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Atlantic Richfield Company

(a BP affiliated company)

P.O. Box 1257 San Ramon, CA 94583 Phone: (925) 275-3801 Fax: (925) 275-3815

6 August 2009

 Re: Vapor Intrusion Assessment and Soil & Ground-Water Investigation Report Atlantic Richfield Company Station No.601
 712 Lewelling Boulevard San Leandro, California ACEH Case #RO0000309

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Submitted by:

Paul Supple Environmental Business Manger



Prepared for:

Mr. Paul Supple Environmental Business Manager Atlantic Richfield Company P.O. Box 1257 San Ramon, California 94583

Prepared by:

BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

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6 August 2009

Project No. 06-88-605

VAPOR INTRUSION ASSESSMENT AND SOIL & GROUND-WATER INVESTIGATION REPORT

Atlantic Richfield Company Station No. 601 712 Lewelling Boulevard, San Leandro, California ACEH Fuel Leak Case No. RO0000309 6 August 2009

BROADBENT & ASSOCIATES, INC ENVIRONMENTAL, WATER RESOURCES & ENGINEERING

Project No. 06-88-605

Atlantic Richfield Company P.O. Box 1257 San Ramon, CA 94583 Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: Vapor Intrusion Assessment and Soil & Ground-Water Investigation Report, Atlantic Richfield Company Station No.601, 712 Lewelling Boulevard, San Leandro, California; ACEH Case No.RO0000309

Dear Mr. Supple:

Broadbent & Associates, Inc. (BAI) is pleased to submit this Vapor Intrusion Assessment and Soil & Ground-Water Investigation Report for Atlantic Richfield Company Station No.601 (herein referred to as Station No.601) located at 712 Lewelling Boulevard, San Leandro, California (Site). This report contains the results of an on-site vapor intrusion assessment and soil and ground-water investigation. These activities were conducted in accordance to the Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan (BAI, 03/24/2009) as approved with technical comments by ACEH in their letter dated 2 April 2009.

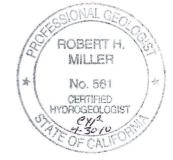
Should you have questions or require additional information, please do not hesitate to contact us at (530) 566-1400.

Sincerely, BROADBENT & ASSOCIATES, INC.

Thomas A. Venus Senior Engineer, P.E.

Jul 7/ Mall

Robert H. Miller, P.G., C.HG. Principal Hydrogeologist



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site) Mr. Karl Busche, City of San Leandro, 835 East 14th St., San Leandro, CA 94577 Electronic copy uploaded to GeoTracker

VAPOR INTRUSION ASSESSMENT AND SOIL & GROUND-WATER INVESTIGATION REPORT Atlantic Richfield Company Station No. 601 712 Lewelling Boulevard, San Leandro, California

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ATTACHMENTS

Drawing 1	Site Location Map
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Drawing 2 Site Layout Plan

APPENDICES

- Appendix A Recent Regulatory Correspondence
- Appendix B Stratus Monitoring and Soil Gas Well Installation Data Package (Includes Field Notes, Soil Boring Logs, Well Construction Logs, Well Completion Reports, Well Permits, Site Layout Plan, and Laboratory Analytical Reports with Chain-of-Custody Documentation)
- Appendix C GeoTracker Upload Confirmation Receipts

VAPOR INTRUSION ASSESSMENT AND SOIL & GROUND-WATER INVESTIGATION REPORT Atlantic Richfield Company Station No. 601 712 Lewelling Boulevard, San Leandro, California

1.0 INTRODUCTION

On behalf of the Atlantic Richfield Company, RM - a BP affiliated company, Broadbent & Associates, Inc. (BAI) has prepared this Vapor Intrusion Assessment and Soil & Ground-Water Investigation Report for the Atlantic Richfield Company Station No. 601, located at 712 Lewelling Boulevard, San Leandro, Alameda County, California (Site). The vapor intrusion assessment and soil and ground-water investigation activities were conducted in accordance to the *Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan* (BAI, 24 March 2009) as approved with technical comments by ACEH in their letter dated 2 April 2009. A copy of recent regulatory correspondence is provided within Appendix A. This document includes discussions on the site background, vapor intrusion assessment activities including analytical results, soil and ground-water investigation activities including monitoring well construction details and analytical results, conclusions and recommendations. Drawings and appendices referenced within this document are provided following the conclusion of the document's text.

2.0 SITE BACKGROUND

The Site is located at 712 Lewelling Boulevard in San Leandro, California. It is an active ARCO-brand gasoline station (Station No.601) with convenience store. Current structures on the Site include four 10,000-gallon underground storage tanks (USTs), two fuel dispenser islands with a total of eight dispensers, and a convenience store building with two unused vehicle service bays. The majority of the Site is paved with asphalt and cement concrete. The location of the Site is shown in Drawing 1.

The Site is bound by the four-to six lane Lewelling Boulevard to the northwest, the four to sixlane Washington Avenue to the east, multi-family residential dwellings of the Chateau Manor Apartments adjacent to the southwest, and a commercial building (Dentist's Office) and parking lot adjacent to the southeast. Across Washington Avenue to the east is a large parking lot and Walgreens store. Across Lewelling Boulevard to the northwest are a Speedy Smog smog check station at the corner of Washington Avenue, Salel's Mobile Home Park, and the parking lot and playground for Lewelling School further southwest. The Smog Check Station at 15275 Washington Avenue is the former Shell Gasoline Service Station No.129460 and an active release site (ACEH Case No. RO0000372 / GeoTracker Global ID T0600101226).

A substantial summary of previous environmental investigations with Site characterization, local and area geology and hydrogeology, remediation status, and preliminary Site conceptual exposure model was recently submitted in the *Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan* (BAI, 24 March 2009).

3.0 VAPOR INTRUSION ASSESSMENT

Vapor intrusion assessment activities were originally proposed in the *Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan* (BAI, 03/24/2009). Vapor intrusion assessment activities were approved with technical comments by ACEH in their letter dated 2 April 2009, and clarified with subsequent emails and telephone conversations.

3.1 Preliminary Field Activities

Prior to initiating field activities, Stratus Environmental Inc. (Stratus) obtained the necessary well drilling permits from the Alameda County Public Works Agency (See Appendix B). Stratus also prepared a site health and safety plan specific to the work scope and cleared the Site for subsurface utilities. The utility clearance included notifying Underground Service Alert of the work a minimum of 48 hours prior to initiating the field investigation, and additionally securing the services of Cruz Brothers, a private utility locating company to confirm the absence of underground utilities at the boring locations. Due to the presence of a footing or buried metal object identified during the utility clearance, boring SG-9 had to be moved slightly to the north-northeast.

3.2 Soil Borings

Soil borings for soil vapor sampling locations SG-9 through SG-14 (See Drawing 2) were advanced on 11 and 12 June 2009 by RSI Drilling of Woodland, California using a hand auger. Each boring was advanced to a total depth of approximately 3.5 ft bgs. Due to the shallow nature of the borings, soils were not classified during boring installation activities. Field notes and well construction logs are provided in Appendix B. A GEO_MAP depicting the boring locations was uploaded to the GeoTracker AB2886 database. A copy of the upload confirmation receipt is provided in Appendix C.

3.3 Soil Vapor Well Construction

The soil vapor sampling wells were constructed by placing a 6-inch long soil vapor probe at the bottom of each boring attached to 0.25-inch diameter nylon tubing extending to the surface. The probes were constructed of double-woven stainless steel wire screen with a pore diameter of 0.057 inch, equipped with stainless steel end fittings. The annulus of the soil vapor sampling wells were constructed with No.2/12 sand filter packs from 3.5 ft bgs to 2.5 ft bgs, overlain with a bentonite annular seal from 2.5 ft bgs to 1.0 ft bgs. The remainder of the annulus was filled with neat cement grout to the surface. The wells were completed with flush, traffic-rated well boxes, with a concrete surface seal to match the existing grade. The cement grout was allowed to cure for approximately 18 days prior to sampling. Residual solids and liquids generated during well construction activities were stored temporarily onsite in a Department of Transportation-approved 55-gallon drums pending analytical results and profiling. Following characterization and profiling, Belshire Environmental Services was scheduled to transport the investigation-derived residuals to an Atlantic Richfield Company-approved facility for treatment or disposal.

3.4 Soil Gas Sampling Procedures

Soil gas sampling activities were completed by Stratus on 30 June 2009. One-liter Summa[®] canisters were used to collect the samples for analysis. The Summa[®] canisters were shipped by the laboratory under high vacuum, leak checked, and batch certified to be free of contaminants. The initial canister vacuum was measured before use and verified to be approximately 29 to 30 inches of Mercury (in.Hg). A purge canister was used to purge the sampling train (sampling point and tubing) a minimum of three volumes prior to sample collection. Swagelok fittings were used to connect the canisters to the tubing. Once the purge canister was connected to the tubing, the sampling train was checked for leaks by applying a vacuum for approximately 11-16 minutes. The vacuum in the canisters did not change, indicating that the sampling trains were properly sealed and not leaking.

Once the leak test was complete, the in-line valve was closed and the sample canister was connected to the tubing. The in-line valve was then opened and the sample collected. The sampling flow rate was set at approximately 167 milliliters per minute (mL/min) as restricted by a laboratory supplied flow regulator. Samples were collected until the pressure in the canister(s) reached approximately 9 to 10 in.Hg.

A leak test was performed as a further check to make sure significant ambient air was not leaking into the sampling trains. Prior to and during sample collection, a tracer/leak test compound (1,1-Difluoroethane [1,1-DFA]) was applied around the probe at the ground surface and at connections in the sampling system. The tracer/leak test compound was emplaced by spraying Dust-Off[®] around the test locations during sample collection. The leak test compound 1,1-DFA was included in the laboratory analysis. An ambient air sample was not collected outside the Station Building as proposed within the work plan due to a misunderstanding by Stratus.

3.5 Laboratory Analysis of Soil Gas Samples

Collected samples were submitted promptly under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. in Garden Grove, California (CA-ELAP #1230, NELAP #03220CA). Soil gas samples were analyzed for Gasoline Range Organics (GRO, hydrocarbon chain lengths C6-12), Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), Methyl Tertiary Butyl Ether (MTBE), Ethanol, Tertiary Butyl Alcohol (TBA), Di-Isopropyl Ether (DIPE), Ethyl Tertiary Butyl Ether (ETBE), Tertiary Amyl Methyl Ether (TAME), and 1,1-DFA (the leak check compound) by EPA Method TO-15. Soil gas samples were also analyzed for Oxygen (O₂) and Argon, Carbon Dioxide (CO₂), and Methane (CH₄) by Modified Method ASTM D-1946. Laboratory analyses for soil gas samples were performed in accordance with the EPA standard holding times for Summa[®] canisters. The laboratory analytical report for the soil gas samples, including chain-of-custody documentation, is provided in Appendix B. Soil vapor laboratory analytical results along with Environmental Screening Levels (ESLs) for shallow soil gas (residential land use) established by the California Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) are also summarized in tabular format on the following page.

Sample Identification	Toluene (mg/m ³)	Oxygen (%)	Carbon Dioxide (%)
SG-9	< 0.0031	4.16	14.4
SG-10	< 0.0039	12.5	8.36
SG-11	0.0033	11.3	9.75
SG-12	< 0.0031	14.2	6.99
SG-13	< 0.0031	22.3	1.19
SG-14	< 0.0033	19.6	3.74
ESLs	63	NA	NA

Soil Gas Samples - Laboratory Analytical Results

 $mg/m^3 = milligrams$ per cubic meter

NA = not applicable

Concentrations of GRO, benzene, ethylbenzene, total xylenes, MTBE, TBA, DIPE, ETBE, TAME, 1,1-DFA, and methane are not included in the above table as the results for these constituents were below their respective laboratory reporting limits. No significant irregularities were reported during laboratory analysis of the soil gas samples. The laboratory results for soil gas sample analyses were uploaded to the GeoTracker AB2886 database. A copy of the GeoTracker upload confirmation receipt (EDF) is provided within Appendix C.

3.6 Discussion of Vapor Intrusion Results

The results obtained during the vapor intrusion assessment activities conducted on-site at Station No.601 indicates that a very minor concentration of Toluene (slightly above the reporting limit of 0.0032 mg/m^3) is present within the shallow subsurface soil at sampling point SG-11. This location is immediately west and adjacent to the USTs. However, the soil gas concentration of Toluene observed is below the residential land use ESL for shallow soil gas established by the SFRWQCB. The residential land use ESLs were used for comparison in an effort to utilize the most conservative approach. The leak test compound, 1,1-DFA, was not detected above laboratory reporting limits in the six soil gas samples collected, which indicates that the sampling trains and fittings were securely sealed during soil vapor sampling collection. The analytical results also indicated the presence of oxygen and carbon dioxide within the shallow subsurface soils at the Site. The presence of oxygen and carbon dioxide in the soil suggests that biodegradation of petroleum hydrocarbons is likely occurring within the soil pore space. Based on the trace concentration of Toluene barely detected above laboratory reporting limit in one sample, the absence of other petroleum contaminants, and the presence of oxygen and carbon dioxide within the shallow subsurface soil, the vapor intrusion to indoor air migration pathway does not appear to be a valid and complete exposure pathway to humans within onsite and/or adjacent buildings.

4.0 SOIL AND GROUND-WATER INVESTIGATION

At the request of ACEH, this soil and ground-water investigation was conducted to further characterize residual hydrocarbon contamination within soils down-gradient and laterally northwest of the source area, presumed to include the former gasoline UST complex. ACEH also requested further ground-water investigation due to the periodically "dry" conditions observed in wells MW-4 through MW-7 in order to ensure that collected ground-water samples provide representative data that will ultimately justify ground-water contaminant plume stability.

Soil and ground-water investigation activities were originally proposed in the *Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan* (BAI, 24 March 2009). Soil and ground-water investigation activities were approved with technical comments by ACEH in their letter dated 2 April 2009.

4.1 Field Activities Performed

On 12 June 2009, Stratus oversaw RSI Drilling, Inc. advance four hollow-stem auger soil borings (identified as MW-16 through MW-19) at the Site. The boring locations for MW-16, MW-17, and MW-18 were repositioned prior to boring advancement due to the presence of large metal anomalies and underground utilities detected during underground clearance activities. Boring MW-16 was located approximately ten feet west of well MW-4, west of the former USTs and the western pump island. Boring MW-17 was located approximately ten feet north of well MW-5, northwest of the former USTs. Boring MW-18 was located approximately ten feet north of well MW-6, south of the former USTs. Boring MW-19 was located approximately ten feet north-northeast of well MW-7, along the southeastern property boundary. The soil boring/monitor well locations from this investigation are shown in Drawing 2.

4.2 Preliminary Field Activities

Prior to initiating field activities, Stratus obtained the necessary well drilling permits from the Alameda County Public Works Agency (See Appendix B), prepared a site health and safety plan specific to the work scope; and cleared the Site for subsurface utilities. The utility clearance included notifying Underground Service Alert of the work a minimum of 48 hours prior to initiating the field investigation, and additionally securing the services of Cruz Brothers, a private utility locating company to confirm the absence of underground utilities at the boring locations. Boreholes were physically cleared to 6.5 ft bgs using an air knife rig on 11 June 2009 in accordance with the safety protocols within BP's Ground Disturbance Defined Practice.

4.3 Soil Boring Advancement

On 12 June 2009, Stratus field personnel observed RSI Drilling (RSI) of Woodland, California advance four soil borings (MW-16 through MW-19). RSI utilized a hollow stem auger CME-75 drill rig equipped with a 10 inch auger to advance each soil boring to a total depth of 15 ft bgs. During drilling activities, the soil borings were described by the on-site Stratus geologist using the Universal Soil Classification System (USCS). Soils encountered at each sampling location

were screened for volatile organic compounds (VOCs) in the field using a photo-ionization detector (PID). Field notes, lithologic boring logs and well construction logs are provided in Appendix B. Boring logs and a site layout plan were uploaded to the GeoTracker AB2886 database. Copies of the upload confirmation receipts (GEO_MAP and GEO_BORE files) are provided in Appendix C.

Soil boring MW-16 was advanced to a total depth of 15 ft bgs. Soil samples were collected at 6.5, eight, 9.5, 11, 12.5, and 15 ft bgs. PID readings observed during boring advancement reached a maximum value of 629 part per million (ppm) at 11 ft bgs. Silty sand was observed from approximately 6.5 to 10 ft bgs. Silty clay was encountered from approximately 10 to 15 ft bgs, the final depth of the boring. Following completion of soil boring advancement and soil classification and sampling, well installation activities began for well MW-16.

Soil boring MW-17 was advanced to a total depth of 15 ft bgs. Soil samples were collected at 6.5, eight, 9.5, 11, 12.5, and 15 feet bgs. PID readings observed during boring advancement reached a maximum value of over 8,000 ppm at eight ft bgs. Silty sand with clay was observed from approximately 6.5 to 8.5 ft bgs. Silty clay was encountered from approximately 8.5 to 12 ft bgs. Clay was observed from approximately 12 to 15 ft bgs, the final depth of the boring. Following completion of soil boring advancement and soil classification and sampling, well installation activities began for well MW-17.

Soil boring MW-18 was advanced to a total depth of 15 ft bgs. Soil samples were collected at 6.5, eight, 9.5, 11, 12.5, and 15 feet bgs. PID readings observed during boring advancement reached a maximum value of 495 ppm at 9.5 ft bgs. Sandy clay was observed from approximately 6.5 to seven ft bgs. Clayey sand was encountered from approximately seven to nine feet bgs. Silty sand was observed from approximately nine to 10 ft bgs and 13 to 13.5 ft bgs. Silty clay was encountered from approximately 10 to 13 ft bgs and 13.5 to 15 ft bgs, the final depth of the boring. Following completion of soil boring advancement and soil classification and sampling, well installation activities began for well MW-18.

Soil boring MW-19 was advanced to a total depth of 15 ft bgs. Soil samples were collected at 6.5, eight, 9.5, 11, 12.5, and 15 feet bgs. A PID reading of 42 ppm was observed during boring advancement at 11 ft bgs. Clayey sand was observed from approximately 6.5 to eight ft bgs. Silty clay was encountered from approximately eight to 15 ft bgs, the final depth of the boring. Following completion of soil boring advancement and soil classification and sampling, well installation activities began for well MW-19.

4.4 Laboratory Analysis of Soil Samples

Soil samples were collected at 6.5, eight, 9.5, 11, 12.5, and 15 ft bgs during the drilling associated with the monitoring well installations. Collected soil samples were delivered under standard chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove, California), a State of California-certified analytical laboratory. Samples were analyzed for GRO (hydrocarbon chain lengths C6-12) by EPA Method 8015M; for BTEX, TAME, TBA, DIPE, EDB, 1,2-DCA, ETBE, and MTBE by EPA Method 8260B; and for lead by EPA Method

200.7. The laboratory analytical reports for soil boring samples, including chain-of-custody documentation, are provided in Appendix B. Soil laboratory analytical results are also summarized in tabular format on the following page.

Sample				Ethyl-	Total	Total
Identification	GRO	Benzene	Toluene	benzene	Xylenes	Lead
MW16 6.5'	< 0.50	< 0.0010	< 0.0010	< 0.0010	< 0.0010	7.33
MW16 8'	78	< 0.10	< 0.10	< 0.10	< 0.10	6.24
MW16 9.5'	150	< 0.10	< 0.10	1.8	0.38	5.48
MW16 11'	330	<1.0	2.2	13	71	7.25
MW16 12.5'	2.0	< 0.0010	0.0031	0.047	0.21	7.06
MW16 15'	4.5	0.0025	0.0077	0.096	0.39	8.59
MW17 6.5'	8.6	< 0.0010	< 0.0010	0.019	0.0017	12.6
MW17 8'	1,200	<1.0	<1.0	20	69	5.02
MW17 9.5'	120	0.17	1.5	4.4	22	6.94
MW17 11'	< 0.50	< 0.0010	0.0018	0.0036	0.015	7.64
MW17 12.5'	< 0.50	< 0.0010	< 0.0010	< 0.0010	< 0.0010	7.53
MW17 15'	< 0.50	< 0.0010	< 0.0010	< 0.0010	0.0021	7.47
MW18 6.5'	< 0.50	< 0.0010	< 0.0010	< 0.0010	< 0.0010	7.03
MW18 8'	5.1	< 0.0010	< 0.0010	< 0.0010	< 0.0010	6.68
MW18 9.5'	480	< 0.20	< 0.20	4.7	< 0.20	5.67
MW18 11'	14	< 0.10	< 0.10	1.0	< 0.10	7.00
MW18 12.5'	0.82	< 0.0010	< 0.0010	0.011	< 0.0010	7.25
MW18 15'	1.5	< 0.0010	< 0.0010	0.019	< 0.0010	7.64
MW19 6.5'	< 0.50	< 0.0010	< 0.0010	< 0.0010	0.0040	16.6
MW19 8'	< 0.50	< 0.0010	< 0.0010	< 0.0010	< 0.0010	8.38
MW19 9.5'	< 0.50	< 0.0010	< 0.0010	< 0.0010	< 0.0010	7.50
MW19 11'	2.3	< 0.0010	< 0.0010	< 0.0010	< 0.0010	5.76
MW19 12.5'	2.6	< 0.0010	< 0.0010	< 0.0010	< 0.0010	5.89
MW19 15'	< 0.50	< 0.0010	< 0.0010	< 0.0010	< 0.0010	5.23

Soil Boring Samples - Laboratory Analytical Results (mg/kg)

mg/kg = milligrams per kilogram

Concentrations detected above laboratory reporting limits are represented with bold-typed font. Concentrations of DIPE, EDB, ETBE, MTBE, TAME, TBA and 1,2-DCA are not included in the above table as the results for these constituents were below their respective laboratory reporting limits. The reporting limits for each constituent analyzed for in sample MW16 8' with the exception of GRO and lead were "raised due to high hydrocarbon background." The laboratory stated "quantitation of unknown hydrocarbon(s) in sample based on gasoline" for sample MW-18 8'. No other significant irregularities were reported during laboratory analysis of the soil boring samples. The laboratory results for soil sample analyses were uploaded to the GeoTracker AB2886 database. A copy of the GeoTracker upload confirmation receipt (EDF) is provided within Appendix C.

4.5 Monitoring Well Construction

Monitoring wells MW-16 through MW-19 were constructed using flush-threaded, four-inch diameter Schedule 40 PVC pipe. The factory-slotted 0.010-inch screen intervals extend from five ft bgs to 15 ft bgs in each well. The filter packs surrounding the screen intervals consist of No.2 1/2 silica sand from four ft bgs to 15 ft bgs in each well. Each well was sealed with bentonite from two to four ft bgs, and with Portland cement grout from two ft bgs to slightly below ground surface. Each wellhead was secured with a locking well cap, and protected by a traffic-rated well vault set flush with the local ground surface. Additional details of well construction are provided in the field notes, lithologic boring logs and well construction logs provided in Appendix B. Well construction information was uploaded to the GeoTracker AB2886 database. A copy of the GeoTracker upload confirmation report is provided within Appendix C.

4.6 Well Development and Surveying

Monitor wells MW-16 through MW-19 were developed on 1 July 2009. Well development activities for each well consisted of surging and bailing the well until relatively silt-free water was removed. Due to slow recharge of the wells, less than 10 well casing volumes were removed from each well. Approximately 17 gallons of water were purged from well MW-16, 16 gallons from well MW-17 and 15 gallons each from wells MW-18 and MW-19. Field sheets from the well development activities are provided within Appendix B.

The soil gas sampling points and new monitoring wells MW-16 through MW-19 were surveyed by Wood Rodgers of Sacramento, California on 23 June 2009. The survey map from Wood Rodgers is provided within Appendix B. The well survey information was uploaded to the GeoTracker AB2886 database. Copies of the GeoTracker upload confirmation reports (GEO_MAP, GEO_XY, and GEO_Z files) are provided within Appendix C.

Ground-water samples will be collected from these wells during the third quarter 2009 groundwater monitoring event and the results will be reported under separate cover.

4.7 Investigation-Derived Residuals Management

Residual solids and liquids generated during the Site investigation activities were stored temporarily onsite in Department of Transportation-approved 55-gallon drums pending analytical results and profiling. Following characterization and profiling, Belshire Environmental Services was scheduled to transport the investigation-derived residuals to an Atlantic Richfield Company-approved facility for treatment or disposal.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

BAI prepared this *Vapor Intrusion Assessment and Soil & Ground-Water Investigation Report* for Station No.601 following implementation of the scope of work proposed in the *Initial Conceptual Site Model with Soil & Ground-Water Investigation Work Plan* (BAI, 24 March 2009). BAI makes the following conclusions:

- Vapor Intrusion Assessment A minor concentration of toluene was detected in the soil gas sample collected from sampling point SG-11 at approximately 3.5 ft bgs. However, this concentration was below the established SFRWQCB ESL. Oxygen and carbon dioxide were also detected in the soil gas samples, suggesting that biodegradation of petroleum hydrocarbons may potentially be occurring within the subsurface soils. The vapor intrusion to indoor air migration pathway does not appear to be a valid and complete exposure pathway to humans within onsite and/or adjacent buildings.
- Soil and Ground-Water Investigation Four monitoring wells (MW-16 through MW-19) were successfully installed on-site with screen intervals from five to 15 ft bgs, which is appropriate given historical depth-to-water measurements on-site have ranged from approximately five to eleven ft bgs. The lithology and hydrocarbon concentrations observed in the soil samples collected during soil boring activities associated with this investigation were generally comparable to the lithology and concentrations observed during boring advancement associated with the installation of wells MW-4 through MW-7 (borings B-9 through B-12) in 1991.

5.2 Recommendations

Based on the information obtained and presented in this report, BAI makes the following recommendations:

- No further action regarding vapor intrusion assessment is warranted at this time.
- Monitoring wells MW-16 through MW-19 will be sampled during the Third Quarter 2009 ground-water monitoring event, replacing wells MW-4 through MW-7 in the monitoring/sampling schedule.
- Begin coordinated co-monitoring with the adjacent Former Shell Station #129460 at 15275 Washington Avenue to help determine a more accurate ground-water flow direction/ gradient of the combined area and distribution and severity of subsurface petroleum contaminants.

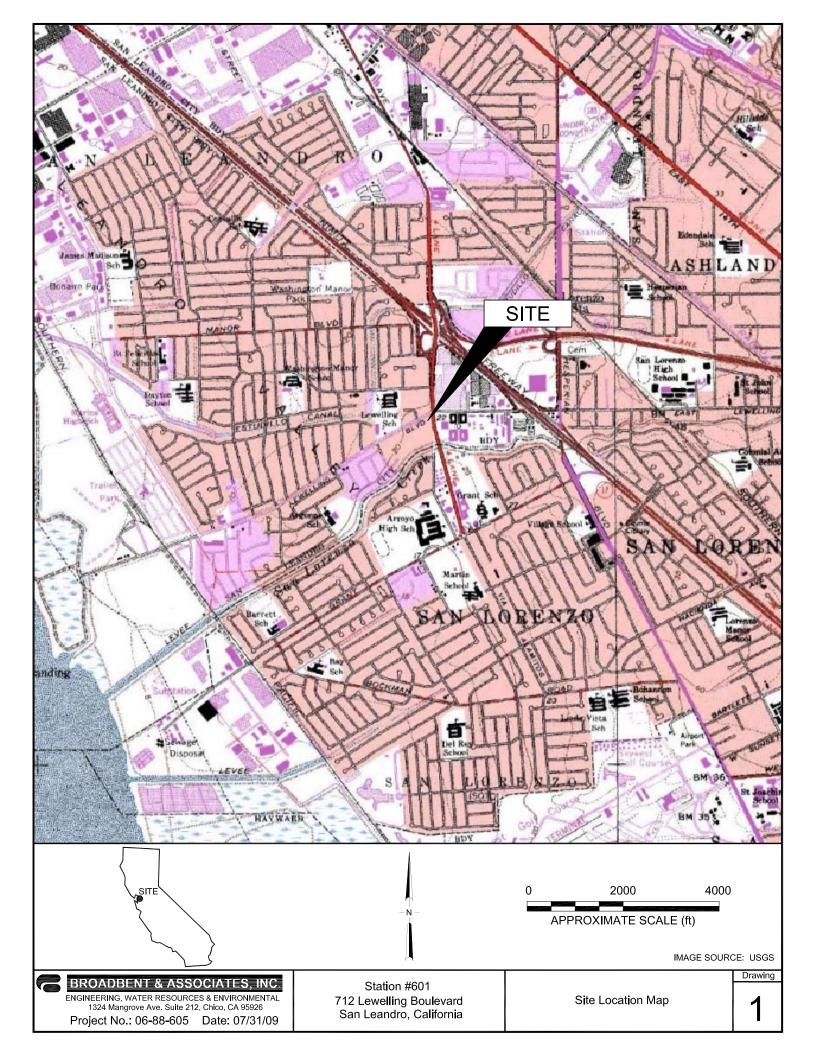
6.0 CLOSURE

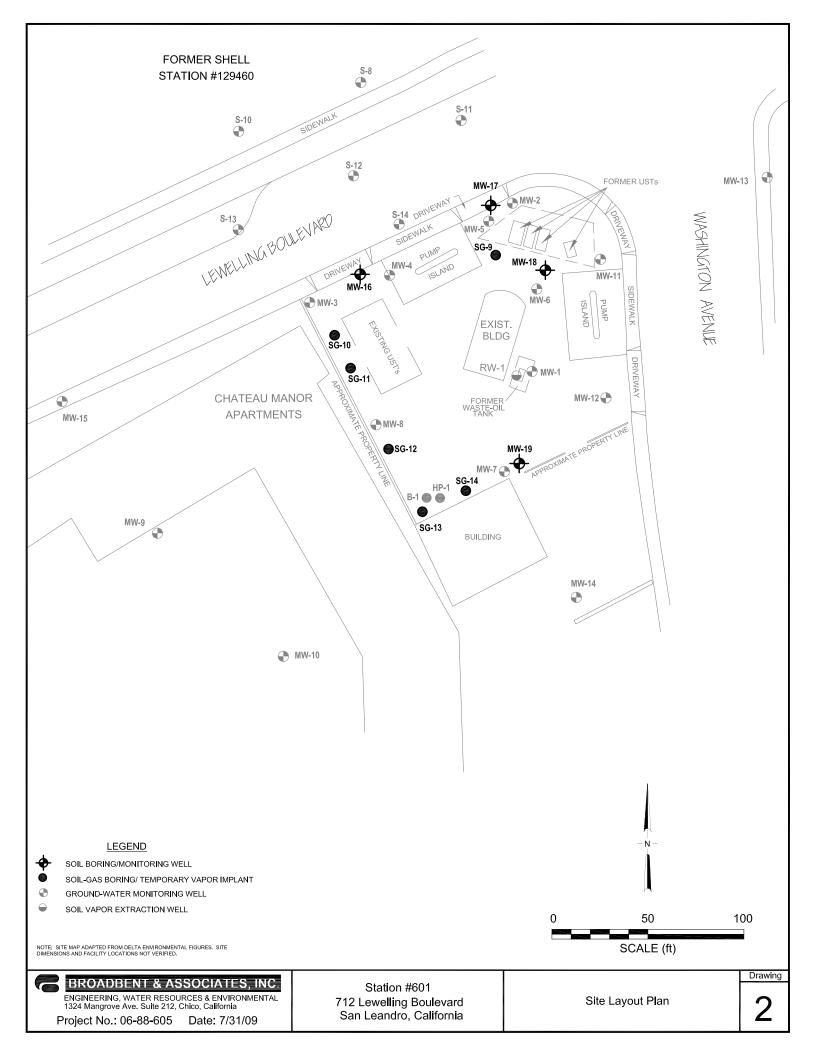
The findings presented in this document are based upon: observation of field personnel from previous consultants, the points investigated, and results of laboratory tests performed by various laboratories. Our services were performed in accordance with the generally accepted standard of

practice at the time this document was written. No other warranty, expressed on implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

7.0 **REFERENCES**

- ACEH, 2 April 2009. Fuel Leak Case No. RO0000309 and Geotracker Global ID T0600100108, ARCO #601, 712 Lewelling Boulevard, San Leandro, CA 94579. Letter from Mr. Paresh Khatri (ACEH) to Mr. Paul Supple (Atlantic Richfield Company) approving work plan with technical comments.
- BAI, 24 March 2009. Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan, Atlantic Richfield Company Station #601, 712 Lewelling Boulevard, San Leandro, California, ACEH Case #RO0000309. Submitted to Messrs. Paul Supple for Atlantic Richfield Company and Mr. Paresh Khatri for ACEH.
- California Regional Water Quality Control Board, San Francisco Bay Region, May 2008. Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater.





APPENDIX A

RECENT REGULATORY CORRESPONDENCE

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY



DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335 RECEIVEI

APR - 8 2009

April 2, 2009

Paul Supple Atlantic Richfield Company (A BP Affiliated Company) P.O. Box 1257 San Ramon, CA 94583

Subject: Fuel Leak Case No. RO0000309 and GeoTracker Global ID T0600100108, ARCO #0601, 712 Lewelling Boulevard, San Leandro, CA 94579

Dear Mr. Supple:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the abovereferenced site including the recently submitted document entitled, "Initial Site Conceptual Model with Soil & Groundwater Investigation Work Plan," dated March 24, 2009, which was prepared by Broadbent & Associates, Inc. (BAI) for the subject site. In addition to the "dry" monitoring wells, source area characterization, and potential contaminant volatilization to indoor air exposure scenario, BAI identified coordinated groundwater monitoring with the adjacent Shell site and bioparameter analyses as additional data gaps.

ACEH generally concurs with the proposed scope of work and the proposed scope of work may be implemented provided that the modifications requested in the technical comments below are addressed and incorporated during the field implementation. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Work Plan and technical comments below is proposed.

We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

 Soil Vapor Sampling Methodology – BAI proposes to install six shallow soil vapor sampling wells to a depth of 3.5 feet bgs. Prior to and during sampling, BAI proposes to use a tracer/leak check compound (i.e. shaving cream or liquid tracer) applied around the probe at the ground surface and at various connections/fittings on the sampling train.

It is recommended that soil vapor wells or probes are constructed with the sampling device and all fittings placed under a shroud with pliable weather-stripping along its base. Inside the shroud, a known concentration of tracer gas can be released and monitored to ensure that a tracer gas atmosphere is maintained. The shroud should ensure that there is tracer gas around all sampling connections. The shroud should have a port for inserting a monitoring and sampling device (e.g. Photo Ionization Detector) to ensure that tracer gas atmosphere is maintained. Mr. Supple RO0000309 April 2, 2009, Page 2

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- April 30, 2009 Quarterly Monitoring Report (1st Quarter 2009)
- July 2, 2009 Soil and Water Investigation Report
- July 30, 2009 Quarterly Monitoring Report (2nd Quarter 2009)
- October 30, 2009 Quarterly Monitoring Report (3rd Quarter 2009)
- January 30, 2010 Quarterly Monitoring Report (4th Quarter 2009)

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic submittal/report rgmts.shtml,

Mr. Supple RO0000309 April 2, 2009, Page 3

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "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." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Paresh C. Khatri Hazardous Materials Specialist

Donna L. Drogos, PÉ

Supervising Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Tom Venus, Broadbent & Associates, Inc., 1324 Mangrove Ave., Ste 212, Chico, CA 95926 Donna Drogos, ACEH Paresh Khatri, ACEH GeoTracker File

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APPENDIX B

STRATUS MONITORING AND SOIL GAS WELL INSTALLATION DATA PACKAGE (Includes Field Notes, Soil Boring Logs, Well Construction Logs, Well Completion Reports, Well Permits, Site Layout Plan, and Laboratory Analytical Reports with Chain-of-Custody Documentation)



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

July 10, 2009

Mr. Tom Venus Broadbent & Associates, Inc. 1324 Mangrove Avenue Chico, California 95926

Re: Monitoring and Soil Gas Well Installation Data Package, ARCO Service Station No. 601, located at 712 Lewelling Boulevard, San Leandro, California (field activities performed between May 29, 2009 and July 1, 2009).

General Information

Data Submittal Prepared / Reviewed by: Collin Fischer / Scott Bittinger Phone Number: (530) 676-2062

Date: May 29, 2009

On-Site Supplier Representative: Collin Fischer

Scope of Work Performed: Health and safety meeting with utility locating subcontractor (Cruz Brothers Locators). Locate all underground utilities onsite and sketch locations on site map per ground disturbance procedures. Cleared 4 boring locations and 6 soil gas wells and mark site for Underground Service Alert (USA).

Variations from Work Scope: Boring locations MW-16, MW-17, MW-18, and SG-9 were adjusted from the positions proposed in the work plan due to the presence of a large metal anomaly detected during underground utility locating activities.

Date: June 8, 2009

On-Site Supplier Representative: Collin Fischer

Scope of Work Performed: Fill out health and safety forms. Check USA markings, update USA tracking sheet and sketch underground utility locations on site map per ground disturbance procedures.

Variations from Work Scope: None noted

Mr. Tom Venus, Broadbent & Associates, Inc. Monitoring & Soil Gas Well Installation Data Package Arco Service Station No. 601, San Leandro, CA

Date: June 11, 2009

On-Site Supplier Representative: Collin Fischer

Scope of Work Performed: Health and safety meeting with air knife subcontractor (RSI Drilling). Clear 4 boring locations (MW-16, MW-17, MW-18 and MW-19) to 6.5' bgs. with air knife. Install 2 soil gas wells (SG-13 and SG-14) to 3.5' bgs. Variations from Work Scope: None noted.

Date: June 12, 2009

On-Site Supplier Representative: Collin Fischer and Levi Ford *Scope of Work Performed:* Health and safety meeting with drilling subcontractor (RSI Drilling). Install 4 soil gas wells (SG-9, SG-10, SG-11 and SG-12) to 3.5' bgs. Install 4 monitoring wells (MW-16, MW-17, MW-18 and MW-19) to 15' bgs. *Variations from Work Scope:* None noted

Date: June 30, 2009 On-Site Supplier Representative: Collin Fischer Scope of Work Performed: Fill out health and safety forms. Purge and sample 6 soil gas wells (SG-9 through SG-14). Variations from Work Scope: None noted

Date: July 1, 2009 On-Site Supplier Representative: Collin Fischer Scope of Work Performed: Fill out health and safety forms. Develop wells MW-16 through MW-19 by surging and bailing.

Variations from Work Scope: Due to very slow groundwater recharge rates, less than 10 well casing volumes were removed from the wells during development (purged dry).

This submittal presents the tabulation of data collected in association with the installation and development of 4 groundwater monitoring wells and the installation and sampling of 6 soil gas wells. The attachments include field data sheets, soil boring logs, DWR well completion reports, well detail diagrams for the soil gas wells, a drilling permit, a surveyed site plan, an underground utility location sketch, certified analytical reports, and chain-of-custody documentation. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Mr. Tom Venus, Broadbent & Associates, Inc. Monitoring & Soil Gas Well Installation Data Package Arco Service Station No. 601, San Leandro, CA

Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

B Scott G. Bittinger Scott G. Bittinger, P.C No. 7477 Project Geologist **Attachments:** OF CAN

- Field Data Sheets
- Boring logs
- Soil Gas Well Detail Diagrams
- DWR Well Completion Reports
- Drilling Permit
- Surveyed Site Plan
- Underground Utility Location Sketch
- Certified Analytical Reports
- Chain-of-Custody Documentation

Cc: Paul Supple, BP/ARCO

nson, P.G.

Project Manager

5/29/09 APLO 601 - Collins Fischer Sunny Ceuz Bros Clear

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Boring No. MW-16

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Address	712 Lewelling Boulevard	Drilling Co.	RSI Drilling	rig type: CME-75
	San Leandro, CA	Driller	Jorge	
Project No.	E601	Method	Hollow Stem Auger	Hole Diameter: 10 inches
Logged By:	Collin Fischer	Sampler:		
Well Pack	sand: 4 ft. to 15 ft	Well Construction	Casing Material: Sch	edule 40 PVC Screen Interval: 5 ft. to 15 ft.
	bent.: 2 ft. to 4 ft.		Casing Diameter: 4 in.	Screen Slot Size: 0.010-in.
	grout: 0 ft. to 2 ft.			

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Boring No. MW-17

Client	ARCO 601	Date	June 12, 2009				
Address	712 Lewelling Boulevard	Drilling Co.	RSI Drilling	rig type: CME-75			
	San Leandro, CA	Driller	Jorge				
Project No.	<u>E601</u>	Method	Hollow Stem Auger	Hole Diameter: 10 inches			
Logged By:	Collin Fischer	Sampler:					
Well Pack	sand: 4 ft. to 15 ft	Well Construction	Casing Material: Sch	edule 40 PVC Screen Interval: 5 ft. to 15 ft.			
	bent.: 2 ft. to 4 ft.		Casing Diameter: 4 in	. Screen Slot Size: 0.010-in.			
	grout: 0 ft. to 2 ft.						

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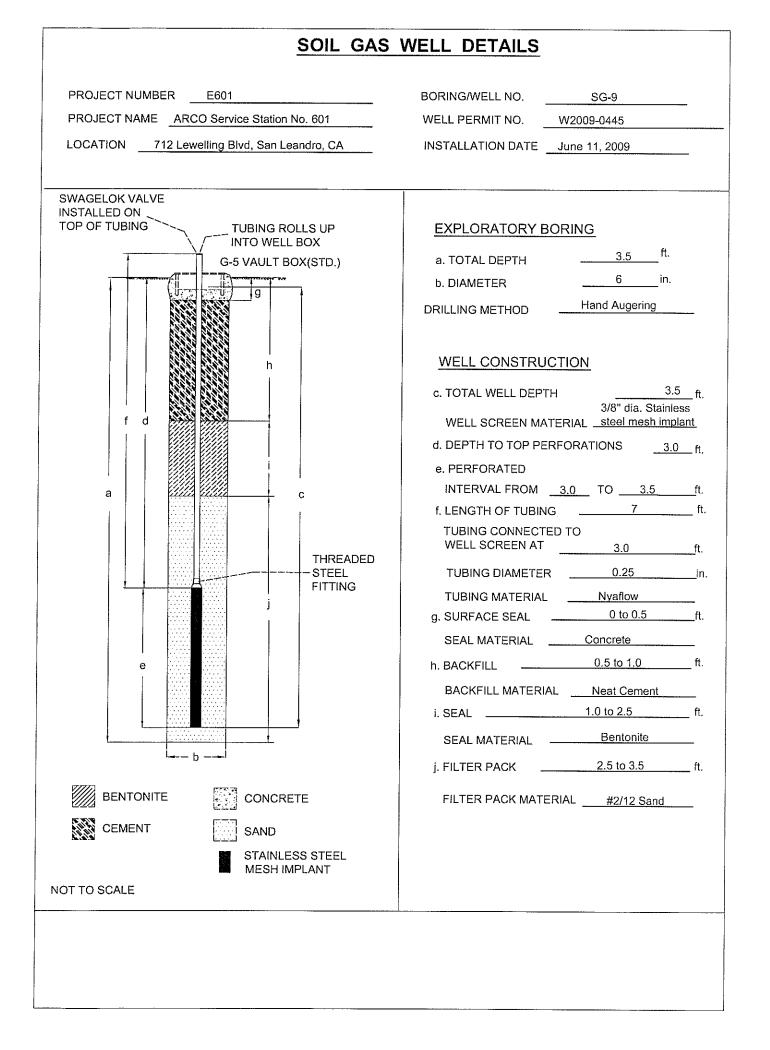
Client	ARCO 601	Date	June 12, 2009	
Address	712 Lewelling Boulevard	Drilling Co.	RSI Drilling rig type: CME-75	
	San Leandro, CA	Driller	Jorge	
Project No.	E601	Method	Hollow Stem Auger Hole Diameter	er: 10 inches
Logged By:	Collin Fischer	Sampler:		
Well Pack	sand: 4 ft. to 15 ft	Well Construction	Casing Material: Schedule 40 PVC	Screen Interval: 5 ft, to 15 ft.
	bent.: 2 ft. to 4 ft.		Casing Diameter: 4 in.	Screen Slot Size: 0.010-in.
	grout: 0 ft. to 2 ft.			

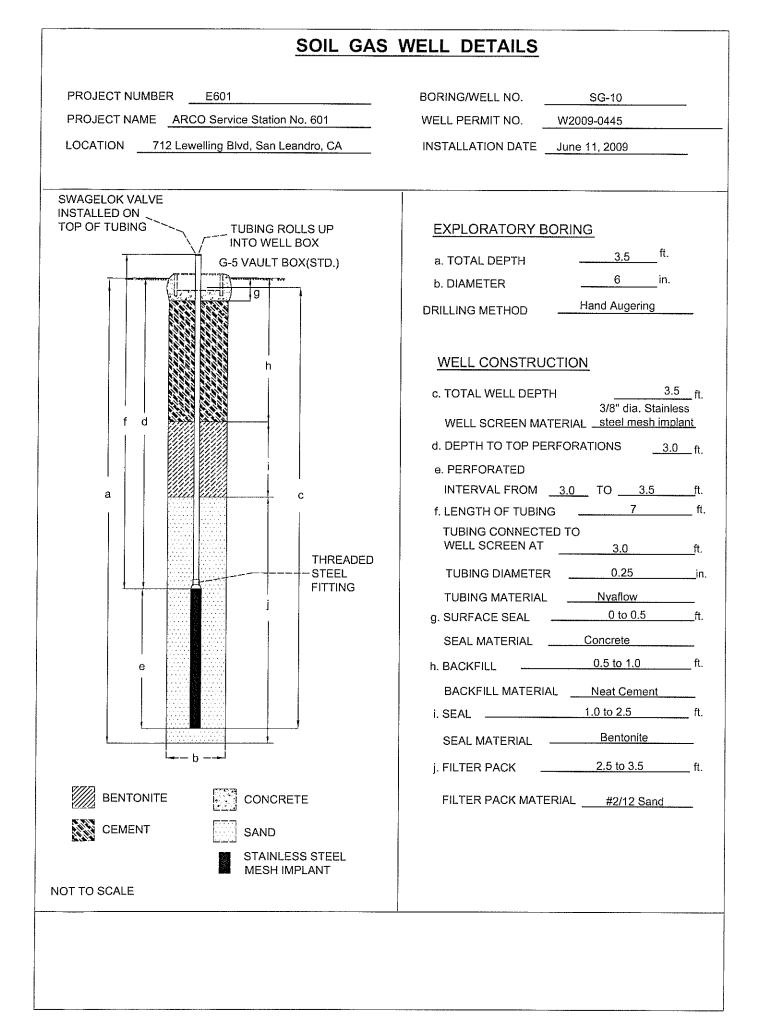
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2 - 1							4			
							— ₅			
							_			
							6			
			1	1	\equiv				Sandy clay, CL, (6.5'-7'), dark brown, moist, medium plasticity	
S	MW-18 6.5'	N/A	1048	100			7		70% clay, 30% fine grained sand	0
									Clayey sand, SC, (7'-9'), grayish brown, moist	
S	MW-18 8'	N/A	1050	100			8	SC	75% fine grained sand, 25% clay	35
			ŧ			••••				
			1050			:•:	9			
S	MW-18 9.5'	N/A	1052	100				SM	Silty sand, SM, (9'-10'), dark gray, wet	495
				+	Ξ		10		80% fine grained sand, 20% silt	
s	MW-18 11'	N/A	1055	100			11			0
		19/7			!∷ ≡			CL	Silty clay, CL, (10'-13'), dark grayish brown, moist, medium plasticity	
			1				12		85% clay, 15% silt	
S	MW-18 12.5'	N/A	1058	100	目目					126
Ĩ					\equiv	: ::	13			120
								SM	Silty sand, SM, (13'-13.5'), dark gray, moist, medium plasticity	
							14		80% fine grained sand, 20% silt	
					li:l∃			CL	Silty clay, CL, (13.5'-15'), dark grayish brown, moist, medium plasticity	
S	MW-18 15	N/A	1100	100	E		15		85% clay, 15% silt	55
			_	L			16			
							¹⁷			
							—			
							18			
]			<u> </u>			
				L			¹⁹			
				l			20			
									Comments:	
									STPATILS	
									STRATUS	
									ENVIRONMENTAL, INC.	
								ARCO 601	MW-18 Bonng Log xie	

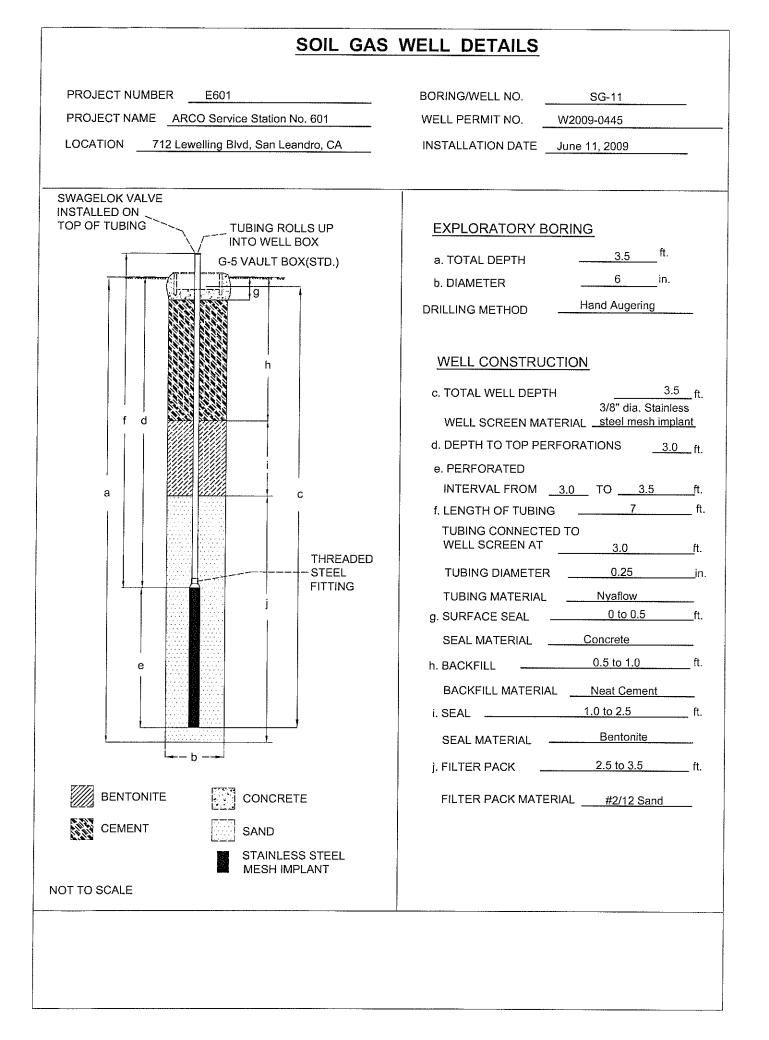
Boring No. MW-19

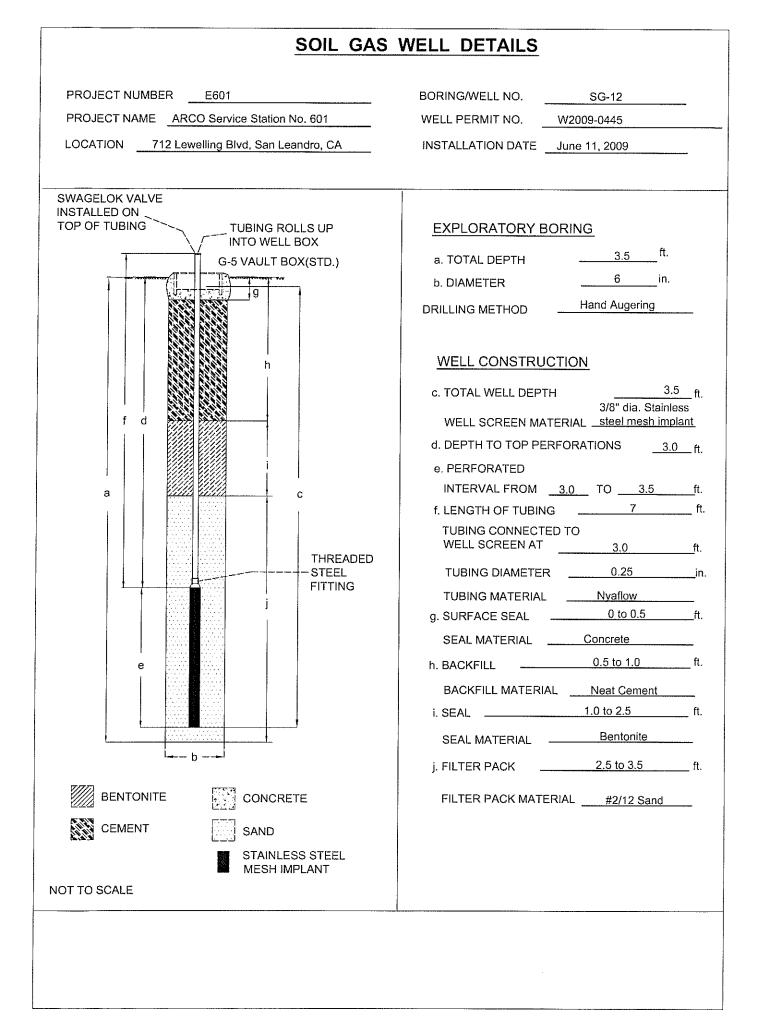
Client	ARCO 601	Date	June 12, 2009		
Address	712 Lewelling Boulevard	Drilling Co.	RSI Drilling	ríg type: CME-75	
	San Leandro, CA	Driller	Jorge		
Project No.	E601	Method	Hollow Stem Auger	Hole Diameter: 10 inches	
Logged By:	Collin Fischer	Sampler:			
Well Pack	sand: 4 ft. to 15 ft	Well Construction	Casing Material: Sch	edule 40 PVC Screen Interval: 5 ft. to 15 ft.	
	bent.: 2 ft. to 4 ft.		Casing Diameter: 4 in	. Screen Slot Size: 0.010-in.	
	grout: 0 ft. to 2 ft.				

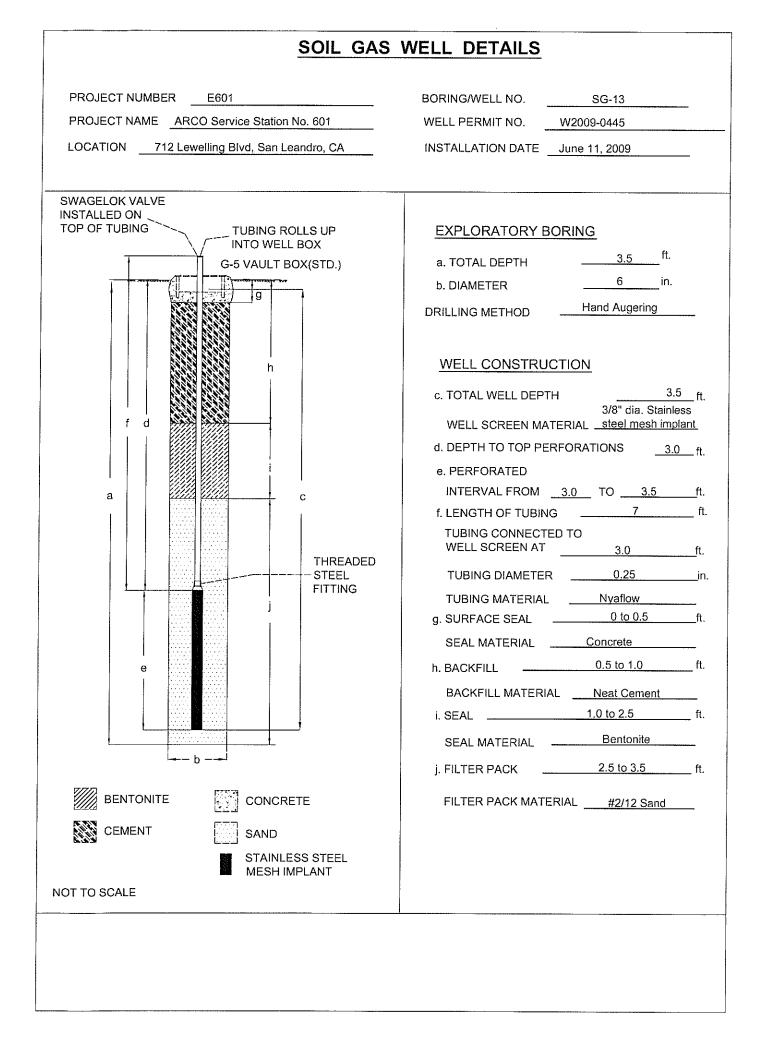
	Sample	Blow	Sample		Well		Depth	Lithologic			
Туре	No.	Count	Time	Recov.		tails	Scale	Column	Descriptions of Materials and Conditions	PID (PPM)	
							_		Cleared to 6.5' bgs. with air knife.		
				+			1				
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				<u> </u>	E	E	6				
s	MW-19 6.5'	N/A	1500	100			7			0	
							ľ	SC	Clayey sand, SC, (6.5'-8'), yellowish brown, moist		
s	MW-19 8'	N/A	1502	100			8		60% fine to medium grained sand, 40% clay	0	
					Ξ	Ē					
s	MW-19 9.5'	N/A	1505	100	E	Ē	9			0	
0	10100-10 0.0	(1000		Ξ		10			Ŭ	
· · ·						Ē					
s	MW-19 11'	N/A	1507	100	E	E	11	~		42	
					Ξ			CL	Silty clay, CL, (8'-15'), grayish brown, moist, medium plasticity 85% clay, 15% silt		
s	MW-19 12.5'	N/A	1510	100	E		12		103 % Clay, 15 % Silt	o	
Ŭ					Ξ		13			Ű	
					Ξ						
					Ξ		14				
S	MW-19 15'	N/A	1512	100	E		15			0	
- <u> </u>	10.00-10 10				·:-:L_		,				
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									STRATUS Environmental, inc.		
									ENVIKUNMENTAL, INC.		
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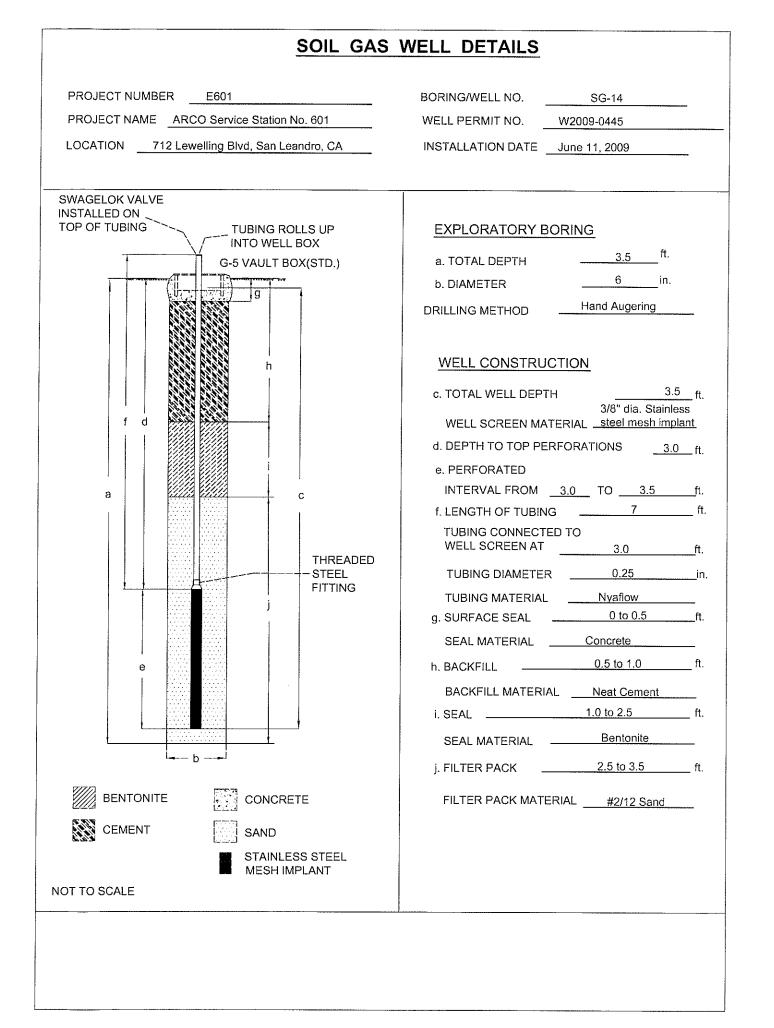












STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

Alameda County Public Works Agency - Water Resources Well Permit

PUBLIC	399 Elmhurst Street Hayward, CA 94544-139 Telephone: (510)670-6633 Fax:(5				
Application Approved	t on: 06/03/2009 By jamesy		ers: W2009-0441 to W2009-0445 id from 06/11/2009 to 06/15/2009		
Application Id: Site Location:	1243640028523	City of Pro	ject Site:San Leandro		
Project Start Date: Assigned Inspector:	712 Lewelling Bl, San Leandro, CA 06/11/2009 Contact Vicky Hamlin at (510) 670-5443 or vicky	Completion Date:06/15/2009 kyh@acpwa.org			
Applicant:	Stratus Envr Scott Bittinger	A 05000	Phone: 530-676-2062		
Property Owner:	3330 Cameron Park Dr #550, Cameron Park, C/ BPI ARCO	999997	Phone: 925-275-3801		
Client:	6 Centerpointe Dr., La Palma, CA 90623 ** same as Property Owner **				
	Receipt Number: WR2009-0198 Payer Name : Stratus				

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 4 Wells Driller: RSI Drilling - Lic #: 802334 - Method: Hand

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2009- 0441	06/03/2009	09/09/2009	MW-16	10.00 in.	4.00 in.	3.00 ft	16.00 ft
W2009- 0442	06/03/2009	09/09/2009	MW-17	10.00 in.	4.00 in.	3.00 ft	16.00 ft
W2009- 0443	06/03/2009	09/09/2009	MW-18	10.00 in.	4.00 in.	3.00 ft	16.00 ft
W2009- 0444	06/03/2009	09/09/2009	MW-19	10.00 in.	4.00 in.	3.00 ft	16.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

Work Total: \$1380.00

Alameda County Public Works Agency - Water Resources Well Permit

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

7. Minimum surface seal thickness is two inches of cement grout placed by tremie

8. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Remediation Well Construction-Vapor Remediation Well - 1 Wells Driller: RSI Drilling - Lic #: 802334 - Method: Hand

Work Total: \$230.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2009- 0445	06/03/2009	09/09/2009	SG9-SG14	6.00 in.	0.50 in.	1.50 ft	5.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

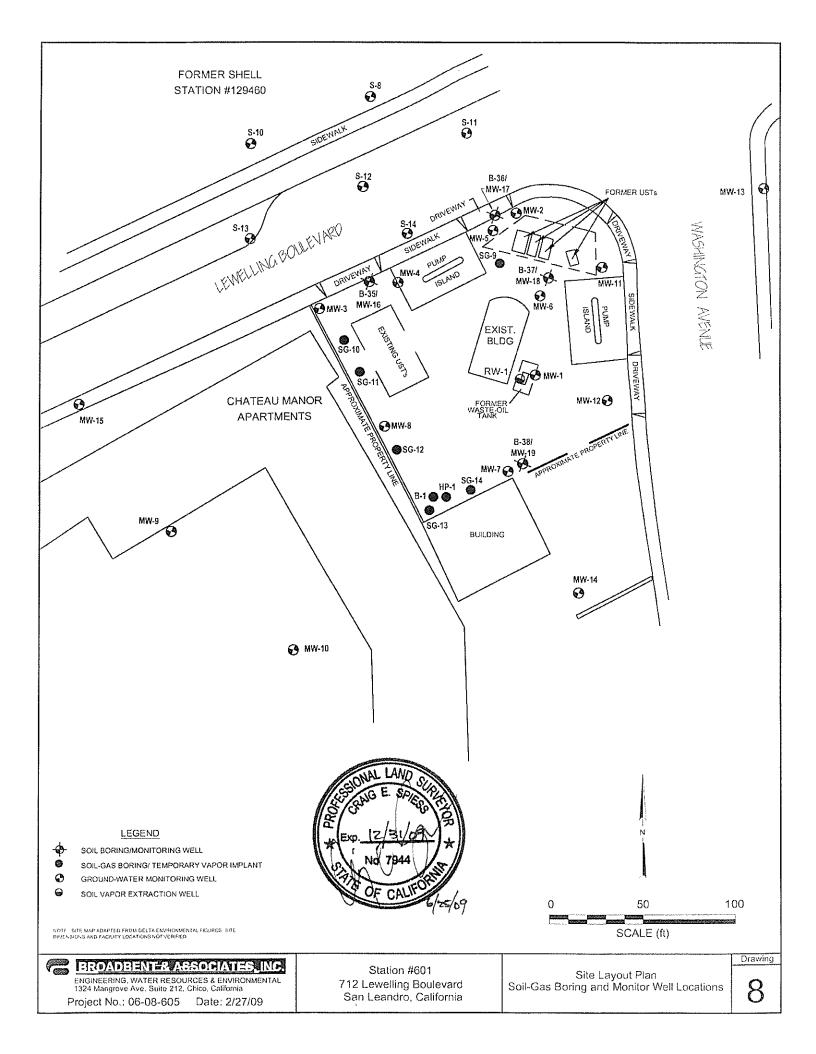
5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

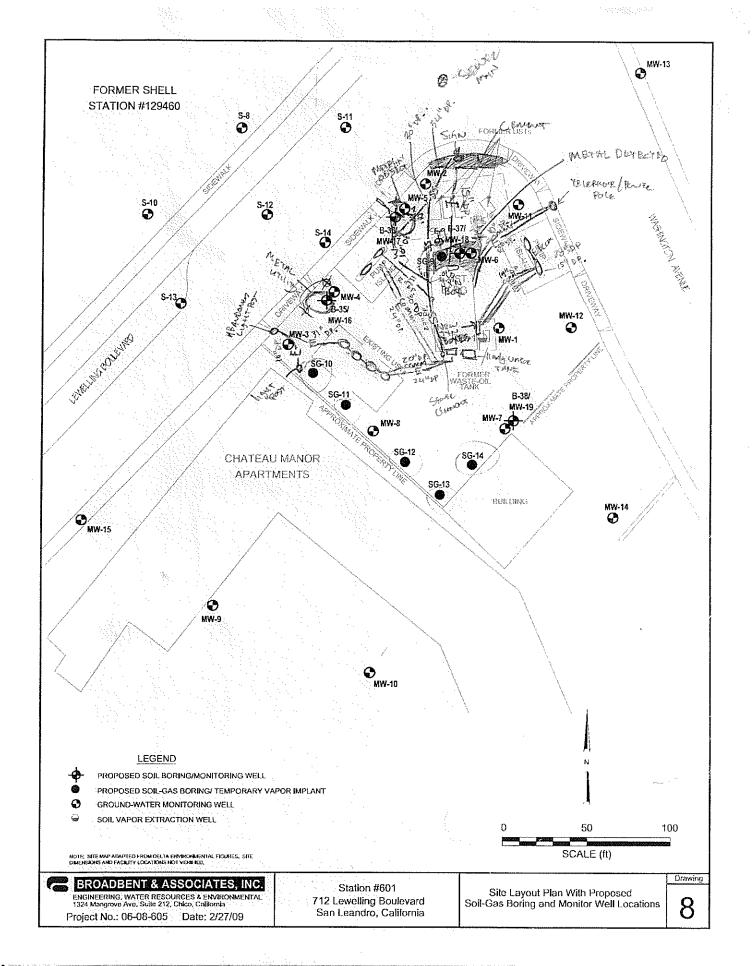
Alameda County Public Works Agency - Water Resources Well Permit

6. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

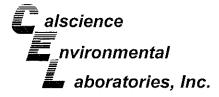
7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.





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June 24, 2009

Jay Johnson Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Subject: Calscience Work Order No.: 09-06-1341 Client Reference: ARCO 601

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/13/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Richard Villa .

Calscience Environmental Laboratories, Inc. Richard Villafania Project Manager

CA-ELAP ID: 1230

: 1230 • NELAP ID: 03220CA • CSDLAC ID: 10109 • SCAQMD ID: 93LA0830 7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

alscience							Page	e 2 of 16
aboratories, Inc.		Analyti						
Stratus Environmental, inc 3330 Cameron Park Drive Cameron Park, CA 95682-	, Suite 550		Date Rec Work Orc Preparati Method:	der No:		<u> </u>	EF	06/13/09 9-06-1341 PA 3050B PA 6010B
Project: ARCO 601							Pa	age 1 of 1
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
swc		09-06-1341-1-A	06/12/09 15:30	Solid	ICP 5300	06/22/09	06/23/09 10:02	090622L03
Parameter	Result	<u>RL</u>	DF	<u>Qual</u>	Units			
Lead	6.45	0.500	1		mg/kg			
Method Blank		097-01-002-12,440	N/A	Solid	ICP 5300	06/22/09	06/23/09 09:55	090622L03
Parameter	Result	<u>RL</u>	DF	<u>Qual</u>	Units			
Lead	ND	0.500	1		mg/kg			

M

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers 7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1341
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: ARCO 601

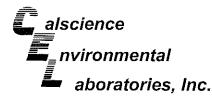
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SWC		09-06-1341-1-A	06/12/09 15:30	Solid	GC 1	06/15/09	06/15/09 12:33	090615B01
Parameter	Result	<u>RL</u>	DE	Qual	Units			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	86	42-126						
Method Blank		099-12-697-120	N/A	Solid	GC 1	06/15/09	06/15/09 10:25	090615B01
Parameter	Result	RL	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	87	42-126						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Page 1 of 1



Stratus Environmenta	al, inc.				Date Re	ceived:				(06/13/09
3330 Cameron Park Drive, Suite 550				50 Work Order No:						09-	06-1341
Cameron Park, CA 9	5682-8861				Preparat	ion:				FP	A 5030B
,					Method:						
					Units:					EPI	4 8260B mg/kg
Project: ARCO 601										Pag	e 1 of 1
Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrumen	Date t Prepare	Date/T d Analy		QC Batch ID
swc			09-06-	-1341-1-A	06/12/09 15:30	Solid	GC/MS Z	06/15/09) 06/15 21:0		090615L01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
Ethylbenzene	ND	0.0010	1		Methyi-t-Butyl	Ether (MTB	E)	ND	0.0010	1	
Toluene	ND	0.0010	1								
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u> Limits		Qual	Surrogates:			<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>
Dibromofluoromethane	94	75-141			1,2-Dichloroetl	hane-d4		124	73-151		
Toluene-d8	97	87-111			1,4-Bromofluo	robenzene		97	71-113		
Method Blank			099-12	2-709-153	N/A	Solid	GC/MS Z	06/15/09	06/15/ 18:3		090615L01
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
Ethylbenzene	ND	0.0010	1		Methyl-t-Butyl	Ether (MTBI	E)	ND	0.0010	1	
Toluene	ND	0.0010	1								
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>	Surrogates:			<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>
Dibromofluoromethane	98	75-141			1,2-Dichloroeth	nane-d4		103	73-151		
Teluene d0	00	07 444			4 4 5 0			<i>~ · · · · · · · · · ·</i>			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

96

87-111



Toluene-d8

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

1,4-Bromofluorobenzene

91

71-113

Calscience nvironmental Quality Control - Spike/Spike Duplicate *aboratories, Inc.*

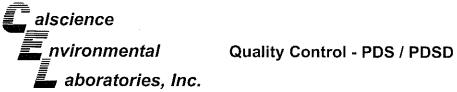
Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1341
Cameron Park, CA 95682-8861	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
SWC	Solid	ICP 5300	06/22/09		06/23/09	090622803
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Lead	99	101	75-125	2	0-20	

RPD - Relative Percent Difference, CL - Control Limit





Stratus Environmental, inc.	Date Received	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1341
Cameron Park, CA 95682-8861	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
swc	Solid	ICP 5300	06/22/09	06/23/09	090622S03
Parameter	PDS %REC	PDSD %REC	%REC CL	RPD RPD C	L Qualifiers
Lead	96	93	75-125	2 0-20	

RPD - Relative Percent Difference , CL - Control Limit



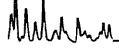


Date Received:	06/13/09
Work Order No:	09-06-1341
Preparation:	EPA 5030B
Method:	EPA 8015B (M)
	Work Order No: Preparation:

Project ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number		
SWC	Solid	GC 1	06/15/09		06/15/09	090615S01		
Parameter	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	<u>RPD CL</u>	Qualifiers		
Gasoline Range Organics (C6-C12)	87	82	42-126	5	0-25			

RPD - Relative Percent Difference, CL - Control Limit



Calscience nvironmental Quality Control - Spike/Spike Duplicate aboratories, Inc.

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1341
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
09-06-1342-11 Parameter Senzene Chloroform ,1-Dichloroethane ,2-Dichloroethane ,1-Dichloroethane	Solid	GC/MS Z	06/15/09		06/15/09	090615S01
Parameter	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	92	90	78-114	2	0-14	
Chloroform	95	95	80-120	0	0-20	
1,1-Dichloroethane	91	91	80-120	0	0-20	
1,2-Dichloroethane	92	89	80-120	4	0-20	
1,1-Dichloroethene	93	93	73-127	1	0-21	
Ethanol	94	89	45-135	5	0-29	
Tetrachloroethene	83	80	80-120	3	0-20	
Toluene	93	92	74-116	2	0-16	
Trichloroethene	90	89	74-122	1	0-17	
Methyl-t-Butyl Ether (MTBE)	84	85	69-123	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit

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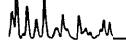
alscience nvironmental Quality Control - LCS/LCS Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1341
Cameron Park, CA 95682-8861	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Dat Prepa	-	Date Analyzed	LCS/LCSD Batc Number	h
097-01-002-12,440	Solid	ICP 5300	06/22	/09 0	6/23/09	090622L03	
Parameter	LCS %	REC LCS	D %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Lead	102	Ş	8	80-120	4	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Calscience nvironmental Quality Control - LCS/LCS Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1341
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number	
099-12-697-120	Solid	GC 1	06/15/09	06/15/09	090615B01	
Parameter	LCS %	REC LCSD	<u>%REC %</u>	REC CL RF		Jualifiers
Gasoline Range Organics (C6-C12)	95	96		70-118 1	0-20	

RPD - Relative Percent Difference, CL - Control Limit





Quality Control - LCS/LCS Duplicate

Date Received:

Work Order No:

Preparation:

Method:

aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

N/A 09-06-1341 EPA 5030B EPA 8260B

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal	ite yzed	LCS/LCSD Numbe	
099-12-709-153	Solid	GC/MS Z	06/15/09	06/15	/09	Number 090615L 1 0-7 3 0-20 29 0-20 2 0-20 2 0-20 1 0-7 3 0-20 2 0-20 1 0-25 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 2 0-20 1 0-20 2 0-20 3 0-20 3 0-20 3 0-20 3 0-20 3 0-20 3 0-20 3 <t< th=""><th>01</th></t<>	01
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	104	103	84-114	79-119	1	0-7	
Bromobenzene	102	105	80-120	73-127	3	0-20	
Bromochloromethane	119	89	80-120	73-127	29	0-20	
Bromodichloromethane	104	102	80-120	73-127	2	0-20	
Bromoform	102	101	80-120	73-127	0	0-20	
Bromomethane	111	97	80-120	73-127	14	0-20	
n-Butylbenzene	109	107	77-123	69-131	1	0-25	
sec-Bulylbenzene	109	107	80-120	73-127	2	0-20	
tert-Butylbenzene	111	109	80-120	73-127	2	0-20	
Carbon Disulfide	108	105	80-120	73-127	3	0-20	
Carbon Tetrachloride	102	100	69-135	58-146	2	0-13	
Chlorobenzene	103	103	85-109	81-113	0	0-8	
Chloroethane	102	96	80-120	73-127	6	0-20	
Chloroform	107	92	80-120	73-127	15	0-20	
Chloromethane	102	98	80-120	73-127	4	0-20	
2-Chlorotoluene	105	107	80-120	73-127	2	0-20	
4-Chlorotoluene	104	103	80-120	73-127	2	0-20	
Dibromochloromethane	102	104	80-120	73-127	2		
1,2-Dibromo-3-Chloropropane	105	104	80-120	73-127	1		
1,2-Dibromoethane	102	103	80-120	73-127	1	0-20	
Dibromomethane	101	100	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	104	101	80-110	75-115	2	0-10	
1,3-Dichlorobenzene	103	101	80-120	73-127	2	0-20	
1,4-Dichlorobenzene	102	99	80-120	73-127	3	0-20	
Dichlorodifluoromethane	106	103	80-120	73-127	4		
1,1-Dichloroethane	103	102	80-120	73-127	2	0-20	
1,2-Dichloroethane	102	102	80-120	73-127	0	0-20	
1,1-Dichloroethene	105	102	83-125	76-132	3	0-10	
c-1,2-Dichloroethene	101	97	80-120	73-127	4	0-20	
t-1,2-Dichloroethene	108	104	80-120	73-127	3		
1,2-Dichloropropane	102	103	79-115	73-121	0		
1,3-Dichloropropane	104	104	80-120	73-127	0		
2,2-Dichloropropane	100	98	80-120	73-127	2		
1,1-Dichloropropene	107	105	80-120	73-127	2	0-20	
c-1,3-Dichloropropene	108	106	80-120	73-127	1	0-20	
t-1,3-Dichloropropene	108	108	80-120	73-127	0	0-20	
Ethylbenzene	107	107	80-120	73-127	1	0-20	
Isopropylbenzene	109	109	80-120	73-127	0	0-20	

CL - Control Limit RPD - Relative Percent Difference ,

h M



Quality Control - LCS/LCS Duplicate

aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received: Work Order No: Preparation: Method:



N/A 09-06-1341 EPA 5030B EPA 8260B

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date alyzed 5/09 1 3 1 0 0 5 2 2 2 2 2 2 2 2 1 1 1 0 1 1 0 2 3 2 0 5 2 1 1 1 0 5 2 1 1 1 0 0 5 2 2 2 1 1 1 0 0 5 5 2 2 2 2 1 1 1 0 0 5 5 2 2 2 2 1 1 1 0 0 5 5 2 2 2 2 2 2 1 1 1 0 0 0 5 5 2 2 2 2 2 2 2 1 1 1 0 0 0 5 5 2 2 2 2 2 2 2 1 1 1 0 0 5 5 2 2 2 2 2 2 1 1 1 0 0 5 5 2 2 2 2 2 2 1 1 1 0 0 5 5 2 2 2 2 2 2 2 2 1 1 1 0 0 5 5 2 2 2 2 2 2 2 2 2 2 2 1 1 1 0 0 5 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	LCS/LCSD Numbe	
099-12-709-153	Solid	GC/MS Z	06/15/09	06/15	/09	090615L	01
99-12-709-153 'arameter p-Isopropyitoluene Methylene Chloride Naphthalene h-Propylbenzene Styrene Ethanol 1,1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane 1,2,3-Trichlorobenzene 1,2,3-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichlorobenzene 1,1,2-Trichloroethane 1,2,3-Trichloroethane 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,3-Trichloropenzene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3,5-Trimethylbenzene 1,5,5-Tri	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyitoluene	107	107	80-120	73-127	1	0-20	
Methylene Chloride	105	102	80-120	73-127	3	0-20	
Naphthalene	97	99	80-120	73-127	1	0-20	
n-Propylbenzene	109	110	80-120	73-127	0	0-20	
Styrene	108	108	80-120	73-127	0	0-20	
Ethanol	116	122	50-134	36-148	5	0-23	
1,1,1,2-Tetrachloroethane	100	102	80-120	73-127	2	0-20	
1,1,2,2-Tetrachloroethane	102	104	80-120	73-127	2	0-20	
Tetrachloroethene	94	96	80-120	73-127	2	0-20	
Toluene	104	105	79-115	73-121	1	0-8	
1,2,3-Trichlorobenzene	97	98	80-120	73-127	1	0-20	
1,2,4-Trichlorobenzene	98	98	80-120	73-127	0	0-20	
1,1,1-Trichloroethane	101	101	80-120	73-127	1	0-20	
1,1,2-Trichloroethane	102	101	80-120	73-127	1	0-20	
Trichloroelhene	101	101	87-111	83-115	0	0-7	
Trichlorofluoromethane	105	102	80-120	73-127	2	0-20	
1,2,3-Trichloropropane	102	100	80-120	73-127	3	0-20	
1,2,4-Trimethylbenzene	108	106	80-120	73-127	2	0-20	
1,3,5-Trimethylbenzene	109	109	80-120	73-127	0	0-20	
Vinyl Acetate	112	106	80-120	73-127	5	0-20	
Vinyl Chloride	100	97	72-126	63-135	2	0-10	
p/m-Xylene	108	108	80-120	73-127	1	0-20	
o-Xylene	107	108	80-120	73-127	1	0-20	
Methyl-t-Butyl Ether (MTBE)	97	96	75-129	66-138	1	0-13	
Tert-Butyl Alcohoi (TBA)	101	101	66-126	56-136	0	0-24	
Diisopropyl Ether (DIPE)	98	96	77-125	69-133	2	0-13	
Ethyl-t-Butyl Ether (ETBE)	97	98	72-132	62-142	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	97	99	77-125	69-133	2	0-10	

Total number of LCS compounds : 66 Total number of ME compounds : 0 Total number of ME compounds allowed : 3 LCS ME CL validation result : Pass

> RPD - Relative Percent Difference , CL - Control Limit

A



Glossary of Terms and Qualifiers



Work Order Number: 09-06-1341

Qualifier	Definition
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = Matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
BZ	Sample preserved improperly.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected.
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspected.
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.

<u>Qualifier</u>	Definition
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.
SG	A silica gel cleanup procedure was performed.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Ç	CABP atfiliated company CABP atfiliated company						nt P	rog	gra	m l	.al	1P	Cha	ain					Recc m/dd/y								of
· · · · · · · · · · · · · · · · · · ·	A BP affiliated company	BPIARC F	acility No:		501	<u>\</u>													lumba			~	NU ./	F 26-i3L	iush TA	T: Yes_	No_
Lab Add	me: CHISCIENCE	·		86	PIARC) Faci	lity Ad	dress	: "]	-12	Le	13 الغ	NA	ſ						-		-					
Lab Add	1055: +440 Linocolno wing,	(unser)	anne, ca	BPIARC Facility Address: 712 Lewelling Blue - City, State, ZIP Code: Sim LEIAND BLED, CA.										Consi	illant/	Contra	ictor:	STR	u-Tuis								
				Lead Regulatory Anency: VA / TS A							Consi		Gonira	clor P	rojeci	No: E	601										
	me: (714) 895 54944			California Global ID No.: TOGOOL COLO8							•••••••••• <u></u> -	Acdre	ss:3	330	C	AMa	RON F	1440-P_	DR. Y	-550							
	pping Accnt: 9,255			Enfos Proposal No: 00051-000 4								CONSL	illant/	Contra	clor P	'М. ~`\	in J	GKN SOI	J .								
	le Order No:			Accounting Made							Phone	5	30	67	66	000											
Other Inf				Sta						ctivity;		<u> </u>				JC-R	M	<u> </u>	Email	EDD	Γο: ([']	Hu	47	OSTRA	+ Tush	JC.N	112-1-
BP/ARC	EBM: PAUL SURPLE		····			atrix	T	No			-			-		_			Involc	a To:		BPIA		4	Contracto		
EBM Pho	ohe:				<u> </u>	T		T		ntain	ers /	Pres	erva	tive	-			Requ	ested	Ana	yses					/pe & Q(Level
Lab No.	Sample Description	Date ©[12]09	Time L≲30	7 Solid	Water / Liquid	Air / Vapor		Total Number of Containers	/ Unpreserved	H ₂ SO4	HNO	HCI	Methanol		7 Gu		<u> </u>		8					Note: If s Sample"	ull Data Pa Co sample not o la commen	andard ackage ackage ackage mments collected, in ts and sing nied sample	
ampier's N	- UTING (ISCHER	·				Re	lingu	ishe	d _j By	/ Aff	illati	on		-	 Da	te	Tirr			Ļ							
ipment M	ppler's Company: Sturrug oment Melhod: GSO Ship Date: 6/12/09 oment Tracking No: 106/6-211 ecial Instructions:				1111112						6/12/0					Wanty Og an G13-9 8:4						- T					
	S LINE - LAB USE ONLY: Custody	Seals in Place	: Yes / No	Ťŧ	emp (Blank:	Yes /	No		Cool	ler Te	mp o	Rece	eipt: _		I	°F/C		Trip Bl	ank: `	/es / N	0	M	S/MSD Sam	Iple Subr	ilted: Yes	

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WORK ORDER #: 09-	
SAMPLE RECEIPT FORM	Cooler <u>/</u> of <u>/</u>
CLIENT: <u>etratus</u> DATE	=: <u>6113109</u>
TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)	
Temperature $4 \cdot 1^{\circ}C - 0.2^{\circ}C$ (CF) = $3 \cdot 9^{\circ}C$ \Box Blank	k 🛛 🛛 Sample
Sample(s) outside temperature criteria (PM/APM contacted by:).	
Sample(s) outside temperature criteria but received on ice/chilled on same day of sam	npling.
□ Received at ambient temperature, placed on ice for transport by Courier. Ambient Temperature: □ Air □ Filter □ Metals Only □ PCBs Only	
Ambient Temperature:	Initial: MSC
CUSTODY SEALS INTACT:	
□ Cooler □ □ No (Not Intact) Z Not Present □ N/	A Initial: <u>WSC</u>
□ Sample □ □ No (Not Intact) ☑ Not Present	Initiali
SAMPLE CONDITION: Yes	N1
Chain-Of-Custody (COC) document(s) received with samples	No N/A
COC document(s) received complete	
Collection date/time, matrix, and/or # of containers logged in based on sample labels.	
COC not relinquished.	
Sampler's name indicated on COC	
Sample container label(s) consistent with COC	
Sample container(s) intact and good condition	
Correct containers and volume for analyses requested	
Analyses received within holding time	
Proper preservation noted on COC or sample container	
☐ Unpreserved vials received for Volatiles analysis Volatile analysis container(s) free of headspace	/
Tedlar bag(s) free of condensation	
Solid: □4ozCGJ □8ozCGJ □16ozCGJ ☑Sleeve □EnCores [®] □TerraCo	ree [®] D
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp □1AGB	
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1PB	
□250PB □250PBn □125PB □125PBznna □100PB □100PBna ₂ □ □	
	ed/Labeled by:
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar (Wide-mouth) B: Bottle (Narrow-mouth) Preservative: h: HCL n: HNO3 na ₂ :Na ₂ S ₂ O ₃ Na: NaOH p: H ₃ PO ₄ s: H ₂ SO ₄ znna: ZnAc ₂ +NaOH f: Field-filtered	Reviewed by:

SOP T100_090 (03/13/09)





June 25, 2009

Jay Johnson Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Subject: Calscience Work Order No.: 09-06-1342 Client Reference: BP/ARCO 601

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/13/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Richard Villey.

Calscience Environmental Laboratories, Inc. Richard Villafania Project Manager

CA-ELAP ID: 1230

D: 1230 • NELAP ID: 03220CA • CSDLAC ID: 10109 • SCAQMD ID: 93LA0830 7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

<u>als</u>	cience
E n	vironmental
Ā	aboratories, Inc.

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project: BP/ARCO 601

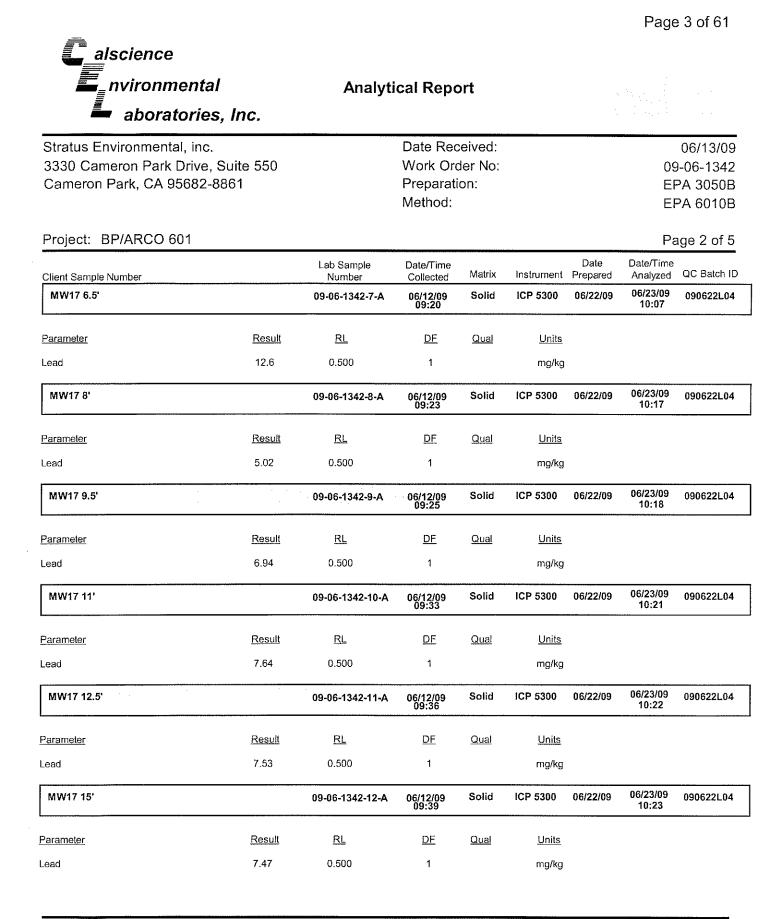
	001							JUC TOTO
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW16 6.5'		09-06-1342-1-A	06/12/09 14:00	Solid	ICP 5300	06/22/09	06/23/09 10:12	090622L04
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	<u>Units</u>			
Lead	7.33	0.500	1		mg/kg			
MW16 8'		09-06-1342-2-A	06/12/09 14:02	Solid	ICP 5300	06/22/09	06/23/09 10:13	090622L04
Parameter	Result	<u>RL</u>	DF	Qual	<u>Units</u>			
Lead	6.24	0.500	1		mg/kg			
MW16 9.5'		09-06-1342-3-A	06/12/09 14:05	Solid	ICP 5300	06/22/09	06/23/09 10:14	090622L04
Parameler	Result	RL	DF	Qual	<u>Units</u>			
Lead	5.48	0.500	1		mg/kg			
MW16 11'		09-06-1342-4-A	06/12/09 14:07	Solid	ICP 5300	06/22/09	06/23/09 10:15	090622L04
Parameter	<u>Result</u>	RL	DF	<u>Qual</u>	<u>Units</u>			
Lead	7.25	0.500	1		mg/kg			
MW16 12.5'		09-06-1342-5-A	06/12/09 14:10	Solid	ICP 5300	06/22/09	06/23/09 10:15	090622L04
Parameter	<u>Result</u>	RL	DF	Qual	Units			
Lead	7.06	0.500	1		mg/kg			
MW16 15'		09-06-1342-6-A	06/12/09 14:12	Solid	ICP 5300	06/22/09	06/23/09 10:16	090622L04
Parameter	Result	<u>RL</u>	DF	Qual	<u>Units</u>			
_ead	8.59	0.500	1		mg/kg			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

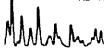
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7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Page 1 of 5



RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



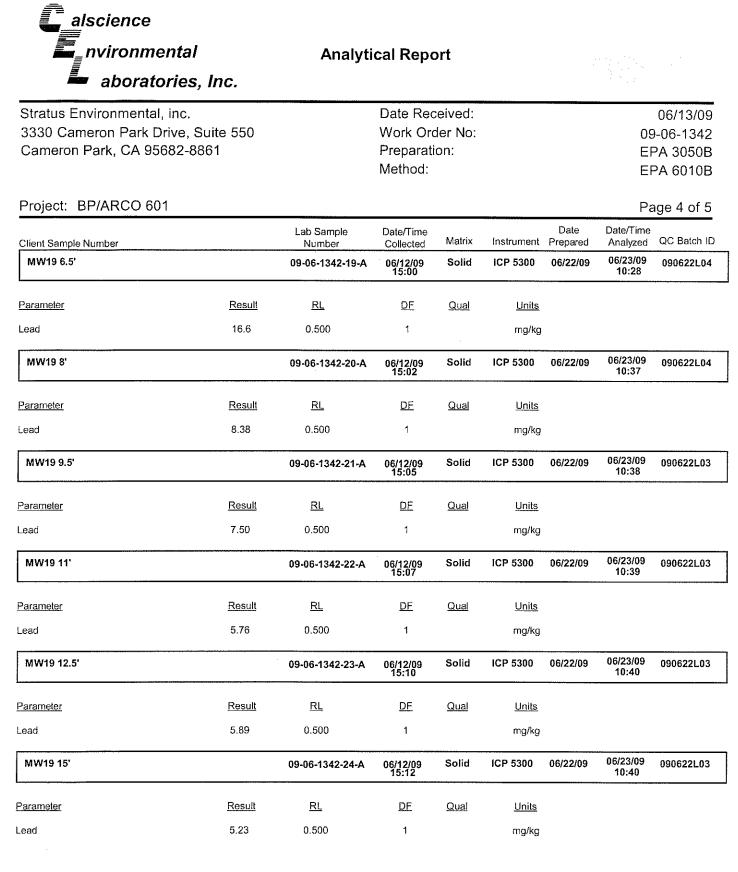


Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 3050B
Method:	EPA 6010B
	Work Order No: Preparation:

Project: BP/ARCO 601							Pa	age 3 of 5
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW18 6.5'		09-06-1342-13-A	06/12/09 10:48	Solid	ICP 5300	06/22/09	06/23/09 10:24	090622L04
Parameter	<u>Result</u>	RL	DF	<u>Qual</u>	<u>Units</u>			
Lead	7.03	0.500	1		mg/kg			
MW18 8'	1.	09-06-1342-14-A	06/12/09 10:50	Solid	ICP 5300	06/22/09	06/23/09 10:24	090622L04
Parameter	Result	RL	DF	Qual	<u>Units</u>			
Lead	6.68	0.500	1		mg/kg			
MW18 9.5'		09-06-1342-15-A	06/12/09 10:52	Solid	ICP 5300	06/22/09	06/23/09 10:25	090622L04
Parameter	Result	RL	DF	Qual	<u>Units</u>			
Lead	5.67	0.500	1		mg/kg			
MW18 11'		09-06-1342-16-A	06/12/09 10:55	Solid	ICP 5300	06/22/09	06/23/09 10:26	090622L04
Parameter	<u>Resuit</u>	<u>RL</u>	DF	Qual	<u>Units</u>			
Lead	7.00	0.500	1		mg/kg			
MW18 12.5'		09-06-1342-17-A	06/12/09 10:58	Solid	ICP 5300	06/22/09	06/23/09 10:27	090622L04
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Units			
Lead	7.25	0.500	1		mg/kg			
MW18 15'		09-06-1342-18-A	06/12/09 11:00	Solid	ICP 5300	06/22/09	06/23/09 10:27	090622L04
Parameter	Result	RL	DF	<u>Qual</u>	<u>Units</u>			
Lead	7.64	0.500	1		mg/kg			

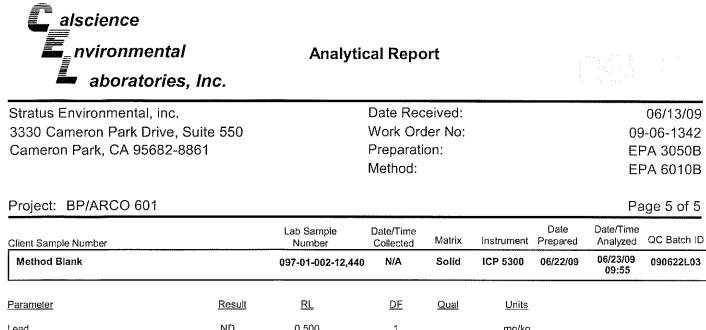
RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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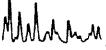


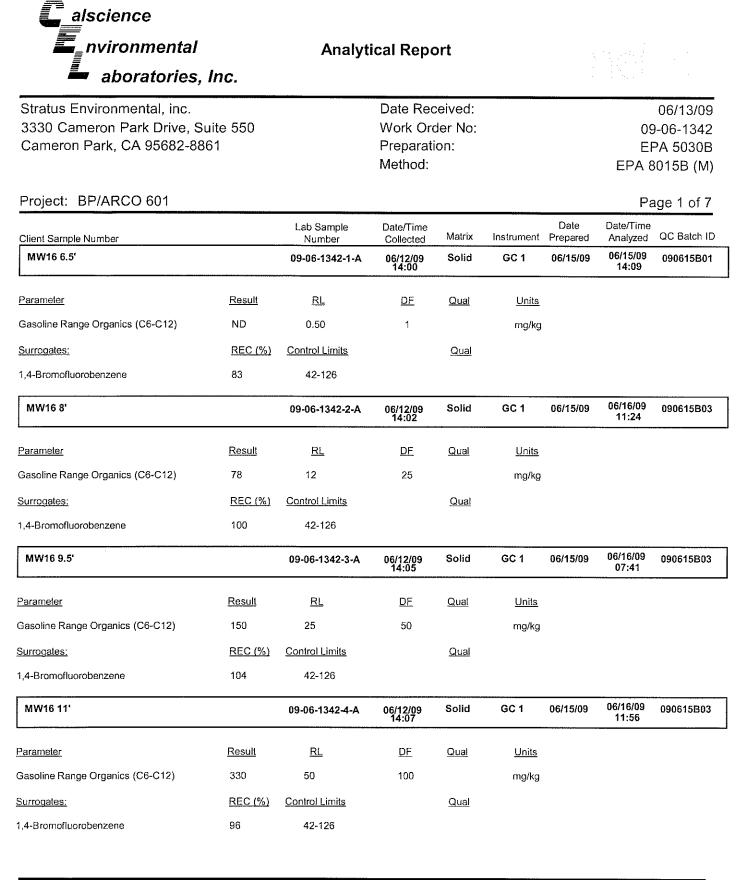
RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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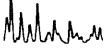


Lead	NU	0.500	1		mg/kg				
Method Blank		097-01-002-12,441	N/A	Solid	ICP 5300	06/22/09	06/23/09 09:56	090622L04	
Parameter	Result	RL	DF	Qual	<u>Units</u>				
Lead	ND	0.500	1		mg/kg				





RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





d: 06/13/09

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received: Work Order No: Preparation: Method:

EPA 8015B (M)

09-06-1342

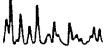
EPA 5030B

Page 2 of 7

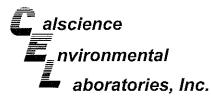
Project: BP/ARCO 601

							1 6	age 2 01 7
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW16 12.5'		09-06-1342-5-A	06/12/09 14:10	Solid	GC 1	06/15/09	06/15/09 17:20	090615B01
Parameler	Result	RL	DF	Quai	<u>Units</u>			
Gasoline Range Organics (C6-C12)	2.0	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	92	42-126						
MW16 15'		09-06-1342-6-A	06/12/09 14:12	Solid	GC 1	06/15/09	06/15/09 17:52	090615B01
Parameter	Result	RL	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	4.5	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	99	42-126						
MW17 6.5'	· · ·	09-06-1342-7-A	06/12/09 09:20	Solid	GC 1	06/15/09	06/15/09 18:24	090615B01
Parameter	<u>Result</u>	RL	DF	Qual	Units			
Gasoline Range Organics (C6-C12)	8.6	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	125	42-126						
MW17 8'		09-06-1342-8-A	06/12/09 09:23	Solid	GC 1	06/15/09	06/16/09 08:44	090615B03
Parameter	Result	RL	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	1200	50	100		mg/kg			
	REC (%)	Control Limits		Qual				
Surrogates:								

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Page 3 of 7

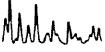


Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP/ARCO 601

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Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW17 9.5'		09-06-1342-9-A	06/12/09 09:25	Solid	GC 1	06/15/09	06/16/09 12:28	090615B03
Parameter	Result	RL	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	120	12	25		mg/kg			
Surrogales:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	102	42-126						
MW17 11'		09-06-1342-10-A	06/12/09 09:33	Solid	GC 1	06/15/09	06/15/09 19:28	090615B01
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	88	42-126						
MW17 12.5'		09-06-1342-11-A	06/12/09 09:36	Solid	GC 1	06/15/09	06/15/09 20:00	090615B01
Parameter	<u>Result</u>	RL	DF	Qual	Units			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	84	42-126						
MW17 15'		09-06-1342-12-A	06/12/09 09:39	Solid	GC 1	06/15/09	06/15/09 20:31	090615B01
Parameter	<u>Result</u>	RL	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	86	42-126						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report

Stratus Environmental, inc.			Date Red	ceived:				 06/13/09
3330 Cameron Park Drive, St	uite 550		Work Or	der No:			09	-06-1342
Cameron Park, CA 95682-88	61		Preparat	ion:				PA 5030B
			Method:				EPA 8	015B (M)
Project: BP/ARCO 601							Pa	ige 4 of 7
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW18 6.5'	· · ·	09-06-1342-13-A	06/12/09 10:48	Solid	GC 1	06/15/09	06/15/09 21:35	090615B01
Parameter	Result	RL	DF	Qual	Units			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	86	42-126						
MW18 8'		09-06-1342-14-A	06/12/09 10:50	Solid	GC 1	06/15/09	06/15/09 22:07	090615B01
	-	ocarbon(s) in sample	+					
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	5.1	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>				
1,4-Bromofluorobenzene	95	42-126						
MW18 9.5'	an a	09-06-1342-15-A	06/12/09 10:52	Solid	GC 1	06/15/09	06/16/09 09:16	090615B03
Parameter	Result	RL	DF	<u>Qual</u>	Units			
Gasoline Range Organics (C6-C12)	480	62	125		mg/kg			

 Surrogates:
 REC (%)
 Control Limits

 1,4-Bromofluorobenzene
 106
 42-126

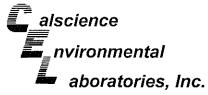
MW18 11'		09-06-1342-16-A	06/12/09 10:55	Solid	GC 1	06/15/09	06/15/09 22:39	090615B01
Parameter	Result	<u>RL</u>	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	14	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	129	42-126		LH,AY				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Qual



Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)
Project: BP/ARCO 601		Page 5 of 7

Project: BP/ARCO 601

								900011
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch IE
MW18 12.5'		09-06-1342-17-A	06/12/09 10:58	Solid	GC 1	06/15/09	06/15/09 23:11	090615B01
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Quai</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	0.82	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
I,4-Bromofluorobenzene	89	42-126						
MW18 15'		09-06-1342-18-A	06/12/09 11:00	Solid	GC 1	06/15/09	06/15/09 23:43	090615B01
Parameter	<u>Result</u>	<u>RL</u>	DE	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	1.5	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
I,4-Bromofluorobenzene	93	42-126						
MW19 6.5'	****	09-06-1342-19-A	06/12/09 15:00	Solid	GC 1	06/15/09	06/16/09 00:14	090615B01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
,4-Bromofluorobenzene	84	42-126						
MW19 8'		09-06-1342-20-A	06/12/09 15:02	Solid	GC 1	06/15/09	06/16/09 00:46	090615B01
arameter	Result	<u>RL</u>	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
urrogales:	<u>REC (%)</u>	Control Limits		Qual				
,4-Bromofluorobenzene	83	42-126						

DF - Dilution Factor , RL - Reporting Limit , Qual - Qualifiers





Stratus Environmental, inc. 3330 Cameron Park Drive, Su Cameron Park, CA 95682-886	Date Received: 06/13/0 Work Order No: 09-06-13/2 Preparation: EPA 5030 Method: EPA 8015B (I							
Project: BP/ARCO 601							Pa	age 6 of 7
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW19 9.5'		09-06-1342-21-D	06/12/09 15:05	Solid	GC 1	06/15/09	06/16/09 07:09	090615B02
Parameler	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	85	42-126						
MW19 11'		09-06-1342-22-D	06/12/09 15:07	Solid	GC 1	06/15/09	06/16/09 03:58	090615B02
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	2.3	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	105	42-126						
MW19 12.5'		09-06-1342-23-D	06/12/09 15:10	Solid	GC 1	06/15/09	06/16/09 04:29	090615B02
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	Units			
Gasoline Range Organics (C6-C12)	2.6	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	107	42-126						
MW19 15'		09-06-1342-24-D	06/12/09 15:12	Solid	GC 1	06/15/09	06/16/09 05:01	090615B02
Parameler	<u>Result</u>	<u>RL</u>	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				

1,4-Bromofluorobenzene

RL - Reporting Limit , DF - Dílution Factor , Qual - Qualifiers

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Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP/ARCO 601

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch IC
Method Blank		099-12-697-120	N/A	Solid	GC 1	06/15/09	06/15/09 10:25	090615B01
Parameter	Result	RL	DF	<u>Qual</u>	Units			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	87	42-126						
Method Blank		099-12-697-121	N/A	Solid	GC 1	06/15/09	06/16/09 02:54	090615B02
Parameter	<u>Result</u>	RL	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	84	42-126						
Method Blank		099-12-697-122	N/A	Solid	GC 1	06/15/09	06/16/09 03:26	090615B03
Parameler	<u>Result</u>	<u>RL</u>	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	5.0	10		mg/kg			
Surrogales:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene	86	42-126						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	mg/kg

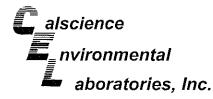
Project: BP/ARCO 601

Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time I Analyzed	000.01
MW16 6.5'			09-06-	1342-1-A	06/12/09 14:00	Solid	GC/MS Z	06/15/09	06/16/09 03:59	090615L03
Parameter	Result	<u>RL</u>	DF	<u>Qual</u>	Parameter			<u>Result</u>	<u>RL</u>	<u>DF Qual</u>
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTB	E)	ND	0.0010	1
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco			ND	0.010	1
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	` '		ND	0.0020	1
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE)		ND	0.0020	1
Foluene	ND	0.0010	1		Tert-Amyl-Meth	· · ·		ND	0.0020	1
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits		Qual	Surrogates:		···· _ ,	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	75-141			1,2-Dichloroeth	iane-d4		112	73-151	
Foluene-d8	98	87-111			1,4-Bromofluor	obenzene		94	71-113	
MW16 8'		· · .	09-06-	1342-2-A	06/12/09 14:02	Solid	GC/MS Z	06/15/09	06/16/09 04:28	090615L04
,2-Dichloroethane Ethylbenzene Ethanol Toluene Surrogates: Dibromofluoromethane Toluene-d8	ND ND ND <u>REC (%)</u> 92 98	0.10 0.10 10 <u>Control</u> <u>Limits</u> 75-141 87-111	100 100 100 100	Qual	Tert-Butyl Alcol Diisopropyl Eth Ethyl-t-Butyl Eth Tert-Amyl-Meth <u>Surrogates:</u> 1,2-Dichloroeth 1,4-Bromofluoro	er (DIPE) her (ETBE) iyl Ether (T/ ane-d4	'	ND ND ND REC (%) 102 102	0.20 0.20	100 100 100 100 <u>Qual</u>
MW16 9.5'			09-06-1	1342-3-A	06/12/09 14:05	Solid	GC/MS Z	06/16/09	06/16/09 16:48	090616L02
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u>)F Qual
Benzene	ND	0.10	100		Xylenes (total)			0.38	0.10	100
,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl E	ther (MTBE	E)	ND		100
,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcol	nol (TBA)		ND		100
thylbenzene	1.8	0.10	100		Diisopropyl Eth	er (DIPE)		ND	0.20	100
thanol	ND	10	100		Ethyl-t-Butyl Eth	ner (ETBE)		ND	0.20	100
oluene	ND	0.10	100		Tert-Amyl-Meth		ME)	ND		100
Surrogates:	REC (%)	Control		Qual	Surrogates:		•	REC (%)	Control	Qual
ibromofluoromethane oluene-d8	98 103	<u>Limits</u> 75-141 87-111			1,2-Dichloroeth			123 101	<u>Limits</u> 73-151 71-113	<u></u>

RL - Reporting Limit

it , DF - Dílution Faclor , Qual - Qualifiers

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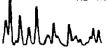


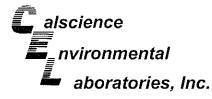
Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	mg/kg
	Page 2 of 11

Project: BP/ARCO 601

Client Sample Number				b Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T i Analy	-	QC Batch ID
MW16 11'			09-06-1	342-4-A	06/12/09 14:07	Solid	GC/MS Z	06/15/09	06/16 05:2		090615L04
Parameter	<u>Result</u>	RL	<u>DF</u>	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	1.0	1000		Xylenes (total)			71	1.0	100	0
1,2-Dibromoethane	ND	1.0	1000		Methyl-t-Butyl E	Ether (MTB	E)	ND	1.0	100	+
1,2-Dichloroethane	ND	1.0	1000		Tert-Butyl Alco	hol (TBA)		ND	10	100	
Ethylbenzene	13	1.0	1000		Diisopropyl Eth	er (DIPE)		ND	2.0	100	0
Ethanol	ND	100	1000		Ethyl-t-Butyl Et	her (ETBE)	}	ND	2.0	100	
Toluene	2.2	1.0	1000		Tert-Amyl-Meth	yl Ether (T	AME)	ND	2.0	100	
Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:	•		<u>REC (%)</u>	Control		Qual
Dibromofluoromethane	98	<u>Limits</u> 75-141			1,2-Dichloroeth	ane-d4		100	<u>Limits</u> 73-151		
Toluene-d8	100	87-111			1,4-Bromofluor	obenzene		98	71-113		
MW16 12.5'			09-06-1	342-5-A	06/12/09 14:10	Solid	GC/MS Z	06/15/09	06/16/ 05:5		090615L03
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			0.21	0.0010	1	<u>uton</u>
1.2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ther (MTB)	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol		-,	ND	0.010	1	
Ethylbenzene	0.047	0.0010	1		Diisopropyl Eth	· · ·		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Eth			ND	0.0020	1	
Toluene	0.0031	0.0010	1		Tert-Amyl-Meth			ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u>	,	Qual	Surrogates:			<u>REC (%)</u>	Control		Qual
Dibromofluoromethane	99	<u>Limits</u> 75-141			1.2-Dichloroeth	ane-d4		103	<u>Limits</u> 73-151		
Foluene-d8	104	87-111			1,4-Bromofluor	obenzene		100	71-113		
MW16 15'			09-06-1	342-6-A	06/12/09 14:12	Solid	GC/MS Z	06/15/09	06/16/ 06:2		090615L03
Parameter	Result	RL	<u>DF</u>	Qual	Parameter			Result	RL	DF	Qual
Benzene	0.0025	0.0010	1		Xylenes (total)			0.39	0.0010	1	
1.2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	ther (MTRI	=)	ND	0.0010	1	
1.2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcoi	•	-,	ND	0.010	1	
Ethylbenzene	0.096	0.0010	1		Diisopropyl Eth	· ·		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Eth	• •		ND	0.0020	1	
Foluene	0.0077	0.0010	1		Tert-Amyl-Meth	• •		ND	0.0020	1	
Surrogates:	REC (%)	Control		Quai	Surrogates:	,(,	'	REC (%)	Control	1	Quai
	<u>,,,,,,</u>	Limits							Limits		
Dibromofluoromethane	101	75-141			1,2-Dichloroeth	ane-d4		103	73-151		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Date Received: Work Order No: Preparation: Method: Units:

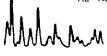


06/13/09 09-06-1342 EPA 5030B EPA 8260B mg/kg Page 3 of 11

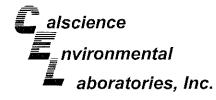
Project: BP/ARCO 601

Client Sample Number				b Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Tim Analyzed	000.000
MW17 6.5'			09-06-1	1342-7-A	06/12/09 09:20	Solid	GC/MS Z	06/15/09	06/16/09 06:56	090615L03
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	RL	<u>DF Qual</u>
Benzene	ND	0.0010	1		Xylenes (total)			0.0017	0.0010	1
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTBI	E)	ND	0.0010	1
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	hol (TBA)		ND	0.010	1
Ethylbenzene	0.019	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE)	1	ND	0.0020	1
Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T	AME)	ND	0.0020	1
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits		Qual	Surrogales:			<u>REC (%)</u>	<u>Control</u> Limits	Qual
Dibromofluoromethane	99	75-141			1,2-Dichloroeth	ane-d4		107	73-151	
Toluene-d8	100	87-111			1,4-Bromofluor	obenzene		99	71-113	
MW17 8'			09-06-1	342-8-A	06/12/09 09:23	Solid	GC/MS Z	06/15/09	06/16/09 07:26	090615L04
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF Qual
Benzene	ND	1.0	1000		Xylenes (total)			69		000
1.2-Dibromoethane	ND	1.0	1000		Methyl-t-Butyl E	Ther (MTBI	E)	ND		000
1.2-Dichloroethane	ND	1.0	1000		Tert-Butyl Alcol	•	-,	ND		000
Ethylbenzene	20	1.0	1000		Diisopropyl Eth	• •		ND		000
Ethanol	ND	100	1000		Ethyl-t-Butyl Et	· ·		ND		000
Toluene	ND	1.0	1000		Tert-Amyl-Meth	• •		ND		000
Surrogates:	REC (%)	<u>Control</u> Limits	1000	Qual	Surrogates:	.) (REC (%)	<u>Control</u> Limits	Qual
Dibromofluoromethane	99	75-141			1,2-Dichloroeth	ano_d4		101	73-151	
Toluene-d8	102	87-111			1.4-Bromofluor			98	71-113	
MW17 9.5'	102	0/-11	09-06-1	342-9-A	06/12/09 09:25	Solid	GC/MS Z	06/16/09	06/16/09 17:17	090616L02
Parameter	Result	RL	DE	Qual	Parameter			Result	RL	DF Qual
Benzene	0.17	0.10	100		Xylenes (total)			22		100
1.2-Dibromoelhane	ND	0.10	100		Methvi-t-Butvl E	Ether (MTBI	E)	ND		100
1.2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcol		- 1	ND		100
Ethylbenzene	4.4	0.10	100		Diisopropyl Eth	. ,		ND		100
Ethanol	ND	10	100		Ethyl-t-Butyl Eth	• •		ND		100
Toluene	1.5	0.10	100		Tert-Amyl-Meth	• •		ND		100
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:		,	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	<u>Limits</u> 75-141			1,2-Dichloroeth	ane-d4		102	73-151	
Toluene-d8	100	87-111			1,4-Bromofluor	obenzene		100	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



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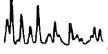
Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

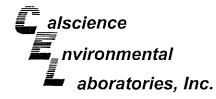
Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	mg/kg

Project: BP/ARCO 601

Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	instrument	Date Prepared	Date/T Analyz		QC Batch ID
MW17 11'			09-06-	1342-10-A	06/12/09 09:33	Solid	GC/MS Z	06/15/09	06/16 08:2		090615L03
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			0.015	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	•	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco	• •		ND	0.010	1	
Ethylbenzene	0.0036	0.0010	1		Diisopropyl Eth	• /		ND	0.0020	1	
Ethano!	ND	0,10	1		Ethyl-t-Butyl Et	· · ·		ND	0.0020	1	
Toluene	0.0018	0.0010	1		Tert-Amyl-Meth	nyl Ether (Ta	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	Control		Qual	Surrogates:			<u>REC (%)</u>	Control		<u>Qual</u>
D ⁽¹⁾	00	<u>Limits</u>			4.0.01.1.1			404	<u>Limits</u>		
Dibromofluoromethane	99	75-141			1,2-Dichloroeth			104	73-151		
Toluene-d8	98	87-111			1,4-Bromofluor			95	71-113		
MW17 12.5'			09-06-	1342-11-A	06/12/09 09:36	Solid	GC/MS Z	06/15/09	06/15/ 19:0		090615L01
Parameler	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTBI	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE)		ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	nyl Ether (T <i>i</i>	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	<u>Surrogates:</u>			<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
0 /1 / / / / / / / / / /	400	<u>Limits</u>						400	Limits		
Dibromofluoromethane	100 98	75-141			1,2-Dichloroeth 1,4-Bromofluor			108 94	73-151		
Toluene-d8	98	87-111			1,4-Bromonuor	openzene		94	71-113		
MW17 15'			09-06-1	1342-12-A	06/12/09 09:39	Solid	GC/MS Z	06/15/09	06/16/ 08:5		090615L03
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	Parameter			<u>Result</u>	<u>RL</u>	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			0.0021	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTB	Ξ)	ND	0.0010	1	
1,2-Dichloroelhane	ND	0.0010	1		Tert-Butyl Alco	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE)		ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T/	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:			REC (%)	Control		Qual
		<u>Limits</u>							Limits		
Dibromofluoromethane	98	75-141			1,2-Dichloroeth			106	73-151		
Toluene-d8	98	87-111			1,4-Bromofluor	obenzene		95	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



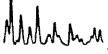


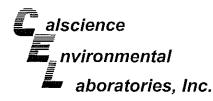
Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	mg/kg
	Page 5 of 11

Project: BP/ARCO 601

Toluene-d8 101 87-111 1,4-Bromofluorobenzene 102 71-113 MW18 9.5' 09-06-1342-15-A 06/12/09 10:52 Solid GC/MS Z 06/17/09 06/17/09 090617L02 Parameter Result RL DF Qual 1,2-Dibromoethane ND 0.20 200 Methyl-I-Butyl Ether (MTBE) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 Ethylo-Dene 4.7 0.20 200 Disopropyl Ether (DIPE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND <	Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Ti I Analyz		QC Batch ID
Berzene ND 0.0010 1 Xylenes (total) ND 0.0010 1 1.2. Dichlorosethane ND 0.0010 1 Methyl-Butyl Ether (MTBE) ND 0.0010 1 Ethylbenzene ND 0.0010 1 Ethylbenzene ND 0.0020 1 Ethylbenzene ND 0.0010 1 Ethylbelyl Ether (TBE) ND 0.0020 1 Ethylbenzene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Toluene-d8 98 87-111 1.2-Dichlorosethane-d4 106 7.3-151 1 1 MW18 8' 09-06-1342-14-A 09/12/09 Solid GC/MS Z 06/16/09 06/16/09 09/06/15/03 09/06/15/03 09/06/15/03 09/06/15/03 09/06/15/03 09/06/15/03 09/06/15/03 00/01 1 1.4-Bromofluorobenzene 93 7.1	MW18 6.5'			09-06-	1342-13-A		Solid	GC/MS Z	06/15/09			090615L03
12-Differemeethane ND 0.0010 1 Methyl-Buly Effer (NTEE) ND 0.0010 1 12-Dichloroethane ND 0.0010 1 Tert-Buly Alcohol (TBA) ND 0.010 1 Ethyloenzene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Ethanol 'ND 0.10 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Limits Limits <td>Parameter</td> <td><u>Result</u></td> <td><u>RL</u></td> <td>DE</td> <td>Qual</td> <td>Parameter</td> <td></td> <td></td> <td><u>Result</u></td> <td><u>RL</u></td> <td>DF</td> <td>Qual</td>	Parameter	<u>Result</u>	<u>RL</u>	DE	Qual	Parameter			<u>Result</u>	<u>RL</u>	DF	Qual
1.2-Dichloroethane ND 0.0010 1 Terl-Buly/Alcohol (TBA) ND 0.010 1 Ethyshenzene ND 0.0010 1 Discoproy/Ether (DPE) ND 0.0020 1 Ethyshenzene ND 0.0010 1 Ethyshelly Ether (ETBE) ND 0.0020 1 Toluene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Limits Umits	Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
Ethylbenzene ND 0.0010 1 Disopropy Ether (DIPE) ND 0.0020 1 Ethand ND 0.0010 1 Ethyl-Buly Ether (DIPE) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: ND 0.0020 1 Dibromofluoromethane 97 75-141 1.2-Dichloroethane-d4 106 73-151 Qual MW18 8' 09-06-1342-14-A 06/12/09 Solid GC/MS Z 06/15/09 09/6/15/09 00/6/15/09 09/6/15/09 09/6/15/09 00/6/15/09 00/6/15/09 00/6/15/09 00/6/15/09 00/6/15/09 00/6/15/09 00/6/15/09 <td>1,2-Dibromoethane</td> <td>ND</td> <td>0.0010</td> <td>1</td> <td></td> <td>Methyl-t-Butyl I</td> <td>Ether (MTB</td> <td>E)</td> <td>ND</td> <td>0.0010</td> <td>1</td> <td></td>	1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl I	Ether (MTB	E)	ND	0.0010	1	
Elhanol ND 0.10 1 Elhyl-Foldy Elher (TAME) ND 0.0020 1 Toluene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Dibromofluoromethane 97 75-141 1.2-Dichloroethane-d4 106 73-151 MW18 8' 09-06-1342-14-A 06/12/09 Solid GC/MS Z 06/15/09 09/615L03 Parameter Result RL DE Qual Parameter Result RL DE Qual Berzene ND 0.0010 1 Xylenes (tota) ND 0.0010 1 1,2-Dichoroethane ND 0.0010 1 Tert-Buryl-Hethyl Ether (MTBE) ND 0.0010 1 1,2-Dichoroethane ND 0.0010 1 Tert-Buryl-Hethyl Ether (TAME) ND 0.0010 1 1,2-Dichoroethane ND 0.0010 1 <td>1,2-Dichloroethane</td> <td>ND</td> <td>0.0010</td> <td>1</td> <td></td> <td>Tert-Butyl Alco</td> <td>hol (TBA)</td> <td></td> <td>ND</td> <td>0.010</td> <td>1</td> <td></td>	1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco	hol (TBA)		ND	0.010	1	
Toluene ND 0.0010 1 Ter-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Limits Qual Surrogates: REC (%) Control Limits Qual Dibromofluoromethane 97 75-141 1,2-Dichloroethane-d4 106 73-151 MW18 8' 09-06-1342-14-A 06/12/09 Solid CC/MS Z 06/15/09 09:615L03 Parameter Result RL DF Qual Parameter Result RL DE Qual 12-Dibromoethane ND 0.0010 1 Methyl-Edutyl Ether (MTBE) ND 0.0010 1 12-Dibromoethane ND 0.0010 1 Ethyl-Edutyl Ether (MTBE) ND 0.0010 1 12-Dibromoethane ND 0.0010 1 Disopropyl Ether (DIPE) ND 0.0020 1 12-Dibromoethane ND 0.0010 1 Ethyl-Dibromoethane-d4 105 73-151 12-Dibromoethane ND 0.0010	Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Surrogates: REC (%) Control Limits Qual Surrogates: REC (%) Control Limits Qual Dibromofluoromethane 97 75-141 1,2-Dichlorosthane-d4 106 73-151 Qual MV18 8' 09-06-1342-14-A 06/12/09 Solid GC/MS Z 06/15/09 06/16/09 090615L03 Parameter Result RL DE Qual Parameter Result RL DE Qual 12-Dichlorosthane ND 0.0010 1 Xylenes (total) ND 0.0010 1 12-Dichlorosthane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0010 1 12-Dichlorosthane ND 0.0010 1 Tert-Anyl-Methyl Eher (MTBE) ND 0.0020 1 Ethylonzene ND 0.0010 1 Tert-Anyl-Methyl Eher (TAME) ND 0.0020 1 Dibromofluoromethane 83 75-141 1,2-Dichlorosthane-d4 105 73-151 1 1 Di	Ethanol	`ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE))	ND	0.0020	1	
Limits Limits Limits Dibromofluoromethane 97 75-141 1,2-Dichloroethane-d4 106 73-151 MW18 8' 09-06-1342-14-A 06/12/09 Solid GC/MS Z 06/15/09 06/16/09 090615L03 Parameter Result RL DE Qual Parameter Result RL DE Qual Benzene ND 0.0010 1 Xtylenes (total) ND 0.0010 1 1,2-Dichtoroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0010 1 1,2-Dichtoroethane ND 0.0010 1 Ethylbenzane ND 0.0020 1 Ethanol ND 0.0010 1 Ethyl-Butyl Ether (IDFE) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 1 <	Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T.	AME)	ND	0.0020	1	
Dibromofluoromethane 97 75-141 1,2-Dichloroethane-d4 106 73-151 Toluene-d8 98 87-111 1,4-Bromofluorobenzene 93 71-113 MW18 8' 09-06-1342-14-A 06/12/09 10:50 Solid GC/MS Z 06/16/09 09:53 090615L03 Parameter Result RL DE Qual Parameter Result RL DE Qual Benzene ND 0.0010 1 Xylenes (total) ND 0.0010 1 1,2-Dichloroethane ND 0.0010 1 Methyl-Butyl Ether (MTBE) ND 0.0010 1 1,2-Dichloroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0020 1 Ethyloenzene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits 09-06-1342-15-A 06/12/09 Solid GC/	Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:			<u>REC (%)</u>	Control		<u>Qual</u>
Toluene-d8 96 87-111 1.4-Bromofluorobenzene 93 71-113 MW18 8' 09-06-1342-14-A 06/12/09 10:50 Solid GC/MS Z 06/15/09 09:53 090615L03 09:53 090615L03 09:53 Parameter Result RL DE Qual Parameter Result RL DE Qual Benzene ND 0.0010 1 Xylenes (tota) ND 0.0010 1 1,2-Dichoroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0010 1 1,2-Dichoroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0020 1 Ethanol ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: Control Qual Imitis 101 87-111 1,2-Dichloroethane-d4 105 73-151 Outcoremethane 83 75-141 1,2-Dichloroethane-d4 10			<u>Limits</u>							Limits		
MW18 8' 09-06-1342-14-A 06/12/09 10:50 Solid GC/MS Z 06/15/09 09:53 090615L03 09:53 Parameter Result RL DE Qual Parameter Result RL DE Qual Benzene ND 0.0010 1 Xylenes (total) ND 0.0010 1 1,2-Dichloroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0010 1 Ethanol ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0020 1 Ethanol ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits 12-Dichloroethane-d4 105 73-151 104097 090617L02 Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 Toluene-d8 101 87-111 1,4-Bramofluorobenzone 102 </td <td>Dibromofluoromethane</td> <td>97</td> <td>75-141</td> <td></td> <td></td> <td>1,2-Dichloroeth</td> <td>iane-d4</td> <td></td> <td>106</td> <td>73-151</td> <td></td> <td></td>	Dibromofluoromethane	97	75-141			1,2-Dichloroeth	iane-d4		106	73-151		
Minist Discontrain Discontrain <t< td=""><td>Toluene-d8</td><td>98</td><td>87-111</td><td></td><td></td><td>1,4-Bromofluor</td><td>obenzene</td><td></td><td>93</td><td>71-113</td><td></td><td></td></t<>	Toluene-d8	98	87-111			1,4-Bromofluor	obenzene		93	71-113		
Benzene ND 0.0010 1 Xylenes (total) ND 0.0010 1 1,2-Dichomoethane ND 0.0010 1 Methyl-t-Butyl Ether (MTBE) ND 0.0010 1 1,2-Dichloroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.0010 1 1,2-Dichloroethane ND 0.0010 1 Disopropyl Ether (DIPE) ND 0.0020 1 Ethyloenzene ND 0.0010 1 Ethyl-t-Butyl Ether (ETBE) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 Toluene-d8 101 87-111 1,4-Bromofluorobenzene 102 71-113 MW18 9.5' 09-06-1342-15-A 06/12(09 10:52 Solid GC/MS Z 06/17/09 10:52 06/17/09 18:34 0900617L02 Parameter Result RL	MW18 8'			09-06-1	1342-14-A		Solid	GC/MS Z	06/15/09			090615L03
1,2-Dibromoethane ND 0.0010 1 Methyl-L-Butyl Ether (MTBE) ND 0.0010 1 1,2-Dichloroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.010 1 Ethylbenzene ND 0.0010 1 Diisopropyl Ether (DIPE) ND 0.0020 1 Ethanol ND 0.0010 1 Ethyl-Butyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 0906617L02 Toluene-d8 101 87-111 1,4-Bromofluorobenzene 102 71-113 090617L02 MW18 9.5' 09-06-1342-15-A 06/12/09 Solid GC/MS Z 06/17/09 06/17/09 090617L02 Benzene ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Kklerter (ETBE) ND 0.20 200 1,2-Dich	Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u>	DF	Qual
1,2-Dichloroethane ND 0.0010 1 Tert-Butyl Alcohol (TBA) ND 0.010 1 Ethylbenzene ND 0.0010 1 Disopropyl Ether (DIPE) ND 0.0020 1 Ethanol ND 0.10 1 Ethyl-Hautyl Ether (ETBE) ND 0.0020 1 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits 1,2-Dichloroethane-d4 105 73-151 0ual Limits Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 Toluene-d8 101 87-111 1,4-Bromofluorobenzene 102 71-113 090617L02 MW18 9.5' 09-06-1342-15-A 06/12/09 Solid GC/MS Z 06/17/09 06/17/09 080617L02 Parameter Result RL DE Qual Parameter Result ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 0.20 200 1,2-Dibromoethane ND </td <td>Benzene</td> <td>ND</td> <td>0.0010</td> <td>1</td> <td></td> <td>Xylenes (total)</td> <td></td> <td></td> <td>ND</td> <td>0.0010</td> <td>1</td> <td></td>	Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
Ethylbenzene ND 0.0010 1 Diisopropyl Ether (DIPE) ND 0.0020 1 Ethanol ND 0.10 1 Ethyl-t-Butyl Ether (ETBE) ND 0.0020 1 Toluene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Limits Qual Surrogates: REC (%) Control Limits Qual Limits Qual Control Qual Limits Qual Limits Qual Limits Qual Control Qual Qual Limits Qual	1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl B	Ether (MTBI	E)	ND	0.0010	1	
Ethanol ND 0.10 1 Ethyl-t-Butyl Ether (ETBE) ND 0.0020 1 Toluene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Limits Qual Surrogates: REC (%) Control Limits Qual Limits Qual Qual Qual Limits Qual Limits Qual Limits Qual Limits Qual Qual Limits Qual Qual Li	1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	hol (TBA)	,	ND	0.010	1	
Toluene ND 0.0010 1 Tert-Amyl-Methyl Ether (TAME) ND 0.0020 1 Surrogates: REC (%) Control Limits Qual Surrogates: REC (%) Control Limits Qual Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 Qual MW18 9.5' 09-06-1342-15-A 06/12/09 10:52 Solid GC/MS Z 06/17/09 06/17/09 09/0617L02 Parameter Result RL Benzene DF Qual Parameter (table) Result RL DE DE Qual 1,2-Dibromoethane ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Tert-Amyl-Methyl Ether (MTBE) ND 0.40 200 Ethylbenzene 4.7 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200	Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Surrogates: REC (%) Control Limits Qual Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 102 71-113 MW18 9.5' 09-06-1342-15-A 06/12/09 10:52 Solid GC/MS Z 06/17/09 06/17/09 090617L02 18:34 Parameter Result RL DF Qual Parameter Result RL DF Qual 1,2-Dibromoethane ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Ethyl+	Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE)	ł	ND	0.0020	1	
Limits Limits Limits Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 Toluene-d8 101 87-111 1,4-Bromofluorobenzene 102 71-113 MW18 9.5' 09-06-1342-15-A 06/12/09 10:52 Solid GC/MS Z 06/17/09 06/17/09 090617L02 18:34 Parameter Result RL DF Qual Parameter Result RL DF Qual Benzene ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Methyl-t-Butyl Ether (MTBE) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 Ethylbenzene 4.7 0.20 200 Disopropyl Ether (DIPE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: <td>Toluene</td> <td>ND</td> <td>0.0010</td> <td>1</td> <td></td> <td>Tert-Amyl-Meth</td> <td>yl Ether (T</td> <td>AME)</td> <td>ND</td> <td>0.0020</td> <td>1</td> <td></td>	Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T	AME)	ND	0.0020	1	
Dibromofluoromethane 83 75-141 1,2-Dichloroethane-d4 105 73-151 Toluene-d8 101 87-111 1,4-Bromofluorobenzene 102 71-113 MW18 9.5' 09-06-1342-15-A 06/12/09 10:52 Solid GC/MS Z 06/17/09 06/17/09 090617L02 Parameter Result RL DE Qual Parameter Result RL DF Qual Benzene ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Methyl-t-Butyl Ether (MTBE) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Ethyl-t-Butyl Ether (DIPE) ND 0.40 200 Ethylbenzene 4.7 0.20 200 Ethyl-t-Butyl Ether (TAME) ND 0.40 200 Toluene ND 0.20 200	Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:	•		REC (%)	Control		<u>Qual</u>
Toluene-d8 101 87-111 1,4-Bromofluorobenzene 102 71-113 MW18 9.5' 09-06-1342-15-A 06/12/09 10:52 Solid GC/MS Z 06/17/09 06/17/09 18:34 090617L02 Parameter Result RL DF Qual Parameter Result RL DF Qual Parameter Result RL DF Qual 1,2-Dibromoethane ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Methyl-t-Butyl Ether (MTBE) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 Ethylbenzene 4.7 0.20 200 Diisopropyl Ether (DIPE) ND 0.40 200 Ethanol ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Limits Qual Surrogates: REC (%)			<u>Limits</u>			-				Limits		
MW18 9.5' 09-06-1342-15-A 06/12/09 10:52 Solid GC/MS Z 06/17/09 18:34 090617L02 18:34 Parameter Result RL DF Qual Parameter Result RL DF Qual Benzene ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Methyl-t-Butyl Ether (MTBE) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Diisopropyl Ether (DIPE) ND 0.40 200 Ethylbenzene 4.7 0.20 200 Ethyl-t-Butyl Ether (ETBE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Limits Qual Surrogates: REC (%) Control Limits Qual Dibromofl	Dibromofluoromethane	83	75-141			1,2-Dichloroeth	ane-d4		105	73-151		
Parameter Result RL DF Qual	Toluene-d8	101	87-111			1,4-Bromofluor	obenzene		102	71-113		
Benzene ND 0.20 200 Xylenes (total) ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Methyl-t-Butyl Ether (MTBE) ND 0.20 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 Ethylbenzene 4.7 0.20 200 Diisopropyl Ether (DIPE) ND 0.40 200 Ethanol ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Limits 1,2-Dichloroethane-d4 104 73-151 Tert-Surgates	MW18 9.5'			09-06-1	1342-15-A		Solid	GC/MS Z	06/17/09			090617L02
ND 0.20 200 Methyl-t-Butyl Ether (MTBE) ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 Ethylbenzene 4.7 0.20 200 Diisopropyl Ether (DIPE) ND 0.40 200 Ethanol ND 0.20 200 Ethyl-t-Butyl Ether (ETBE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Limits Limits Limits Limits Limits Limits	Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qual	Parameter			<u>Result</u>	RL	DF	Qual
ND 0.20 200 Methyl-t-Butyl Ether (MTBE) ND 0.20 200 1,2-Dibromoethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 Ethylbenzene 4.7 0.20 200 Diisopropyl Ether (DIPE) ND 0.40 200 Ethanol ND 0.20 200 Ethyl-t-Butyl Ether (ETBE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Limits Limits Limits Limits Limits Limits	Benzene	ND	0.20			Xylenes (total)			ND	0.20	200	1
1,2-Dichloroethane ND 0.20 200 Tert-Butyl Alcohol (TBA) ND 2.0 200 Ethylbenzene 4.7 0.20 200 Diisopropyl Ether (DIPE) ND 0.40 200 Ethylbenzene 4.7 0.20 200 Ethyl-t-Butyl Alcohol (TBA) ND 0.40 200 Ethylbenzene ND 20 200 Ethyl-t-Butyl Ether (ETBE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Limits Qual Surrogates: REC (%) Control Limits Qual Dibromofluoromethane 99 75-141 1,2-Dichloroethane-d4 104 73-151	1.2-Dibromoethane	-				, , ,	Ether (MTBI	E)				
Ethylbenzene 4.7 0.20 200 Diisopropyl Ether (DIPE) ND 0.40 200 Ethylbenzene ND 20 200 Ethyl-t-Butyl Ether (ETBE) ND 0.40 200 Ethanol ND 0.20 200 Ethyl-t-Butyl Ether (ETBE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Limits 1,2-Dichloroethane-d4 104 73-151								•				
Ethanol ND 20 200 Ethyl-t-Butyl Ether (ETBE) ND 0.40 200 Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Limits Limits Limits Limits Limits	Ethylbenzene					•	. ,					
Toluene ND 0.20 200 Tert-Amyl-Methyl Ether (TAME) ND 0.40 200 Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Limits Limits Limits Limits Dibromofluoromethane 99 75-141 1,2-Dichloroethane-d4 104 73-151	Ethanol	ND					• •	I				
Surrogates: REC (%) Control Qual Surrogates: REC (%) Control Qual Limits Limits Limits Limits Limits Limits	Toluene						· · ·					
Limits Limits Dibromofluoromethane 99 75-141 1,2-Dichloroethane-d4 104 73-151		REC (%)			Qual	-		,	REC (%)			
									A			
Toluene-d8 101 87-111 1,4-Bromofluorobenzene 98 71-113	Dibromofluoromethane	99	75-141			1,2-Dichloroeth	ane-d4		104			
	Toluene-d8	101	87-111			1,4-Bromofluor	obenzene		98	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



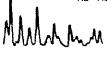


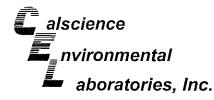
Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	mg/kg
	Page 6 of 11

Project: BP/ARCO 601

Client Sample Number				lb Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T I Analyz		QC Batch ID
MW18 11'			09-06-′	1342-16-A	06/12/09 10:55	Solid	GC/MS Z	06/17/09	06/17/ 19:0		090617L02
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			<u>Result</u>	<u>RL</u>	DF	Qual
Benzene	ND	0.10	100		Xylenes (total)			ND	0.10	10)
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl E	Ether (MTBE	E)	ND	0.10	10	
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alco	hol (TBA)		ND	1.0	10	
Ethylbenzene	1.0	0.10	100		Diisopropyl Eth	er (DIPE)		ND	0.20	10	
Ethanol	ND	10	100		Ethyl-t-Butyl Et	her (ETBE)		ND	0.20	100	-
Toluene	ND	0.10	100		Tert-Amyl-Meth	• • •		ND	0.20	100	
Surrogates:	REC (%)	Control		Qual	Surrogates:	·)· =-··· (··	,	REC (%)	Control	101	Qual
<u></u>	· · · · · · · · · · · · · · · · · · ·	Limits			,			<u></u>	Limits		
Dibromofluoromethane	94	75-141			1,2-Dichloroeth	ane-d4		98	73-151		
Toluene-d8	100	87-111			1,4-Bromofluor	obenzene		96	71-113		
MW18 12.5'			09-06-1	342-17-A	06/12/09 10:58	Solid	GC/MS Z	06/16/09	06/16/ 19:4		090616L01
					.0.00				10.4	·	
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u>	DF	<u>Qual</u>
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTBE	Ξ)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	hol (TBA)		ND	0.010	1	
Ethylbenzene	0.011	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE)		ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (TA	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	Control		<u>Qual</u>	Surrogates:		,	<u>REC (%)</u>	Control		Qual
Dibromofluoromethane	101	<u>Limits</u> 75-141			1,2-Dichloroeth	ano-d4		105	<u>Limits</u> 73-151		
Foluene-d8	100	87-111			1,4-Bromofluor			97	71-113		
	100	07-111									
MW18 15'			09-06-1	342-18-A	06/12/09 11:00	Solid	GC/MS Z	06/16/09	06/16/ 20:1		090616L01
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
	ND	0.0010						ND			Guai
Benzene	ND	0.0010	1		Xylenes (total)	lbor (MTD	= \	ND	0.0010	1	
1,2-Dibromoethane	ND		1 1		Methyl-t-Butyl E	•	=)		0.0010	1	
1,2-Dichloroethane	0.019	0.0010			Tert-Butyl Alcol	. ,		ND	0.010	1	
Ethylbenzene		0.0010	1		Diisopropyl Eth			ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Eth	• •		ND	0.0020	1	
Foluene	ND	0.0010	1	0	Tert-Amyl-Meth	iyi Ether (17		ND	0.0020	1	<u> </u>
Surrogates:	<u>REC (%)</u>	Control		Qual	Surrogates:			<u>REC (%)</u>	Control		<u>Qual</u>
21	101	<u>Limits</u>						404	<u>Limits</u>		
Dibromofluoromethane	101	75-141			1,2-Dichloroeth			104	73-151		
foluene-d8	103	87-111			1,4-Bromofluor	openzene		99	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



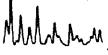


Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	mg/kg
	Page 7 of 11

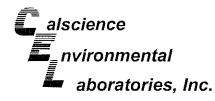
Project: BP/ARCO 601

Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T 1 Analyz		QC Batch ID
MW19 6.5'			09-06-	1342-19-A	06/12/09 15:00	Solid	GC/MS Z	06/16/09	06/16/ 20:4		090616L01
Parameter	<u>Result</u>	<u>RL</u>	DE	Qual	Parameter			<u>Result</u>	<u>RL</u>	DE	Qual
Benzene	ND	0.0010	1		Xylenes (totai)			0.0040	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl 6	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco			ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	• •		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	, ,		ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	iyl Ether (T.	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:			<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
	101	<u>Limits</u>			4.0 D'al-				Limits		
Dibromofluoromethane Toluene-d8	104 99	75-141			1,2-Dichloroeth			110	73-151		
	99	87-111			1,4-Bromofluor	openzene		94	71-113		
MW19 8'			09-06-	1342-20-A	06/12/09 15:02	Solid	GC/MS Z	06/16/09	06/16/ 21:1		090616L01
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	Parameter			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTBI	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth			ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et			ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T		ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	Surrogates:			REC (%)	<u>Control</u>		<u>Qual</u>
		<u>Limits</u>							Limits		
Dibromofluoromethane	99	75-141			1,2-Dichloroeth			108	73-151		
Toluene-d8	100	87-111			1,4-Bromofluor	openzene		91	71-113		
MW19 9.5'			09-06-1	1342-21-A	06/12/09 15:05	Solid	GC/MS Z	06/16/09	06/16/ 21:43		090616L01
Parameter	<u>Result</u>	RL	DF	Qual	Parameter			<u>Result</u>	<u>RL</u>	DE	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Etl			ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	iyl Ether (T <i>i</i>	,	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	Control		Qual	Surrogates:			REC (%)	Control		<u>Qual</u>
		<u>Limits</u>							Limits		
Dibromofluoromethane	99	75-141			1,2-Dichloroeth			105	73-151		
Toluene-d8	99	87-111			1,4-Bromofluor	obenzene		93	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



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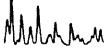
Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	mg/kg

Project: BP/ARCO 601

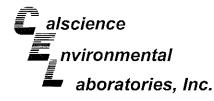
Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T d Analyz		QC Batch ID
MW19 11'			09-06-	1342-22-A	06/12/09 15:07	Solid	GC/MS Z	06/18/09	06/18/ 17:1		090618L01
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	Parameter			<u>Result</u>	<u>RL</u>	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Díbromoethane	ND	0.0010	1		Methyi-t-Butyl E	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco			ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	, ,		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et			ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T	AME)	ND	0.0020	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:			<u>REC (%)</u>	<u>Control</u>		Qual
		<u>Limits</u>			4.0.01.1.				Limits		
Dibromofluoromethane	86	75-141			1,2-Dichloroeth			111	73-151		
Toluene-d8	100	87-111			1,4-Bromofluor			115	71-113		LH,AY
MW19 12.5'			09-06-	1342-23-A	06/12/09 15:10	Solid	GC/MS Z	06/17/09	06/17/ 20:3		090617L01
Parameter	Result	<u>RL</u>	DF	<u>Qual</u>	Parameter			<u>Result</u>	<u>RL</u>	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol			ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	· · ·		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Etl	• •		ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T.	AME)	ND	0.0020	1	
Surrogales:	<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>	Surrogates:			<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>
Dibromofluoromethane	97	75-141			1,2-Dichloroeth	ane-d4		102	73-151		
Toluene-d8	100	87-111			1,4-Bromofluor	obenzene		104	71-113		
MW19 15'			09-06-	1342-24-A	06/12/09 15:12	Solid	GC/MS Z	06/18/09	06/18/ 17:4		090618L01
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	Parameter			<u>Result</u>	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Eth	her (ETBE)	1	ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	yl Ether (T	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:			REC (%)	<u>Control</u>		Qual
		<u>Limits</u>							Limits		
Dibromofluoromethane	100	75-141			1,2-Dichloroeth			130	73-151		
Toluene-d8	98	87-111			1,4-Bromofluor	obenzene		96	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



mg/kg

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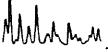
Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received: 06/13/09 Work Order No: 09-06-1342 Preparation: EPA 5030B Method: EPA 8260B Units:

Project: BP/ARCO 601

Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/I Analy		QC Batch ID
Method Blank			099-12	-709-153	N/A	Solid	GC/MS Z	06/15/09	06/15 18:3		090615L01
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl I	Ether (MTB	BE)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco	•		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyi-t-Butyl Et)	ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amvl-Metl	•	,	ND	0.0020	1	
Surrogates:	REC (%)	Control	•	Qual	Surrogates:	.j. = (.		REC (%)	Control	•	Qual
<u>ourrogatos.</u>	11201101	Limits		dda	<u>eunoquicu.</u>				Limits		<u>Quai</u>
Dibromofiuoromethane	98	75-141			1,2-Dichloroeth	nane-d4		103	73-151		
Toluene-d8	96	87-111			1,4-Bromofluor			91	71-113		
Method Blank		·. · ·	099-12	-709-154	N/A	Solid	GC/MS Z	06/15/09	06/16		090615L03
									03:2	9	
Parameter	Result	RL	DF	Qual	Parameter			Result	<u>RL</u>	DF	<u>Qual</u>
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl f	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et)	ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth		,	ND	0.0020	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	, ,	•	REC (%)	Control		Qual
	<u> </u>	Limits						<u></u>	Limits		
Dibromofluoromethane	100	75-141			1,2-Dichloroeth	ane-d4		104	73-151		
Toluene-d8	96	87-111			1,4-Bromofluor	obenzene		93	71-113		
Method Blank			099-12	-709-156	N/A	Solid	GC/MS Z	06/15/09	06/16 03:0		090615L04
Paramatar	Populi	RL		Qual	Parameter			Popult	DI		Qual
Parameter	Result		<u>DF</u>	Qual	Parameter			<u>Result</u>	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	0.10	100		Xylenes (total)		-	ND	0.10	100	
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl E		E)	ND	0.10	100	
1,2-Dichloroethane	ND	0.10	100		Terl-Butyi Alco	, ,		ND	1.0	100	
Ethylbenzene	ND	0.10	100		Diisopropyl Eth	, .		ND	0.20	100	
Ethanol	ND	10	100		Ethyl-t-Butyl Et	• •	,	ND	0.20	100	
Foluene	ND	0.10	100		Tert-Amyl-Meth	iyl Ether (T	,	ND	0.20	100)
Surrogates:	REC (%)	<u>Control</u>		Qual	Surrogates:			<u>REC (%)</u>	Control		Qual
		<u>Limits</u>							Limits		
		70 444						400			
Dibromofluoromethane	102 98	75-141			1,2-Dichloroeth	ane-d4		106 93	73-151		

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers





Date Received:Work Order No:09Preparation:EPMethod:EPUnits:EP

06/13/09

09-06-1342 EPA 5030B EPA 8260B mg/kg

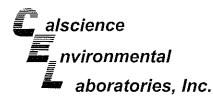
Page 10 of 11

Project: BP/ARCO 601

Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/I I Analy		QC Batch ID
Method Blank			099-12	2-709-157	N/A	Solid	GC/MS Z	06/16/09	06/16 13:5		090616L01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl I	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alco	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Et	her (ETBE))	ND	0.0020	1	•
Toluene	ND	0.0010	1		Tert-Amyl-Meth	nyl Ether (T	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits		Qual	Surrogates:			<u>REC (%)</u>	<u>Control</u> Limits		Qual
Dibromofluoromethane	102	75-141			1,2-Dichloroeth			106	73-151		
Toluene-d8	98	87-111			1,4-Bromofluor	obenzene		94	71-113	·····	
Method Blank			099-12	-709-158	N/A	Solid	GC/MS Z	06/16/09	06/16 13:2		090616L02
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	RL	DF	Quai
Benzene	ND	0.10	100		Xylenes (total)			ND	0.10	100	
1.2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl E	Ether (MTB	E)	ND	0.10	100	•
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alco	hol (TBA)		ND	1.0	100	ł
Ethylbenzene	ND	0.10	100		Diisopropyl Eth	er (DIPE)		ND	0.20	100	I
Ethanol	ND	10	100		Ethyl-t-Butyl Et	her (ETBE)	1	ND	0.20	100	I
Foluene	ND	0.10	100		Tert-Amyl-Meth	yl Ether (T	AME)	ND	0.20	100	I
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>	Surrogates:			<u>REC (%)</u>	<u>Control</u> Límits		Qual
Dibromofluoromethane	87	75-141			1.2-Dichloroeth	ane-d4		110	73-151		
Foluene-d8	99	87-111			1,4-Bromofluor			94	71-113		
Method Blank			099-12	-709-159	N/A	Solid	GC/MS Z	06/17/09	06/17		090617L01
Parameter	Result	RL	DE	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0010	1	MMM	Xvienes (total)			ND	0.0010	1	
I.2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ther (MTR	=)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	•	-,	ND	0.0010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	• •		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Eth	• •		ND	0.0020	1	
Foluene	ND	0.0010	1		Tert-Amyl-Meth	. ,		ND	0.0020	1	
			,	Quel	*		,	REC (%)		1	0
	REC (%)	Control			Surronates						
Surrogates:	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	Surrogates:			REU [%]	<u>Control</u>		Qual
	<u>REC (%)</u> 100	Limits 75-141		Quar	<u>Surrogates:</u>	ane-d4		107	<u>Limits</u> 73-151		Quai

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Mulham



Analytical Report

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received:
Work Order No:
Preparation:
Method:
Units:

06/13/09 09-06-1342 EPA 5030B EPA 8260B

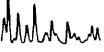
Page 11 of 11

mg/kg

Project: BP/ARCO 601

Client Sample Number				b Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T i Analyz		QC Batch ID
Method Blank			099-12	-709-160	N/A	Solid	GC/MS Z	06/17/09	06/17/ 15:0		090617L02
Parameter	Result	RL	DF	Qual	Parameler			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.10	100		Xylenes (totai)			ND	0.10	100)
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl 8	Ether (MTB	E)	ND	0.10	100)
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alco	hol (TBA)		ND	1.0	100)
Ethylbenzene	ND	0.10	100		Diisopropyl Eth	er (DIPE)		ND	0.20	100)
Ethanol	ND	10	100		Ethyl-t-Butyl Et	her (ETBE)	ND	0.20	100)
Toluene	ND	0.10	100		Tert-Amyl-Meth	yl Ether (T	AME)	ND	0.20	100)
Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:			REC (%)	<u>Control</u>		Qual
		<u>Limits</u>							<u>Limits</u>		
Dibromofluoromethane	106	75-141			1,2-Dichloroeth			110	73-151		
Toluene-d8	99	87-111			1,4-Bromofluor	obenzene		93	71-113		
Method Blank			099-12-	-709-161	N/A	Solid	GC/MS Z	06/18/09	06/18/ 13:01		090618L01
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
1.2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTB	E)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcol	hol (TBA)		ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Eth	er (DIPE)		ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Etl	her (ETBE)	ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Meth	iyl Ether (T	AME)	ND	0.0020	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits		<u>Quai</u>	Surrogates:			<u>REC (%)</u>	<u>Control</u> Limits		Qual
Dibromofluoromethane	105	75-141			1,2-Dichloroeth	ane-d4		110	73-151		
Toluene-d8	95	87-111			1,4-Bromofluor	obenzene		90	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



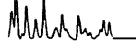
alscience nvironmental Quality Control - Spike/Spike Duplicate *aboratories, Inc.*

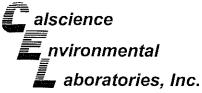
Date Received:	06/13/09
Work Order No:	09-06-1342
Preparation:	EPA 3050B
Method:	EPA 6010B
	Work Order No: Preparation:

Project BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
09-06-1341-1	Solid	ICP 5300	06/22/09		06/23/09	090622S03
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Lead	99	101	75-125	2	0-20	

RPD - Relative Percent Difference, CL - Control Limit





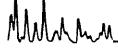


Stratus Environmental, inc.	Date Received	06/13/09
3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861	Work Order No: Preparation:	09-06-1342 EPA 3050B
	Method:	EPA 6010B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number	
09-06-1341-1	Solid	ICP 5300	06/22/09	06/23/09	090622803	
Parameter	PDS %REC	PDSD %REC	%REC CL	RPD RPD C	L Qualifiers	
Lead	96	93	75-125	2 0-20		

RPD - Relative Percent Difference CL - Control Limit



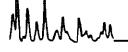
alscience nvironmental Quality Control - Spike/Spike Duplicate aboratories, Inc.

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project BP/ARCO 601

Quality Control Sample ID	Matrix	instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
MW17 6.5'	Solid	ICP 5300	06/22/09		06/23/09	090622S04
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Lead	102	96	75-125	4	0-20	

RPD - Relative Percent Difference, CL - Control Limit



EPA 6010B

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Quality Control - PDS / PDSD

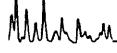
Method:

Date Received	06/13/09
	09-06-1342 EPA 3050B
	Date Received Work Order No: Preparation:

Project: BP/ARCO 601

Quality Control Sample ID	I Sample ID Matrix Instru		Date Prepared	Date Analyzed	PDS/PDSD Batch Number	
MW17 6.5'	Solid	ICP 5300	06/22/09	06/23/09	090622S04	
Parameter	PDS %REC	PDSD %REC	<u>%REC CL</u>	RPD RPD C	Qualifiers	
Lead	91	94	75-125	2 0-20		

RPD - Relative Percent Difference, CL - Control Limit



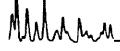
alscience nvironmental Quality Control - Spike/Spike Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
09-06-1341-1	Solid	GC 1	06/15/09		06/15/09	090615S01
Parameter	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	87	82	42-126	5	0-25	

RPD - Relative Percent Difference, CL - Control Limit



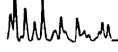
alscience nvironmental aboratories, Inc.

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project BP/ARCO 601

Quality Control Sample ID	Matrix	Matrix Instrument		Date Analyzed		MS/MSD Batch Number	
MW19 15'	Solid	GC 1	06/15/09		06/16/09	090615S02	
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers	
Gasoline Range Organics (C6-C12)	87	85	42-126	3	0-25		

RPD - Relative Percent Difference, CL - Control Limit



Calscience nvironmental Quality Control - Spike/Spike Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number 090615S01	
MW17 12.5'	Solid	Solid GC/MS Z			06/15/09		
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers	
Benzene	92	90	78-114	2	0-14		
Chloroform	95	95	80-120	0	0-20		
1,1-Dichloroethane	91	91	80-120	0	0-20		
1,2-Dichloroethane	92	89	80-120	4	0-20		
1,1-Dichloroethene	93	93	73-127	1	0-21		
Ethanol	94	89	45-135	5	0-29		
Tetrachloroethene	83	80	80-120	3	0-20		
Toluene	93	92	74-116	2	0-16		
Trichloroethene	90	89	74-122	1	0-17		
Methyl-t-Butyl Ether (MTBE)	84	85	69-123	1	0-18		

RPD - Relative Percent Difference , CL - Control Limit



Calscience nvironmental Quality Control - Spike/Spike Duplicate aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550	Date Received: Work Order No:	06/13/09 09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project BP/ARCO 601

Quality Contro! Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number	
09-06-1281-1	Solid	GC/MS Z	06/16/09		06/16/09	090616S01	
Datameter				DDD			
<u>Parameter</u>	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	Qualifiers	
Benzene	95	98	79-115	3	0-13		
Toluene	96	98	79-115	2	0-15		
Ethylbenzene	96	99	70-130	2	0-30		
Methyl-t-Butyl Ether (MTBE)	91	97	68-128	6	0-14		
Tert-Butyl Alcohol (TBA)	91	98	44-134	6	0-37		
Dilsopropyl Ether (DIPE)	98	103	75-123	6	0-12		
Ethyl-t-Butyl Ether (ETBE)	90	96	75-117	6	0-12		
Tert-Amyl-Methyl Ether (TAME)	88	92	79-115	4	0-12		
Ethanol	119	130	42-138	9	0-28		
1,1-Dichloroethene	100	102	69-123	2	0-16		
1,2-Dibromoethane	100	103	70-130	4	0-30		
1,2-Dichlorobenzene	90	92	63-123	2	0-23		
Carbon Tetrachloride	90	95	55-139	5	0-15		
Chlorobenzene	92	94	79-115	2	0-17		
Trichloroethene	92	93	66-144	1	0-14		
Vinyl Chloride	96	97	60-126	1	0-14		

RPD - Relative Percent Difference, CL - Control Limit

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alscience nvironmental Quality Control - Spike/Spike Duplicate aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550	Date Received: Work Order No:	06/13/09 09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
09-06-1572-1	Solid	GC/MS Z	06/17/09		06/17/09	090617S01
Parameter	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	90	93	79-115	2	0-13	
Carbon Tetrachloride	82	84	55-139	2	0-15	
Chlorobenzene	97	99	79-115	2	0-17	
1,2-Dibromoethane	98	101	70-130	2	0-30	
1,2-Dichlorobenzene	98	102	63-123	4	0-23	
1,1-Dichloroethene	92	94	69-123	2	0-16	
Ethylbenzene	100	102	70-130	2	0-30	
Toluene	91	93	79-115	3	0-15	
Trichloroethene	115	120	66-144	4	0-14	
Vinyl Chloride	90	88	60-126	3	0-14	
Methyl-t-Butyl Ether (MTBE)	79	80	68-128	2	0-14	
Tert-Butyl Alcohol (TBA)	107	121	44-134	12	0-37	
Diisopropyl Ether (DIPE)	93	95	75-123	2	0-12	
Ethyl-I-Butyl Ether (ETBE)	83	83	75-117	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	79	82	79-115	4	0-12	
Ethanol	134	106	42-138	23	0-28	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience nvironmental Quality Control - Spike/Spike Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	06/13/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number	
09-06-1663-2	Solid	GC/MS Z	06/18/09	06/18/09		090618S01	
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	Qualifiers	
Benzene	96	94	79-115	2	0-13		
Carbon Tetrachloride	87	86	55-139	2	0-15		
Chlorobenzene	101	99	79-115	2	0-17		
1,2-Dibromoethane	107	105	70-130	2	0-30		
1,2-Dichlorobenzene	102	101	63-123	1	0-23		
1,1-Dichloroethene	96	95	69-123	1	0-16		
Ethylbenzene	103	102	70-130	1	0-30		
Toluene	97	94	79-115	3	0-15		
Trichloroelhene	91	90	66-144	2	0-14		
Vinyl Chloride	102	102	60-126	0	0-14		
Methyl-t-Butyl Ether (MTBE)	87	86	68-128	1	0-14		
Tert-Butyl Alcohol (TBA)	105	99	44-134	6	0-37		
Diisopropyl Ether (DIPE)	105	102	75-123	3	0-12		
Ethyl-t-Butyl Ether (ETBE)	90	89	75-117	1	0-12		
Tert-Amyl-Methyl Ether (TAME)	88	86	79-115	2	0-12		
Ethanol	141	136	42-138	4	0-28	LM,AY	

RPD - Relative Percent Difference , CL - Control Límit

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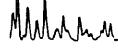
Calscience nvironmental Quality Control - LCS/LCS Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrum	nent	Date Prepared	Dat Analy		LCS/LCSD Batcl Number	ז
097-01-002-12,440	Solid	ICP 53	00	06/22/09	06/23/	09	090622L03	
Parameler	LCS 9	6REC	LCSD %R	<u>EC %R</u>	EC CL	RPD	RPD CL	<u>Qualifiers</u>
Lead	102		98	8	0-120	4	0-20	

RPD - Relative Percent Difference, CL - Control Limit



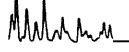
alscience nvironmental Quality Control - LCS/LCS Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSI Numb	
097-01-002-12,441	Solid	ICP 5300	06/22/09	06/23/09	090622	2L04
Parameter	LCS %	REC LCSD	<u>%REC %</u>	REC CL R	PD RPD (CL Qualífiers
Lead	101	100) (80-120	1 0-20	C

RPD - Relative Percent Difference, CL - Control Limit



alscience nvironmental aboratories, Inc.

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyz	-	LCS/LCSD Batcl	1
099-12-697-122	Solid	GC 1	06/15/09	06/16/0)9	090615B03	
Parameter	LCS	REC LCSD	<u>%REC %</u>	REC CL	<u>RPD</u>	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	92	95		70-118	з	0-20	

RPD - Relative Percent Difference, CL - Control Limit

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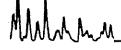
alscience nvironmental Quality Control - LCS/LCS Duplicate aboratories, Inc.

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrumer	Da nt Prep		Da Analy	-	LCS/LCSD Batc Number	h
099-12-697-120	Solid	GC 1	06/1	5/09	06/15	/09	090615B01	
Parameter	LCS ?	<u> «REC LC</u>	SD %REC	<u>%RE</u>	CCL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	95		96	70-	-118	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit



alscience nvironmental Quality Control - LCS/LCS Duplicate *aboratories, Inc.*

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyz	_	LCS/LCSD Batc Number	h
099-12-697-121	Solid	GC 1	06/15/09	06/16/0	09	090615B02	
Parameter	LCS %	<u> REC LCSD</u>	<u>%REC %</u>	REC CL	RPD	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	92	95		70-118	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Calscience nvironmental C *aboratories, Inc.*

Quality Control - LCS/LCS Duplicate

Date Received:

Work Order No:

Preparation:

Method:

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 i ja...

	·	
		N/A
	09-0	6-1342

EPA 5030B

EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Matrix Instrument			ale yzed	LCS/LCSD Batch Number 090615L01	
099-12-709-153	Solid	GC/MS Z	06/15/09	06/15/09			
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	104	103	84-114	79-119	1	0-7	
Bromobenzene	102	105	80-120	73-127	3	0-20	
Bromochloromethane	119	89	80-120	73-127	29	0-20	
Bromodichloromethane	104	102	80-120	73-127	2	0-20	
Bromoform	102	101	80-120	73-127	0	0-20	
Bromomethane	111	97	80-120	73-127	14	0-20	
n-Butylbenzene	109	107	77-123	69-131	1	0-25	
sec-Butylbenzene	109	107	80-120	73-127	2	0-20	
tert-Butylbenzene	111	109	80-120	73-127	2	0-20	
Carbon Disulfide	108	105	80-120	73-127	3	0-20	
Carbon Tetrachloride	102	100	69-135	58-146	2	0-13	
Chlorobenzene	103	103	85-109	81-113	0	0-8	
Chloroethane	102	96	80-120	73-127	6	0-20	
Chloroform	107	92	80-120	73-127	15	0-20	
Chloromethane	102	98	80-120	73-127	4	0-20	
2-Chlorotoluene	105	107	80-120	73-127	2	0-20	
4-Chlorotoluene	104	103	80-120	73-127	2	0-20	
Dibromochloromethane	102	104	80-120	73-127	2	0-20	
1,2-Dibromo-3-Chloropropane	105	104	80-120	73-127	1	0-20	
1,2-Dibromoelhane	102	103	80-120	73-127	1	0-20	
Dibromomethane	101	100	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	104	101	80-110	75-115	2	0-10	
1,3-Dichlorobenzene	103	101	80-120	73-127	2	0-20	
1,4-Dichlorobenzene	102	99	80-120	73-127	3	0-20	
Dichlorodifluoromethane	106	103	80-120	73-127	4	0-20	
1.1-Dichloroethane	103	102	80-120	73-127	2	0-20	
1,2-Dichloroethane	102	102	80-120	73-127	0	0-20	
1.1-Dichloroethene	105	102	83-125	76-132	3	0-10	
c-1,2-Dichloroethene	101	97	80-120	73-127	4	0-20	
t-1,2-Dichloroethene	108	104	80-120	73-127	3	0-20	
1,2-Dichloropropane	102	103	79-115	73-121	0	0-25	
1,3-Dichloropropane	104	104	80-120	73-127	0	0-20	
2,2-Dichloropropane	100	98	80-120	73-127	2	0-20	
1,1-Dichloropropene	107	105	80-120	73-127	2	0-20	
c-1,3-Dichloropropene	108	106	80-120	73-127	1	0-20	
t-1,3-Dichloropropene	108	108	80-120	73-127	0	0-20	
Ethylbenzene	107	107	80-120	73-127	1	0-20	
Isopropylbenzene	109	109	80-120	73-127	0	0-20	

RPD - Relative Percent Difference, CL - Control Limit

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aboratories, Inc.

Stratus Environmental, inc.				
3330 Cameron Park Drive, Suite 550				
Cameron Park, CA 95682-8861				

Date Received:	N/A
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID		Date Prepared	Date Analyzed		LCS/LCSD Batch Number		
099-12-709-153	Solid	GC/MS Z	06/15/09	06/15/09		090615L01	
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	107	107	80-120	73-127	1	0-20	
Methylene Chloride	105	102	80-120	73-127	3	0-20	
Naphthalene	97	99	80-120	73-127	1	0-20	
n-Propylbenzene	109	110	80-120	73-127	0	0-20	
Styrene	108	108	80-120	73-127	0	0-20	
Ethanol	116	122	50-134	36-148	5	0-23	
1,1,1,2-Tetrachloroethane	100	102	80-120	73-127	2	0-20	
1,1,2,2-Tetrachloroethane	102	104	80-120	73-127	2	0-20	
Tetrachloroethene	94	96	80-120	73-127	2	0-20	
Toluene	104	105	79-115	73-121	1	0-8	
1,2,3-Trichlorobenzene	97	98	80-120	73-127	1	0-20	
1,2,4-Trichlorobenzene	98	98	80-120	73-127	0	0-20	
1,1,1-Trichloroethane	101	101	80-120	73-127	1	0-20	
1,1,2-Trichloroethane	102	101	80-120	73-127	1	0-20	
Trichloroethene	101	101	87-111	83-115	0	0-7	
Trichlorofluoromethane	105	102	80-120	73-127	2	0-20	
1,2,3-Trichloropropane	102	100	80-120	73-127	3	0-20	
1,2,4-Trimethylbenzene	108	106	80-120	73-127	2	0-20	
1,3,5-Trimethylbenzene	109	109	80-120	73-127	0	0-20	
Vinyl Acetate	112	106	80-120	73-127	5	0-20	
Vinyl Chloride	100	97	72-126	63-135	2	0-10	
p/m-Xylene	108	108	80-120	73-127	1	0-20	
o-Xylene	107	108	80-120	73-127	1	0-20	
Methyl-t-Butyl Ether (MTBE)	97	96	75-129	66-138	1	0-13	
Tert-Butyl Alcohol (TBA)	101	101	66-126	56-136	0	0-24	
Diisopropyl Ether (DIPE)	98	96	77-125	69-133	2	0-13	
Ethyl-t-Butyl Ether (ETBE)	97	98	72-132	62-142	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	97	99	77-125	69-133	2	0-10	

Total number of LCS compounds : 66

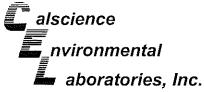
Total number of ME compounds : 0

Total number of ME compounds allowed : 3

LCS ME CL validation result : Pass

RPD - Relative Percent Difference, CL - Control Limit

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Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: BP/ARCO 601

999-12-709-154SolidGCMS Z04/6004/1004/10.5CountiliarsParameterLCS %RECNRE CMRE CNRE C </th <th>Quality Control Sample ID</th> <th>Matrix</th> <th>Instrument</th> <th>Date Prepared</th> <th>Da Anal</th> <th></th> <th>LCS/LCSD I Numbe</th> <th></th>	Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD I Numbe	
Instruct Instruct	099-12-709-154	Solid	GC/MS Z	06/15/09	06/16	/09	090615L)3
Bromobenzene 104 105 80-120 73-127 1 0-20 Bromochioromethane 124 119 80-120 73-127 3 0-20 Bromochioromethane 103 103 80-120 73-127 1 0-20 Bromoretin 103 103 80-120 73-127 1 0-20 Bromoretin 102 110 77-123 69-131 8 0-20 Bromoretin 108 117 80-120 73-127 8 0-20 Bromoretin 108 117 80-120 73-127 8 0-20 Carbon Disulfide 107 112 80-120 73-127 8 0-20 Chlorobenzene 103 109 60-135 58-146 5 0-13 Chlorobetane 103 107 80-120 73-127 4 0-20 Chlorobetane 103 107 80-120 73-127 6 0-20 Chlorobetane 104<	Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	<u>RPD</u>	RPD CL	Qualifiers
Bromochloromethane 124 119 80-120 73-127 3 0-20 Bromodichloromethane 106 108 80-120 73-127 0 0-20 Bromodichloromethane 105 108 80-120 73-127 1 0-20 Bromodichloromethane 115 113 80-120 73-127 2 0-20 n-Bulylbanzene 108 117 80-120 73-127 8 0-20 Lert-Butylbanzene 106 115 80-120 73-127 8 0-20 Carbon Tetrachloride 103 107 85-108 81-113 4 0-8 Chlorobenzene 103 107 80-120 73-127 4 0-20 Chlorobenzene 103 109 80-120 73-127 4 0-20 Chlorobenzene 104 108 80-120 73-127 4 0-20 Chlorobenzene 104 108 80-120 73-127 5 0-20	Benzene	106	109	84-114	79-119	4	0-7	
Bromodichloromethane 108 108 80-120 73-127 0 0.20 Bromodicm 103 103 80-120 73-127 1 0.20 Bromodicm 103 103 80-120 73-127 1 0.20 Bromodichloromethane 102 110 77-123 69-131 8 0.25 see-Bulybenzene 106 115 80-120 73-127 8 0.20 Carbon Disulfide 107 112 80-120 73-127 8 0.20 Carbon Disulfide 107 112 80-120 73-127 8 0.20 Carbon Disulfide 103 109 69-135 81-46 5 0-13 Chlorothane 103 107 80-120 73-127 4 0-20 Chlorothane 103 109 80-120 73-127 4 0-20 2-Chlorothane 104 108 80-120 73-127 4 0-20 1-Lorothorothane <td>Bromobenzene</td> <td>104</td> <td>105</td> <td>80-120</td> <td>73-127</td> <td>1</td> <td>0-20</td> <td></td>	Bromobenzene	104	105	80-120	73-127	1	0-20	
Bromoform 103 103 80-120 73-127 1 0-20 Bromoform 115 113 80-120 73-127 2 0-20 Denomothane 106 115 80-120 73-127 8 0-20 sec-Bulybenzene 108 117 80-120 73-127 8 0-20 Carbon Disulfide 107 112 80-120 73-127 8 0-20 Carbon Disulfide 103 109 69-135 58-146 5 0-13 Chlorobhane 103 107 85-120 73-127 4 0-20 Chlorobhane 103 107 80-120 73-127 4 0-20 Chlorobhane 103 109 80-120 73-127 4 0-20 Chlorobhane 104 106 80-120 73-127 6 0-20 Chlorobhane 100 105 80-120 73-127 6 0-20 Dibromochhane 107	Bromochloromethane	124	119	80-120	73-127	3	0-20	
Bromomelhane 115 113 80-120 73-127 2 0-20 n-Butylbenzene 102 110 77-123 69-131 8 0-25 ber-Butylbenzene 106 117 60-120 73-127 8 0-20 Carbon Disulfide 107 112 80-120 73-127 5 0-20 Carbon Disulfide 107 112 80-120 73-127 5 0-20 Carbon Disulfide 103 107 60-135 58-146 5 0-13 Chloroberaere 103 107 60-120 73-127 4 0-20 Chloroberaere 103 107 80-120 73-127 4 0-20 Chlorobluene 104 106 80-120 73-127 4 0-20 2-Chlorobluene 100 105 80-120 73-127 6 0-20 12-Dibrono-blanemehane 107 107 80-120 73-127 6 0-20 12-Dibronoe	Bromodichloromethane	108	108	80-120	73-127	0	0-20	
n-Butylbenzene 102 110 77-123 69-131 8 0-25 sec-Butylbenzene 108 117 60-120 73-127 8 0-20 lert-Butylbenzene 106 115 80-120 73-127 5 0-20 Carbon Disulfide 107 112 80-120 73-127 5 0-20 Carbon Disulfide 103 109 69-135 58-146 5 0-13 Chlorobhanzene 103 107 80-120 73-127 4 0-20 Chlorobhane 103 107 80-120 73-127 4 0-20 Chlorobhane 103 108 80-120 73-127 6 0-20 Chlorobhane 100 105 80-120 73-127 5 0-20 Chlorobhane 100 105 80-120 73-127 0 0-20 Dibromochloromethane 107 107 80-120 73-127 0 0-20 1,2-Dichorobenzene	Bromoform	103	103	80-120	73-127	1	0-20	
sec-Butylbenzene 108 117 80-120 73-127 8 0-20 Carbon Disulfide 106 115 80-120 73-127 8 0-20 Carbon Disulfide 107 112 80-120 73-127 8 0-20 Carbon Tetrachloride 103 109 69-135 55-146 5 0-13 Chlorobenzene 103 107 80-120 73-127 4 0-20 Chlorobentane 103 107 80-120 73-127 4 0-20 Chloroblane 103 109 80-120 73-127 5 0-20 2-Chloroblane 104 106 80-120 73-127 5 0-20 2-Chloroblane 106 107 80-120 73-127 6 0-20 1/2-Dibromo-3-Chloropropane 101 107 80-120 73-127 6 0-20 1/2-Dibromo-3-Chloropropane 101 107 80-120 73-127 7 0-20	Bromomethane	115	113	80-120	73-127	2	0-20	
terl-Butybenzene 106 115 80-120 73-127 8 0-20 Carbon Disulfide 107 112 80-120 73-127 5 0-20 Carbon Disulfide 103 109 69-135 58-146 5 0-13 Chlorobenzene 103 107 80-120 73-127 4 0-20 Chlorobenzene 103 107 80-120 73-127 4 0-20 Chlorobenzene 103 109 80-120 73-127 4 0-20 2-Chlorotelhane 104 108 80-120 73-127 5 0-20 2-Chlorotelhane 100 105 80-120 73-127 5 0-20 1/2-Dibromoethane 100 105 80-120 73-127 6 0-20 1/2-Dibromoethane 107 107 80-120 73-127 7 0 0-20 1/2-Dibromoethane 107 107 80-120 73-127 7 0-20 1	n-Butylbenzene	102	110	77-123	69-131	8	0-25	
Carbon Disulfide10711280-12073-12750-20Carbon Tetrachloride10310969-13558-14650-13Chlorobenzene10310785-19981-11340-8Chlorodhane10310760-12073-12740-20Chlorodhane10310980-12073-12740-20Chlorodhane10310980-12073-12740-20Chlorodhane10410880-12073-12740-202-Chlorotlouene10010580-12073-12710-20L'Enbrono-S-Chloropropane10110780-12073-12760-201.2-Dibromo-S-Chloropropane10110780-12073-12700-201.2-Dibromo-S-Chloropropane10710580-12073-12700-201.2-Dibromo-S-Chloropropane10710780-12073-12700-201.2-Dibromo-S-Chloropropane10710580-12073-12730-201.2-Dibromo-S-Chloropropane10710380-12073-12730-201.2-Diblorobenzene969880-12073-12770-201.4-Dichlorobenzene10611080-12073-12710-201.4-Dichloroethane10611080-12073-12710-201.4-Dichloroethane10611080-12073-12710-20	sec-Butylbenzene	108	117	80-120	73-127	8	0-20	
Carbon Tetrachloride 103 109 69-135 58-146 5 0-13 Chlorobenzene 103 107 85-109 81-113 4 0-8 Chlorobenzene 103 107 80-120 73-127 4 0-20 Chloroform 111 112 80-120 73-127 6 0-20 Chlorobluene 103 109 80-120 73-127 6 0-20 2-Chlorobluene 104 108 80-120 73-127 5 0-20 2-Chlorobluene 100 105 80-120 73-127 6 0-20 1.2-Dibromodhane 107 107 80-120 73-127 6 0-20 1.2-Dibromodhane 107 107 80-120 73-127 0 0-20 1.2-Dibromodhane 107 107 80-120 73-127 0 0-20 1.2-Dichlorobenzene 96 98 80-120 73-127 3 0-20 1.4-Dichloroben	tert-Butylbenzene	106	115	80-120	73-127	8	0-20	
Chloroberzene10310785-10981-11340.8Chloroethane10310780-12073-12740-20Chloroethane11111280-12073-12710-20Chloroethane10310980-12073-12760-202-Chlorolduene10410880-12073-12740-204-Chlorotoluene10010580-12073-12750-202-Chlorotoluene10010580-12073-12710-201,2-Dibromo-3-Chloropropane10110780-12073-12760-201,2-Dibromo-shchane10710580-12073-12700-20Dibromomethane10710780-12073-12720-201,2-Dibromo-shchane10710580-12073-12730-201,3-Dichlorobenzene969880-12073-12730-201,4-Dichlorobenzene969880-12073-12730-201,4-Dichlorobenzene10511380-12073-12740-201,1-Dichloroethane10611283-12578-13250-10c-1,2-Dichloroethane10611080-12073-12740-201,1-Dichloroethane10511080-12073-12740-201,1-Dichloroethane10611283-12578-13250-10c-1,2-Dichloroethane </td <td>Carbon Disulfide</td> <td>107</td> <td>112</td> <td>80-120</td> <td>73-127</td> <td>5</td> <td>0-20</td> <td></td>	Carbon Disulfide	107	112	80-120	73-127	5	0-20	
Chlorobenzene 103 107 85-109 81-113 4 0-8 Chlorobethane 103 107 80-120 73-127 4 0-20 Chlorooform 111 112 80-120 73-127 6 0-20 Chloroofunen 103 109 80-120 73-127 4 0-20 2-Chloroofulene 104 108 60-120 73-127 5 0-20 2-Chlorobluene 100 105 80-120 73-127 5 0-20 12-Dibromo-chloronethane 100 105 80-120 73-127 6 0-20 1,2-Dibromo-shchane 101 107 80-120 73-127 0 0-20 1,2-Dibromoethane 107 105 80-120 73-127 1 0-20 1,2-Dichorobenzene 102 103 80-120 73-127 5 0-20 1,4-Dichlorobenzene 98 103 80-120 73-127 7 0-20 1,	Carbon Tetrachloride	103	109	69-135	58-146	5	0-13	
Chloroform11111280-12073-12710-20Chloromethane10310980-12073-12760-202-Chlorotoluene10410880-12073-12740-204-Chlorotoluene10010580-12073-12710-201/2-Dibromo-3-Chloropropane10110780-12073-12760-201/2-Dibromo-3-Chloropropane10110780-12073-12760-201/2-Dibromoethane10710780-12073-12700-201/2-Dibromoethane10710780-12073-12720-201/2-Dibromoethane10710580-12073-12720-201/2-Dichlorobenzene9810380-12073-12730-201/4-Dichlorobenzene969880-12073-12770-201/4-Dichloroethane10611380-12073-12740-201/1-Dichloroethane10611283-12073-12740-201/1-Dichloroethane10611283-12073-12740-201/1-Dichloroethane10611283-12073-12740-201/1-Dichloroethene10511080-12073-12740-201/1-Dichloroethene10511080-12073-12740-201/1-Dichloropropane10810980-12073-12710-20	Chlorobenzene	103	107	85-109	81-113		0-8	
Chloromethane10310980-12073-12760-202-Chlorotoluene10410880-12073-12740-204-Chlorotoluene10010580-12073-12750-20Dibromochloromethane10010780-12073-12710-201,2-Dibromo-3-Chloropropane10110780-12073-12760-201,2-Dibromo-3-Chloropropane10110780-12073-12720-20Dibromomethane10710580-12073-12720-20Dibromomethane10710580-12073-12750-201,2-Dichlorobenzene10210380-11075-11510-101,3-Dichlorobenzene969880-12073-12770-201,4-Dichlorobenzene10611080-12073-12770-201,1-Dichloroethane10611080-12073-12740-201,2-Dichloroethane10611283-12576-13250-10c-1,2-Dichloroethane10611080-12073-12740-201,2-Dichloroptopane10810879-11573-12740-201,1-Dichloroethene10611080-12073-12740-201,2-Dichloroptopane10810879-11573-12740-201,2-Dichloroptopane10610880-12073-12740-20 </td <td>Chloroethane</td> <td>103</td> <td>107</td> <td>80-120</td> <td>73-127</td> <td>4</td> <td>0-20</td> <td></td>	Chloroethane	103	107	80-120	73-127	4	0-20	
2-Chlorokluene10410880-12073-12740-204-Chlorokluene10010580-12073-12710-20Dibromochloromethane10810780-12073-12710-201,2-Dibromo-3-Chloropropane10110780-12073-12760-201,2-Dibromoethane10710780-12073-12700-20Dibromoethane10710780-12073-12720-201,2-Dichlorobenzene10210380-11075-11510-101,3-Dichlorobenzene9810380-12073-12750-201,4-Dichlorobenzene969880-12073-12770-201,1-Dichloroethane10511380-12073-12770-201,2-Dichloroethane10611283-12578-13250-101,2-Dichloroethane10611283-12578-13250-101,1-Dichloroethane10611283-12573-12710-201,2-Dichloroethene10810879-11573-12740-201,2-Dichloroptene10810879-11573-12740-201,2-Dichloroptene10810879-11573-12740-201,2-Dichloroptene10810879-11573-12710-201,2-Dichloroptopane10810879-11573-12710-201	Chloroform	111	112	80-120	73-127	1	0-20	
4-Chlorobluene 100 105 80-120 73-127 5 0-20 Dibromochloromethane 108 107 80-120 73-127 1 0-20 1,2-Dibromo-3-Chloropropane 101 107 80-120 73-127 6 0-20 1,2-Dibromoethane 107 107 80-120 73-127 2 0-20 Dibromomethane 107 107 80-120 73-127 2 0-20 Dibromomethane 107 105 80-120 73-127 2 0-20 1,2-Dichlorobenzene 98 103 80-110 75-115 1 0-10 1,3-Dichlorobenzene 98 103 80-120 73-127 3 0-20 1,4-Dichlorobenzene 98 103 80-120 73-127 3 0-20 1,4-Dichlorobtenzene 106 113 80-120 73-127 4 0-20 1,1-Dichloroethane 106 110 80-120 73-127 1 0-20 1,2-Dichloroethene 113 125 80-120 73-127 1	Chloromethane	103	109	80-120	73-127	6	0-20	
Dibromochloromethane10810780-12073-12710-201,2-Dibromo-3-Chloropropane10110780-12073-12760-201,2-Dibromoethane10710780-12073-12700-20Dibromomethane10710580-12073-12720-201,2-Dichlorobenzene10210380-11075-11510-101,3-Dichlorobenzene9810380-12073-12750-201,4-Dichlorobenzene969880-12073-12730-201,1-Dichlorobentane10511380-12073-12770-201,1-Dichlorobethane10611080-12073-12740-201,2-Dichloroethane10611283-12576-13250-10c-1,2-Dichloroethene10611080-12073-12740-201,2-Dichloroethene10511080-12073-127100-201,1-Dichloroethene10511080-12073-12740-201,2-Dichloroptopane10710980-12073-127100-201,2-Dichloroptopane10710980-12073-12720-201,2-Dichloroptopane10710880-12073-12710-201,2-Dichloroptopane10710880-12073-12770-201,3-Dichloroptopane10611380-12073-12710	2-Chlorotoluene	104	108	80-120	73-127	4	0-20	
1,2-Dibromo-3-Chloropropane10110780-12073-12760-201,2-Dibromoethane10710780-12073-12700-20Dibromomethane10710580-12073-12720-201,2-Dichlorobenzene10210380-11075-11510-101,3-Dichlorobenzene9810380-12073-12750-201,4-Dichlorobenzene969880-12073-12730-201,4-Dichlorobenzene10511380-12073-12770-201,1-Dichloroethane10611080-12073-12740-201,2-Dichloroethane10611283-12576-13250-101,2-Dichloroethane10611283-12073-12740-201,1-Dichloroethane10611283-12073-127100-201,1-Dichloroethene10611283-12073-12740-201,2-Dichloroethene10511080-12073-12740-201,2-Dichloroethene10511080-12073-12740-201,2-Dichloroethene10511080-12073-12740-201,2-Dichloroethene10511080-12073-12740-201,2-Dichloroethene10710980-12073-12710-201,3-Dichloropropane10710980-12073-12770-20 </td <td>4-Chiorotoluene</td> <td>100</td> <td>105</td> <td>80-120</td> <td>73-127</td> <td>5</td> <td>0-20</td> <td></td>	4-Chiorotoluene	100	105	80-120	73-127	5	0-20	
1,2-Dibromoethane10710780-12073-12700-20Dibromomethane10710580-12073-12720-201,2-Dichlorobenzene10210380-11075-11510-101,3-Dichlorobenzene9810380-12073-12750-201,4-Dichlorobenzene969880-12073-12730-201,4-Dichlorobenzene969880-12073-12770-201,1-Dichloroethane10511380-12073-12740-201,2-Dichloroethane10611080-12073-12710-201,2-Dichloroethane10611283-12576-13250-101,2-Dichloroethene10611283-12073-12710-201,2-Dichloroethene10511080-12073-12740-201,2-Dichloroethene10511080-12073-12710-201,2-Dichloroethene10511080-12073-12740-201,2-Dichloroptopane10710880-12073-12710-201,3-Dichloroptopane10710880-12073-12710-202,2-Dichloroptopane10710880-12073-12710-201,3-Dichloroptopene10511380-12073-12710-201,1-Dichloroptopene10610680-12073-12710-20<	Dibromochloromethane	108	107	80-120	73-127	1	0-20	
Dibrommethane10710580-12073-12720-201,2-Dichlorobenzene10210380-11075-11510.101,3-Dichlorobenzene9810380-12073-12750.201,4-Dichlorobenzene969880-12073-12730.20Dichlorodifluoromethane10511380-12073-12770.201,1-Dichloroethane10611080-12073-12740.201,2-Dichloroethane10611283-12576-13250.101,2-Dichloroethene10611283-12073-12710.201,1-Dichloroethene10611283-12073-12740.201,2-Dichloroethene10611283-12073-127100.201,2-Dichloroethene10511080-12073-12740.201,2-Dichloroethene10511080-12073-12740.201,2-Dichloroptopane10810879-11573-12100.251,3-Dichloropropane10710980-12073-12710.201,1-Dichloropropane10511380-12073-12710.201,1-Dichloropropene10511380-12073-12710.201,1-Dichloropropene10511380-12073-12710.201,1-Dichloropropene10610680-12073-12700.20 </td <td>1,2-Dibromo-3-Chloropropane</td> <td>101</td> <td>107</td> <td>80-120</td> <td>73-127</td> <td>6</td> <td>0-20</td> <td></td>	1,2-Dibromo-3-Chloropropane	101	107	80-120	73-127	6	0-20	
1,2-Dichlorobenzene10210380-11075-11510-101,3-Dichlorobenzene9810380-12073-12750-201,4-Dichlorobenzene969880-12073-12730-20Dichlorodifluoromethane10511380-12073-12770-201,1-Dichloroethane10611080-12073-12740-201,2-Dichloroethane10611283-12576-13250-10c-1,2-Dichloroethene10611283-12073-127100-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-20t,3-Dichloropopane10710980-12073-12720-202,2-Dichloropopane10511380-12073-12710-201,1-Dichloropropane10511380-12073-12710-20t,1-Dichloropropane10611380-12073-12710-20t,1,3-Dichloropropene10610680-12073-12710-20t,1,3-Dichloropropene10610680-12073-12700-20t,1,3-Dichloropropene10610680-12073-1270	1,2-Dibromoethane	107	107	80-120	73-127	0	0-20	
1,3-Dichlorobenzene9810380-12073-12750-201,4-Dichlorobenzene969880-12073-12730-20Dichlorodifluoromethane10511380-12073-12770-201,1-Dichloroethane10611080-12073-12740-201,2-Dichloroethane10710680-12073-12710-201,1-Dichloroethane10611283-12576-13250-10c-1,2-Dichloroethene10611280-12073-127100-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-20t,2-Dichloropropane10710980-12073-12720-201,3-Dichloropropane10710980-12073-12710-201,1-Dichloropropane10511380-12073-12710-201,1-Dichloropropene10511380-12073-12710-20c-1,3-Dichloropropene10611380-12073-12710-20t,1,3-Dichloropropene10610680-12073-12700-20t,1,3-Dichloropropene10610680-12073-12700-20t,1,3-Dichloropropene10610680-12073-127 <td< td=""><td>Dibromomethane</td><td>107</td><td>105</td><td>80-120</td><td>73-127</td><td>2</td><td>0-20</td><td></td></td<>	Dibromomethane	107	105	80-120	73-127	2	0-20	
1,4-Dichlorobenzene969880-12073-12730-20Dichlorodifluoromethane10511380-12073-12770-201,1-Dichloroethane10611080-12073-12740-201,2-Dichloroethane10710680-12073-12710-201,1-Dichloroethene10611283-12576-13250-10c-1,2-Dichloroethene10312580-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-201,2-Dichloroptopane10810879-11573-12740-201,3-Dichloropropane10710980-12073-12710-202,2-Dichloropropane10511380-12073-12710-201,1-Dichloropropane10511380-12073-12710-201,1-Dichloropropane10511380-12073-12710-201,1-Dichloropropane10611380-12073-12710-20c-1,3-Dichloropropene10610680-12073-12700-20t-1,3-Dichloropropene10610680-12073-12700-20t-1,3-Dichloropropene10610680-12073-12700-20t-1,3-Dichloropropene10610680-12073-127	1,2-Dichlorobenzene	102	103	80-110	75-115	1	0-10	
Dichlorodifluoromethane10511380-12073-12770-201,1-Dichloroethane10611080-12073-12740-201,2-Dichloroethane10710680-12073-12710-201,1-Dichloroethene10611283-12576-13250-10c-1,2-Dichloroethene11312580-12073-12740-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroptopane10810879-11573-12100-251,3-Dichloroptopane10710980-12073-12720-202,2-Dichloroptopane919080-12073-12710-201,1-Dichloroptopene10511380-12073-12710-201,1-Dichloroptopene10511380-12073-12710-201,1-Dichloroptopene10610880-12073-12710-201,1-Dichloroptopene10610880-12073-12710-201,3-Dichloroptopene10610680-12073-12700-201,3-Dichloroptopene10610680-12073-12700-201,3-Dichloroptopene10611380-12073-12710-201,3-Dichloroptopene10610680-12073-12710-201,3-Dichloroptopene10610680-12073-1276<	1,3-Dichlorobenzene	98	103	80-120	73-127	5	0-20	
1,1-Dichloroethane10611080-12073-12740-201,2-Dichloroethane10710680-12073-12710-201,1-Dichloroethene10611283-12576-13250-10c-1,2-Dichloroethene11312580-12073-127100-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroethene10810879-11573-12100-251,3-Dichloropropane10710980-12073-12720-202,2-Dichloropropane919080-12073-12710-201,1-Dichloropropane10511380-12073-12710-201,1-Dichloropropane10511380-12073-12710-201,1-Dichloropropane10511380-12073-12710-201,1-Dichloropropane10610880-12073-12710-201,1-Dichloropropane10610680-12073-12710-201,3-Dichloropropane10610680-12073-12700-201,3-Dichloropropane10611380-12073-12700-201,3-Dichloropropane10611380-12073-12710-201,3-Dichloropropane10610680-12073-12700-201,3-Dichloropropane10610680-12073-12760	1,4-Dichlorobenzene	96	98	80-120	73-127	3	0-20	
1,2-Dichloroethane10710680-12073-12710-201,1-Dichloroethene10611283-12576-13250-10c-1,2-Dichloroethene11312580-12073-127100-20t-1,2-Dichloroethene10511080-12073-12740-20t-1,2-Dichloroptopane10810879-11573-12100-251,3-Dichloropropane10710980-12073-12720-202,2-Dichloropropane919080-12073-12710-201,1-Dichloropropane10511380-12073-12770-201,1-Dichloropropane10610880-12073-12710-201,1-Dichloropropane10511380-12073-12710-201,1-Dichloropropane10610880-12073-12710-201,1-Dichloropropane10610680-12073-12710-201,3-Dichloropropane10610680-12073-12700-201,3-Dichloropropane10611380-12073-12700-20	Dichlorodifluoromethane	105	113	80-120	73-127	7	0-20	
1,1-Dichloroethene10611283-12576-13250-10c-1,2-Dichloroethene11312580-12073-127100-20t-1,2-Dichloroethene10511080-12073-12740-201,2-Dichloroptopane10810879-11573-12100-251,3-Dichloroptopane10710980-12073-12720-202,2-Dichloroptopane919080-12073-12710-201,1-Dichloroptopene10511380-12073-12770-20c-1,3-Dichloroptopene10710880-12073-12710-20t,1-Dichloroptopene10611380-12073-12700-20	1,1-Dichloroethane	106	110	80-120	73-127	4	0-20	
c-1,2-Dichloroethene11312580-12073-127100-20t-1,2-Dichloroethene10511080-12073-12740-201,2-Dichloropropane10810879-11573-12100-251,3-Dichloropropane10710980-12073-12720-202,2-Dichloropropane919080-12073-12710-201,1-Dichloropropane10511380-12073-12770-201,1-Dichloropropene10511380-12073-12710-20c-1,3-Dichloropropene10610680-12073-12700-20Ethylbenzene10611380-12073-12760-20	1,2-Dichloroethane	107	106	80-120	73-127	1	0-20	
t-1,2-Dichloropethene10511080-12073-12740-201,2-Dichloropropane10810879-11573-12100-251,3-Dichloropropane10710980-12073-12720-202,2-Dichloropropane919080-12073-12710-201,1-Dichloropropane10511380-12073-12770-201,1-Dichloropropene10510880-12073-12710-201,1-Dichloropropene10710880-12073-12710-20t-1,3-Dichloropropene10610680-12073-12700-20Ethylbenzene10611380-12073-12760-20	1,1-Dichloroethene	106	112	83-125	76-132	5	0-10	
1,2-Dichloropropane10810879-11573-12100-251,3-Dichloropropane10710980-12073-12720-202,2-Dichloropropane919080-12073-12710-201,1-Dichloropropane10511380-12073-12770-20c-1,3-Dichloropropene10710880-12073-12710-20t-1,3-Dichloropropene10610680-12073-12700-20Ethylbenzene10611380-12073-12760-20	c-1,2-Dichloroethene	113	125	80-120	73-127	10	0-20	
1,3-Dichloropropane10710980-12073-12720-202,2-Dichloropropane919080-12073-12710-201,1-Dichloropropane10511380-12073-12770-20c-1,3-Dichloropropane10710880-12073-12710-20c-1,3-Dichloropropane10610680-12073-12700-20t-1,3-Dichloropropane10611380-12073-12700-20	t-1,2-Dichloroethene	105	110	80-120	73-127	4	0-20	
2,2-Dichloropropane919080-12073-12710-201,1-Dichloropropene10511380-12073-12770-20c-1,3-Dichloropropene10710880-12073-12710-20t-1,3-Dichloropropene10610680-12073-12700-20Ethylbenzene10611380-12073-12760-20	1,2-Dichloropropane	108	108	79-115	73-121	0	0-25	
1,1-Dichloropropene10511380-12073-12770-20c-1,3-Dichloropropene10710880-12073-12710-20t-1,3-Dichloropropene10610680-12073-12700-20Ethylbenzene10611380-12073-12760-20	1,3-Dichloropropane	107	109	80-120	73-127	2	0-20	
c-1,3-Dichloropropene10710880-12073-12710-20t-1,3-Dichloropropene10610680-12073-12700-20Ethylbenzene10611380-12073-12760-20	2,2-Dichloropropane	91	90	80-120	73-127	1	0-20	
t-1,3-Dichloropropene10610680-12073-12700-20Ethylbenzene10611380-12073-12760-20	1,1-Dichloropropene	105	113	80-120	73-127	7	0-20	
Ethylbenzene 106 113 80-120 73-127 6 0-20	c-1,3-Dichloropropene	107	108	80-120	73-127	1	0-20	
	t-1,3-Dichloropropene	106	106	80-120	73-127	0	0-20	
•	Ethylbenzene	106	113	80-120	73-127	6	0-20	
	Isopropylbenzene	107	115	80-120	73-127	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received:	N/A
Work Order No:	09-06-1342
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal	ate yzed	LCS/LCSD Numbe	
099-12-709-154	Solid	GC/MS Z	06/15/09	06/16/09		090615L03	
Parameter	LCS %REC LC	LCSD %REC	<u>%REC CL</u>	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	104	112	80-120	73-127	7	0-20	
Methylene Chloride	108	109	80-120	73-127	1	0-20	
Naphthalene	96	96	80-120	73-127	0	0-20	
n-Propylbenzene	107	114	80-120	73-127	6	0-20	
Styrene	109	112	80-120	73-127	3	0-20	
Ethanol	125	121	50-134	36-148	3	0-23	
1,1,1,2-Tetrachloroethane	104	106	80-120	73-127	1	0-20	
1,1,2,2-Tetrachloroethane	99	99	80-120	73-127	0	0-20	
Tetrachloroethene	105	117	80-120	73-127	11	0-20	
Toluene	105	110	79-115	73-121	4	0-8	
1,2,3-Trichlorobenzene	92	91	80-120	73-127	2	0-20	
1,2,4-Trichlorobenzene	86	86	80-120	73-127	0	0-20	
1,1,1-Trichloroethane	102	108	80-120	73-127	6	0-20	
1,1,2-Trichloroethane	107	107	80-120	73-127	0	0-20	
Trichloroethene	105	110	87-111	83-115	5	0-7	
Trichlorofluoromethane	104	110	80-120	73-127	6	0-20	
1,2,3-Trichloropropane	103	105	80-120	73-127	2	0-20	
1,2,4-Trimethylbenzene	105	110	80-120	73-127	5	0-20	
1,3,5-Trimethylbenzene	107	113	80-120	73-127	6	0-20	
Vinyl Acetate	88	80	80-120	73-127	9	0-20	
Vinyl Chloride	101	105	72-126	63-135	4	0-10	
p/m-Xylene	106	112	80-120	73-127	6	0-20	
o-Xylene	108	112	80-120	73-127	4	0-20	
Methyl-t-Butyl Ether (MTBE)	99	96	75-129	66-138	3	0-13	
Tert-Butyl Alcohol (TBA)	104	101	66-126	56-136	3	0-24	
Diisopropyl Ether (DIPE)	104	103	77-125	69-133	1	0-13	
Ethyl-t-Butyl Ether (ETBE)	100	109	72-132	62-142	9	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	95	77-125	69-133	4	0-10	

Total number of LCS compounds : 66 Total number of ME compounds : 2 Total number of ME compounds allowed : 3 LCS ME CL validation result : Pass

> RPD - Relative Percent Difference, CL - Control Limit

n.M



Date Received:

Work Order No:

Preparation:

Method:

aboratories, Inc.

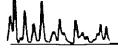
Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

N/A 09-06-1342 EPA 5030B EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD Numbe	
099-12-709-156	Solid	GC/MS Z	06/15/09 %REC CL	06/16/09		090615L04	
Parameter	LCS %REC	LCSD %REC		ME_CL	RPD	RPD CL	Qualifier
Benzene	106	109	84-114	79-119	4	0-7	
Bromobenzene	104	105	80-120	73-127	1	0-20	
Bromochloromethane	124	119	80-120	73-127	3	0-20	
Bromodichloromethane	108	108	80-120	73-127	0	0-20	
Bromoform	103	103	80-120	73-127	1	0-20	
Bromomethane	115	113	80-120	73-127	2	0-20	
n-Butylbenzene	102	110	77-123	69-131	8	0-25	
sec-Butylbenzene	108	117	80-120	73-127	8	0-20	
tert-Butylbenzene	106	115	80-120	73-127	8	0-20	
Carbon Disulfide	107	112	80-120	73-127	5	0-20	
Carbon Tetrachloride	103	109	69-135	58-146	5	0-13	
Chlorobenzene	103	107	85-109	81-113	4	0-8	
Chloroethane	103	107	80-120	73-127	4	0-20	
Chloroform	111	112	80-120	73-127	1	0-20	
Chloromethane	103	109	80-120	73-127	6	0-20	
2-Chlorotoluene	104	108	80-120	73-127	4	0-20	
4-Chlorotoluene	100	105	80-120	73-127	5	0-20	
Dibromochloromethane	108	107	80-120	73-127	1	0-20	
1,2-Dibromo-3-Chloropropane	101	107	80-120	73-127	6	0-20	
1,2-Dibromoethane	107	107	80-120	73-127	0	0-20	
Dibromomethane	107	105	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	102	103	80-110	75-115	1	0-10	
1,3-Dichlorobenzene	98	103	80-120	73-127	5	0-20	
1,4-Dichlorobenzene	96	98	80-120	73-127	3	0-20	
Dichlorodifluoromethane	105	113	80-120	73-127	7	0-20	
1,1-Dichloroethane	106	110	80-120	73-127	4	0-20	
1,2-Dichloroethane	107	106	80-120	73-127	1	0-20	
1,1-Dichloroethene	106	112	83-125	76-132	5	0-10	
c-1,2-Dichloroethene	113	125	80-120	73-127	10	0-20	
t-1,2-Dichloroethene	105	110	80-120	73-127	4	0-20	
1,2-Dichloropropane	108	108	79-115	73-121	0	0-25	
1,3-Dichloropropane	107	109	80-120	73-127	2	0-20	
2,2-Dichloropropane	91	90	80-120	73-127	1	0-20	
1,1-Dichloropropene	105	113	80-120	73-127	7	0-20	
c-1,3-Dichloropropene	107	108	80-120	73-127	1	0-20	
t-1,3-Dichloropropene	106	106	80-120	73-127	0	0-20	
Ethylbenzene	106	113	80-120	73-127	6	0-20	
Isopropylbenzene	107	115	80-120	73-127	7	0-20	

RPD - Relative Percent Difference, CL - Control Limit





aboratories, Inc.

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Date Instrument Prepared			ale yzed	LCS/LCSD Batch Number 090615L04	
099-12-709-156	Solid	GC/MS Z	06/15/09 %REC CL	06/16/09			
Parameter	LCS %REC	LCSD %REC		ME CL	RPD	RPD CL	Qualifiers
p-lsopropylloluene	104	112	80-120	73-127	7	0-20	
Methylene Chloride	108	109	80-120	73-127	1	0-20	
Naphthalene	96	96	80-120	73-127	0	0-20	
n-Propylbenzene	107	114	80-120	73-127	6	0-20	
Styrene	109	112	80-120	73-127	3	0-20	
Ethanol	125	121	50-134	36-148	3	0-23	
1,1,1,2-Tetrachloroethane	104	106	80-120	73-127	1	0-20	
1,1,2,2-Tetrachloroethane	99	99	80-120	73-127	0	0-20	
Tetrachloroethene	105	117	80-120	73-127	11	0-20	
Toluene	105	110	79-115	73-121	4	0-8	
1,2,3-Trichlorobenzene	92	91	80-120	73-127	2	0-20	
1,2,4-Trichlorobenzene	86	86	80-120	73-127	0	0-20	
1,1,1-Trichloroethane	102	108	80-120	73-127	6	0-20	
1,1,2-Trichloroethane	107	107	80-120	73-127	0	0-20	
Trichloroethene	105	110	87-111	83-115	5	0-7	
Trichlorofluoromethane	104	110	80-120	73-127	6	0-20	
1,2,3-Trichloropropane	103	105	80-120	73-127	2	0-20	
1,2,4-Trimethylbenzene	105	110	80-120	73-127	5	0-20	
1,3,5-Trimethylbenzene	107	113	80-120	73-127	6	0-20	
Vinyl Acetate	88	80	80-120	73-127	9	0-20	
Vinyl Chloride	101	105	72-126	63-135	4	0-10	
p/m-Xylene	106	112	80-120	73-127	6	0-20	
o-Xylene	108	112	80-120	73-127	4	0-20	
Methyl-t-Butyl Ether (MTBE)	99	96	75-129	66-138	3	0-13	
Tert-Butyl Alcohol (TBA)	104	101	66-126	56-136	3	0-24	
Diisopropyl Ether (DIPE)	104	103	77-125	69-133	1	0-13	
Ethyl-t-Butyl Ether (ETBE)	100	109	72-132	62-142	9	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	95	77-125	69-133	4	0-10	

Total number of ME compounds : 2 Total number of ME compounds allowed : 3 LCS ME CL validation result : Pass

> RPD - Relative Percent Difference, CL - Control Limit





aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

N/A

Preparation: Method:

Date Received:

Work Order No:

09-06-1342 EPA 5030B EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD Numbe	
099-12-709-157	Solid	GC/MS Z	06/16/09	06/16/09		090616L01	
Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	102	107	84-114	79-119	5	0-7	
Bromobenzene	102	104	80-120	73-127	2	0-20	
Bromochioromethane	121	93	80-120	73-127	26	0-20	
Bromodichloromethane	103	103	80-120	73-127	0	0-20	
Bromoform	99	100	80-120	73-127	1	0-20	
Bromomethane	107	112	80-120	73-127	4	0-20	
n-Butylbenzene	107	110	77-123	69-131	3	0-25	
sec-Butylbenzene	106	110	80~120	73-127	3	0-20	
tert-Butylbenzene	110	110	80-120	73-127	0	0-20	
Carbon Disulfide	106	112	80-120	73-127	6	0-20	
Carbon Tetrachloride	99	102	69-135	58-146	3	0-13	
Chlorobenzene	102	106	85-109	81-113	4	0-8	
Chloroethane	104	107	80-120	73-127	2	0-20	
Chloroform	108	109	80-120	73-127	2	0-20	
Chloromethane	103	106	80-120	73-127	3	0-20	
2-Chlorotoluene	105	107	80-120	73-127	3	0-20	
4-Chlorotoluene	102	105	80-120	73-127	3	0-20	
Dibromochloromethane	103	105	80-120	73-127	3	0-20	
1,2-Dibromo-3-Chloropropane	93	104	80-120	73-127	11	0-20	
1,2-Dibromoethane	103	105	80-120	73-127	2	0-20	
Dibromomethane	101	103	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	102	103	80-110	75-115	1	0-10	
1,3-Dichlorobenzene	100	102	80-120	73-127	2	0-20	
1.4-Dichlorobenzene	99	101	80-120	73-127	2	0-20	
Dichlorodifluoromethane	101	105	80-120	73-127	4	0-20	
1.1-Dichloroethane	106	108	80-120	73-127	2	0-20	
1,2-Dichloroethane	102	102	80-120	73-127	1	0-20	
1,1-Dichloroethene	105	109	83-125	76-132	4	0-10	
c-1,2-Dichloroethene	122	104	80-120	73-127	17	0-20	
t-1,2-Dichloroethene	103	109	80-120	73-127	5	0-20	
1,2-Dichloropropane	105	108	79-115	73-121	2	0-25	
1,3-Dichloropropane	106	107	80-120	73-127	1	0-20	
2,2-Dichloropropane	99	101	80-120	73-127	2	0-20	
1,1-Dichloropropene	106	109	80-120	73-127	3	0-20	
c-1,3-Dichloropropene	109	110	80-120	73-127	2	0-20	
t-1,3-Dichloropropene	109	109	80-120	73-127	0	0-20	
Ethylbenzene	105	109	80-120	73-127	4	0-20	
Isopropylbenzene	106	110	80-120	73-127	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received: Work Order No: (Preparation:

Method:

N/A 09-06-1342 EPA 5030B EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date t Prepared		ate yzed	LCS/LCSD Batch Number 090616L01	
099-12-709-157	Solid	GC/MS Z	06/16/09	06/16/09			
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	104	109	80-120	73-127	4	0-20	
Methylene Chloride	108	108	80-120	73-127	0	0-20	
Naphthalene	97	98	80-120	73-127	1	0-20	
n-Propylbenzene	107	112	80-120	73-127	4	0-20	
Styrene	108	111	80-120	73-127	2	0-20	
Ethanol	114	131	50-134	36-148	14	0-23	
1,1,1,2-Tetrachloroethane	101	103	80-120	73-127	2	0-20	
1,1,2,2-Tetrachioroethane	102	104	80-120	73-127	2	0-20	
Tetrachloroethene	87	101	80-120	73-127	15	0-20	
Toluene	102	107	79-115	73-121	5	0-8	
1,2,3-Trichlorobenzene	99	97	80-120	73-127	2	0-20	
1,2,4-Trichlorobenzene	99	97	80-120	73-127	2	0-20	
1,1,1-Trichloroethane	98	100	80-120	73-127	2	0-20	
1,1,2-Trichloroethane	105	104	80-120	73-127	1	0-20	
Trichloroethene	99	104	87-111	83-115	5	0-7	
Trichlorofluoromethane	101	104	80-120	73-127	3	0-20	
1,2,3-Trichloropropane	96	103	80-120	73-127	7	0-20	
1,2,4-Trimethylbenzene	104	108	80-120	73-127	3	0-20	
1,3,5-Trimethylbenzene	107	110	80-120	73-127	2	0-20	
Vinyl Acetate	111	112	80-120	73-127	1	0-20	
Vinyl Chloride	100	105	72-126	63-135	5	0-10	
p/m-Xylene	105	110	80-120	73-127	4	0-20	
o-Xylene	106	109	80-120	73-127	2	0-20	
Methyl-t-Butyl Ether (MTBE)	99	96	75-129	66-138	2	0-13	
Tert-Butyl Alcohol (TBA)	99	104	66-126	56-136	5	0-24	
Diisopropyl Ether (DIPE)	106	105	77-125	69-133	1	0-13	
Ethyl-t-Butyl Ether (ETBE)	100	98	72-132	62-142	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	97	94	77-125	69-133	2	0-10	

Total number of LCS compounds : 66

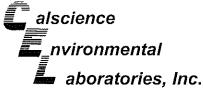
Total number of ME compounds : 2

Total number of ME compounds allowed : 3 LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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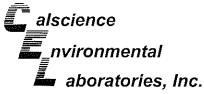
Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD I Number	
099-12-709-158	Solid	GC/MS Z	06/16/09	06/16/09		090616L0)2
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	102	107	84-114	79-119	5	0-7	
Bromobenzene	102	104	80-120	73-127	2	0-20	
Bromochloromethane	121	93	80-120	73-127	26	0-20	
Bromodichloromethane	103	103	80-120	73-127	0	0-20	
Bromoform	99	100	80-120	73-127	1	0-20	
Bromomethane	107	112	80-120	73-127	4	0-20	
n-Butylbenzene	107	110	77-123	69-131	3	0-25	
sec-Butylbenzene	106	110	80-120	73-127	3	0-20	
tert-Butylbenzene	110	110	80-120	73-127	0	0-20	
Carbon Disulfide	106	112	80-120	73-127	6	0-20	
Carbon Telrachloride	99	102	69-135	58-146	3	0-13	
Chlorobenzene	102	106	85-109	81-113	4	0-8	
Chloroethane	104	107	80-120	73-127	2	0-20	
Chloroform	108	109	80-120	73-127	2	0-20	
Chloromethane	103	106	80-120	73-127	3	0-20	
2-Chlorotoluene	105	107	80-120	73-127	3	0-20	
4-Chlorotoluene	102	105	80-120	73-127	3	0-20	
Dibromochloromethane	103	105	80~120	73-127	3	0-20	
1,2-Dibromo-3-Chloropropane	93	104	80-120	73-127	11	0-20	
1,2-Dibromoethane	103	105	80-120	73-127	2	0-20	
Dibromomethane	101	103	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	102	103	80-110	75-115	1	0-10	
1,3-Dichlorobenzene	100	102	80-120	73-127	2	0-20	
1,4-Dichlorobenzene	99	101	80-120	73-127	2	0-20	
Dichlorodifluoromethane	101	105	80-120	73-127	4	0-20	
1,1-Dichloroethane	106	108	80-120	73-127	2	0-20	
1.2-Dichloroethane	102	102	80-120	73-127	1	0-20	
1,1-Dichloroethene	105	109	83-125	76-132	4	0-10	
c-1,2-Dichloroethene	122	104	80-120	73-127	17	0-20	
t-1,2-Dichloroelhene	103	109	80-120	73-127	5	0-20	
1,2-Dichloropropane	105	108	79-115	73-121	2	0-25	
1,3-Dichloropropane	106	107	80-120	73-127	1	0-20	
2,2-Dichloropropane	99	101	80-120	73-127	2	0-20	
1,1-Dichloropropene	106	109	80-120	73-127	3	0-20	
c-1,3-Dichloropropene	109	110	80-120	73-127	2	0-20	
t-1,3-Dichloropropene	109	109	80-120	73-127	0	0-20	
Ethylbenzene	105	109	80-120	73-127	4	0-20	
Isopropylbenzene	106	110	80-120	73-127	4	0-20	

RPD - Relative Percent Difference, CL - Control Limit

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N/A
09-06-1342
EPA 5030B
EPA 8260B

Project: BP/ARCO 601

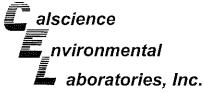
Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate yzed	LCS/LCSD Numbe	
099-12-709-158 Parameter	Solid	GC/MS Z	06/16/09	06/16/09		090616L02	
	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	<u>RPD</u>	RPD CL	Qualifiers
p-Isopropyltoluene	104	109	80-120	73-127	4	0-20	
Methylene Chloride	108	108	80-120	73-127	0	0-20	
Naphthalene	97	98	80-120	73-127	1	0-20	
n-Propylbenzene	107	112	80-120	73-127	4	0-20	
Styrene	108	111	80-120	73-127	2	0-20	
Ethanol	114	131	50-134	36-148	14	0-23	
1,1,1,2-Tetrachloroethane	101	103	80-120	73-127	2	0-20	
1,1,2,2-Tetrachloroethane	102	104	80-120	73-127	2	0-20	
Tetrachloroethene	87	101	80-120	73-127	15	0-20	
Toluene	102	107	79-115	73-121	5	0-8	
1,2,3-Trichlorobenzene	99	97	80-120	73-127	2	0-20	
1,2,4-Trichlorobenzene	99	97	80-120	73-127	2	0-20	
1,1,1-Trichloroethane	98	100	80-120	73-127	2	0-20	
1,1,2-Trichloroethane	105	104	80-120	73-127	1	0-20	
Trichloroethene	99	104	87-111	83-115	5	0-7	
Trichlorofluoromethane	101	104	80-120	73-127	3	0-20	
1,2,3-Trichloropropane	96	103	80-120	73-127	7	0-20	
1,2,4-Trimethylbenzene	104	108	80-120	73-127	3	0-20	
1,3,5-Trimethylbenzene	107	110	80-120	73-127	2	0-20	
Vinyl Acetate	111	112	80-120	73-127	1	0-20	
Vinyl Chloride	100	105	72-126	63-135	5	0-10	
p/m-Xylene	105	110	80-120	73-127	4	0-20	
o-Xylene	106	109	80-120	73-127	2	0-20	
Methyl-t-Butyl Ether (MTBE)	99	96	75-129	66-138	2	0-13	
Tert-Butyl Alcohol (TBA)	99	104	66-126	56-136	5	0-24	
Diisopropyl Ether (DIPE)	106	105	77-125	69-133	1	0-13	
Ethyl-t-Butyl Ether (ETBE)	100	98	72-132	62-142	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	97	94	77-125	69-133	2	0-10	

Total number of LCS compounds : 66 Total number of ME compounds : 2

Total number of ME compounds allowed : 3 LCS ME CL validation result : Pass

> RPD - Relative Percent Difference . CL - Control Limit

h.M

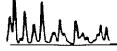


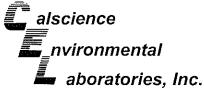
Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD Numbe	
099-12-709-159	Solid	GC/MS Z	06/17/09	06/17/09		090617L	01
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	<u>RPD</u>	<u>RPD CL</u>	Qualifiers
Benzene	104	105	84-114	79-119	1	0-7	
Bromobenzene	101	101	80-120	73-127	0	0-20	
Bromochloromethane	99	101	80-120	73-127	2	0-20	
Bromodichloromethane	105	106	80-120	73-127	1	0-20	
Bromoform	98	99	80-120	73-127	1	0-20	
Bromomethane	109	108	80-120	73-127	1	0-20	
n-Bulyibenzene	104	104	77-123	69-131	0	0-25	
sec-Butylbenzene	104	104	80-120	73-127	0	0-20	
tert-Butylbenzene	104	104	80-120	73-127	0	0-20	
Carbon Disulfide	110	112	80-120	73-127	2	0-20	
Carbon Tetrachloride	96	100	69-135	58-146	3	0-13	
Chlorobenzene	103	101	85-109	81-113	2	0-8	
Chloroethane	108	108	80-120	73-127	0	0-20	
Chloroform	99	100	80-120	73-127	1	0-20	
Chloromethane	106	109	80-120	73-127	3	0-20	
2-Chlorotoluene	103	102	80-120	73-127	1	0-20	
4-Chlorotoluene	100	101	80-120	73-127	1	0-20	
Dibromochloromethane	103	104	80-120	73-127	0	0-20	
1,2-Dibromo-3-Chloropropane	91	96	80-120	73-127	5	0-20	
1,2-Dibromoethane	103	105	80-120	73-127	2	0-20	
Dibromomethane	106	107	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	102	103	80-110	75-115	0	0-10	
1,3-Dichlorobenzene	99	100	80-120	73-127	1	0-20	
1,4-Dichlorobenzene	99	98	80-120	73-127	1	0-20	
Dichlorodifluoromethane	100	100	80-120	73-127	0	0-20	
1,1-Dichloroethane	110	113	80-120	73-127	2	0-20	
1,2-Dichloroethane	103	107	80-120	73-127	3	0-20	
1,1-Dichloroethene	109	112	83-125	76-132	3	0-10	
c-1,2-Dichloroethene	103	107	80-120	73-127	4	0-20	
t-1,2-Dichloroethene	106	109	80-120	73-127	2	0-20	
1,2-Dichloropropane	107	109	79-115	73-121	2	0-25	
1,3-Dichloropropane	108	108	80-120	73-127	0	0-20	
2,2-Dichloropropane	97	98	80-120	73-127	1	0-20	
1,1-Dichloropropene	106	107	80-120	73-127	1	0-20	
c-1,3-Dichloropropene	107	110	80-120	73-127	3	0-20	
t-1,3-Dichloropropene	105	106	80-120	73-127	1	0-20	
Ethylbenzene	104	104	80-120	73-127	0	0-20	
Isopropylbenzene	104	105	80-120	73-127	1	0-20	

RPD - Relative Percent Difference CL - Control Limit





Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal	ate yzed	LCS/LCSD Numbe	
099-12-709-159 Parameter	Solid	GC/MS Z	Z 06/17/09	06/17/09		090617L01	
	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	102	102	80-120	73-127	0	0-20	
Methylene Chloride	112	116	80-120	73-127	4	0-20	
Naphthalene	95	97	80-120	73-127	2	0-20	
n-Propylbenzene	106	106	80-120	73-127	0	0-20	
Styrene	107	107	80-120	73-127	0	0-20	
Ethanol	137	135	50-134	36-148	1	0-23	LQ
1,1,1,2-Tetrachloroethane	99	99	80-120	73-127	0	0-20	
1,1,2,2-Tetrachloroethane	103	105	80-120	73-127	2	0-20	
Tetrachloroethene	94	92	80-120	73-127	2	0-20	
Toluene	105	105	79-115	73-121	0	0-8	
1,2,3-Trichiorobenzene	96	96	80-120	73-127	0	0-20	
1,2,4-Trichlorobenzene	94	93	80-120	73-127	1	0-20	
1,1,1-Trichloroethane	96	98	80-120	73-127	2	0-20	
1,1,2-Trichloroethane	107	107	80-120	73-127	1	0-20	
Trichloroethene	100	102	87-111	83-115	2	0-7	
Trichlorofluoromelhane	100	102	80-120	73-127	2	0-20	
1,2,3-Trichloropropane	98	99	80-120	73-127	1	0-20	
1,2,4-Trimethylbenzene	103	103	80-120	73-127	1	0-20	
1,3,5-Trimethylbenzene	105	105	80-120	73-127	0	0-20	
Vinyl Acetate	109	120	80-120	73-127	9	0-20	
Vinyl Chloride	107	109	72-126	63-135	2	0-10	
p/m-Xylene	104	104	80-120	73-127	0	0-20	
o-Xylene	105	105	80-120	73-127	1	0-20	
Methyl-t-Butyl Ether (MTBE)	95	98	75-129	66-138	3	0-13	
Tert-Butyl Alcohol (TBA)	102	106	66-126	56-136	3	0-24	
Diisopropyl Ether (DIPE)	111	113	77-125	69-133	2	0-13	
Ethyl-t-Butyl Ether (ETBE)	99	101	72-132	62-142	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	92	95	77-125	69-133	3	0-10	

Total number of LCS compounds : 66 Total number of ME compounds : 1

Total number of ME compounds allowed : 3 LCS ME CL validation result : Pass

> RPD - Relative Percent Difference, CL - Control Limít

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Quality Control - LCS/LCS Duplicate

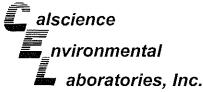
Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate yzed	LCS/LCSD Numbe	
099-12-709-160 Parameter	Solid	GC/MS Z	06/17/09	06/17/09		090617L02	
	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	RPD	<u>RPD CL</u>	Qualifiers
Benzene	104	105	84-114	79-119	1	0-7	
Bromobenzene	101	101	80-120	73-127	0	0-20	
Bromochloromethane	99	101	80-120	73-127	2	0-20	
Bromodichloromethane	105	106	80-120	73-127	1	0-20	
Bromoform	98	99	80-120	73-127	1	0-20	
Bromomethane	109	108	80-120	73-127	1	0-20	
n-Butylbenzene	104	104	77-123	69-131	0	0-25	
sec-Butylbenzene	104	104	80-120	73-127	0	0-20	
ert-Butylbenzene	104	104	80-120	73-127	0	0-20	
Carbon Disulfide	110	112	80-120	73-127	2	0-20	
Carbon Tetrachloride	96	100	69-135	58-146	3	0-13	
Chlorobenzene	103	101	85-109	81-113	2	0-8	
Chloroethane	108	108	80-120	73-127	0	0-20	
Chloroform	99	100	80-120	73-127	1	0-20	
Chioromethane	106	109	80-120	73-127	3	0-20	
P-Chlorotoluene	103	102	80-120	73-127	1	0-20	
-Chlorotoluene	100	101	80-120	73-127	1	0-20	
Dibromochloromethane	103	104	80~120	73-127	0	0-20	
,2-Dibromo-3-Chloropropane	91	96	80-120	73-127	5	0-20	
,2-Dibromoethane	103	105	80-120	73-127	2	0-20	
Dibromomethane	106	107	80-120	73-127	1	0-20	
,2-Dichlorobenzene	102	103	80-110	75-115	0	0-10	
,3-Dichlorobenzene	99	100	80-120	73-127	1	0-20	
,4-Dichlorobenzene	99	98	80-120	73-127	1	0-20	
Dichlorodifluoromethane	100	100	80-120	73-127	0	0-20	
,1-Dichloroethane	110	113	80-120	73-127	2	0-20	
,2-Dichloroethane	103	107	80~120	73-127	3	0-20	
,1-Dichloroethene	109	112	83-125	76-132	3	0-10	
-1,2-Dichloroethene	103	107	80-120	73-127	4	0-20	
-1,2-Dichloroethene	106	109	80-120	73-127	2	0-20	
,2-Dichloropropane	107	109	79-115	73-121	2	0-25	
,3-Dichloropropane	108	108	80-120	73-127	0	0-20	
,2-Dichloropropane	97	98	80-120	73-127	1	0-20	
,1-Dichloropropene	106	107	80-120	73-127	1	0-20	
-1,3-Dichloropropene	107	110	80-120	73-127	3	0-20	
-1,3-Dichloropropene	105	106	80-120	73-127	1	0-20	
Ethylbenzene	104	104	80-120	73-127	0	0-20	
sopropylbenzene	104	105	80-120	73-127	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit





Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate yzed	LCS/LCSD Numbe	
099-12-709-160 Parameter	Solid	GC/MS Z	06/17/09	06/17/09		090617L02	
	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	<u>RPD</u>	RPD CL	Qualifiers
p-Isopropyltoluene	102	102	80-120	73-127	0	0-20	
Methylene Chloride	112	116	80-120	73-127	4	0-20	
Naphthalene	95	97	80-120	73-127	2	0-20	
n-Propylbenzene	106	106	80~120	73-127	0	0-20	
Styrene	107	107	80-120	73-127	0	0-20	
Ethanol	137	135	50-134	36-148	1	0-23	LQ
1,1,1,2-Tetrachloroethane	99	99	80-120	73-127	0	0-20	
1,1,2,2-Tetrachloroethane	103	105	80-120	73-127	2	0-20	
Tetrachloroethene	94	92	80-120	73-127	2	0-20	
Toluene	105	105	79-115	73-121	0	0-8	
1,2,3-Trichlorobenzene	96	96	80-120	73-127	0	0-20	
1,2,4-Trichlorobenzene	94	93	80-120	73-127	1	0-20	
1,1,1-Trichloroethane	96	98	80-120	73-127	2	0-20	
1,1,2-Trichloroethane	107	107	80-120	73-127	1	0-20	
Trichloroethene	100	102	87-111	83-115	2	0-7	
Trichlorofluoromethane	100	102	80-120	73-127	2	0-20	
1,2,3-Trichloropropane	98	99	80-120	73-127	1	0-20	
1,2,4-Trimethylbenzene	103	103	80-120	73-127	1	0-20	
1,3,5-Trimethylbenzene	105	105	80-120	73-127	0	0-20	
Vinyl Acetate	109	120	80-120	73-127	9	0-20	
Vinyl Chloride	107	109	72-126	63-135	2	0-10	
p/m-Xylene	104	104	80-120	73-127	0	0-20	
o-Xylene	105	105	80-120	73-127	1	0-20	
Methyl-t-Butyl Ether (MTBE)	95	98	75-129	66-138	3	0-13	
Tert-Butyl Alcohol (TBA)	102	106	66-126	56-136	3	0-24	
Diisopropyl Ether (DIPE)	111	113	77-125	69-133	2	0-13	
Ethyl-t-Butyl Ether (ETBE)	99	101	72-132	62-142	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	92	95	77-125	69-133	3	0-10	

Total number of LCS compounds : 66

Total number of ME compounds : 1

Total number of ME compounds allowed : LCS ME CL validation result : Pass

> RPD - Relative Percent Difference , CL - Control Limit

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Quality Control - LCS/LCS Duplicate

aboratories, Inc.

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-06-1342
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate yzed	LCS/LCSD Numbe	
099-12-709-161	Solid	GC/MS Z	06/18/09	06/18/09		090618L	01
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	RPD	RPD CL	Qualifiers
Benzene	98	98	84-114	79-119	0	0-7	
Bromobenzene	104	104	80-120	73-127	0	0-20	
Bromochloromethane	114	114	80-120	73-127	1	0-20	
Bromodichloromethane	99	98	80-120	73-127	1	0-20	
Bromoform	101	101	80-120	73-127	0	0-20	
Bromomethane	98	90	80-120	73-127	8	0-20	
n-Butylbenzene	114	114	77-123	69-131	0	0-25	
sec-Butylbenzene	114	114	80-120	73-127	0	0-20	
tert-Butylbenzene	114	112	80-120	73-127	2	0-20	
Carbon Disulfide	98	98	80-120	73-127	1	0-20	
Carbon Tetrachloride	91	91	69-135	58-146	0	0-13	
Chlorobenzene	104	105	85-109	81-113	1	0-8	
Chloroethane	107	109	80-120	73-127	1	0-20	
Chloroform	102	101	80-120	73-127	1	0-20	
Chloromethane	112	113	80-120	73-127	2	0-20	
2-Chlorotoluene	107	108	80-120	73-127	1	0-20	
4-Chlorotoluene	109	108	80-120	73-127	1	0-20	
Dibromochloromethane	107	108	80-120	73-127	1	0-20	
1,2-Dibromo-3-Chloropropane	105	108	80-120	73-127	3	0-20	
1,2-Dibromoethane	107	108	80-120	73-127	1	0-20	
Dibromomethane	99	99	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	110	109	80-110	75-115	1	0-10	
1,3-Dichlorobenzene	108	106	80-120	73-127	2	0-20	
1,4-Dichlorobenzene	106	104	80-120	73-127	1	0-20	
Dichlorodifluoromethane	116	115	80-120	73-127	0	0-20	
1,1-Dichloroethane	103	103	80-120	73-127	0	0-20	
1,2-Dichloroethane	97	97	80-120	73-127	0	0-20	
1,1-Dichloroethene	97	97	83-125	76-132	0	0-10	
c-1,2-Dichloroethene	94	115	80-120	73-127	20	0-20	
t-1,2-Dichloroethene	96	97	80-120	73-127	0	0-20	
1,2-Dichloropropane	104	104	79-115	73-121	0	0-25	
1,3-Dichloropropane	110	112	80-120	73-127	2	0-20	
2,2-Dichloropropane	95	89	80-120	73-127	6	0-20	
1,1-Dichloropropene	99	100	80-120	73-127	1	0-20	
c-1,3-Dichloropropene	105	106	80-120	73-127	1	0-20	
t-1,3-Dichloropropene	113	114	80-120	73-127	0	0-20	
Ethylbenzene	108	108	80-120	73-127	0	0-20	
Isopropylbenzene	108	109	80-120	73-127	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit

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aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received: Work Order No: Preparation: Method:



N/A 09-06-1342 EPA 5030B EPA 8260B

Project: BP/ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal	ate yzed	LCS/LCSD Numbe	
099-12-709-161	Solid	GC/MS Z	06/18/09	06/18	/09	090618L	01
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	112	111	80-120	73-127	1	0-20	
Methylene Chloride	103	100	80-120	73-127	3	0-20	
Naphthalene	108	110	80-120	73-127	2	0-20	
n-Propylbenzene	110	110	80-120	73-127	0	0-20	
Styrene	111	112	80-120	73-127	0	0-20	
Ethanol	142	140	50-134	36-148	2	0-23	LQ
1,1,1,2-Tetrachloroethane	101	103	80-120	73-127	2	0-20	
1,1,2,2-Tetrachloroethane	103	104	80-120	73-127	1	0-20	
Tetrachloroethene	95	97	80-120	73-127	2	0-20	
Toluene	99	99	79-115	73-121	0	0-8	
1,2,3-Trichlorobenzene	104	106	80-120	73-127	1	0-20	
1,2,4-Trichlorobenzene	103	103	80-120	73-127	0	0-20	
1,1,1-Trichloroethane	90	92	80-120	73-127	2	0-20	
1,1,2-Trichloroethane	109	111	80-120	73-127	1	0-20	
Trichloroethene	96	96	87-111	83-115	0	0-7	
Trichlorofluoromethane	97	98	80-120	73-127	1	0-20	
1,2,3-Trichloropropane	101	101	80-120	73-127	0	0-20	
1,2,4-Trimethylbenzene	113	113	80-120	73-127	0	0-20	
1,3,5-Trimethylbenzene	109	110	80-120	73-127	1	0-20	
Vinyl Acetate	117	110	80-120	73-127	6	0-20	
Vinyl Chloride	108	110	72-126	63-135	1	0-10	
p/m-Xylene	107	108	80-120	73-127	0	0-20	
o-Xylene	109	109	80-120	73-127	1	0-20	
Methyl-t-Butyl Ether (MTBE)	97	95	75-129	66-138	1	0-13	
Tert-Butyl Alcohol (TBA)	111	108	66-126	56-136	2	0-24	
Diisopropyl Ether (DIPE)	109	108	77-125	69-133	0	0-13	
Ethyl-t-Butyl Ether (ETBE)	100	110	72-132	62-142	9	0-12	
Tert-Amyl-Methyl Ether (TAME)	96	95	77-125	69-133	0	0-10	

Total number of LCS compounds : 66

Total number of ME compounds : 1

Total number of ME compounds allowed : 3

LCS ME CL validation result : Pass

CL - Control Limit RPD - Relative Percent Difference

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Work Order Number: 09-06-1342

Qualifier	Definition
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = Matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
BZ	Sample preserved improperly.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected.
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspected.
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.

Qualifier	Definition
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.
SG	A silica gel cleanup procedure was performed.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

<u>.</u>	Richfield Company O A BP affiliated company	DPIARC F	atory Ma Project Name facility No:												TAT. V.	of											
Lab N	ddress: Zhan Land			BP	/AR(C Fac	ality A	ddres	s: ๅ	-12	Le	JELL	129	 	_		<u> </u>				t/Con					<u> </u>	
Lab P	M. D. CHUCINCOLN LING,	(MARDEN)	GROVE, CA	- Cit	y, St	ate, z		ode:	Sm	J	ran	i) P	0	CI	¥		•		Con	sultan	1/Cont				E60		·
	M: RICHALDY, hone: (74) 895 5494			Lea	ad Re	egula	tory A	genc	r A	-07	NI	A			<u> </u>		<u> </u>	·	Add						1=60	<u>.</u>	
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Other				Sta	ge:					ctivity					=			-	Ema) To: (<u>H</u>	ufl	F-Q	STRATU	SINC. N	JET
BP/AF	ICEBM: PAUL SUPPLE			-	M	atrix						/ Pres	······		т—				nnvo	ce lo	:	BF	ARC	\pm	- Contr	ractor	
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EBM 6	Email:			_				Containers							(9)	6	10	(o)	26.0	6263	(f. 002)				Full Dat	Standard a Package	
Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor		Total Number of C	Unpreserved	H ₂ SO4	HNO ₃	HCI	Methanol		6 to (6058)	Correl (Breo)	504, (824	607287 903	112 DCA Qued	ETHUN OL (B269)	TOTAL LAND (200					Comments	nficato "Ma
	MW-16 6-51	Glizlog	1400	V				l (1			<u> </u>	+	+	+										and initial any p	reprinted sample	e description.
2.	MW-16 84		1402					<u>`</u>	$\frac{2}{1}$			<u> </u>			$\downarrow +$	+	++-	×-	*	*	×						
3	MW-16 9.51		1405	11-		-		<u> </u>	+		<u> </u>	┼──			╂╌╁╼╡		4-			\square							
4	MW-16 11		1407			<u> </u>		- <u> </u>	+		┣──	 		<u> </u>	++	4-								_			
5	MW-16 12-51	<u> - </u>	1410										<u> </u>			4											- <u></u>
6	MW-16 151	╏╼┼╴━╴	1412									ļ		ļ											······		
7	MW-17 6.51		0920			<u> </u>		_1_	+				 	L												<u></u>	<u> </u>
8	MW-17 B1	╏┉╁┈━━							-															-1			
9	MW-17 9-51		0923	\parallel																					·····		
10	MW-17 111		0925	$\left \right _{-1}$				\square																			
		V	0933	V				\Box	\mathbf{V}						V	$\overline{\mathbf{V}}$	V	\mathbf{V}	$\forall l$	\forall^{\dagger}	\mathbb{A}				······		
		<u>k</u>	,,			R	eline	juish	edB	y / A	ffiliat	ion			Da	te	Tin				Acce		By L		ation	<u> </u>	WSC.66
	's Company: Stustus			<u> </u>			L		n	F					9/12/0		180	2			. ?-		0.22	2/2	-7	Date	Time
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	nt Tracking No: 106/66211												. <u> </u>														8:450
	Instructions:														L				····-								
	THIS LINE - LAB USE ONLY: Custod	y Seals in Plac	e: Yes / No	T	emp	Blan	k: Yes	s / No		Со	oler T	emp o	on Red	ceipt.			°F/C		Trip	Blank	Yes /	No		MS/N	ASD Sample S	ubmitted: Yes	

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, 	Richfield Company ÖABP affiliated company	DPIARU H	atory Ma Project Name: Facility No:		o (nent	Pro	gra		LaN	1P	Cha	ain -	Re	eq Du	ie Da	ite (i	nm/o	COI Id/yy nber:): _		· · ·			Rush	TAT:	Yes	ofNo	
Lab N	Name: CIAlSCIEUCE			BP/	ARC	Facility	Addrag						-				raei	' Nur	nber:					9-0	<u> 26-13</u>	34:	<u>2</u>	<u> </u>	
Lab A	Ndress: 7440 Lincoln cim, M: RICTUALD)	CILMON	Conversion of	Citv	Stat	Facility		* <u> </u>	-12	Lile	velh	Ng	<u></u>	<u>Sluc</u>	}			c	onsult	ant/C	ontrac	tor: S	TRV	4-7-1	S				
Lab F	M: RICHWARDN'S	0,00,00	aparty con	lea	l Rec		Acces	214	<u> </u>	en o	0184	<u></u>	CA	⊬.	·			C	onsult	ant/C	ontrac	lar Proj	ject No	o: VE	- 60	 \			
Lab P	thone: (714) 895 5494					gulatory	Agenc	H :	·Cf	$\frac{2}{2}$	4							A	ddress	:33	30	CAL	MBRI				2. #	-550	
Lab S	hipping Acont: 9,755			Contra		Giobal	IU NO.:	11	066	010	00/	.08		·····.				с	onsult	ant/C	ontrac	tor PM:	T.	~ ~	John	Sard			
1	ottle Order No:					posal N								•				PI	hone:	53	0 (576	60	500	<u></u>		- <u>··</u>		
Other	Info:					ng Mode		Pro	ovision	<u>×</u>	0	ОС-ВЦ	!	_ 00	DC-RI	M		E	nail El	DD To	»: (° -	Huf) (71	WA TU				
BP/AF	RCEBM: PAUL SURPLIE	-		Stag				_	ctivity									In	voice	Fo:		BP/AR(<u>-</u>	~		ractor		· <u>·</u> ···	
EBM (<u></u>	<u> </u>	Mat	trix	No	o. Co	ntair	iers /	Pres	erva	tive				Red	ques	ted A	naly				T		rt Type		t evel	
EBM (Email:		······	-			5										T		~		P		T	+	<u> </u>				
							Containers							(60(2(J))	0708		1 0266		DCA (8260)	Image: Standard Standard Image: Standard Full Data Package									
Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor	Total Number of	Unpreserved	H ₂ SO ₄	HNO3	НĊ	Methanol		Geo (co		13	4		94-I	۶ ·				Note: Sam	Comments Note: If sample not collected, Indicate Sample" in comments and single-strik and initial any preprinted sample desc				
11	MW-17- 12-51	6/12/09	0136	V			$\frac{1}{1}$	<u> </u>	-	<u> </u>	<u> </u>	2		<u> </u>	<u> </u>		+		1	<u> </u>	<u>F</u>		<u></u>	and in	nilial any p	preprinted	nd single I sample	-strike out descriptio	
12	MW-17 151		0939		-		$\begin{bmatrix} \cdot \\ \cdot \end{bmatrix}$	$\frac{1}{1}$						4	<u> </u> *	<u>+ </u>	ļγ	41	47	4	4								
13	MW-18 6-51		1048	┠┼┼										┢┥	┞╢	_	$\left \right $	\downarrow			<u> </u>	_						······	
14	Mw-18 81		1050	╊┼┼										┝┼╴	┝╌┟╌		$\downarrow \downarrow$				_								
15	MW-18 4 9.51		1052	╏╌┼╌┝			<u> </u>							┞╌┞╴	_ _		\square												
16	Mm-18 11		1055	┠┼┼			$\left \frac{1}{2} \right $							┨━╍┤━		\square													
17	MW-18 12-51	╂╼╍╊╼╼╍╾	1058	$\left + \right $				┥┥						\square	μ											<u> </u>		······	
18	MW-18 151	┨──┼───	· · · · · · · · · · · · · · · · · · ·	+	_			-																			·		
19	MW-14 6.51	┨──┤───	1100	┝╌┨┥╴																Π									
20	MW-19 gl					_	4													Π					<u> </u>	— <u>— </u>	<u>-</u> -		
	r's Name: Collin Fischy	<u> </u>	1502	V				V			[V	\mathbb{V}	\vee	V	1	VN	V									
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	nt Method: G150	Ship Date: 6		<u>_</u>	;	626	1	h	1]	914	09	180	SO		11	Li.	SP,	50	$\overline{\mathcal{Z}}$	1-2				Time	
	nt Tracking No: 136/63241	Ship Date: 4	12/09	<u> </u>			_ <u></u>											ľ	- L		-12	<u>fac</u>	-5	<u> </u>	CEL.	-12/3	579	8.46	
	Instructions:									_						_				·····									
									-										<u> </u>					-			l	of G	
	THIS LINE - LAB USE ONLY: Custod	ly Seals In Plac	e: Yes / No	Te	mp 8	lank: Ye	s / No		Co	oler Te	emp o	n Rec	eipt:			_°F/C		Tr	ip Bla	nk: Ye	s / No	1		Mon -	Sample S				

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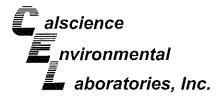
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Richfield	Lалога BP/ARC P	atory IVIa roject Name:									Cha	in												Page	<u> (</u>	of(
C A BP affiliated company	BP/ARC F		6	0 (-	Rei Lat	q Du h Wo	e Dat rk Or	e (mi dor N	n/dd	/yy):	<u></u>		~	<u></u>	Ru	sh TAT - V		NoX
Lab Name: CALSCLENCE Lab Address: Z440 LINCOLN LIM,	(CLARDON)		BP/A	RC Fac	cility A	ddres	s: 1	-12	Len	151k	N°)	- P	1			aer r			//Con				-TH S	342	; 	
KICHARDV	()	aport cot	Lead	State, Z Regula			<u> 514</u>		ring"	DEA A	<u></u>	CA	<u>.</u>						_		r Proje		1			·····
Lab Phone: (714) 895 5494			Califo	ornia Gl	obal II		<u>к н</u>	rCt	1	4	<u> </u>				·		Add	ress: ;	3330	2 (CAN	-13R.0	N PH	WE DR	、	550
Lab Shipping Accent: 9,255			Enfo	ornia Gl	sal No			260	$\frac{20}{0}$	<u>80 </u>	ଟ୍ୟ			·			Con	sultan	VCont	racto	r PM:	Th	5 74	in sort	······	
Lab Bottle Order No:			Acco	Propo	Aorley	<u>~ 0</u>	$\underline{\mathfrak{S}}$	<u>>(-</u>		व्य						<u> </u>	Pho	ne: <	30	6	\mathcal{H}	60	00		<u> </u>	
Other Info:	·····	······································	Stage					······			DC-BU		_ 00	C-RN			Ema	iil EDC	то: (CH.	nf	FQ	STRAJ	USINC	N	121
BP/ARCEBM: PAUL SUZPLIC			+	Matrix		<u> </u>		ctivity					.				Invo	ice To		Bl	PIARC	+		ontractor		
EBM Phone:			┠╍┯	Matin			5. Co T	ntair	hers /	Pres	servat	ive ——	<u> </u>			Requ	este	d An	alyse	s				ort Type &	_	Level
EBM Email: Lab Sample Description $2/1$ Nw -19 9.5^1 22 MW -19 11^1 23 Nw -19 12.5^1 24 Nw -19 15^1		Time 505 507 510 512	Soil / Solid	Air / Vapor		Containers		H2504	HNO3	HCI	Methanoi		6+	Halas 7	4	< 1 × 1 × 200 (8260)	+						Note: If sam Sample* in c	Standar Data Packag Comme ople not collect comments and y preprinted s	ents led, India	cale "No
Sampler's Name: Collins Fischer Sampler's Company: Stimmer Shipment Method: G150 Shipment Tracking No: 10616-21 Special Instructions:	۲۰۰۰ Ship Dale: ۲۵	12/09	l	R	eling	juish	ed B	y / Al	ffillati	ion			Dai /[12-/ o		Tim 180	_	Ziz	Leon	1	pted	By I		ation	Da G13	ate 1-02 9	Time B B S'R CO O O
THIS LINE - LAB USE ONLY: Custod	y Seals in Place	: Yes / No	Ter	on Pia-																						<u>- 0</u>
			ren	np Blan	K; 189	i / No		Co	oler Te	emp a	n Rece	ipt:_			°F/C		Trip	Blank	Yes	No	1	MS/M	ASD Sample	Submitted:	Yes /	

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WORK ORDER #	: 09-0	6-11	
aboratorles, Inc. SAMPLE RECEIPT FO	RM o	Cooler	<u>/</u> of _/_
CLIENT: <u>Stratus</u>	DATE:	611	3109
TEMPERATURE: (Criteria: 0.0 °C - 6.0 °C, not frozen) Temperature °C - 0.2 °C (CF) =9 °C □ Sample(s) outside temperature criteria (PM/APM contacted by:). □ Sample(s) outside temperature criteria but received on ice/chilled on same □ Received at ambient temperature, placed on ice for transport by C Ambient Temperature: □ □ Filter □ □ PCBs	day of sampl ourier.	ing.	ple al: <u>KLSC</u>
CUSTODY SEALS INTACT: Cooler Not Present Sample Not Present			al: <u>WSC</u> al: <u>JD</u>
SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	🗹		
COC document(s) received complete	💋		
□ Collection date/time, matrix, and/or # of containers logged in based on sample label	3.		
\Box COC not relinquished. \Box No date relinquished. \Box No time relinquished.	-		
Sampler's name indicated on COC			
Sample container label(s) consistent with COC			
Sample container(s) intact and good condition			
Correct containers and volume for analyses requested	/		
Analyses received within holding time			
Proper preservation noted on COC or sample container	🗆		Ø
Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace			
Tedlar bag(s) free of condensation	🗆		
CONTAINER TYPE:			
Solid: □4ozCGJ □8ozCGJ □16ozCGJ ☑Sleeve □EnCores [®]	□TerraCore	s® □	
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp	□1AGB [∃1AGB na ₂	□1AGB s
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGB	s ⊡1PB [□500PB 🗆	500PB na
□250PB □250PBn □125PB □125PBznna □100PB □100PBna ₂ □_]
Air: □Tedlar [®] □Summa [®] □ Other: □		/Labeled by	
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar (Wide-mouth) B: Bottle (Narrow-mo Preservative: h: HCL n: HNO3 na ₂ :Na ₂ S ₂ O ₃ Na: NaOH p: H ₃ PO ₄ s: H ₂ SO ₄ znna: ZnAc ₂ +NaOH		Reviewed by Scanned by	110

SOP T100_090 (03/13/09)



July 08, 2009

Jay Johnson Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Subject: Calscience Work Order No.: 09-07-0008 Client Reference: ARCO 601

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/1/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

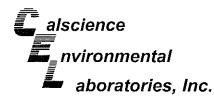
Sincerely,

Richard Villay.

Calscience Environmental Laboratories, Inc. Richard Villafania Project Manager

CA-ELAP ID: 1230 • NELAP ID: 03220CA • CSDLAC ID: 10109 • SCAQMD ID: 93LA0830 7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Page 1 of 1



Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

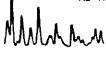
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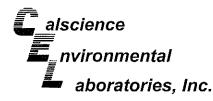
Project: ARCO 601

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Toject. AICO 001									<u>га</u>	age i oi i
Client Sample Number				b Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time d Analyzed	QC Batch ID
SG-9			09-07-6	0008-1-A	06/30/09 14:35	Air	GC 36	N/A	07/01/09 00:00	090701L01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u> C	F Qual
Methane	ND	0.835	1.67		Oxygen + Argon			4.16	0.835 1	.67
Carbon Dioxide	14.4	0.835	1.67							
SG-10		· . · · ·	09-07-0)008-2-A	06/30/09 09:26	Air	GC 36	N/A	07/01/09 00:00	090701L01
Parameter	Result	RL	DE	Qual	Parameter			Result	RL D	F Qual
Methane	ND	1.02	2.05		Oxygen + Argon			12.5		.05
Carbon Dioxide	8.36	1.02	2.05		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
SG-11			09-07-0)008-3-A	06/30/09 10:21	Air	GC 36	N/A	07/01/09 00:00	090701L01
Parameler	Result	RL	DF	Qual	Parameter			Result	RL D	<u>F Qual</u>
Vethane	ND	0.860	1.72		Oxygen + Argon			11.3		.72
Carbon Dioxide	9.75	0.860	1.72							
\$G-12	· · · ·		09-07-0	0008-4-A	06/30/09 11:24	Air	GC 36	N/A	07/01/09 00:00	090701L01
Parameter	<u>Result</u>	RL	DF	Qual	Parameter			Result	<u>RL</u> D	<u>F Qual</u>
Methane	ND	0.825	1.65		Oxygen + Argon			14.2	0.825 1	.65
Carbon Dioxide	6.99	0.825	1.65							
SG-13			09-07-0	008-5-A	06/30/09 12:19	Air	GC 36	N/A	07/01/09 00:00	090701L01
Parameter	<u>Result</u>	<u>RL</u>	DE	<u>Qual</u>	Parameter			Result	<u>RL</u> D	<u>F</u> Qual
Vethane	ND	0.815	1.63		Oxygen + Argon			22.3	0.815 1	.63
Carbon Dioxide	1,19	0.815	1.63							
SG-14	· .		09-07-0	008-6-A	06/30/09 13:25	Air	GC 36	N/A	07/01/09 00:00	090701L01
Parameter	Result	RL	DF	Qual	Parameter			Result	<u>RL</u> D	F Qual
Aethane	ND	0.870	1.74		Oxygen + Argon			19.6		.74
Carbon Dioxide	3.74	0.870	1,74		20 - 0					
Method Blank			099-03-	002-830	N/A	Air	GC 36	N/A	07/01/09 00:00	090701L01
Parameter	Popult	Di	DF	Qual	Paramotor			Beault	Dt D	
<u>rarameter</u> Aethane	<u>Result</u> ND	RL 0.500		<u>uuai</u>	Parameter			Result	<u>RL</u> <u>D</u>	
Zerbon Dioxide	ND	0.500 0.500	1 1		Oxygen + Argon			ND	0.500	1
		0.000	E							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Date Received: Work Order No: Preparation: Method: Units:

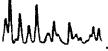
07/01/09

09-07-0008 N/A EPA TO-15 mg/m3 Page 1 of 3

Project: ARCO 601

Client Sample Number				b Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Tim Analyzed	000.000
SG-9			09-07-0	0008-1-A	06/30/09 14:35	Air	GC/MS V	N/A	07/02/09 20:07	090702L01
Parameter	<u>Result</u>	RL	DF	Qual	Parameter			<u>Result</u>	RL	DF Qual
Benzene	ND	0.0027	1.67		Xylenes (total)			ND	0.015	1.67
Diisopropyl Ether (DIPE)	ND	0.014	1.67		Tert-Amyl-Meth	yl Ether (1	TAME)	ND	0.014	1.67
Ethanol	ND	0.016	1.67		Tert-Butyl Alcol	hol (TBA)		ND	0.010	1,67
Ethyl-t-Butyl Ether (ETBE)	ND	0.014	1.67		Toluene			ND	0.0031	1.67
Ethylbenzene	ND	0.0036	1.67		1,1-Difluoroetha	ane		ND	0.0090	1.67
Methyl-t-Butyl Ether (MTBE)	ND	0.012	1.67							
Surrogales:	<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>	Surrogates:			<u>REC (%)</u>	<u>Control</u> Limits	<u>Qual</u>
1,4-Bromofluorobenzene	85	57-129			1,2-Dichloroeth	ane-d4		88	47-137	
Toluene-d8	100	78-156								
SG-10	n na star ta		09-07-0	008-2-A	06/30/09 09:26	Air	GC/MS DD	N/A	07/01/09 22:47	090701L01
Parameter	Result	RL	DF	<u>Qual</u>	Parameter			Result	<u>RL I</u>	DF Qual
Benzene	ND	0.0033	2.05		Xylenes (total)			ND	0.018	2,05
Diisopropyl Ether (DIPE)	ND	0.017	2.05		Tert-Amyl-Meth	vl Ether (1	(AME)	ND	-	2,05
Ethanol	ND	0.019	2.05		Tert-Butyl Alcol		···· _ ,	ND		2.05
Ethyl-t-Butyl Ether (ETBE)	ND	0.017	2.05		Toluene			ND		2.05
Ethylbenzene	ND	0.0045	2.05		1.1-Difluoroetha	ine		ND		2.05
Methyl-I-Butyl Ether (MTBE)	ND	0.015	2.05		,,, =				0.011 2	
Surrogates:	REC (%)	Control	2.00	Qual	Surrogates:			REC (%)	Control	Qual
		Limits			······································				Limits	
1,4-Bromofluorobenzene	104	57-129			1,2-Dichloroeth	ane-d4		117	47-137	
Toluene-d8	105	78-156								
SG-11			09-07-0	008-3-A	06/30/09 10:21	Air	GC/MS DD	N/A	07/01/09 23:34	090701L01
Parameter	Result	RL	DE	Qual	Parameter			Result	RL I	DF Qual
Benzene	ND	0.0027	1.72		Xylenes (total)			ND		
Diisopropyl Ether (DIPE)	ND	0.014	1.72		Tert-Amyl-Meth	vi Ether (T	TAME)			1.72
Ethanol	ND	0.016	1.72		Tert-Butyl Alcoh					1.72
Ethyl-t-Butyl Ether (ETBE)	ND	0.014	1.72		Toluene					1.72
Ethylbenzene	ND	0.0037	1.72		1,1-Difluoroetha	ine				.72
Methyl-t-Butyl Ether (MTBE)	ND	0.012	1.72		.,				0.0035	
Surrogates:	REC (%)	Control Limits	1.72	Qual	Surrogates:			<u>REC (%)</u>	Control	Qual
1,4-Bromofluorobenzene Toluene-d8	100 99	57-129 78-156			1,2-Dichloroetha	ane-d4		109	<u>Limits</u> 47-137	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Date Received:0Work Order No:09-0Preparation:0Method:EPAUnits:0

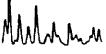
07/01/09 09-07-0008 N/A EPA TO-15 mg/m3

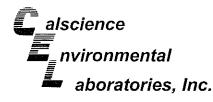
Page 2 of 3

Project: ARCO 601

										-
Client Sample Number				b Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Tim Analyzed	
SG-12			09-07-1	0008-4-A	06/30/09 11:24	Air	GC/MS DD	N/A	07/02/09 00:21	090701L01
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			<u>Result</u>	<u>RL</u>	DF Quai
Benzene	ND	0.0026	1.65		Xylenes (total)			ND	0.014	1.65
Diisopropyl Ether (DIPE)	ND	0.014	1.65		Tert-Amyl-Meth	yl Ether (T	AME)	ND	0.014	1.65
Ethanol	ND	0.016	1.65		Tert-Butyl Alcol	hol (TBA)	-	ND	0.010	1.65
Ethyl-t-Butyl Ether (ETBE)	ND	0.014	1.65		Toluene	. ,		ND	0.0031	1.65
Ethylbenzene	ND	0.0036	1.65		1,1-Difluoroetha	ane		ND		1.65
Methyl-t-Butyl Ether (MTBE)	ND	0.012	1.65		· , · _ · · · · · · · · · · · · · · · ·					
Surrogates:	REC (%)	Control		Qual	Surrogates:			<u>REC (%)</u>	Control	Qual
<u>ounoquiou.</u>	1.00 1101	Limits			Carrogatoon			1120 (101	Limits	
1.4-Bromofluorobenzene	105	57-129			1,2-Dichloroeth	ane-d4		120	47-137	
Toluene-d8	105	78-156			,					7
SG-13			09-07-0	0008-5-A	06/30/09 12:19	Air	GC/MS DD	N/A	07/02/09 01:08	090701L01
Parameter	Result	RL	DF	Qual	Parameter			Result	RL I	DF Quai
Benzene	ND	0.0026	1.63		Xylenes (total)			ND	0.014	1.63
Diisopropyl Ether (DIPE)	ND	0.014	1.63		Tert-Amyl-Meth	wi Ether (T		ND		1.63
Ethanol	ND	0.015	1.63		Tert-Butyl Alcol	•	/ (()(=)	ND		1.63
Ethyl-t-Butyl Ether (ETBE)	ND	0.013	1.63		Totuene			ND		1.63
Ethylbenzene	ND	0.0035	1.63		1,1-Difluoroetha	ane		ND		1.63
Methyl-t-Butyl Ether (MTBE)	ND	0.0000	1.63		1,1-Dillaolocula	and		ND	0.0000	1.05
	REC (%)	Control	1.05	Qual	Surrogates:			REC (%)	Control	Qual
Surrogates:		Limits		Quai	<u>ounoquies.</u>			<u>REU [76]</u>	Limits	Guai
1.4-Bromofluorobenzene	87	57-129			1,2-Dichloroeth	ano d4		108	47-137	
Toluene-d8	101	78-129 78-156			1,2-Dicitionen	ane-u4		100	47-137	
SG-14		73-130	09-07-()008-6-A	06/30/09 13:25	Air	GC/MS DD	N/A	07/02/09 01:56	090701L01
Parameter	Result	<u>RL</u>	DE	<u>Qual</u>	Parameter			<u>Result</u>	<u>RL</u> !	DF Quai
Benzene	ND	0.0028	1.74		Xylenes (total)			ND	0.015	1.74
Diisopropyl Ether (DIPE)	ND	0.015	1.74		Tert-Amyl-Meth	ıyl Ether (T	AME)	ND		1.74
Ethanol	ND	0.016	1.74		Tert-Butyl Alcoi	•	-	ND	0.011	1.74
Ethyl-t-Butyl Ether (ETBE)	ND	0.015	1,74		Toluene	. ,		ND		1,74
Ethylbenzene	ND	0.0038	1.74		1,1-Difluoroetha	ane		ND		1.74
Methyl-t-Butyl Ether (MTBE)	ND	0.013	1.74			-		-		
Surrogates:	REC (%)	Control		Qual	Surrogates:			REC (%)	Control	Qual
<u>gutoo.</u>		Limits							Limits	
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroeth	ane-d4		110	47-137	
Toluene-d8	102	78-156								

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





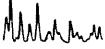
Date Received: Work Order No: Preparation: Method: Units:

07/01/09 09-07-0008 N/A EPA TO-15 mg/m3 Page 3 of 3

Project: ARCO 601

Client Sample Number				ib Sample Number	Date/Time Collected	Matrix	Instrumen	Date I Prepared	Date/1 I Analy		QC Batch IE
Method Blank	· · · ·	· ·.	095-01	-021-7,853	3 N/A	Air	GC/MS DI	D N/A	07/01 14:5		090701L01
Parameter	Result	<u>RL</u>	DE	Qual	Parameter			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)			ND	0.0087	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Terl-Amyl-Meti	hyl Ether (T	AME)	ND	0.0084	1	
Ethanol	ND	0.0094	1		Tert-Butyl Alco	hol (TBA)		ND	0.0061	1	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1		Toluene			ND	0.0019	1	
Ethylbenzene	ND	0.0022	1		1,1-Difluoroeth	ane		ND	0.0054	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1								
Surrogates:	REC (%)	Control		Qual	Surrogates:			<u>REC (%)</u>	Control		Qual
		Limits							<u>Limits</u>		
1,4-Bromofluorobenzene	104	57-129			1,2-Dichloroeth	nane-d4		116	47-137		
Toluene-d8	96	78-156									
Method Blank			095-01	-021-7,870	N/A	Air	GC/MS V	N/A	07/02 10:4		090702L01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)			ND	0.0087	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Tert-Amyl-Meth	nyl Ether (T	AME)	ND	0.0084	1	
Ethanol	ND	0.0094	1		Tert-Butyl Alco	hol (TBA)	,	ND	0.0061	1	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1		Toluene			ND	0.0019	1	
Ethylbenzene	ND	0.0022	1		1,1-Difluoroeth	ane		ND	0.0054	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1								
Surrogates:	REC (%)	Control		<u>Qual</u>	Surrogates:			<u>REC (%)</u>	Control		<u>Qual</u>
		Limits							<u>Limits</u>		
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroeth	nane-d4		105	<u>Limits</u> 47-137		
1,4-Bromofluorobenzene Toluene-d8					1,2-Dichloroeth	nane-d4		105			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Stratus Environmental, inc.			Date Rec	eived:				07/01/09
3330 Cameron Park Drive, Su		Work Order No:				09-07-0008		
Cameron Park, CA 95682-88	61		Preparati	on:				N/A
			Method:				EF	РА ТО-ЗМ
Project: ARCO 601							Pa	ige 1 of 2
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SG-9		09-07-0008-1-A	06/30/09 14:35	Air	GC 19	N/A	07/01/09 12:50	090701L01
Parameter	Result	RL	DF	Qual	Units			
Gasoline Range Organics (C6-C12)	ND	64	1.67		mg/m3			
	ND							
SG-10		09-07-0008-2-A	06/30/09 09:26	Air	GC 19	N/A	07/01/09 13:23	090701L01
Parameter	Result	<u>RL</u>	DF	Qual	Units			
Gasoline Range Organics (C6-C12)	ND	78	2.05		mg/m3			
SG-11		09-07-0008-3-A	06/30/09 10:21	Air	GC 19	N/A	07/01/09 13:57	090701L01
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	66	1.72		mg/m3			
SG-12		09-07-0008-4-A	06/30/09 11:24	Air	GC 19	N/A	07/01/09 14:32	090701L01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	63	1.65		mg/m3			
SG-13		09-07-0008-5-A	06/30/09 12:19	Air	GC 19	N/A	07/01/09 15:05	090701L01
Parameter	Result	RL	<u>DF</u>	<u>Quai</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	62	1.63		mg/m3			
SG-14		09-07-0008-6-A	06/30/09 13:25	Air	GC 19	N/A	07/01/09 15:41	090701L01
Parameter	<u>Result</u>	RL	DF	Qual	<u>Units</u>			

RL - Reporting Limit , DF - Dílution Factor , Qual - Qualifiers

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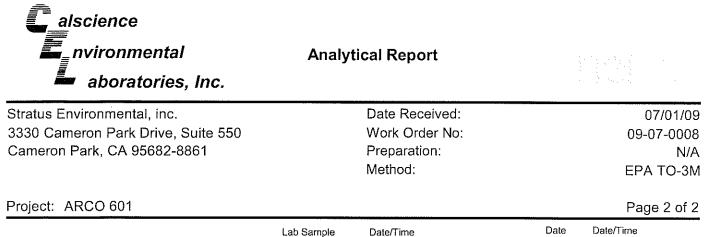
Mulhan

Gasoline Range Organics (C6-C12)

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

mg/m3

1.74



Number

RL

38

<u>Result</u>

ND

099-12-685-169

Matrix

Air

Qual

Collected

N/A

<u>DF</u>

1

Instrument Prepared

N/A

GC 19

<u>Units</u>

mg/m3

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Client Sample Number

Gasoline Range Organics (C6-C12)

Method Blank

Parameter

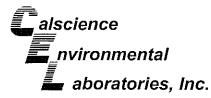
7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

QC Batch ID

090701L01

Analyzed 07/01/09

08:39



Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861	Date Received: Work Order No: Preparation: Method:	07/01/09 09-07-0008 N/A EPA TO-3M

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
09-07-0012-1	Air	GC 19	N/A	07/01/09	090701D01
Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	5700	6100	6	0-20	

MMMmm 7

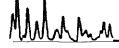
alscience nvironmental aboratories, Inc.

Stratus Environmental, inc.	Date Received:	N/A
3330 Cameron Park Drive, Suite 550	Work Order No:	09-07-0008
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	ASTM D-1946

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Analı		LCS/LCSD Bate Number	:h
099-03-002-830	Air	GC 36	N/A	07/01	/09	090701L01	
Parameter		LCS	Conc LC	SD Conc	<u>RPD</u>	RPD CL	Qualifiers
Carbon Dioxide		4.84	14	4.853	0	0-30	
Oxygen + Argon		17,9	90	17.84	0	0-30	
Nitrogen		61.	24	61.10	0	0-30	

RPD - Relative Percent Difference, CL - Control Limit





aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received:	N/A
Work Order No:	09-07-0008
Preparation:	N/A
Method:	EPA TO-15

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal	ate yzed	LCS/LCSD Numbe	
095-01-021-7,853	Air	GC/MS DD	N/A	07/01/09		090701L	01
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	120	104	60-156	44-172	14	0-40	
Carbon Tetrachloride	139	116	64-154	49-169	18	0-32	
1,2-Dibromoethane	127	111	54-144	39-159	14	0-36	
1,2-Dichlorobenzene	117	113	34-160	13-181	3	0-47	
1,2-Dichloroethane	148	122	69-153	55-167	19	0-30	
1,2-Dichloropropane	123	107	67-157	52-172	14	0-35	
1,4-Dichlorobenzene	114	112	36-156	16-176	2	0-47	
c-1,3-Dichloropropene	154	132	61-157	45-173	15	0-35	
Ethylbenzene	136	116	52-154	35-171	16	0-38	
o-Xylene	135	116	52-148	36-164	15	0-38	
p/m-Xylene	132	112	42-156	23-175	16	0-41	
Tetrachloroethene	128	105	56-152	40-168	20	0-40	
Toluene	121	101	56-146	41-161	18	0-43	
Trichloroethene	130	111	63-159	47-175	16	0-34	
1,1,2-Trichloroethane	129	111	65-149	51- 163	15	0-37	
Vinyl Chloride	135	116	45-177	23-199	15	0-36	

Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1 LCS ME CL validation result : Pass

> RPD - Relative Percent Difference, CL - Control Limit

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Quality Control - LCS/LCS Duplicate

aboratories, Inc.

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received: Work Order No: Preparation: Method:

N/A 09-07-0008 N/A EPA TO-15

Project: ARCO 601

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal	ite yzed	LCS/LCSD Numbe	
095-01-021-7,870	Air	GC/MS V	N/A	07/02	/09	090702L	01
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME_CL	RPD	RPD CL	Qualifiers
Benzene	120	112	60-156	44-172	7	0-40	
Carbon Tetrachioride	97	94	64-154	49-169	3	0-32	
1,2-Dibromoethane	119	113	54-144	39-159	5	0-36	
1,2-Dichlorobenzene	124	121	34-160	13-181	3	0-47	
1,2-Dichloroethane	102	97	69-153	55-167	5	0-30	
1,2-Dichloropropane	118	111	67-157	52-172	7	0-35	
1,4-Dichlorobenzene	124	119	36-156	16-176	4	0-47	
c-1,3-Dichloropropene	131	125	61-157	45-173	5	0-35	
Ethylbenzene	128	121	52-154	35-171	6	0-38	
o-Xylene	128	122	52-148	36-164	5	0-38	
p/m-Xylene	124	118	42-156	23-175	5	0-41	
Tetrachloroethene	119	112	56-152	40-168	6	0-40	
Toluene	123	115	56-146	41-161	7	0-43	
Trichloroethene	· 109	104	63-159	47-175	5	0-34	
1,1,2-Trichloroethane	117	111	65-149	51-163	5	0-37	
Vinyl Chloride	120	111	45-177	23-199	8	0-36	

Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1 LCS ME CL validation result : Pass

RPD - Relative Percent Difference, CL - Control Limit

h.M

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Glossary of Terms and Qualifiers



Work Order Number: 09-07-0008

Qualifier	Definition
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = Matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
BZ	Sample preserved improperly.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected.
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspected.
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.

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Qualifier	Definition
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.
SG	A silica gel cleanup procedure was performed.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Richfield Company OABP affliated company	BP/ARC P	atory Ma Project Name: acility No:		nent		gram	Lal	<i>1</i> P	Chaiı	Re	iq Du	e Date	∍ (mn	n/dd/yy	n):	60		Rush T	Page <u> </u>	
Lab Name: CALSCIENCE Lab Address: 7440 UNCOLN Lab PM: Enclume V. Lab Phone: (74) (895 54 Lab Shipping Accnt: 9255 Lab Bottle Order No: Other Info. BP/ARC EBM: PAN Supply EBM Phone: EBM Email: PAN Supply	ه ۵۷ ۱ ۹۷		BP/ARC City, Sta Lead Re California Enfos Pr Accounti Stage:	Facility /	Address ade: Agency ID No.: a:	5 417 5 414 706 900 5 Provis Activ	$\frac{1}{100}$	ND 1 001 000	08 1 (<u>BL</u> CH_ 275	UD E	• ++		Consu Addres Consu Phone Email I Invoice	tant/Co tant/Co s: 33 tant/Co S3(EDD To	ntractor ntractor ntractor	STI Project N Munu PM:	COOLES MATUS EGOI EGOI EGOI DATE DATE DATE Contrac Report	De_ #	550
Lab No. Sample Description 1 SG7 - 9 2 SG7 - 9 2 SG7 - 10 3 SG7 - 11 4 SG7 - 12 5 SG7 - 13 6 SG7 - 14	Date	Time 1435 0926 1021 1124 1219 1219	Soli / Solid Vater / Liquid	+ + + + + + Air / Vapor		t t t t t t t t t t t t	HNO3	HOI	Methanol	7 7 7 600	* *		XXXX + XX + BUNNOL	X X X X X	X X X X X X COL	XXXXXIIDE		C Note: If sample n Sample" in comm and initiat any pre	ents and sincle-	strike out
Sampler's Name: CF Sampler's Company: Sthutus Shipment Method: GS 0 Shipment Tracking No: 1062798 Special Instructions: 106279 THIS LINE - LAB USE ONLY: Custod	853		Temp	-77-	Ûi				on Receip	6/30		Tin \%c				nk	By / Aff	Illiation CCC G/MSD Sample Su	Date 7/61/64	e 14 of 18

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的复数形式 化合物合金 化合金合金 化合金合金 1 tot i Citatel ALCO GOT -Cellos Figures 6/30/0C ONSOL -> 0800 -> Fill out Strep PARENDER, SET US & BEGUN SAWEING. Surving Ulan Lente serious Real Stop Rules Sanor Rules and Smillesour States and WELL FC # CHUT SGI-10 AVSH 0850(-30) 08:0(30) 0903(-10) 0905(30) 0924(30) 1077-0 0034(-30) 8G-4 A175 0430(-30) 0950(-30) 0950(-30) 0001(-18) 1002(-30) 1021(-7) DOGZ SG-12 A195 D398 1046 (-18) 1046 (-18) 1102 (-5) 1102 (-30) +124 (-10) 076(-13) 567-13 AMU D525 1128(-24) 1148(-24) 148(-201) 1200(-17) 120(-30) 1219(-10) SG-14 A268 D303 1225(-17) 1245(-17) 1300(-3) 1302(-30) 1325(-10) SG-9/ 4177 0532 1330(-13) (13,50(-12) (350(-12) (140564) (1407(-21))1435(-10) PID'S ALL O @ SAMPLE Collection 1435-5 BRAND CLEMENR & THEE DOWN, LADA CHANGERS. 1445 -> OFFSITE STRATUS ENV, U.C.

WORK ORDER #: 09	9-07		16 of 18
aboratorias, Inc. SAMPLE RECEIPT FORM	ا م	Box ooler	of <u>3</u>
CLIENT: Stratus D	ATE: _	07/01	109
TEMPERATURE: (Criteria: 0.0 °C - 6.0 °C, not frozen) Temperature °C - 0.2 °C (CF) = °C □ BI □ Sample(s) outside temperature criteria (PM/APM contacted by:). □ Sample(s) outside temperature criteria but received on ice/chilled on same day of □ Received at ambient temperature, placed on ice for transport by Courier Ambient Temperature: □ Air □ Filter □ Metals Only □ PCBs Only	samplir r.	Sample ng. , Initial:	
CUSTODY SEALS INTACT: Cooler No (Not Intact) Sample No (Not Intact) No (Not Intact) Not Present] N/A	Initial:	
SAMPLE CONDITION: Yes Chain-Of-Custody (COC) document(s) received with samples Image: Sample Samp	- ,	No .	N/A
COC document(s) received complete			
Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
\Box COC not relinquished. \Box No date relinquished. \Box No time relinquished.			
Sampler's name indicated on COC	-		
Sample container label(s) consistent with COC			
Sample container(s) intact and good condition	_		
Correct containers and volume for analyses requested	/		
Analyses received within holding time			
Proper preservation noted on COC or sample container \Box			
Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace			ġ
Tedlar bag(s) free of condensation			
CONTAINER TYPE:			
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve □EnCores [®] □Terr	aCore	s® □	
Water: DVOA DVOAh DVOAna2 D125AGB D125AGBh D125AGBp D14	AGB 🗆]1AGBna₂ ⊏	1AGBs
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1	IPB 🗆	3500PB □50	0PB na
□250PB □250PBn □125PB □125PBznna □100PJ □100PJna ₂ □	_ 🗆		
Air: 🗆 Tedlar [®] 🖓 Summa [®] 🗆 Other: 🗆 Ch	necked/	Labeled by:	NZ
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar (Wide-mouth) B: Bottle (Narrow-mouth) Preservative: h: HCL n: HNO3 na ₂ :Na ₂ S ₂ O ₃ Na: NaOH p: H ₃ PO ₄ s: H ₂ SO ₄ znna: ZnAc ₂ +NaOH f: Field-f		eviewed by: Scanned by:	

SOP T100_090 (03/13/09)

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				Page 1	7 of 18
Celocience	WOF	RK ORDER #:	09-0	7-00	OB
Environmental				Box	
Laboratories, inc. S	AMPLE REC	EIPT FOR	€ى الله	coler <u>2</u>	of <u>3</u>
			<u> </u>	2777/09 p	
CLIENT: Stratus	·····	1	DATE:	07/01	109
TEMPERATURE: (Criteria: 0.	.0 °C – 6.0 °C, not frozen)				
Temperature•°	C - 0.2 °C (CF) =	_•°C 🛛	Blank	🗆 Sample	•
□ Sample(s) outside temperatur	e criteria (PM/APM contact	ed by:).			
□ Sample(s) outside temperatur	e criteria but received on ic	e/chilled on same da	ly of sampl	ling.	
Received at ambient temper	rature, placed on ice fo	r transport by Cou	urier.	-	
Ambient Temperature: GAir				ہ Initial:	N
CUSTODY SEALS INTACT:		_			
□ Cooler □	_ □ No (Not Intact)	☑ Not Present	□ N/A	Initial:	
□ Sample □	_ □ No (Not Intact)	D Not Present		Initial:	M
SAMPLE CONDITION:			/es	No	N/A
Chain-Of-Custody (COC) docum	ont/s) received with sam		/		
COC document(s) received com					
Collection date/time, matrix, and/					المبيا
□ COC not relinquished. □ No o Sampler's name indicated on CC	date relinquished.	-			
Sample container label(s) consis			~		
Sample container(s) intact and g				· □ ·	
Correct containers and volume for			<u> </u>		
Analyses received within holding					
Proper preservation noted on CC					
Unpreserved vials received for				_	
Volatile analysis container(s) free	•				4 mm
Tedlar bag(s) free of condensation	•				
CONTAINER TYPE:				_	in the
Solid: 04ozCGJ 08ozCGJ	□16ozCGJ □Sleeve	□EnCores [®] □	TerraCore	es® 🔲	
Water: DVOA DVOAh DVOA					
□500AGB □500AGJ □500AG		-			
□250PB □250PBn □125PB					
				•	
Container: C: Clear A: Amber P: Plas				i/Labeled by: Reviewed by:	- <u>-</u>
Preservative: h: HCL n: HNO3 na2:Na2S2		•			
			_		

a start option

E.G. P. S. KARANA A.

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SOP T100_090 (03/13/09)

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		Page 1	
WORK OR	der #: 09-0	7-00	08
Convironmental Leboratories, Inc. SAMPLE RECEIPT	FORM	Box Gooler_3	of 3
		V11/09 2	
CLIENT: Stratus	DATE:	07/01	109
TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)			
Temperature °C - 0.2 °C (CF) =	_°C 🛛 🗆 Blank	🗆 Sample	
□ Sample(s) outside temperature criteria (PM/APM contacted by:).		
Sample(s) outside temperature criteria but received on ice/chilled o	on same day of sam	oling.	
Received at ambient temperature, placed on ice for transpondent	ort by Courier.	·,	
Ambient Temperature: Air D Filter D Metals Only	PCBs Only	ک Initial:	_N
CUSTODY SEALS INTACT:			17
	Present □ N/A		
□ Sample □ □ No (Not Intact) ☑ Not	Present	Initial:	M
SAMPLE CONDITION:	Yes	No .	N/A
Chain-Of-Custody (COC) document(s) received with samples			
COC document(s) received complete	🗹		
COC document(s) received complete			
Collection date/time, matrix, and/or # of containers logged in based on sar	mple labels.		
 ☐ Collection date/time, matrix, and/or # of containers logged in based on sar ☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished. 	mple labels. shed.		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished. Sampler's name indicated on COC	mple labels. shed.		
 ☐ Collection date/time, matrix, and/or # of containers logged in based on sar ☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished. 	mple labels. shed.		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished. Sampler's name indicated on COC	mple labels. shed. 		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC Sample container label(s) consistent with COC Sample container(s) intact and good condition	mple labels. shed. 2 2 		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC	mple labels. shed.		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC	mple labels. shed.		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC Sample container label(s) consistent with COC Sample container(s) intact and good condition Correct containers and volume for analyses requested Analyses received within holding time Proper preservation noted on COC or sample container	mple labels. shed. 		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC	mple labels. shed. 		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC	mple labels. shed. 		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC	mple labels. shed.		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC	mple labels. shed. 		
□ Collection date/time, matrix, and/or # of containers logged in based on sar □ COC not relinquished. □ No date relinquished. □ No time relinquished Sampler's name indicated on COC	mple labels. shed. 	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
□ Collection date/time, matrix, and/or # of containers logged in based on sam □ COC not relinquished. □ No date relinquished. □ No time relinquished. Sampler's name indicated on COC	mple labels. shed. 	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
□ Collection date/time, matrix, and/or # of containers logged in based on sam □ COC not relinquished. □ No date relinquished. □ No time relinquished. Sampler's name indicated on COC	mple labels. shed. 	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
□ Collection date/time, matrix, and/or # of containers logged in based on sam □ COC not relinquished. □ No date relinquished. □ No time relinquished. □ Sampler's name indicated on COC	mple labels. shed. 	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	

 $\mathbb{E}_{\mathbf{x}} = \{\mathbf{x}_{1}, \dots, \mathbf{y}_{k}\} \quad \text{for } \mathbf{y} \in \{\mathbf{x}_{1}, \dots, \mathbf{y}_{k}\}, \dots, \mathbf{y}_{k}\}$

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SOP T100_090 (03/13/09)

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APPENDIX C

GEOTRACKER UPLOAD CONFIRMATION RECEIPTS

STATE WATER RESOURCES CONTROL BOARD

UPLOADING A EDF FILE

Procossing is	complete. No errors were found!
•	s been successfully submitted!
	-
Submittal Type:	EDF - Soil and Water Investigation Repor
Submittal Title:	SOIL INVESTIGATION
Facility Global ID:	T0600100108
Facility Name:	ARCO #0601
File Name:	09061342 FIX.zip
Organization Name:	Broadbent & Associates, Inc.
Username:	BROADBENT-C
IP Address:	67.118.40.90
Submittal Date/Time:	8/3/2009 11:03:55 AM
Confirmation Number:	6908479988
	VIEW QC REPORT

STATE WATER RESOURCES CONTROL BOARD

UPLOADING A EDF FILE

SUCCESS

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

Submittal Type: Submittal Title: Facility Global ID: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: EDF - Site Investigation Vapor Intrusion Assessment T0600100108 ARCO #0601 09070008.zip Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 8/3/2009 11:15:10 AM 7258194446

VIEW QC REPORT

VIEW DETECTIONS REPORT

STATE WATER RESOURCES CONTROL BOARD

UPLOADING A GEO_MAP FILE

SUCCESS

Your GEO_MAP file has been successfully submitted!

Submittal Type: Facility Global ID: Facility Name: File Name: Username: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO_MAP T0600100108 ARCO #0601 712 Lewelling Blvd_2009-06-23.pdf Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 7/8/2009 11:49:20 AM 2093584358

UPLOADING A GEO_BORE FILE

SUCCESS

Your GEO_BORE file has been successfully submitted!

Submittal Type: Facility Global ID: Field Point: Facility Name: File Name: Username: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO_BORE T0600100108 MW-16 ARCO #0601 GEO_BORE MW-16.pdf Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 8/3/2009 10:48:07 AM 1320870518

UPLOADING A GEO_BORE FILE

SUCCESS

Your GEO_BORE file has been successfully submitted!

Submittal Type: Facility Global ID: Field Point: Facility Name: File Name: Username: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO_BORE T0600100108 MW-17 ARCO #0601 GEO_BORE MW-17.pdf Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 8/3/2009 10:48:39 AM 6980028450

UPLOADING A GEO_BORE FILE

SUCCESS

Your GEO_BORE file has been successfully submitted!

Submittal Type: Facility Global ID: Field Point: Facility Name: File Name: Username: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO_BORE T0600100108 MW-18 ARCO #0601 GEO_BORE MW-18.pdf Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 8/3/2009 10:48:56 AM 3745215177

UPLOADING A GEO_BORE FILE

SUCCESS

Your GEO_BORE file has been successfully submitted!

Submittal Type: Facility Global ID: Field Point: Facility Name: File Name: Username: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO_BORE T0600100108 MW-19 ARCO #0601 GEO_BORE MW-19.pdf Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 8/3/2009 10:49:15 AM 4735009312

UPLOADING A GEO_XY FILE

	SUCCESS
-	complete. No errors were found! s been successfully submitted!
Submittal Type:	GEO_XY
Submittal Title:	GEO_XY 6-23-2009 B-1, HP-1, SG-9 to 14
Facility Global ID:	T0600100108
Facility Name:	ARCO #0601
File Name:	GEO_XY.zip
Organization Name:	Broadbent & Associates, Inc.
Username:	BROADBENT-C
IP Address:	67.118.40.90
Submittal Date/Time:	7/8/2009 12:06:24 PM
Confirmation Number:	8486914396

UPLOADING A GEO_XY FILE

	SUCCESS
•	s complete. No errors were found!
Your file h	as been successfully submitted!
Submittal Type:	GEO_XY
Submittal Title:	GEO_XY 6-23-2009 MW-1 to 3, MW-16 to 19
Facility Global ID:	T0600100108
Facility Name:	ARCO #0601
File Name:	GEO_XY.zip
Organization Name:	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
IP Address:	67.118.40.90
Submittal Date/Time:	7/8/2009 11:48:01 AM
Confirmation Number:	5692404508

UPLOADING A GEO_Z FILE

	SUCCESS
-	s complete. No errors were found!
Your file n	as been successfully submitted!
Submittal Type:	GEO_Z
Submittal Title:	GEO_XY 6-23-2009 MW-1 to 3, MW-16 to 19
Facility Global ID:	T0600100108
Facility Name:	ARCO #0601
File Name:	GEO_Z.zip
Organization Name:	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
IP Address:	67.118.40.90
Submittal Date/Time:	7/8/2009 11:46:52 AM
Confirmation Number:	4501999378