4** Batch ID: **33957** Analysis Date: **12/03/2014 14:12**

Sample ID: **LCS-33957** Units : µg/L Run ID: **MANUAL_141203G** Prep Date: **12/01/2014 14:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	46.6	10	50		93	85	115			
Iron (Fe)	5090	300	5000		102	85	115			
Nickel (Ni)	48.5	10	50		97	85	115			
Copper (Cu)	49.8	20	50		99.7	85	115			
Zinc (Zn)	490	100	500		98	85	115			
Arsenic (As)	50.6	5	50		101	85	115			
Silver (Ag)	47	5	50		94	85	115			
Cadmium (Cd)	47	2	50		94	85	115			
Lead (Pb)	47.7	5	50		95	85	115			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 200.8**

File ID: **5** Batch ID: **33957** Analysis Date: **12/03/2014 14:14**

Sample ID: **14112426-01AMS** Units : µg/L Run ID: **MANUAL_141203G** Prep Date: **12/01/2014 14:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	83.9	10	50	39.29	89	70	130			
Iron (Fe)	5780	300	5000	756.4	100	70	130			
Nickel (Ni)	53.7	10	50	0	107	70	130			
Copper (Cu)	213	20	50	166.8	92	70	130			
Zinc (Zn)	572	100	500	0	114	70	130			
Arsenic (As)	105	5	50	57.8	95	70	130			
Silver (Ag)	46.7	5	50	0	93	70	130			
Cadmium (Cd)	46.4	2	50	0	93	70	130			
Lead (Pb)	50.5	5	50	0	101	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 200.8**

File ID: **6** Batch ID: **33957** Analysis Date: **12/03/2014 14:17**

Sample ID: **14112426-01AMSD** Units : µg/L Run ID: **MANUAL_141203G** Prep Date: **12/01/2014 14:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	88.2	10	50	39.29	98	70	130	83.94	4.9(20)	
Iron (Fe)	6020	300	5000	756.4	105	70	130	5778	4.0(20)	
Nickel (Ni)	56.2	10	50	0	112	70	130	53.7	4.6(20)	
Copper (Cu)	445	20	50	166.8	556	70	130	212.6	70.7(20)	M1 R58
Zinc (Zn)	605	100	500	0	121	70	130	572.4	5.5(20)	
Arsenic (As)	111	5	50	57.8	106	70	130	105.2	5.0(20)	
Silver (Ag)	47.9	5	50	0	96	70	130	46.74	2.5(20)	
Cadmium (Cd)	49.1	2	50	0	98	70	130	46.4	5.6(20)	
Lead (Pb)	52.1	5	50	0	104	70	130	50.5	3.1(20)	

Alpha Analytical, Inc.

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

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

Date: *04-Dec-14*

QC Summary Report

Work Order: 14112541

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.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

R58 = MS/MSD RPD exceeded the laboratory control limit.

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

Date: *04-Dec-14*

QC Summary Report

Work Order: 14112541

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141202\14120206.D** Batch ID: **MS10W1202B** Analysis Date: **12/02/2014 13:20**

Sample ID: **MBLK MS10W1202B** Units : **µg/L** Run ID: **MSD_10_141202A** Prep Date: **12/02/2014 13:20**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.79		10		98	70	130			
Surr: Toluene-d8	11.1		10		111	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141202\14120205.D** Batch ID: **MS10W1202B** Analysis Date: **12/02/2014 12:34**

Sample ID: **GLCS MS10W1202B** Units : **µg/L** Run ID: **MSD_10_141202A** Prep Date: **12/02/2014 12:34**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	343	50	400		86	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10		99	70	130			
Surr: Toluene-d8	10.8		10		108	70	130			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141202\14120220.D** Batch ID: **MS10W1202B** Analysis Date: **12/02/2014 18:13**

Sample ID: **14112541-03AGS** Units : **µg/L** Run ID: **MSD_10_141202A** Prep Date: **12/02/2014 18:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1590	250	2000	0	80	54	143			
Surr: 1,2-Dichloroethane-d4	49.4		50		99	70	130			
Surr: Toluene-d8	53.6		50		107	70	130			
Surr: 4-Bromofluorobenzene	51.9		50		104	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141202\14120221.D** Batch ID: **MS10W1202B** Analysis Date: **12/02/2014 18:33**

Sample ID: **14112541-03AGSD** Units : **µg/L** Run ID: **MSD_10_141202A** Prep Date: **12/02/2014 18:33**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2070	250	2000	0	104	54	143	1591	26.4(23)	R5
Surr: 1,2-Dichloroethane-d4	49.7		50		99	70	130			
Surr: Toluene-d8	52		50		104	70	130			
Surr: 4-Bromofluorobenzene	51.9		50		104	70	130			

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.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

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

Date: 04-Dec-14

QC Summary Report

Work Order: 14112541

Method Blank

Type **MBLK** Test Code: **EPA Method 624/SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141202\14120206.D** Batch ID: **MS10W1202I** Analysis Date: **12/02/2014 13:20**

Sample ID: **MBLK MS10W1202I** Units : µg/L Run ID: **MSD_10_141202B** Prep Date: **12/02/2014 13:20**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	2								
Vinyl chloride	ND	1								
Chloroethane	ND	1								
Bromomethane	ND	2								
Trichlorofluoromethane	ND	1								
1,1-Dichloroethene	ND	1								
Dichloromethane	ND	2								
trans-1,2-Dichloroethene	ND	1								
Methyl tert-butyl ether (MTBE)	ND	1								
1,1-Dichloroethane	ND	1								
Chloroform	ND	1								
1,2-Dichloroethane	ND	1								
1,1,1-Trichloroethane	ND	1								
Carbon tetrachloride	ND	1								
Benzene	ND	1								
1,2-Dichloropropane	ND	1								
Trichloroethene	ND	1								
Bromodichloromethane	ND	1								
2-Chloroethylvinylether	ND	5								
cis-1,3-Dichloropropene	ND	1								
trans-1,3-Dichloropropene	ND	1								
1,1,2-Trichloroethane	ND	1								
Toluene	ND	1								
Dibromochloromethane	ND	1								
Tetrachloroethene	ND	1								
Chlorobenzene	ND	1								
Ethylbenzene	ND	1								
m,p-Xylene	ND	1								
Bromoform	ND	1								
o-Xylene	ND	1								
1,1,2,2-Tetrachloroethane	ND	1								
1,3-Dichlorobenzene	ND	1								
1,4-Dichlorobenzene	ND	1								
1,2-Dichlorobenzene	ND	1								
Naphthalene	ND	2								
Surr: 1,2-Dichloroethane-d4	9.79		10		98	70	130			
Surr: Toluene-d8	11.1		10		111	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141202\14120204.D** Batch ID: **MS10W1202I** Analysis Date: **12/02/2014 12:14**

Sample ID: **LCS MS10W1202I** Units : µg/L Run ID: **MSD_10_141202B** Prep Date: **12/02/2014 12:14**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	10.7	1	10		107	1	234			
Methyl tert-butyl ether (MTBE)	10.9	0.5	10		109	63	137			
Benzene	11.1	0.5	10		111	37	151			
Trichloroethene	11.1	1	10		111	71	157			
Toluene	11.1	0.5	10		111	47	150			
Chlorobenzene	9.68	1	10		97	37	160			
Ethylbenzene	9.68	0.5	10		97	37	162			
m,p-Xylene	9.46	0.5	10		95	65	139			
o-Xylene	9.45	0.5	10		95	70	130			
Surr: 1,2-Dichloroethane-d4	9.93		10		99	70	130			
Surr: Toluene-d8	11.1		10		111	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Alpha Analytical, Inc.

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Date: *04-Dec-14*

QC Summary Report

Work Order: 14112541

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141203\14120307.D** Batch ID: **MS10W1202I** Analysis Date: **12/03/2014 13:28**

Sample ID: **14112503-01AMS** Units : µg/L Run ID: **MSD_10_141202B** Prep Date: **12/03/2014 13:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	65.8	2.5	50	0	132	1	234			
Methyl tert-butyl ether (MTBE)	70.7	1.3	50	0	141	56	140			M1
Benzene	66.7	1.3	50	0	133	37	151			
Trichloroethene	64.6	2.5	50	0	129	71	157			
Toluene	60.3	1.3	50	0	121	47	150			
Chlorobenzene	54.2	2.5	50	0	108	37	160			
Ethylbenzene	51.7	1.3	50	0	103	37	162			
m,p-Xylene	47.9	1.3	50	0	96	65	139			
o-Xylene	49.5	1.3	50	0	99	69	130			
Surr: 1,2-Dichloroethane-d4	48.5		50		97	70	130			
Surr: Toluene-d8	52.7		50		105	70	130			
Surr: 4-Bromofluorobenzene	52.6		50		105	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141203\14120308.D** Batch ID: **MS10W1202I** Analysis Date: **12/03/2014 13:48**

Sample ID: **14112503-01AMSD** Units : µg/L Run ID: **MSD_10_141202B** Prep Date: **12/03/2014 13:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	58.6	2.5	50	0	117	1	234	65.81	11.7(21)	
Methyl tert-butyl ether (MTBE)	63.2	1.3	50	0	126	56	140	70.67	11.2(40)	
Benzene	60.7	1.3	50	0	121	37	151	66.66	9.4(21)	
Trichloroethene	58.8	2.5	50	0	118	71	157	64.59	9.3(20)	
Toluene	54.2	1.3	50	0	108	47	150	60.33	10.7(20)	
Chlorobenzene	48.7	2.5	50	0	97	37	160	54.15	10.6(20)	
Ethylbenzene	46.3	1.3	50	0	93	37	162	51.68	10.9(20)	
m,p-Xylene	42.7	1.3	50	0	85	65	139	47.85	11.3(20)	
o-Xylene	43.7	1.3	50	0	87	69	130	49.45	12.4(20)	
Surr: 1,2-Dichloroethane-d4	48.2		50		96	70	130			
Surr: Toluene-d8	52.6		50		105	70	130			
Surr: 4-Bromofluorobenzene	52.4		50		105	70	130			

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.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

December 04, 2014

CLS Work Order #: CXK1133
COC #:

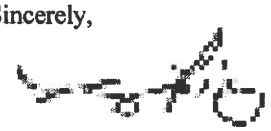
Reyna Vallejo
Alpha Analytical, Inc.-Sparks
255 Glendale Ave.; Suite 21
Sparks, NV 89431

Project Name: STR14112541

Enclosed are the results of analyses for samples received by the laboratory on 11/25/14 13:55. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



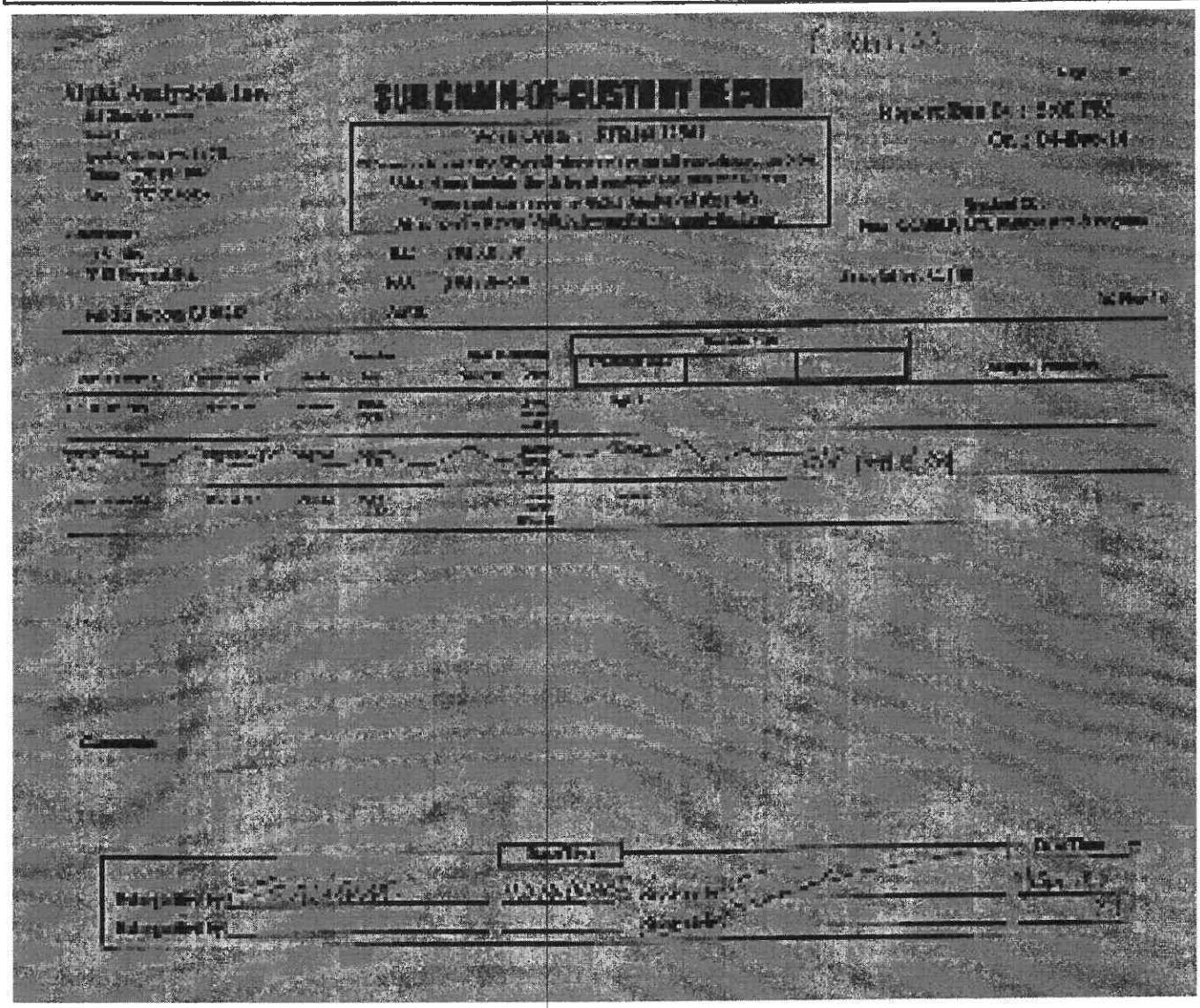
James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

12/04/14 13:57

Alpha Analytical, Inc.-Sparks	Project: STR14112541	
255 Glendale Ave.; Suite 21	Project Number: [none]	**CLS Work Order #: CXK1133**
Sparks, NV 89431	Project Manager: Reyna Vallejo	COC #:



CALIFORNIA LABORATORY SERVICES

12/04/14 13:57

Alpha Analytical, Inc.-Sparks
255 Glendale Ave.; Suite 21
Sparks, NV 89431

Project: STR14112541
Project Number: [none]
Project Manager: Reyna Vallejo

CLS Work Order #: CXK1133
COC #:

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
STR14112541-01A - Grim W INF (CXK1133-01) Aqueous Sampled: 11/25/14 10:35 Received: 11/25/14 13:55									
Mercury	ND	0.20	µg/L	1	CX08472	11/26/14	11/26/14	EPA 245.1	
STR14112541-03A - Grim W EFF (CXK1133-02) Aqueous Sampled: 11/25/14 10:25 Received: 11/25/14 13:55									
Mercury	ND	0.20	µg/L	1	CX08472	11/26/14	11/26/14	EPA 245.1	

Alpha Analytical, Inc.-Sparks
255 Glendale Ave., Suite 21
Sparks, NV 89431

Project: STR14112541
Project Number: [none]
Project Manager: Reyna Vallejo

CLS Work Order #: CXK1133
COC #:

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CX08472 - EPA 7470A										
Blank (CX08472-BLK1)				Prepared & Analyzed: 11/26/14						
Mercury	ND	0.20	µg/L							
LCS (CX08472-BS1)				Prepared & Analyzed: 11/26/14						
Mercury	4.50	0.20	µg/L	5.00		90	85-115			
Matrix Spike (CX08472-MS1)	**Source: CXK1143-01**			Prepared & Analyzed: 11/26/14						
Mercury	1400	20	µg/L	5.00	2560	NR	70-130			QM-4X
Matrix Spike Dup (CX08472-MSD1)	**Source: CXK1143-01**			Prepared & Analyzed: 11/26/14						
Mercury	1450	20	µg/L	5.00	2560	NR	70-130	4	25	QM-4X

CALIFORNIA LABORATORY SERVICES

12/04/14 13:57

Alpha Analytical, Inc.-Sparks	Project: STR14112541	
255 Glendale Ave.; Suite 21	Project Number: [none]	**CLS Work Order #: CXK1133**
Sparks, NV 89431	Project Manager: Reyna Vallejo	COC #:

Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Reyna Vallejo

From: Reyna Vallejo
Sent: Thursday, December 04, 2014 3:35 PM
To: Allan Dudding (adudding@stratusinc.net); Debbie Barr (dbarr@stratusinc.net); Gowri Kowtha (gkowtha@stratusinc.net); Scott Bittinger (sbittinger@stratusinc.net); 'Trevor Hartwell'
Subject: STR14120245 EAGLE GAS-PDF FILE
Attachments: STR14120245F_EAGLE GAS.pdf

Please find the attached PDF file.

Alpha Analytical, Inc. appreciates your business. If you have any questions regarding the electronic report, please contact Client Services by phone at (800)283-1183 or by e-mail at reyna@alpha-analytical.com.

Reyna Vallejo
Project Manager/Sample Control Supervisor
Alpha Analytical, Inc.
(800)283-1183 ext. 120

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

CA

WorkOrder : STR14112541

Report Due By : 5:00 PM On : 04-Dec-14

Report Attention	Phone Number	EMail Address
Scott Bittinger	(530) 676-2062 x	sbittinger@stratusinc.net

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

PO :

Client's COC # : 16869 Job : Grimit Auto

EDD Required : Yes

Sampled by : C. Hill

Cooler Temp	Samples Received	Date Printed
3 °C	25-Nov-14	26-Nov-14

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests MERCURY_DW	METALS_DW	TPH/P_W	VOC_W					Sample Remarks
STR14112541-01A	Grim W INF	AQ	11/25/14 10:35	5	1	5	Hg(SUB)	Spec List	GAS-C	Special Analyte List : 624 QC Criteria					
STR14112541-02A	Grim W GAC 1	AQ	11/25/14 10:30	4	0	5			GAS-C	Special Analyte List : 624 QC Criteria					
STR14112541-03A	Grim W EFF	AQ	11/25/14 10:25	5	1	5	Hg(SUB)	Spec List	GAS-C	Special Analyte List : 624 QC Criteria					

Comments: Prelogged on 11/25/14 in order for SAC office to sub Total Mercury by 245.1 to CLS. Remaining samples received on 11/26/14. Security seals intact. Frozen ice. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHAVEZ	**Alpha Analytical, Inc.**	11/26/14 1145

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:

Company: Stratus
Attn: Debbie
Address: 5330 Carnegie Pkwy
City, State, Zip: Carnegie Pk
Phone Number: 5306266604 Fax: 5306266603

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 — Phone: 775-355-1044, Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 — Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 — Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 — Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 — Phone: 702-281-4848

16869

Page # 1 of 1

Consultant/ Client Info:

Company: Stratus
Address:
City, State, Zip:

Job and Purchase Order Info:

Job #
Job Name: Grimit Auto
P.O. #:

Report Attention/Project Manager:

Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:

EDD Required? Yes / No — EDF Required? Yes / No
Global ID: T0600100667
Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR (CA) KS NV OR WA DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: 8015, 8260 GRO & BTEX	VOCs 624 8260	MTBE, 1,2DCA 8260	Naphthalene 8260	Total 245.1 Mercury	Total metals 200.8	VOC's including PCE, TCE, Vinyl chloride	Chromium			Remarks
1035	11/25/14	AQ	STR141125 01A	Grim w INF	5DAY	6		X	X	X	X	X	X	X	X	X			metals
1050			-02A	Grim w GAC1	5DAY	4		X	X	X	X	X			X	X			Cadmium
1125	11/25/14		-03A	Grim w EFF	5DAY	6		X	X	X	X	X	X	X	X	X			Chromium
																			Copper
																			Lead
																			Nickel
																			Zinc
																			Arsenic
																			Iron
																			Silver
																			added based on paperwork from D.Barr

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: CHILL

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Chill Stratus	11/25/14	1220	E. Finnigan	72514	1220
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date: 11-26-14	Time: 0930
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received : 12/20/14

Job: Grimit Auto

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

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**Grim W INF**					
Lab ID :	STR14122242-01A	TPH-P (GRO)	130	50 µg/L	12/22/14	12/22/14
Date Sampled	12/19/14 07:10	Vinyl chloride	ND	1.0 µg/L	12/22/14	12/22/14
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	12/22/14	12/22/14
		1,2-Dichloroethane	ND	1.0 µg/L	12/22/14	12/22/14
		Benzene	1.9	0.50 µg/L	12/22/14	12/22/14
		Trichloroethene	ND	1.0 µg/L	12/22/14	12/22/14
		Toluene	2.6	0.50 µg/L	12/22/14	12/22/14
		Tetrachloroethene	ND	1.0 µg/L	12/22/14	12/22/14
		Ethylbenzene	4.0	0.50 µg/L	12/22/14	12/22/14
		m,p-Xylene	6.2	0.50 µg/L	12/22/14	12/22/14
		o-Xylene	2.9	0.50 µg/L	12/22/14	12/22/14
		Naphthalene	11	2.0 µg/L	12/22/14	12/22/14

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

ACLASS ACCREDITED DoD ELAP

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 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.
Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

NELAP ACCREDITED LABORATORY

12/23/14
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: STR14122242 **Job:** Grimit Auto

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14122242-01A	Grim W INF	Aqueous	2

12/23/14

Report Date

Alpha Analytical, Inc.

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

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

Date: *26-Dec-14*

QC Summary Report

Work Order: 14122242

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141222\14122206.D** Batch ID: **MS10W1222B** Analysis Date: **12/22/2014 13:12**

Sample ID: **MBLK MS10W1222B** Units : **µg/L** Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 13:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.92		10		99	70	130			
Surr: Toluene-d8	11.3		10		113	70	130			
Surr: 4-Bromofluorobenzene	9.25		10		93	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141222\14122204.D** Batch ID: **MS10W1222B** Analysis Date: **12/22/2014 12:28**

Sample ID: **GLCS MS10W1222B** Units : **µg/L** Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 12:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	352	50	400		88	70	130			
Surr: 1,2-Dichloroethane-d4	10.2		10		102	70	130			
Surr: Toluene-d8	11.5		10		115	70	130			
Surr: 4-Bromofluorobenzene	11.2		10		112	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141222\14122218.D** Batch ID: **MS10W1222B** Analysis Date: **12/22/2014 17:37**

Sample ID: **14121120-21AGS** Units : **µg/L** Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 17:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1810	250	2000	0	90	54	143			
Surr: 1,2-Dichloroethane-d4	56		50		112	70	130			
Surr: Toluene-d8	55.9		50		112	70	130			
Surr: 4-Bromofluorobenzene	53.6		50		107	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\141222\14122219.D** Batch ID: **MS10W1222B** Analysis Date: **12/22/2014 17:59**

Sample ID: **14121120-21AGSD** Units : **µg/L** Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 17:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1990	250	2000	0	99	54	143	1810	9.4(23)	
Surr: 1,2-Dichloroethane-d4	56		50		112	70	130			
Surr: Toluene-d8	56.3		50		113	70	130			
Surr: 4-Bromofluorobenzene	52.8		50		106	70	130			

Comments:

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

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

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

Date: *26-Dec-14*

QC Summary Report

Work Order: 14122242

Method Blank

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

File ID: **C:\HPCHEM\MS10\DATA\141222\14122206.D** Batch ID: **MS10W1222A** Analysis Date: **12/22/2014 13:12**

Sample ID: **MBLK MS10W1222A** Units : µg/L Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 13:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Vinyl chloride	ND	1								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,2-Dichloroethane	ND	1								
Benzene	ND	0.5								
Trichloroethene	ND	1								
Toluene	ND	0.5								
Tetrachloroethene	ND	1								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Naphthalene	ND	2								
Surr: 1,2-Dichloroethane-d4	9.92		10		99	70	130			
Surr: Toluene-d8	11.3		10		113	70	130			
Surr: 4-Bromofluorobenzene	9.25		10		93	70	130			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS10\DATA\141222\14122203.D** Batch ID: **MS10W1222A** Analysis Date: **12/22/2014 11:56**

Sample ID: **LCS MS10W1222A** Units : µg/L Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	12.2	0.5	10		122	63	137			
Benzene	9.78	0.5	10		98	70	130			
Trichloroethene	9.46	1	10		95	68	138			
Toluene	11.1	0.5	10		111	80	120			
Ethylbenzene	9.73	0.5	10		97	80	120			
m,p-Xylene	9.07	0.5	10		91	65	139			
o-Xylene	9.23	0.5	10		92	70	130			
Surr: 1,2-Dichloroethane-d4	11.1		10		111	70	130			
Surr: Toluene-d8	11.9		10		119	70	130			
Surr: 4-Bromofluorobenzene	11.4		10		114	70	130			

Sample Matrix Spike

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

File ID: **C:\HPCHEM\MS10\DATA\141222\14122216.D** Batch ID: **MS10W1222A** Analysis Date: **12/22/2014 16:53**

Sample ID: **14121801-01AMS** Units : µg/L Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 16:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	75.7	1.3	50	0	151	56	140			M1
Benzene	55.4	1.3	50	0	111	67	134			
Trichloroethene	53.7	2.5	50	0	107	68	138			
Toluene	60.9	1.3	50	0	122	38	130			
Ethylbenzene	52.5	1.3	50	0	105	70	130			
m,p-Xylene	48.9	1.3	50	0	98	65	139			
o-Xylene	50.5	1.3	50	0	101	69	130			
Surr: 1,2-Dichloroethane-d4	59.2		50		118	70	130			
Surr: Toluene-d8	57.8		50		116	70	130			
Surr: 4-Bromofluorobenzene	55.4		50		111	70	130			

Sample Matrix Spike Duplicate

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

File ID: **C:\HPCHEM\MS10\DATA\141222\14122217.D** Batch ID: **MS10W1222A** Analysis Date: **12/22/2014 17:15**

Sample ID: **14121801-01AMSD** Units : µg/L Run ID: **MSD_10_141222A** Prep Date: **12/22/2014 17:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	66.9	1.3	50	0	134	56	140	75.69	12.4(40)	
Benzene	48.4	1.3	50	0	97	67	134	55.42	13.5(21)	
Trichloroethene	46.7	2.5	50	0	93	68	138	53.7	14.1(20)	
Toluene	52.7	1.3	50	0	105	38	130	60.85	14.4(20)	
Ethylbenzene	45.9	1.3	50	0	92	70	130	52.54	13.4(20)	
m,p-Xylene	43.6	1.3	50	0	87	65	139	48.88	11.4(20)	
o-Xylene	44.7	1.3	50	0	89	69	130	50.46	12.2(20)	
Surr: 1,2-Dichloroethane-d4	60.5		50		121	70	130			
Surr: Toluene-d8	57.3		50		115	70	130			
Surr: 4-Bromofluorobenzene	53.8		50		108	70	130			

Alpha Analytical, Inc.

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

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

Date: *26-Dec-14*

QC Summary Report

Work Order: 14122242

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.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

Billing Information :

CHAIN-OF-CUSTODY RECORD

RUSH!

CA

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

WorkOrder : STR14122242

Report Due By : 5:00 PM On : 23-Dec-14

Report Attention	Phone Number	EMail Address
Scott Bittinger	(530) 676-2062 x	sbittinger@stratusinc.net

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

EDD Required : Yes

Sampled by : C. Hill

PO :

Client's COC # : 16871 Job : Grimit Auto

Cooler Temp	Samples Received	Date Printed
0 °C	20-Dec-14	22-Dec-14

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_W	VOC_W							Sample Remarks
STR14122242-01A	Grim W INF	AQ	12/19/14 07:10	6	0	1	GAS-C	BTEX/M/ 1-2DCA/Naph./ PCE/TCE/ Vinyl Cl_C							

Comments: 24hr TAT. Security seals intact. Frozen ice. Saturday delivery; kept cold and secure until login on Monday, 12/22/14. TAT logged in per client notes. Chain split into three work orders due to different TAT. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	12/22/14 1005

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:

Company: Stantec
Attn: Debbie
Address: 3330 Cameron Park Dr #12
City, State, Zip: Cameron Park
Phone Number: 530 676 6004 Fax: 530 672 6004

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

16871

Page # 1 of 1

Consultant/ Client Info:

Company: Stantec
Address:
City, State, Zip:

Job and Purchase Order Info:

Job #
Job Name: Grimit Auto
P.O. #:

Report Attention/Project Manager:

Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No
Global ID: T0600100667
Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR CA KS NV OR WA DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: BTEX, 8260 BTEX	MTBE, 1,2 DCA 8260	Naphthalene 8260	VOC's PCE, TCE 8260	Vinyl Chloride	Remarks
0710	12/19/14	AQ	[redacted]	Grim W INF	5DAY	6		X	X	X	X	X	X	
0720	"	AQ		Grim W GAC 1	STD	6		X	X	X	X	X	X	
0715	"	AQ		Grim W EFF	5DAY	6		X	X	X	X	X	X	

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: CHRIS

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	121914	1155	[signature]	121914	1155
			[signature]	12-22-14	0930

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received : 12/20/14

Job: Grimit Auto

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

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**Grim W GAC 1**					
Lab ID :	STR14122243-01A	TPH-P (GRO)	ND	50 µg/L	12/23/14	12/23/14
Date Sampled	12/19/14 07:20	Vinyl chloride	ND	1.0 µg/L	12/23/14	12/23/14
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	12/23/14	12/23/14
		1,2-Dichloroethane	ND	1.0 µg/L	12/23/14	12/23/14
		Benzene	ND	0.50 µg/L	12/23/14	12/23/14
		Trichloroethene	ND	1.0 µg/L	12/23/14	12/23/14
		Toluene	ND	0.50 µg/L	12/23/14	12/23/14
		Tetrachloroethene	ND	1.0 µg/L	12/23/14	12/23/14
		Ethylbenzene	ND	0.50 µg/L	12/23/14	12/23/14
		m,p-Xylene	ND	0.50 µg/L	12/23/14	12/23/14
		o-Xylene	ND	0.50 µg/L	12/23/14	12/23/14
		Naphthalene	ND	2.0 µg/L	12/23/14	12/23/14

Gasoline Range Organics (GRO) C4-C13

ND = Not Detected
Reported in micrograms per Liter, per client request.

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.

NELAP ACCREDITED LABORATORY

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

12/30/14
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: STR14122243 **Job:** Grimit Auto

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14122243-01A	Grim W GAC 1	Aqueous	2

12/30/14

Report Date

Alpha Analytical, Inc.

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

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

Date: *30-Dec-14*

QC Summary Report

Work Order: 14122243

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14122305.D** Batch ID: **MS12W1223B** Analysis Date: **12/23/2014 13:11**

Sample ID: **MBLK MS12W1223B** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 13:11**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.8		10		118	70	130			
Surr: Toluene-d8	9.59		10		96	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14122303.D** Batch ID: **MS12W1223B** Analysis Date: **12/23/2014 12:21**

Sample ID: **GLCS MS12W1223B** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 12:21**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	453	50	400		113	70	130			
Surr: 1,2-Dichloroethane-d4	11.5		10		115	70	130			
Surr: Toluene-d8	9.05		10		91	70	130			
Surr: 4-Bromofluorobenzene	10.2		10		102	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14122320.D** Batch ID: **MS12W1223B** Analysis Date: **12/23/2014 18:56**

Sample ID: **14122243-01AGS** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 18:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2020	250	2000	0	101	54	143			
Surr: 1,2-Dichloroethane-d4	53.6		50		107	70	130			
Surr: Toluene-d8	46		50		92	70	130			
Surr: 4-Bromofluorobenzene	53.7		50		107	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **14122321.D** Batch ID: **MS12W1223B** Analysis Date: **12/23/2014 19:17**

Sample ID: **14122243-01AGSD** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 19:17**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1850	250	2000	0	92	54	143	2018	9.0(23)	
Surr: 1,2-Dichloroethane-d4	50.7		50		101	70	130			
Surr: Toluene-d8	46.6		50		93	70	130			
Surr: 4-Bromofluorobenzene	54		50		108	70	130			

Comments:

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

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

Date: 30-Dec-14

QC Summary Report

Work Order: 14122243

Method Blank

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

File ID: **14122305.D** Batch ID: **MS12W1223A** Analysis Date: **12/23/2014 13:11**

Sample ID: **MBLK MS12W1223A** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 13:11**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Vinyl chloride	ND	1								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,2-Dichloroethane	ND	1								
Benzene	ND	0.5								
Trichloroethene	ND	1								
Toluene	ND	0.5								
Tetrachloroethene	ND	1								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Naphthalene	ND	2								
Surr: 1,2-Dichloroethane-d4	11.8		10		118	70	130			
Surr: Toluene-d8	9.59		10		96	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Laboratory Control Spike

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

File ID: **14122304.D** Batch ID: **MS12W1223A** Analysis Date: **12/23/2014 12:42**

Sample ID: **LCS MS12W1223A** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 12:42**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	12.6	0.5	10		126	63	137			
Benzene	11	0.5	10		110	70	130			
Trichloroethene	7.52	1	10		75	68	138			
Toluene	10.5	0.5	10		105	80	120			
Ethylbenzene	9.54	0.5	10		95	80	120			
m,p-Xylene	10	0.5	10		100	65	139			
o-Xylene	9.77	0.5	10		98	70	130			
Surr: 1,2-Dichloroethane-d4	11.5		10		115	70	130			
Surr: Toluene-d8	9.25		10		93	70	130			
Surr: 4-Bromofluorobenzene	10		10		100	70	130			

Sample Matrix Spike

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

File ID: **14122318.D** Batch ID: **MS12W1223A** Analysis Date: **12/23/2014 18:14**

Sample ID: **14122243-01AMS** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 18:14**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	60.3	1.3	50	0	121	56	140			
Benzene	53.8	1.3	50	0	108	67	134			
Trichloroethene	37.5	2.5	50	0	75	68	138			
Toluene	53	1.3	50	0	106	38	130			
Ethylbenzene	48.7	1.3	50	0	97	70	130			
m,p-Xylene	51	1.3	50	0	102	65	139			
o-Xylene	50.3	1.3	50	0	101	69	130			
Surr: 1,2-Dichloroethane-d4	56.2		50		112	70	130			
Surr: Toluene-d8	45.7		50		91	70	130			
Surr: 4-Bromofluorobenzene	49.4		50		99	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14122319.D** Batch ID: **MS12W1223A** Analysis Date: **12/23/2014 18:35**

Sample ID: **14122243-01AMSD** Units : µg/L Run ID: **MSD_12_141223A** Prep Date: **12/23/2014 18:35**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	56.7	1.3	50	0	113	56	140	60.29	6.1(40)	
Benzene	50.8	1.3	50	0	102	67	134	53.82	5.8(21)	
Trichloroethene	35.5	2.5	50	0	71	68	138	37.46	5.3(20)	
Toluene	50	1.3	50	0	99.9	38	130	53.02	5.9(20)	
Ethylbenzene	46.8	1.3	50	0	94	70	130	48.74	4.1(20)	
m,p-Xylene	48.9	1.3	50	0	98	65	139	51.01	4.2(20)	
o-Xylene	48.2	1.3	50	0	96	69	130	50.34	4.4(20)	
Surr: 1,2-Dichloroethane-d4	55.1		50		110	70	130			
Surr: Toluene-d8	46		50		92	70	130			
Surr: 4-Bromofluorobenzene	49.1		50		98	70	130			

Alpha Analytical, Inc.

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

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

Date: *30-Dec-14*

QC Summary Report

Work Order: 14122243

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.

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

CA

WorkOrder : STR14122243

Report Due By : 5:00 PM On : 30-Dec-14

Report Attention	Phone Number	EMail Address
Scott Bittinger	(530) 676-2062 x	sbittinger@stratusinc.net

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

PO :

Client's COC # : 16871 Job : Grimit Auto

EDD Required : **Yes**

Sampled by : C. Hill

Cooler Temp	Samples Received	Date Printed
0 °C	20-Dec-14	22-Dec-14

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_W	VOC_W							Sample Remarks
STR14122243-01A	Grim W GAC 1	AQ	12/19/14 07:20	6	0	5	GAS-C	BTEX/M/ 1-2DCA/Naph./ PCE/TCE/ Vinyl Cl_C							

Comments: Security seals intact. Frozen ice. Saturday delivery; kept cold and secure until login on Monday, 12/22/14. Chain split into three work orders due to different TAT. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	12/22/14 1019

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:

Company: Stantec
Attn: Debbie
Address: 3330 Cameron Park Dr
City, State, Zip: Cameron Park
Phone Number: 530 676 6004 Fax: 530 676 6005

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 — Phone: 775-355-1044, Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 — Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 — Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 — Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 — Phone: 702-281-4848

16871

Page # 1 of 1

Consultant/ Client Info:

Company: Stantec
Address:
City, State, Zip:

Job and Purchase Order Info:

Job #
Job Name: Grimit Auto
P.O. #:

Report Attention/Project Manager:

Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:

EDD Required? Yes / No — EDF Required? Yes / No
Global ID: T0600100667
Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR CA KS NV OR WA DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: 8015, 8260 GRO, BTEX	8260 MTBE, 1,2DCA	8260 Naphthalene	8260 VOCs PCE, TCE	8260 Vinyl Chloride	Remarks
0710	12/19/14	AQ		Grim w INF	5DAY	6		X	X	X	X	X	X	
0720	)	AQ	STR-141222-43-01A	Grim w GAC's	STD	6		X	X	X	X	X	X	
0715	)	AQ		Grim w EFF	5DAY	6		X	X	X	X	X	X	

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: C. Ohle

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
C. Ohle Stantec	121914	1155	E. Fruciano	121914	1155
				12-22-14	0930

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received : 12/20/14

Job: Grimit Auto

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

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**Grim W EFF**					
Lab ID :	STR14122241-01A	TPH-P (GRO)	ND	50 µg/L	12/22/14	12/22/14
Date Sampled	12/19/14 07:15	Vinyl chloride	ND	1.0 µg/L	12/22/14	12/22/14
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	12/22/14	12/22/14
		1,2-Dichloroethane	ND	1.0 µg/L	12/22/14	12/22/14
		Benzene	ND	0.50 µg/L	12/22/14	12/22/14
		Trichloroethene	ND	1.0 µg/L	12/22/14	12/22/14
		Toluene	ND	0.50 µg/L	12/22/14	12/22/14
		Tetrachloroethene	ND	1.0 µg/L	12/22/14	12/22/14
		Ethylbenzene	ND	0.50 µg/L	12/22/14	12/22/14
		m,p-Xylene	ND	0.50 µg/L	12/22/14	12/22/14
		o-Xylene	ND	0.50 µg/L	12/22/14	12/22/14
		Naphthalene	ND	2.0 µg/L	12/22/14	12/22/14

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

ACLASS ACCREDITED DoD ELAP

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 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way.
Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

12/22/14
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: STR14122241 **Job:** Grimit Auto

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14122241-01A	Grim W EFF	Aqueous	2

12/22/14

Report Date

Alpha Analytical, Inc.

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

Date: *26-Dec-14*

QC Summary Report

Work Order: 14122241

Method Blank

File ID: **14122204.D** Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

Sample ID: **MBLK MS12W1222B** Batch ID: **MS12W1222B** Analysis Date: **12/22/2014 12:25**

Units : µg/L Run ID: **MSD_12_141222A** Prep Date: **12/22/2014 12:25**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.7		10		117	70	130			
Surr: Toluene-d8	9.48		10		95	70	130			
Surr: 4-Bromofluorobenzene	13.2		10		132	70	130			S55

Laboratory Control Spike

File ID: **14122203.D** Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

Sample ID: **GLCS MS12W1222B** Batch ID: **MS12W1222B** Analysis Date: **12/22/2014 12:04**

Units : µg/L Run ID: **MSD_12_141222A** Prep Date: **12/22/2014 12:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	417	50	400		104	70	130			
Surr: 1,2-Dichloroethane-d4	11.5		10		115	70	130			
Surr: Toluene-d8	9.13		10		91	70	130			
Surr: 4-Bromofluorobenzene	10.5		10		105	70	130			

Sample Matrix Spike

File ID: **14122210.D** Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

Sample ID: **14122241-01AGS** Batch ID: **MS12W1222B** Analysis Date: **12/22/2014 15:14**

Units : µg/L Run ID: **MSD_12_141222A** Prep Date: **12/22/2014 15:14**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2050	250	2000	0	103	54	143			
Surr: 1,2-Dichloroethane-d4	55.1		50		110	70	130			
Surr: Toluene-d8	45.5		50		91	70	130			
Surr: 4-Bromofluorobenzene	54.5		50		109	70	130			

Sample Matrix Spike Duplicate

File ID: **14122211.D** Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

Sample ID: **14122241-01AGSD** Batch ID: **MS12W1222B** Analysis Date: **12/22/2014 15:35**

Units : µg/L Run ID: **MSD_12_141222A** Prep Date: **12/22/2014 15:35**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2040	250	2000	0	102	54	143	2052	0.4(23)	
Surr: 1,2-Dichloroethane-d4	51.9		50		104	70	130			
Surr: Toluene-d8	46.3		50		93	70	130			
Surr: 4-Bromofluorobenzene	54.3		50		109	70	130			

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.

S55 = Surrogate recovery was above laboratory acceptance limits.

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

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

Date: 26-Dec-14

QC Summary Report

Work Order: 14122241

Method Blank

File ID: **14122204.D** Type **MBLK** Test Code: **EPA Method SW8260B**

Sample ID: **MBLK MS12W1222A** Units : **µg/L** Batch ID: **MS12W1222A** Run ID: **MSD_12_141222A** Analysis Date: **12/22/2014 12:25** Prep Date: **12/22/2014 12:25**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Vinyl chloride	ND	1								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,2-Dichloroethane	ND	1								
Benzene	ND	0.5								
Trichloroethene	ND	1								
Toluene	ND	0.5								
Tetrachloroethene	ND	1								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Naphthalene	ND	2								
Surr: 1,2-Dichloroethane-d4	11.7		10		117	70	130			
Surr: Toluene-d8	9.48		10		95	70	130			
Surr: 4-Bromofluorobenzene	13.2		10		132	70	130			S55

Laboratory Control Spike

File ID: **14122202.D** Type **LCS** Test Code: **EPA Method SW8260B**

Sample ID: **LCS MS12W1222A** Units : **µg/L** Batch ID: **MS12W1222A** Run ID: **MSD_12_141222A** Analysis Date: **12/22/2014 11:41** Prep Date: **12/22/2014 11:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	13	0.5	10		130	63	137			
Benzene	10.2	0.5	10		102	70	130			
Trichloroethene	7.13	1	10		71	68	138			
Toluene	9.92	0.5	10		99	80	120			
Ethylbenzene	9.23	0.5	10		92	80	120			
m,p-Xylene	9.61	0.5	10		96	65	139			
o-Xylene	9.61	0.5	10		96	70	130			
Surr: 1,2-Dichloroethane-d4	11.7		10		117	70	130			
Surr: Toluene-d8	9.18		10		92	70	130			
Surr: 4-Bromofluorobenzene	9.85		10		99	70	130			

Sample Matrix Spike

File ID: **14122208.D** Type **MS** Test Code: **EPA Method SW8260B**

Sample ID: **14122241-01AMS** Units : **µg/L** Batch ID: **MS12W1222A** Run ID: **MSD_12_141222A** Analysis Date: **12/22/2014 14:30** Prep Date: **12/22/2014 14:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	57.8	1.3	50	0	116	56	140			
Benzene	55.2	1.3	50	0	110	67	134			
Trichloroethene	37.5	2.5	50	0	75	68	138			
Toluene	54.1	1.3	50	0	108	38	130			
Ethylbenzene	52.4	1.3	50	0	105	70	130			
m,p-Xylene	56.6	1.3	50	0	113	65	139			
o-Xylene	54.8	1.3	50	0	110	69	130			
Surr: 1,2-Dichloroethane-d4	55.3		50		111	70	130			
Surr: Toluene-d8	47		50		94	70	130			
Surr: 4-Bromofluorobenzene	49		50		98	70	130			

Sample Matrix Spike Duplicate

File ID: **14122209.D** Type **MSD** Test Code: **EPA Method SW8260B**

Sample ID: **14122241-01AMSD** Units : **µg/L** Batch ID: **MS12W1222A** Run ID: **MSD_12_141222A** Analysis Date: **12/22/2014 14:52** Prep Date: **12/22/2014 14:52**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	63	1.3	50	0	126	56	140	57.75	8.7(40)	
Benzene	53.2	1.3	50	0	106	67	134	55.21	3.7(21)	
Trichloroethene	35.9	2.5	50	0	72	68	138	37.47	4.3(20)	
Toluene	52.4	1.3	50	0	105	38	130	54.13	3.2(20)	
Ethylbenzene	48	1.3	50	0	96	70	130	52.44	8.9(20)	
m,p-Xylene	50.9	1.3	50	0	102	65	139	56.6	10.6(20)	
o-Xylene	50	1.3	50	0	100	69	130	54.75	9.1(20)	
Surr: 1,2-Dichloroethane-d4	59.4		50		119	70	130			
Surr: Toluene-d8	45.7		50		91	70	130			
Surr: 4-Bromofluorobenzene	51.1		50		102	70	130			

Alpha Analytical, Inc.

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

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

Date: *26-Dec-14*

QC Summary Report

Work Order: 14122241

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.

S55 = Surrogate recovery was above laboratory acceptance limits.

Billing Information :

CHAIN-OF-CUSTODY RECORD

RUSH!

CA

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

WorkOrder : STR14122241

Report Due By : 5:00 PM On : 22-Dec-14

Report Attention	Phone Number	EMail Address
Scott Bittinger	(530) 676-2062 x	sbittinger@stratusinc.net

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

EDD Required : **Yes**

Sampled by : C. Hill

PO :

Client's COC # : 16871 Job : Grimit Auto

Cooler Temp	Samples Received	Date Printed
0 °C	20-Dec-14	22-Dec-14

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_W	VOC_W							Sample Remarks
STR14122241-01A	Grim W EFF	AQ	12/19/14 07:15	6	0	0	GAS-C	BTEX/M/ 1-2DCA/Naph./ PCE/TCE/ Vinyl Cl_C							

Comments: ASAP TAT. Security seals intact. Frozen ice. Saturday delivery; kept cold and secure until login on Monday, 12/22/14. TAT logged in per client notes. Chain split into three work orders due to different TAT. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIANNA CHACON	Alpha Analytical, Inc.	12/22/14 0954

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:

Company: Stanley's
Attn: Debbie
Address: 3330 Cameron Park Dr #12
City, State, Zip: Cameron Park
Phone Number: 530 676 6404 Fax: 530 676 6005

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 — Phone: 775-355-1044, Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 — Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 — Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 — Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 — Phone: 702-281-4848

16871

Page # 1 of 1

Consultant/ Client Info:

Company: Stanley's
Address:
City, State, Zip:

Job and Purchase Order Info:

Job #
Job Name: Grimit Auto
P.O. #:

Report Attention/Project Manager:

Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:

EDD Required? Yes / No — EDF Required? Yes / No
Global ID: T0600100667
Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR CA KS NV OR WA DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: BTEX, 8260	MTBE, 8260	Naphthalene	VOCs PCE, TCE 8260	Vinyl Chloride	Remarks
0710	12/19/14	AQ		Grim W INF	5DAY	6		X	X	X	X	X	X	
0720	)	AQ		Grim W GAC1	STD	6		X	X	X	X	X	X	
0715	)	AQ	1412224-01A	Grim W EFF	5DAY	6		X	X	X	X	X	X	

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: Office

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Stanley	121914	1155	E. Arguiano	121914	1155
				12-22-14	0930

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

NOTE: Samples are discarded 60 days after sample receipt 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

APPENDIX C

GEOTRACKER ELECTRONIC SUBMITTAL CONFIRMATIONS

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

Submittal Type:	EDF
Report Title:	4Q14 QSR 11-20-14 AINF-AEFF
Report Type:	Remedial Progress Report
Facility Global ID:	T0600100667
Facility Name:	GRIMIT AUTO REPAIR & SERVICE
File Name:	EDF_GrimitAuto_89712.ZIP
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/30/2015 2:10:51 PM
Confirmation Number:	8016683995

VIEW QC REPORT

VIEW DETECTIONS REPORT

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

Submittal Type:	EDF
Report Title:	4Q14 QSR 12-18-14 AINF-AEFF
Report Type:	Remedial Progress Report
Facility Global ID:	T0600100667
Facility Name:	GRIMIT AUTO REPAIR & SERVICE
File Name:	EDF_GrimitAuto_89947.ZIP
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/28/2015 12:04:52 PM
Confirmation Number:	6360307812

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

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Submittal Type:	EDF
Report Title:	4Q14 QSR 11-25-14 WINF-WEFF
Report Type:	Remedial Investigation Report
Facility Global ID:	T0600100667
Facility Name:	GRIMIT AUTO REPAIR & SERVICE
File Name:	14112541_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/9/2015 4:57:11 PM
Confirmation Number:	7172126114

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
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Submittal Type:	EDF
Report Title:	4Q14 QSR 12-19-14 WGAC
Report Type:	Remedial Progress Report
Facility Global ID:	T0600100667
Facility Name:	GRIMIT AUTO REPAIR & SERVICE
File Name:	14122243_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/9/2015 4:58:04 PM
Confirmation Number:	9055457413

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Submittal Type:	EDF
Report Title:	4Q14 QSR 12-19-14 WINF
Report Type:	Remedial Progress Report
Facility Global ID:	T0600100667
Facility Name:	GRIMIT AUTO REPAIR & SERVICE
File Name:	14122242_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/12/2015 10:42:04 AM
Confirmation Number:	8664481461

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

Submittal Type:	EDF
Report Title:	4Q14 QSR 12-19-14 WEFF
Report Type:	Remedial Progress Report
Facility Global ID:	T0600100667
Facility Name:	GRIMIT AUTO REPAIR & SERVICE
File Name:	14122241_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/12/2015 10:42:47 AM
Confirmation Number:	2632377386

VIEW QC REPORT

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