



**RECEIVED**

2:42 pm, Feb 01, 2008

Alameda County  
Environmental Health

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

January 28, 2008  
Project No. 2007-0057-01

Ms. Mirtha Ninayahuar  
East Bay Municipal Utility District  
Environmental Services Division, MS 702  
P.O. Box 24055  
Oakland, CA 94623-1055

Re: Self-Monitoring Report for July 2007 to December 2007  
Permit Number: 5054635 2  
Former USA Station No. 57  
10700 MacArthur Boulevard  
Oakland, California

Dear Ms. Ninayahuar:

Stratus Environmental Inc. (Stratus) has prepared this report, on behalf of Moller Investment Group, Inc. (MIGI), to present the results of a dual phase extraction (DPE) and air sparge (AS) event conducted during the second half of 2007 at former USA Station No. 57, located at 10700 MacArthur Boulevard, Oakland, California. This report has been prepared in accordance with the requirements identified in the East Bay Municipal Utility District (EBMUD) *Wastewater Discharge Permit* (dated May 31, 2005).

One DPE-AS petroleum hydrocarbon mass removal event was completed at the site during the self-monitoring period of July through December 2007 (per EBMUD Permit No. 5054635 2). The DPE-AS event was conducted between September 4, 2007 and November 14, 2007. During the DPE-AS event, petroleum hydrocarbon laden soil vapors and groundwater were concurrently extracted from multiple wells using a 15-horsepower (hp) liquid ring pump of a CBA Equipment, LLC (CBA) DPE system. Soil vapors and groundwater were separated in a 100-gallon knockout tank, situated on the trailer-mounted DPE system. Groundwater from the knockout tank was then treated on-site using two 500 pound (lb) granular activated carbon (GAC) vessels, in series, containing virgin coconut shell carbon; the treated groundwater was discharged to the EBMUD sanitary sewer system. The soil vapors were abated in the thermal oxidizer of the DPE system prior to discharge to the atmosphere.

## **FLOW SUMMARY**

### **September to November 2007 DPE-AS Event**

This DPE-AS event was conducted between September 4, 2007, and November 14, 2007, for 779.50 hours (approximately 32.48 days). The DPE-AS system was unable to operate continuously due to frequent malfunctions of the propane generator used to power the control panel of the DPE system. During this event, approximately 690 gallons of groundwater were extracted, treated, and discharged to the sanitary sewer (Table 1). The treated groundwater was discharged to the sanitary sewer at flow rates in the range of 0.01 to 0.37 gallons per minute (gpm).

## **ANALYTICAL RESULTS**

### **September to November 2007 DPE-AS Event**

Four influent and two effluent water samples were collected between September 4, 2007 and November 14, 2007, and forwarded to Alpha Analytical, Inc. (ELAP #2019) for chemical analysis. These water samples were analyzed for gasoline range organics (GRO) using United States Environmental Protection Agency (USEPA) Method SW8015B, and for benzene, toluene, ethyl benzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), and tertiary amyl ether (TAME) using USEPA Method 8260B. Certified analytical reports with chain-of-custody documentation are included in Appendix A.

Petroleum hydrocarbons and fuel oxygenates were not reported in any of the effluent water samples collected during this DPE-AS event. GRO, benzene, and MTBE concentrations in the influent water samples ranged from 51 to 470 micrograms per liter ( $\mu\text{g/L}$ ), 9.2 to 140  $\mu\text{g/L}$ , and 3.8 to 230  $\mu\text{g/L}$ , respectively (Table 2).

## **DISCUSSION**

One DPE-AS event was conducted at the site during the self-monitoring period for July through December 2007 (per EBMUD Permit No. 5054635 2), to reduce the petroleum hydrocarbon mass. A total of approximately 690 gallons of treated groundwater were discharged to the sanitary sewer during this reporting period. Petroleum hydrocarbons or fuel oxygenates were not reported in any of the effluent water samples collected during the DPE-AS event. The DPE system operated in compliance with the EBMUD permit requirements.

January 28, 2008

Stratus will likely conduct an additional DPE-AS event once an alternative power supply can be obtained at the site. Stratus has requested electrical service for the site from Pacific Gas and Electric (PG&E).

### Certification

"I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment or both."

If you have any questions or comments, please call Scott Bittinger at (530) 676-2062.

Sincerely,

*STRATUS ENVIRONMENTAL INC.,*

*Sonia Nandi*  
Sonia Nandi  
Staff Engineer

*for Scott G. Bittinger*  
for Scott G. Bittinger, P.G.  
Project Manager



### Attachments:

- Table 1 DPE-AS Event Field Observation Summary, September to November 2007
- Table 2 Groundwater Analytical Results, September to November 2007
- Appendix A Certified Analytical Reports with Chain-of-Custody Documentation

cc: Mr. Charles Miller, Moller Investment Group, Inc.  
Mr. Barney Chan, Alameda County Health Care Services  
Mr. John Jay, Jay-Phares Corporation  
Mr. Peter McIntyre, AEI Consultants

**TABLE 1**  
**DPE-AS EVENT FIELD OBSERVATION SUMMARY, September to November 2007**  
Former USA Station No. 57  
10700 MacArthur Boulevard  
Oakland, California

| Date  | Hour Meter Reading   | TE days | Appl Vac "Hg | Air Flow <sup>1</sup> cfm | Totalizer Reading gallons | GW Ext Rate gpm | Inf PID ppmv  | Oper Temp deg F | Depth to Water, feet bgs and Induced Vacuum, "WC |      |                |      |                |      |                |      |                |      |
|---|--|---------|--------------|---------------------------|---------------------------|-----------------|---------------|-----------------|--|------|----------------|------|----------------|------|----------------|------|----------------|------|
|   |  |         |              |                           |                           |                 |               |                 | S-1  |      | S-2            |      | MW-3           |      | MW-7           |      | MW-8           |      |
|   |  |         |              |                           |                           |                 |               |                 | DTW  | DD   | DTW            | DD   | DTW            | DD   | DTW            | DD   | DTW            | DD   |
| 9/4/07 5:45   | NM   | NM      | NM           | NM                        | NM                        | NM              | NM            | NM              | 18.57  | --   | 20.69          | --   | 15.43          | --   | 17.60          | --   | 19.55          | --   |
| 9/4/07 9:40   | <b>Begin DPE-AS event using wells EX-1 through EX-4 and AS-1 through AS-2. Hour Meter Reading = 11,489.50. Totalizer reading = 199,300 gallons</b> |         |              |                           |                           |                 |               |                 |  |      |                |      |                |      |                |      |                |      |
| 9/4/07 9:40   | 11,489.50  | 0.00    | 15.00        | 93.3                      | 199,307                   | --              | NM            | NM              | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 9/4/07 10:15  | 11,490.50  | 0.04    | 15.00        | 98.2                      | 199,320                   | 0.22            | 230           | 1,490           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 9/4/06 11:15  | 11,491.40  | 0.08    | 14.00        | 103.1                     | 199,340                   | 0.37            | 140           | 1,450           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 9/11/07 10:15   | 11,524.00  | 1.44    | 12.00        | 122.8                     | 199,410                   | 0.04            | 160           | 1,450           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 9/17/07 5:45  | 11,592.60  | 4.30    | 10.00        | 122.8                     | 199,550                   | 0.03            | 139           | 1,483           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 9/18/07 4:15  | 11,616.70  | 5.30    | NM           | NM                        | 199,550                   | 0.00            | NM            | NM              | 18.80  | 0.23 | 20.94          | 0.25 | 16.10          | 0.67 | 17.78          | 0.18 | 23.69          | 4.14 |
| 9/20/07 5:00  | 11,640.00  | 6.27    | NM           | 98.2                      | 199,550                   | 0.00            | 418           | 1,538           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 9/25/07 9:00  | 11,668.10  | 7.44    | 14.00        | 103.1                     | 199,630                   | 0.05            | 400           | 1,527           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 10/2/07 5:00  | 11,730.00  | 10.02   | NM           | NM                        | NM                        | --              | NM            | NM              | 19.12  | 0.55 | 21.33          | 0.64 | 16.40          | 0.97 | 18.11          | 0.51 | 20.2           | 0.69 |
| 10/3/07 5:30  | 11,762.20  | 11.36   | 8.00         | 132.6                     | 199,690                   | 0.01            | 1,060         | 1,480           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 10/5/07 5:00  | 11,808.80  | 13.30   | NM           | NM                        | 199,690                   | --              | NM            | NM              | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 10/11/07 7:00   | 11,862.00  | 15.52   | 11.00        | 122.8                     | 199,770                   | 0.03            | 90            | 1,460           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 10/15/07 4:50   | 11,960.30  | 19.62   | NM           | NM                        | 199,830                   | 0.01            | NM            | NM              | 19.22  | 0.65 | 21.32          | 0.63 | 16.45          | 1.02 | 18.29          | 0.69 | 20.4           | 0.81 |
| 10/17/07 8:00   | 11,972.00  | 20.10   | 11.00        | 103.1                     | 199,830                   | --              | 300           | 1,497           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 10/30/07 8:50   | 12,101.00  | 25.48   | 14.50        | 117.9                     | 199,920                   | 0.01            | 69            | 1,450           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 11/6/07 7:00  | 12,108.00  | 25.77   | 12.00        | 117.9                     | 199,990                   | 0.17            | 347           | 1,485           | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 11/14/07 6:00   | 12,269.00  | 32.48   | NM           | NM                        | NM                        | --              | NM            | NM              | NM   | --   | NM             | --   | NM             | --   | NM             | --   | NM             | --   |
| 11/14/07 20:00  | <b>Discontinue DPE-AS event.</b>   |         |              |                           |                           |                 |               |                 |  |      |                |      |                |      |                |      |                |      |
| <b>Average</b>  | --   | --      | <b>12.41</b> | <b>111.31</b>             | --                        | <b>0.08</b>     | <b>304.82</b> | <b>1,483</b>    |  |      |                |      |                |      |                |      |                |      |
| <b>Distance to Nearest Extraction Well, feet</b>                  |  |         |              |                           |                           |                 |               |                 | <b>20</b>  |      | <b>27</b>      |      | <b>15</b>      |      | <b>33</b>      |      | <b>62</b>      |      |
| <b>Screening Interval : EX-1=EX-2=EX-3=EX-4= 5 to 25 feet bgs</b> |  |         |              |                           |                           |                 |               |                 | <b>20 - 40</b>                                   |      | <b>20 - 40</b> |      | <b>24 - 44</b> |      | <b>10 - 40</b> |      | <b>10 - 35</b> |      |

**TABLE 1**  
**DPE-AS EVENT FIELD OBSERVATION SUMMARY, September to November 2007**  
Former USA Station No. 57  
10700 MacArthur Boulevard  
Oakland, California

| Date   | Hour<br>Meter<br>Reading | TE<br>days | Appl<br>Vac<br>"Hg | Air<br>Flow <sup>1</sup><br>cfm | Totalizer<br>Reading<br>gallons | GW<br>Ext Rate<br>gpm | Inf<br>PID<br>ppmv | Oper<br>Temp<br>deg F              | Depth to Water, feet bgs and Induced Vacuum, "WC |    |     |    |      |    |      |    |      |    |  |  |  |
|--|--------------------------|------------|--------------------|---------------------------------|---------------------------------|-----------------------|--------------------|------------------------------------|--|----|-----|----|------|----|------|----|------|----|--|--|--|
|  |                          |            |                    |                                 |                                 |                       |                    |                                    | S-1  |    | S-2 |    | MW-3 |    | MW-7 |    | MW-8 |    |  |  |  |
|  |                          |            |                    |                                 |                                 |                       |                    |                                    | DTW  | DD | DTW | DD | DTW  | DD | DTW  | DD | DTW  | DD |  |  |  |
| Notes:   |                          |            |                    |                                 |                                 |                       |                    |                                    |  |    |     |    |      |    |      |    |      |    |  |  |  |
| TE - Time Elapsed calculated as difference of hour meter readings, days                        |                          |            |                    | cfm - cubic feet per minute     |                                 |                       |                    | Temp - Temperature                 |  |    |     |    |      |    |      |    |      |    |  |  |  |
| Appl - Applied   |                          |            |                    | Inf - Influent                  |                                 |                       |                    | deg F - degree Fahrenheit          |  |    |     |    |      |    |      |    |      |    |  |  |  |
| Oper - Operating   |                          |            |                    | DD - Drawdown                   |                                 |                       |                    | PID - Photo Ionization Detector    |  |    |     |    |      |    |      |    |      |    |  |  |  |
| Inf - Influent   |                          |            |                    | gpm - gallons per minute        |                                 |                       |                    | ppmv - parts per million by volume |  |    |     |    |      |    |      |    |      |    |  |  |  |
| Vac - Vacuum   |                          |            |                    | " Hg - Inches mercury           |                                 |                       |                    | NM - Not measured                  |  |    |     |    |      |    |      |    |      |    |  |  |  |
| DTW - depth to groundwater   |                          |            |                    |                                 |                                 |                       |                    |                                    |  |    |     |    |      |    |      |    |      |    |  |  |  |
| GW Ext Rate = Difference of Totalizer Readings, gallons  |                          |            |                    |                                 |                                 |                       |                    |                                    |  |    |     |    |      |    |      |    |      |    |  |  |  |
| <sup>1</sup> Flow rate measured using a digital anemometer at 3" diameter steel pipe;          |                          |            |                    |                                 |                                 |                       |                    |                                    |  |    |     |    |      |    |      |    |      |    |  |  |  |
| flow rate = velocity x area of pipe ( e.g. flow rate = 600 feet per minute x 0.05 square feet) |                          |            |                    |                                 |                                 |                       |                    |                                    |  |    |     |    |      |    |      |    |      |    |  |  |  |

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS, September to November 2007  
Former USA Station No. 57  
10700 MacArthur Boulevard  
Oakland, California

| Sample Date | Sample Time | Sample ID   | GRO | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE  | TBA | DIPE    | ETBE    | TAME    |
|-------------|-------------|-------------|-----|---------|---------|--------------|---------------|-------|-----|---------|---------|---------|
| 09/04/07    | 10:15       | INF         | 470 | 25      | 2.9     | 10           | 19            | 230   | 120 | <1.0    | <1.0    | <1.0    |
| 10/03/07    | 5:30        | 0057WINF    | 51  | 9.2     | 0.63    | <0.50        | 1.82          | 5.4   | 19  | <1.0    | <1.0    | <1.0    |
| 10/11/07    | 6:35        | USA57 W INF | 120 | 25      | 1.6     | 3.3          | 8.7           | 3.8   | 18  | <1.0    | <1.0    | <1.0    |
| 10/11/07    | 6:30        | USA57 W EFF | <50 | <0.50   | <0.50   | <0.50        | <0.50         | <0.50 | <10 | <1.0    | <1.0    | <1.0    |
| 11/06/07    | 7:35        | 00057 W INF | 430 | 140     | 33      | 9.6          | 61            | 9.0   | 41  | <2.0[1] | <2.0[1] | <2.0[1] |
| 11/06/07    | 7:30        | 00057 W EFF | <50 | <0.50   | <0.50   | <0.50        | <0.50         | <0.50 | <10 | <1.0    | <1.0    | <1.0    |
|             |             |             |     |         |         |              |               |       |     |         |         |         |

**Notes:**

All water sample values reported in micrograms per liter ( $\mu\text{g/L}$ )

GRO = Gasoline Range Organics C4-C13

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

**Analytical Laboratory**

Alpha Analytical, Inc. (ELAP #2019)

**Analytical Methods**

GRO analyzed by EPA Method SW8015B/DHS LUFT Manual

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

EPA Method SW8260B

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

## **APPENDIX A**

### **CERTIFIED ANALYTICAL REPORTS WITH CHAIN-OF-CUSTODY DOCUMENTATION**



# Alpha Analytical, Inc.

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

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received : 09/05/07

Job#: USA 57

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

|                 | Parameter                         | Concentration | Reporting | Date     | Date     |
|-----------------|-----------------------------------|---------------|-----------|----------|----------|
|                 |                                   |               | Limit     | Sampled  | Analyzed |
| Client ID :     | TPH-P (GRO)                       | 470           | 50 µg/L   | 09/04/07 | 09/07/07 |
| INF             | Tertiary Butyl Alcohol (TBA)      | 120           | 10 µg/L   | 09/04/07 | 09/07/07 |
| Lab ID :        | Methyl tert-butyl ether (MTBE)    | 230           | 0.50 µg/L | 09/04/07 | 09/07/07 |
| STR07090555-01A | Di-isopropyl Ether (DIPE)         | ND            | 1.0 µg/L  | 09/04/07 | 09/07/07 |
|                 | Ethyl Tertiary Butyl Ether (ETBE) | ND            | 1.0 µg/L  | 09/04/07 | 09/07/07 |
|                 | Benzene                           | 25            | 0.50 µg/L | 09/04/07 | 09/07/07 |
|                 | Tertiary Amyl Methyl Ether (TAME) | ND            | 1.0 µg/L  | 09/04/07 | 09/07/07 |
|                 | Toluene                           | 2.9           | 0.50 µg/L | 09/04/07 | 09/07/07 |
|                 | Ethylbenzene                      | 10            | 0.50 µg/L | 09/04/07 | 09/07/07 |
|                 | m,p-Xylene                        | 14            | 0.50 µg/L | 09/04/07 | 09/07/07 |
|                 | o-Xylene                          | 5.0           | 0.50 µg/L | 09/04/07 | 09/07/07 |

Gasoline Range Organics (GRO) C4-C13

ND = Not Detected

Reported in micrograms per Liter, per client request.

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

9/12/07

Report Date



# *Alpha Analytical, Inc.*

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

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## **VOC Sample Preservation Report**

**Work Order:** STR07090555

**Project:** USA 57

---

| Alpha's Sample ID | Client's Sample ID | Matrix  | pH |
|-------------------|--------------------|---------|----|
| 07090555-01A      | INF                | Aqueous | 2  |

---

9/12/07  
**Report Date**



# Alpha Analytical, Inc.

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

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

Date:  
11-Sep-07

## QC Summary Report

Work Order:  
07090555

### Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B**

File ID: C:\HPCHEM\MS07\DATA\070907\07090707.D

Batch ID: **MS07W0907B**

Analysis Date: **09/07/2007 11:13**

Sample ID: **MBLK MS07W0907A**

Units : **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | ND     | 50  |        |           |      |         |         |           |             |      |
| Surr: 1,2-Dichloroethane-d4 | 9.5    |     | 10     |           | 95   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 10.1   |     | 10     |           | 101  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 9.81   |     | 10     |           | 98   | 80      | 120     |           |             |      |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B**

File ID: C:\HPCHEM\MS07\DATA\070907\07090703.D

Batch ID: **MS07W0907B**

Analysis Date: **09/07/2007 09:44**

Sample ID: **GLCS MS07W0907B**

Units : **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | 369    | 50  | 400    |           | 92   | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4 | 9.6    |     | 10     |           | 96   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 10.1   |     | 10     |           | 101  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 10     |     | 10     |           | 100  | 80      | 120     |           |             |      |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B**

File ID: C:\HPCHEM\MS07\DATA\070907\07090712.D

Batch ID: **MS07W0907B**

Analysis Date: **09/07/2007 13:05**

Sample ID: **07090451-06AGS**

Units : **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | 1580   | 250 | 2000   |           | 0    | 79      | 60      | 131       |             |      |
| Surr: 1,2-Dichloroethane-d4 | 46.7   |     | 50     |           | 93   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 50.1   |     | 50     |           | 100  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 51.1   |     | 50     |           | 102  | 80      | 120     |           |             |      |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B**

File ID: C:\HPCHEM\MS07\DATA\070907\07090713.D

Batch ID: **MS07W0907B**

Analysis Date: **09/07/2007 13:27**

Sample ID: **07090451-06AGSD**

Units : **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual    |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|---------|
| TPH-P (GRO)                 | 1740   | 250 | 2000   |           | 0    | 87      | 60      | 131       | 1583        | 9.7(20) |
| Surr: 1,2-Dichloroethane-d4 | 47.3   |     | 50     |           | 95   | 75      | 128     |           |             |         |
| Surr: Toluene-d8            | 50.3   |     | 50     |           | 101  | 80      | 120     |           |             |         |
| Surr: 4-Bromofluorobenzene  | 49.5   |     | 50     |           | 99   | 80      | 120     |           |             |         |

### Comments:

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

Reported in micrograms per Liter, per client request.



# Alpha Analytical, Inc.

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

Date:  
11-Sep-07

## QC Summary Report

Work Order:  
07090555

### Method Blank

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

File ID: C:\HPCHEM\MS07\DATA\070907\07090707.D

Batch ID: **MS07W0907A**

Analysis Date: **09/07/2007 11:13**

Sample ID: **MBLK MS07W0907A**

Units: **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                           | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Tertiary Butyl Alcohol (TBA)      | ND     | 10  |        |           |      |         |         |           |             |      |
| Methyl tert-butyl ether (MTBE)    | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Di-isopropyl Ether (DIPE)         | ND     | 1   |        |           |      |         |         |           |             |      |
| Ethyl Tertiary Butyl Ether (ETBE) | ND     | 1   |        |           |      |         |         |           |             |      |
| Benzene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Tertiary Amyl Methyl Ether (TAME) | ND     | 1   |        |           |      |         |         |           |             |      |
| Toluene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Ethylbenzene                      | ND     | 0.5 |        |           |      |         |         |           |             |      |
| m,p-Xylene                        | ND     | 0.5 |        |           |      |         |         |           |             |      |
| o-Xylene                          | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Surr: 1,2-Dichloroethane-d4       | 9.5    |     | 10     |           | 95   | 75      | 128     |           |             |      |
| Surr: Toluene-d8                  | 10.1   |     | 10     |           | 101  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene        | 9.81   |     | 10     |           | 98   | 80      | 120     |           |             |      |

### Laboratory Control Spike

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

File ID: C:\HPCHEM\MS07\DATA\070907\07090704.D

Batch ID: **MS07W0907A**

Analysis Date: **09/07/2007 10:06**

Sample ID: **LCS MS07W0907A**

Units: **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 9.59   | 0.5 | 10     |           | 96   | 70      | 130     |           |             |      |
| Benzene                        | 9.27   | 0.5 | 10     |           | 93   | 70      | 130     |           |             |      |
| Toluene                        | 9.38   | 0.5 | 10     |           | 94   | 80      | 120     |           |             |      |
| Ethylbenzene                   | 9.12   | 0.5 | 10     |           | 91   | 80      | 120     |           |             |      |
| m,p-Xylene                     | 9.18   | 0.5 | 10     |           | 92   | 70      | 130     |           |             |      |
| o-Xylene                       | 9.38   | 0.5 | 10     |           | 94   | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 9.44   |     | 10     |           | 94   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 10.2   |     | 10     |           | 102  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 9.96   |     | 10     |           | 99.6 | 80      | 120     |           |             |      |

### Sample Matrix Spike

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

File ID: C:\HPCHEM\MS07\DATA\070907\07090710.D

Batch ID: **MS07W0907A**

Analysis Date: **09/07/2007 12:20**

Sample ID: **07090451-06AMS**

Units: **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 48.5   | 1.3 | 50     | 0         | 97   | 62      | 139     |           |             |      |
| Benzene                        | 45.5   | 1.3 | 50     | 0         | 91   | 70      | 130     |           |             |      |
| Toluene                        | 45.2   | 1.3 | 50     | 0         | 90   | 67      | 130     |           |             |      |
| Ethylbenzene                   | 42.8   | 1.3 | 50     | 0         | 86   | 70      | 130     |           |             |      |
| m,p-Xylene                     | 43.3   | 1.3 | 50     | 0         | 87   | 69      | 130     |           |             |      |
| o-Xylene                       | 45.8   | 1.3 | 50     | 0         | 92   | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 46     |     | 50     |           | 92   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 50.9   |     | 50     |           | 102  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 50.3   |     | 50     |           | 101  | 80      | 120     |           |             |      |

### Sample Matrix Spike Duplicate

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

File ID: C:\HPCHEM\MS07\DATA\070907\07090711.D

Batch ID: **MS07W0907A**

Analysis Date: **09/07/2007 12:43**

Sample ID: **07090451-06AMSD**

Units: **µg/L**

Run ID: **MSD\_07\_070907A**

Prep Date: **09/07/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 50.1   | 1.3 | 50     | 0         | 100  | 62      | 139     | 48.51     | 3.2(20)     |      |
| Benzene                        | 45.6   | 1.3 | 50     | 0         | 91   | 70      | 130     | 45.54     | 0.2(20)     |      |
| Toluene                        | 45.5   | 1.3 | 50     | 0         | 91   | 67      | 130     | 45.22     | 0.6(20)     |      |
| Ethylbenzene                   | 43.8   | 1.3 | 50     | 0         | 88   | 70      | 130     | 42.76     | 2.5(20)     |      |
| m,p-Xylene                     | 43.9   | 1.3 | 50     | 0         | 88   | 69      | 130     | 43.28     | 1.3(20)     |      |
| o-Xylene                       | 46.1   | 1.3 | 50     | 0         | 92   | 70      | 130     | 45.82     | 0.6(20)     |      |
| Surr: 1,2-Dichloroethane-d4    | 47.1   |     | 50     |           | 94   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 50.5   |     | 50     |           | 101  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 50.1   |     | 50     |           | 100  | 80      | 120     |           |             |      |



# *Alpha Analytical, Inc.*

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

**Date:**  
*11-Sep-07*

## QC Summary Report

**Work Order:**  
07090555

**Comments:**

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

# CHAIN-OF-CUSTODY RECORD

# CA

WorkOrder : STR07090555

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

Report Due By : 5:00 PM On : 13-Sep-07

**Client:**

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

Scott Bittinger  
 TEL : (530) 676-2062 x  
 FAX : (530) 676-6005  
 EMail sbittinger@stratusinc.net

EDD Required : Yes

Sampled by : C. Hill

Report Attention : Scott Bittinger

Job : USA 57

Cooler Temp

Samples Received

Date Printed

CC Report :

PO :

Client's COC # : 10041

4 °C

05-Sep-07

05-Sep-07

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

| Alpha Sample ID | Client Sample ID | Collection Matrix | Collection Date   | No. of Bottles |     |     | PWS # | Requested Tests |               |  |  |  |  | Sample Remarks |  |  |
|-----------------|------------------|-------------------|-------------------|----------------|-----|-----|-------|-----------------|---------------|--|--|--|--|----------------|--|--|
|                 |                  |                   |                   | ORG            | SUB | TAT |       | TPHP_W          | VOC_W         |  |  |  |  |                |  |  |
| STR07090555-01A | INF              | AQ                | 09/04/07<br>10:15 | 5              | 0   | 6   |       | GAS-C           | BTEX/OXY<br>C |  |  |  |  |                |  |  |

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

| Logged in by: | Signature | Print Name     | Company                | Date/Time   |
|---------------|-----------|----------------|------------------------|-------------|
|               |           | Tara Dickenson | Alpha Analytical, Inc. | 9/5/07 1049 |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**Billing Information:**

Name Stratus ENV  
 Address 3390 Cameron Pk DR  
 City, State, Zip Cameron Pk CA  
 Phone Number 5306266204 Fax 5306266205



**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21  
 Sparks, Nevada 89431-5778  
 Phone (775) 355-1044  
 Fax (775) 355-0406

**Samples Collected From Which State?**

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

|                                 |  |               |  |                       |  |                       |  |  |  |            |  |                        |  |                               |  |   |  |
|---------------------------------|--|---------------|--|-----------------------|--|-----------------------|--|--|--|------------|--|------------------------|--|-------------------------------|--|---|--|
| Client Name <u>USA 57</u>       |  |               |  | P.O. #                |  | Job #                 |  | Analyses Required  |  |            |  | 10041                  |  |                               |  |   |  |
| Address                         |  |               |  | E-Mail Address        |  |                       |  |  |  |            |  | Required QC Level?     |  |                               |  |   |  |
| City, State, Zip <u>Oakland</u> |  |               |  | Phone #               |  | Fax #                 |  | <div style="writing-mode: vertical-rl; transform: rotate(180deg);">                 GRO-BEX<br/>                 5045             </div> |  |            |  | I II III IV            |  |                               |  |   |  |
| Time Sampled                    |  | Date Sampled  |  | Matrix* See Key Below |  | Office Use Only       |  |  |  |            |  | Sampled by <u>CHIC</u> |  | Report Attention <u>Scott</u> |  | EDD / EDF? YES <input type="checkbox"/> NO <input type="checkbox"/> |  |
|                                 |  |               |  |                       |  |                       |  |  |  |            |  |                        |  |                               |  | Global ID #   |  |
|                                 |  |               |  | Lab ID Number         |  | Sample Description    |  |  |  |            |  | TAT                    |  | Field Filtered                |  | REMARKS   |  |
| <u>1015</u>                     |  | <u>9/3/07</u> |  | <u>AQ</u>             |  | <u>STR0709D555-01</u> |  | <u>IMF</u>   |  | <u>5.4</u> |  |                        |  |                               |  |   |  |

**ADDITIONAL INSTRUCTIONS:**

| Signature       | Print Name             | Company        | Date          | Time        |
|-----------------|------------------------|----------------|---------------|-------------|
|                 | <u>CHIC</u>            | <u>Stratus</u> | <u>9/3/07</u> | <u>1515</u> |
|                 | <u>Mike Giltner</u>    | <u>Alpha</u>   | <u>9/4/07</u> | <u>1515</u> |
|                 | <u>Taree Dickinson</u> | <u>Alpha</u>   | <u>9/5/07</u> | <u>1049</u> |
| Relinquished by |                        |                |               |             |
| Received by     |                        |                |               |             |

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other      \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other  
**NOTE:** Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.



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

# FILE COPY

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received 10/04/07

OCT 22 2007

Job#: 2007-0057-01/USA 57

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

|                 | Parameter                         | Concentration | Reporting Limit | Date Sampled | Date Analyzed |
|-----------------|-----------------------------------|---------------|-----------------|--------------|---------------|
| Client ID :     | TPH-P (GRO)                       | 51            | 50 µg/L         | 10/03/07     | 10/05/07      |
| 0057WINF        | Tertiary Butyl Alcohol (TBA)      | 19            | 10 µg/L         | 10/03/07     | 10/05/07      |
| Lab ID :        | Methyl tert-butyl ether (MTBE)    | 5.4           | 0.50 µg/L       | 10/03/07     | 10/05/07      |
| STR07100432-01A | Di-isopropyl Ether (DIPE)         | ND            | 1.0 µg/L        | 10/03/07     | 10/05/07      |
|                 | Ethyl Tertiary Butyl Ether (ETBE) | ND            | 1.0 µg/L        | 10/03/07     | 10/05/07      |
|                 | Benzene                           | 9.2           | 0.50 µg/L       | 10/03/07     | 10/05/07      |
|                 | Tertiary Amyl Methyl Ether (TAME) | ND            | 1.0 µg/L        | 10/03/07     | 10/05/07      |
|                 | Toluene                           | 0.63          | 0.50 µg/L       | 10/03/07     | 10/05/07      |
|                 | Ethylbenzene                      | ND            | 0.50 µg/L       | 10/03/07     | 10/05/07      |
|                 | m,p-Xylene                        | 1.1           | 0.50 µg/L       | 10/03/07     | 10/05/07      |
|                 | o-Xylene                          | 0.72          | 0.50 µg/L       | 10/03/07     | 10/05/07      |

Gasoline Range Organics (GRO) C4-C13

ND = Not Detected

Reported in micrograms per Liter, per client request.

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

10/10/07

Report Date



# Alpha Analytical, Inc.

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

---

## VOC Sample Preservation Report

Work Order: STR07100432

Project: 2007-0057-01/USA 57

---

| Alpha's Sample ID | Client's Sample ID | Matrix  | pH |
|-------------------|--------------------|---------|----|
| 07100432-01A      | 0057WINF           | Aqueous | 2  |

---

10/10/07  
Report Date



# Alpha Analytical, Inc.

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

Date:  
10-Oct-07

## QC Summary Report

Work Order:  
07100432

### Method Blank

| Method Blank                                   |              | Type | Test Code: EPA Method SW8015B |           |      |         |                                 |           |             |      |
|--|--------------|------|-------------------------------|-----------|------|---------|---------------------------------|-----------|-------------|------|
| File ID: D:\HPCHEM\MS09\DATA\071005\07100504.D |              |      | Batch ID: MS09W1005B          |           |      |         | Analysis Date: 10/05/2007 13:04 |           |             |      |
| Sample ID: MBLK MS09W1005B                     | Units : µg/L |      | Run ID: MSD_09_071005A        |           |      |         | Prep Date: 10/05/2007           |           |             |      |
| Analyte  | Result       | PQL  | SpkVal                        | SpkRefVal | %REC | LCL(ME) | UCL(ME)                         | RPDRefVal | %RPD(Limit) | Qual |
| TPH-P (GRO)                                    | ND           | 50   |                               |           |      |         |                                 |           |             |      |
| Surr: 1,2-Dichloroethane-d4                    | 8.87         |      | 10                            |           | 89   | 75      | 128                             |           |             |      |
| Surr: Toluene-d8                               | 10.5         |      | 10                            |           | 105  | 80      | 120                             |           |             |      |
| Surr: 4-Bromofluorobenzene                     | 10.6         |      | 10                            |           | 106  | 80      | 120                             |           |             |      |

### Laboratory Control Spike

| Laboratory Control Spike                       |              | Type | Test Code: EPA Method SW8015B |           |      |         |                                 |           |             |      |
|--|--------------|------|-------------------------------|-----------|------|---------|---------------------------------|-----------|-------------|------|
| File ID: D:\HPCHEM\MS09\DATA\071005\07100503.D |              |      | Batch ID: MS09W1005B          |           |      |         | Analysis Date: 10/05/2007 12:41 |           |             |      |
| Sample ID: GLCS MS09W1005B                     | Units : µg/L |      | Run ID: MSD_09_071005A        |           |      |         | Prep Date: 10/05/2007           |           |             |      |
| Analyte  | Result       | PQL  | SpkVal                        | SpkRefVal | %REC | LCL(ME) | UCL(ME)                         | RPDRefVal | %RPD(Limit) | Qual |
| TPH-P (GRO)                                    | 379          | 50   | 400                           |           | 95   | 70      | 130                             |           |             |      |
| Surr: 1,2-Dichloroethane-d4                    | 8.7          |      | 10                            |           | 87   | 75      | 128                             |           |             |      |
| Surr: Toluene-d8                               | 10.6         |      | 10                            |           | 106  | 80      | 120                             |           |             |      |
| Surr: 4-Bromofluorobenzene                     | 10.3         |      | 10                            |           | 103  | 80      | 120                             |           |             |      |

### Sample Matrix Spike

| Sample Matrix Spike                            |              | Type | Test Code: EPA Method SW8015B |           |      |         |                                 |           |             |      |
|--|--------------|------|-------------------------------|-----------|------|---------|---------------------------------|-----------|-------------|------|
| File ID: D:\HPCHEM\MS09\DATA\071005\07100508.D |              |      | Batch ID: MS09W1005B          |           |      |         | Analysis Date: 10/05/2007 14:40 |           |             |      |
| Sample ID: 07100426-01AGS                      | Units : µg/L |      | Run ID: MSD_09_071005A        |           |      |         | Prep Date: 10/05/2007           |           |             |      |
| Analyte  | Result       | PQL  | SpkVal                        | SpkRefVal | %REC | LCL(ME) | UCL(ME)                         | RPDRefVal | %RPD(Limit) | Qual |
| TPH-P (GRO)                                    | 1610         | 250  | 2000                          | 0         | 81   | 60      | 131                             |           |             |      |
| Surr: 1,2-Dichloroethane-d4                    | 42.6         |      | 50                            |           | 85   | 75      | 128                             |           |             |      |
| Surr: Toluene-d8                               | 54.1         |      | 50                            |           | 108  | 80      | 120                             |           |             |      |
| Surr: 4-Bromofluorobenzene                     | 50.8         |      | 50                            |           | 102  | 80      | 120                             |           |             |      |

### Sample Matrix Spike Duplicate

| Sample Matrix Spike Duplicate                  |              | Type | Test Code: EPA Method SW8015B |           |      |         |                                 |           |             |      |
|--|--------------|------|-------------------------------|-----------|------|---------|---------------------------------|-----------|-------------|------|
| File ID: D:\HPCHEM\MS09\DATA\071005\07100509.D |              |      | Batch ID: MS09W1005B          |           |      |         | Analysis Date: 10/05/2007 15:04 |           |             |      |
| Sample ID: 07100426-01AGSD                     | Units : µg/L |      | Run ID: MSD_09_071005A        |           |      |         | Prep Date: 10/05/2007           |           |             |      |
| Analyte  | Result       | PQL  | SpkVal                        | SpkRefVal | %REC | LCL(ME) | UCL(ME)                         | RPDRefVal | %RPD(Limit) | Qual |
| TPH-P (GRO)                                    | 1820         | 250  | 2000                          | 0         | 91   | 60      | 131                             | 1612      | 11.9(20)    |      |
| Surr: 1,2-Dichloroethane-d4                    | 42.4         |      | 50                            |           | 85   | 75      | 128                             |           |             |      |
| Surr: Toluene-d8                               | 53.5         |      | 50                            |           | 107  | 80      | 120                             |           |             |      |
| Surr: 4-Bromofluorobenzene                     | 50.7         |      | 50                            |           | 101  | 80      | 120                             |           |             |      |

### Comments:

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

Reported in micrograms per Liter, per client request.



# Alpha Analytical, Inc.

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

Date:  
10-Oct-07

## QC Summary Report

Work Order:  
07100432

### Method Blank

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

File ID: **D:\HPCHEM\MS09\DATA\071005\07100504.D**

Batch ID: **MS09W1005A**

Analysis Date: **10/05/2007 13:04**

Sample ID: **MBLK MS09W1005A**

Units: **µg/L**

Run ID: **MSD\_09\_071005A**

Prep Date: **10/05/2007**

| Analyte                           | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Tertiary Butyl Alcohol (TBA)      | ND     | 10  |        |           |      |         |         |           |             |      |
| Methyl tert-butyl ether (MTBE)    | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Di-isopropyl Ether (DIPE)         | ND     | 1   |        |           |      |         |         |           |             |      |
| Ethyl Tertiary Butyl Ether (ETBE) | ND     | 1   |        |           |      |         |         |           |             |      |
| Benzene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Tertiary Amyl Methyl Ether (TAME) | ND     | 1   |        |           |      |         |         |           |             |      |
| Toluene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Ethylbenzene                      | ND     | 0.5 |        |           |      |         |         |           |             |      |
| m,p-Xylene                        | ND     | 0.5 |        |           |      |         |         |           |             |      |
| o-Xylene                          | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Surr: 1,2-Dichloroethane-d4       | 8.87   |     | 10     |           | 89   | 75      | 128     |           |             |      |
| Surr: Toluene-d8                  | 10.5   |     | 10     |           | 105  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene        | 10.6   |     | 10     |           | 106  | 80      | 120     |           |             |      |

### Laboratory Control Spike

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

File ID: **D:\HPCHEM\MS09\DATA\071005\07100502.D**

Batch ID: **MS09W1005A**

Analysis Date: **10/05/2007 12:18**

Sample ID: **LCS MS09W1005A**

Units: **µg/L**

Run ID: **MSD\_09\_071005A**

Prep Date: **10/05/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 8.48   | 0.5 | 10     |           | 85   | 70      | 130     |           |             |      |
| Benzene                        | 9.32   | 0.5 | 10     |           | 93   | 70      | 130     |           |             |      |
| Toluene                        | 10.1   | 0.5 | 10     |           | 101  | 80      | 120     |           |             |      |
| Ethylbenzene                   | 10.9   | 0.5 | 10     |           | 109  | 80      | 120     |           |             |      |
| m,p-Xylene                     | 10.3   | 0.5 | 10     |           | 103  | 70      | 130     |           |             |      |
| o-Xylene                       | 10.3   | 0.5 | 10     |           | 103  | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 8.77   |     | 10     |           | 88   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 10.4   |     | 10     |           | 104  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 9.51   |     | 10     |           | 95   | 80      | 120     |           |             |      |

### Sample Matrix Spike

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

File ID: **D:\HPCHEM\MS09\DATA\071005\07100506.D**

Batch ID: **MS09W1005A**

Analysis Date: **10/05/2007 13:53**

Sample ID: **07100426-01AMS**

Units: **µg/L**

Run ID: **MSD\_09\_071005A**

Prep Date: **10/05/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 41.5   | 1.3 | 50     | 0         | 83   | 62      | 139     |           |             |      |
| Benzene                        | 42.6   | 1.3 | 50     | 0         | 85   | 70      | 130     |           |             |      |
| Toluene                        | 46.5   | 1.3 | 50     | 0         | 93   | 67      | 130     |           |             |      |
| Ethylbenzene                   | 49.7   | 1.3 | 50     | 0         | 99   | 70      | 130     |           |             |      |
| m,p-Xylene                     | 48     | 1.3 | 50     | 0         | 96   | 69      | 130     |           |             |      |
| o-Xylene                       | 48.1   | 1.3 | 50     | 0         | 96   | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 41.8   |     | 50     |           | 84   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 52.7   |     | 50     |           | 105  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 47.1   |     | 50     |           | 94   | 80      | 120     |           |             |      |

### Sample Matrix Spike Duplicate

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

File ID: **D:\HPCHEM\MS09\DATA\071005\07100507.D**

Batch ID: **MS09W1005A**

Analysis Date: **10/05/2007 14:16**

Sample ID: **07100426-01AMSD**

Units: **µg/L**

Run ID: **MSD\_09\_071005A**

Prep Date: **10/05/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 46.6   | 1.3 | 50     | 0         | 93   | 62      | 139     | 41.53     | 11.5(20)    |      |
| Benzene                        | 43.4   | 1.3 | 50     | 0         | 87   | 70      | 130     | 42.56     | 1.9(20)     |      |
| Toluene                        | 46.3   | 1.3 | 50     | 0         | 93   | 67      | 130     | 46.45     | 0.4(20)     |      |
| Ethylbenzene                   | 48.1   | 1.3 | 50     | 0         | 96   | 70      | 130     | 49.72     | 3.3(20)     |      |
| m,p-Xylene                     | 47.3   | 1.3 | 50     | 0         | 95   | 69      | 130     | 48.01     | 1.4(20)     |      |
| o-Xylene                       | 49.7   | 1.3 | 50     | 0         | 99   | 70      | 130     | 48.09     | 3.3(20)     |      |
| Surr: 1,2-Dichloroethane-d4    | 42.1   |     | 50     |           | 84   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 52.5   |     | 50     |           | 105  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 46.8   |     | 50     |           | 94   | 80      | 120     |           |             |      |



# *Alpha Analytical, Inc.*

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

**Date:**  
*10-Oct-07*

## QC Summary Report

**Work Order:**  
07100432

**Comments:**

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

# Alpha Analytical, Inc.

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

## Sample Receipt Checklist

Date Report is due to Client : 10/12/2007

Date of Notice : 10/4/2007 2:13:50 P

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

Client Name: **Stratus Environmental**

Project ID : 2007-0057-01/USA 57

Project Manager: **Scott Bittinger**

Client's EMail: **sbittinger@stratusinc.net**

Work Order Number: **STR07100432**

Client's Phone: **(530) 676-2062**

Date Received: **10/4/2007**

Client's FAX: **(530) 676-6005**

Received by: **Kathryn Murray**

### Chain of Custody (COC) Information

Carrier name FedEx

|  |  |  |   |
|--|--|--|---|
| Chain of custody present ?                               | Yes <input checked="" type="checkbox"/>  | <input type="checkbox"/> No            |   |
| Custody seals intact on shipping container/cooler ?      | Yes <input checked="" type="checkbox"/>  | <input type="checkbox"/> No            | Not Present <input type="checkbox"/>            |
| Custody seals intact on sample bottles ?                 | Yes <input type="checkbox"/>             | <input type="checkbox"/> No            | Not Present <input checked="" type="checkbox"/> |
| Chain of custody signed when relinquished and received ? | Yes <input checked="" type="checkbox"/>  | <input type="checkbox"/> No            |   |
| Chain of custody agrees with sample labels ?             | Yes <input checked="" type="checkbox"/>  | <input type="checkbox"/> No            |   |
| Sample ID noted by Client on COC ?                       | Yes <input checked="" type="checkbox"/>  | <input type="checkbox"/> No            |   |
| Date and time of collection noted by Client on COC ?     | Yes <input checked="" type="checkbox"/>  | <input type="checkbox"/> No            |   |
| Samplers's name noted on COC ?                           | Yes <input checked="" type="checkbox"/>  | <input type="checkbox"/> No            |   |
| Internal Chain of Custody (COC) requested ?              | Yes <input type="checkbox"/>             | <input checked="" type="checkbox"/> No |   |
| Sub Contract Lab Used :                                  | None <input checked="" type="checkbox"/> | <input type="checkbox"/> See Comments  |   |

### Sample Receipt Information

|  |   |                             |                                      |
|--|---|-----------------------------|--------------------------------------|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No | Not Present <input type="checkbox"/> |
| Samples in proper container/bottle?          | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No |                                      |
| Sample containers intact?                    | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No |                                      |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No |                                      |

### Sample Preservation and Hold Time (HT) Information

|   |   |                             |   |
|---|---|-----------------------------|---|
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No |   |
| Container/Temp Blank temperature in compliance (0-6°C)? | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No | Cooler Temperature<br>4 °C                      |
| Water - VOA vials have zero headspace / no bubbles?     | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No | No VOA vials submitted <input type="checkbox"/> |
| Sample labels checked for correct preservation?         | Yes <input checked="" type="checkbox"/> | <input type="checkbox"/> No |   |
| TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?    | Yes <input type="checkbox"/>            | <input type="checkbox"/> No | N/A <input checked="" type="checkbox"/>         |

### Analytical Requirement Information

|  |                              |  |   |
|--|------------------------------|--|---|
| Are non-Standard or Modified methods requested ? | Yes <input type="checkbox"/> | <input checked="" type="checkbox"/> No |   |
| Are there client specific Project requirements ? | Yes <input type="checkbox"/> | <input checked="" type="checkbox"/> No | If YES : see the Chain of Custody (COC) |

Comments :

# CHAIN-OF-CUSTODY RECORD

## Alpha Analytical, Inc.

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

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

# CA

WorkOrder : STR07100432

Report Due By : 5:00 PM On : 12-Oct-07

**Client:**

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

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

EDD Required : Yes

Sampled by : CHILL

**PO :**

Client's COC # : 18505

Job : 2007-0057-01/USA 57

| Cooler Temp | Samples Received | Date Printed |
|-------------|------------------|--------------|
| 4 °C        | 04-Oct-07        | 04-Oct-07    |

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

| Alpha Sample ID | Client Sample ID | Collection Matrix | Date              | No. of Bottles |     |     | Requested Tests |            |  |  |  |  | Sample Remarks |  |  |
|-----------------|------------------|-------------------|-------------------|----------------|-----|-----|-----------------|------------|--|--|--|--|----------------|--|--|
|                 |                  |                   |                   | Alpha          | Sub | TAT | TPH/P_W         | VOC_W      |  |  |  |  |                |  |  |
| STR07100432-01A | 0057WINF         | AQ                | 10/03/07<br>05:30 | 5              | 0   | 6   | GAS-C           | BTEX/OXY_C |  |  |  |  |                |  |  |

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

| Signature       | Print Name | Company                | Date/Time    |
|-----------------|------------|------------------------|--------------|
| <i>K Murray</i> | K Murray   | Alpha Analytical, Inc. | 10/4/07 1415 |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report. Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**Billing Information:**

Name Stratus Environmental, Inc.  
 Address 3330 Cameron Park Dr. #550  
 City, State, Zip Cameron Park, CA 95682  
 Phone Number 5306766004 Fax 5306766005



**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21  
 Sparks, Nevada 89431-5778  
 Phone (775) 355-1044  
 Fax (775) 355-0406

Samples Collected From Which State?  
 AZ \_\_\_ CA  NV \_\_\_ WA \_\_\_  
 ID \_\_\_ OR \_\_\_ OTHER \_\_\_

18505

Page # 1 of 1

|                                    |               |  |                            |  |                    |   |  |            |          |          |  |                                   |                |   |  |  |  |
|------------------------------------|---------------|--|----------------------------|--|--------------------|---|--|------------|----------|----------|--|-----------------------------------|----------------|---|--|--|--|
| Client Name<br><u>USA 57</u>       |               | P.O. #                                     |                            | Job #<br><u>2007-0057-01</u>                 |                    | Analyses Required<br>GRO, BTEX<br>Soxys |  |            |          |          |  | Required QC Level?<br>① II III IV |                |   |  |  |  |
| Address                            |               | E-Mail Address                             |                            | Phone #                                      |                    |   |  |            |          |          |  | Fax #                             |                | EDD / EDF? YES <input checked="" type="checkbox"/> NO ___ |  |  |  |
| City, State, Zip<br><u>Oakland</u> |               | Report Attention<br><u>Scott Bittinger</u> |                            | Total and type of containers<br>** See below |                    |   |  |            |          |          |  | Global ID #                       |                |   |  |  |  |
| Time Sampled                       | Date Sampled  | Matrix* See Key Below                      | Sampled by<br><u>CHILL</u> | Lab ID Number (Office Use Only)              | Sample Description |   |  |            |          |          |  | TAT                               | Field Filtered | REMARKS   |  |  |  |
| <u>0530</u>                        | <u>9/3/07</u> | <u>AQ</u>                                  |                            | <u>STR07100432-01</u>                        | <u>0057WINF</u>    | <u>S</u>                                |  | <u>5-V</u> | <u>X</u> | <u>X</u> |  |                                   |                |   |  |  |  |

**ADDITIONAL INSTRUCTIONS:**

| Signature       | Print Name              | Company        | Date            | Time        |
|-----------------|-------------------------|----------------|-----------------|-------------|
|                 | <u>Christopher Hill</u> | <u>Stratus</u> | <u>10/3/07</u>  | <u>1345</u> |
|                 | <u>Mike Gilmore</u>     | <u>Alpha</u>   | <u>10/30/07</u> | <u>1345</u> |
|                 | <u>K Murray</u>         | <u>AAI</u>     | <u>10/4/07</u>  | <u>1410</u> |
| Relinquished by |                         |                |                 |             |
| Received by     |                         |                |                 |             |
| Relinquished by |                         |                |                 |             |
| Received by     |                         |                |                 |             |

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other  
 NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.



# Alpha Analytical, Inc.

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

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received 10/12/07

Job#: USA 57

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

|                    | Parameter                         | Concentration                | Reporting | Date     | Date     |          |
|--------------------|-----------------------------------|------------------------------|-----------|----------|----------|----------|
|                    |                                   |                              | Limit     | Sampled  | Analyzed |          |
| Client ID :        | TPH-P (GRO)                       | 120                          | 50 µg/L   | 10/11/07 | 10/15/07 |          |
| <b>USA57 W INF</b> | Tertiary Butyl Alcohol (TBA)      | 18                           | 10 µg/L   | 10/11/07 | 10/15/07 |          |
| Lab ID :           | Methyl tert-butyl ether (MTBE)    | 3.8                          | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
| STR07101220-01A    | Di-isopropyl Ether (DIPE)         | ND                           | 1.0 µg/L  | 10/11/07 | 10/15/07 |          |
|                    | Ethyl Tertiary Butyl Ether (ETBE) | ND                           | 1.0 µg/L  | 10/11/07 | 10/15/07 |          |
|                    | Benzene                           | 25                           | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | Tertiary Amyl Methyl Ether (TAME) | ND                           | 1.0 µg/L  | 10/11/07 | 10/15/07 |          |
|                    | Toluene                           | 1.6                          | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | Ethylbenzene                      | 3.3                          | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | m,p-Xylene                        | 6.5                          | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | o-Xylene                          | 2.2                          | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | Client ID :                       | TPH-P (GRO)                  | ND        | 50 µg/L  | 10/11/07 | 10/15/07 |
|                    | <b>USA57 W EFF</b>                | Tertiary Butyl Alcohol (TBA) | ND        | 10 µg/L  | 10/11/07 | 10/15/07 |
| Lab ID :           | Methyl tert-butyl ether (MTBE)    | ND                           | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
| STR07101220-02A    | Di-isopropyl Ether (DIPE)         | ND                           | 1.0 µg/L  | 10/11/07 | 10/15/07 |          |
|                    | Ethyl Tertiary Butyl Ether (ETBE) | ND                           | 1.0 µg/L  | 10/11/07 | 10/15/07 |          |
|                    | Benzene                           | ND                           | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | Tertiary Amyl Methyl Ether (TAME) | ND                           | 1.0 µg/L  | 10/11/07 | 10/15/07 |          |
|                    | Toluene                           | ND                           | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | Ethylbenzene                      | ND                           | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | m,p-Xylene                        | ND                           | 0.50 µg/L | 10/11/07 | 10/15/07 |          |
|                    | o-Xylene                          | ND                           | 0.50 µg/L | 10/11/07 | 10/15/07 |          |

### Gasoline Range Organics (GRO) C4-C13

ND = Not Detected

Reported in micrograms per Liter, per client request.

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

10/19/07

Report Date



# Alpha Analytical, Inc.

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

---

## VOC Sample Preservation Report

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**Work Order:** STR07101220

**Project:** USA 57

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| Alpha's Sample ID | Client's Sample ID | Matrix  | pH |
|-------------------|--------------------|---------|----|
| 07101220-01A      | USA57 W INF        | Aqueous | 2  |
| 07101220-02A      | USA57 W EFF        | Aqueous | 2  |

---

10/19/07  

---

Report Date



# Alpha Analytical, Inc.

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

Date:  
17-Oct-07

## OC Summary Report

Work Order:  
07101220

### Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\071015\07101504.D**

Batch ID: **MS09W1015B**

Analysis Date: **10/15/2007 10:44**

Sample ID: **MBLK MS09W1015B**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | ND     | 50  |        |           |      |         |         |           |             |      |
| Surr: 1,2-Dichloroethane-d4 | 8.74   |     | 10     |           | 87   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 10.4   |     | 10     |           | 104  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 11     |     | 10     |           | 110  | 80      | 120     |           |             |      |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\071015\07101503.D**

Batch ID: **MS09W1015B**

Analysis Date: **10/15/2007 10:20**

Sample ID: **GLCS MS09W1015B**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | 424    | 50  | 400    |           | 106  | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4 | 8.68   |     | 10     |           | 87   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 10.7   |     | 10     |           | 107  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 10.5   |     | 10     |           | 105  | 80      | 120     |           |             |      |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\071015\07101515.D**

Batch ID: **MS09W1015B**

Analysis Date: **10/15/2007 15:09**

Sample ID: **07101220-02AGS**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | 2130   | 250 | 2000   | 0         | 107  | 60      | 131     |           |             |      |
| Surr: 1,2-Dichloroethane-d4 | 44.5   |     | 50     |           | 89   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 52.7   |     | 50     |           | 105  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 54.8   |     | 50     |           | 110  | 80      | 120     |           |             |      |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\071015\07101516.D**

Batch ID: **MS09W1015B**

Analysis Date: **10/15/2007 15:32**

Sample ID: **07101220-02AGSD**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | 2130   | 250 | 2000   | 0         | 107  | 60      | 131     | 2132      | 0.1(20)     |      |
| Surr: 1,2-Dichloroethane-d4 | 45.1   |     | 50     |           | 90   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 51.3   |     | 50     |           | 103  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 52.9   |     | 50     |           | 106  | 80      | 120     |           |             |      |

### Comments:

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

Reported in micrograms per Liter, per client request.



# Alpha Analytical, Inc.

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

Date:  
17-Oct-07

## OC Summary Report

Work Order:  
07101220

### Method Blank

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

File ID: **D:\HPCHEMMS09\DATA\071015\07101504.D**

Batch ID: **MS09W1015A**

Analysis Date: **10/15/2007 10:44**

Sample ID: **MBLK MS09W1015A**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                           | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Tertiary Butyl Alcohol (TBA)      | ND     | 10  |        |           |      |         |         |           |             |      |
| Methyl tert-butyl ether (MTBE)    | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Di-isopropyl Ether (DIPE)         | ND     | 1   |        |           |      |         |         |           |             |      |
| Ethyl Tertiary Butyl Ether (ETBE) | ND     | 1   |        |           |      |         |         |           |             |      |
| Benzene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Tertiary Amyl Methyl Ether (TAME) | ND     | 1   |        |           |      |         |         |           |             |      |
| Toluene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Ethylbenzene                      | ND     | 0.5 |        |           |      |         |         |           |             |      |
| m,p-Xylene                        | ND     | 0.5 |        |           |      |         |         |           |             |      |
| o-Xylene                          | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Surr: 1,2-Dichloroethane-d4       | 8.74   |     | 10     |           | 87   | 75      | 128     |           |             |      |
| Surr: Toluene-d8                  | 10.4   |     | 10     |           | 104  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene        | 11     |     | 10     |           | 110  | 80      | 120     |           |             |      |

### Laboratory Control Spike

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

File ID: **D:\HPCHEMMS09\DATA\071015\07101502.D**

Batch ID: **MS09W1015A**

Analysis Date: **10/15/2007 09:55**

Sample ID: **LCS MS09W1015A**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 9.14   | 0.5 | 10     |           | 91   | 70      | 130     |           |             |      |
| Benzene                        | 10.4   | 0.5 | 10     |           | 104  | 70      | 130     |           |             |      |
| Toluene                        | 11.1   | 0.5 | 10     |           | 111  | 80      | 120     |           |             |      |
| Ethylbenzene                   | 11.9   | 0.5 | 10     |           | 119  | 80      | 120     |           |             |      |
| m,p-Xylene                     | 11.2   | 0.5 | 10     |           | 112  | 70      | 130     |           |             |      |
| o-Xylene                       | 11.3   | 0.5 | 10     |           | 113  | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 9.28   |     | 10     |           | 93   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 10.4   |     | 10     |           | 104  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 9.54   |     | 10     |           | 95   | 80      | 120     |           |             |      |

### Sample Matrix Spike

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

File ID: **D:\HPCHEMMS09\DATA\071015\07101513.D**

Batch ID: **MS09W1015A**

Analysis Date: **10/15/2007 14:20**

Sample ID: **07101220-02AMS**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 49.3   | 1.3 | 50     | 0         | 99   | 62      | 139     |           |             |      |
| Benzene                        | 53.2   | 1.3 | 50     | 0         | 106  | 70      | 130     |           |             |      |
| Toluene                        | 53.2   | 1.3 | 50     | 0         | 106  | 67      | 130     |           |             |      |
| Ethylbenzene                   | 59.3   | 1.3 | 50     | 0         | 119  | 70      | 130     |           |             |      |
| m,p-Xylene                     | 53.4   | 1.3 | 50     | 0         | 107  | 69      | 130     |           |             |      |
| o-Xylene                       | 54.8   | 1.3 | 50     | 0         | 110  | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 50.9   |     | 50     |           | 102  | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 49.9   |     | 50     |           | 99.9 | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 48.3   |     | 50     |           | 97   | 80      | 120     |           |             |      |

### Sample Matrix Spike Duplicate

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

File ID: **D:\HPCHEMMS09\DATA\071015\07101514.D**

Batch ID: **MS09W1015A**

Analysis Date: **10/15/2007 14:45**

Sample ID: **07101220-02AMSD**

Units: **µg/L**

Run ID: **MSD\_09\_071015A**

Prep Date: **10/15/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 48.2   | 1.3 | 50     | 0         | 96   | 62      | 139     | 49.25     | 2.1(20)     |      |
| Benzene                        | 52.8   | 1.3 | 50     | 0         | 106  | 70      | 130     | 53.21     | 0.9(20)     |      |
| Toluene                        | 54.4   | 1.3 | 50     | 0         | 109  | 67      | 130     | 53.19     | 2.2(20)     |      |
| Ethylbenzene                   | 59.3   | 1.3 | 50     | 0         | 119  | 70      | 130     | 59.25     | 0.1(20)     |      |
| m,p-Xylene                     | 54.3   | 1.3 | 50     | 0         | 109  | 69      | 130     | 53.39     | 1.7(20)     |      |
| o-Xylene                       | 55.5   | 1.3 | 50     | 0         | 111  | 70      | 130     | 54.81     | 1.3(20)     |      |
| Surr: 1,2-Dichloroethane-d4    | 49.1   |     | 50     |           | 98   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 51.1   |     | 50     |           | 102  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 48.4   |     | 50     |           | 97   | 80      | 120     |           |             |      |



# *Alpha Analytical, Inc.*

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

**Date:**  
*17-Oct-07*

## OC Summary Report

**Work Order:**  
07101220

**Comments:**

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

**Billing Information :**

# CHAIN-OF-CUSTODY RECORD

## Alpha Analytical, Inc.

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

# CA

**WorkOrder : STR07101220**  
**Report Due By : 5:00 PM On : 22-Oct-07**

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

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

EDD Required : Yes

Sampled by : CHILL

**PO :**  
 Client's COC # : 18503                      Job : USA 57

|                    |                         |                     |
|--------------------|-------------------------|---------------------|
| <u>Cooler Temp</u> | <u>Samples Received</u> | <u>Date Printed</u> |
| 4 °C               | 12-Oct-07               | 12-Oct-07           |

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

| Alpha Sample ID | Client Sample ID | Collection Matrix | Date              | No. of Bottles |     |     | Requested Tests |               |  |  |  |  |  | Sample Remarks |  |  |
|-----------------|------------------|-------------------|-------------------|----------------|-----|-----|-----------------|---------------|--|--|--|--|--|----------------|--|--|
|                 |                  |                   |                   | Alpha          | Sub | TAT | TPHP_W          | VOC_W         |  |  |  |  |  |                |  |  |
| STR07101220-01A | USA57 W INF      | AQ                | 10/11/07<br>06:35 | 5              | 0   | 6   | GAS-C           | BTEX/OXY<br>C |  |  |  |  |  |                |  |  |
| STR07101220-02A | USA57 W EFF      | AQ                | 10/11/07<br>06:30 | 5              | 0   | 6   | GAS-C           | BTEX/OXY<br>C |  |  |  |  |  |                |  |  |

**Comments:**                      Security seals intact. Frozen ice. Send copy of receipt checklist with final report. :

|                      |                  |                   |                        |                  |
|----------------------|------------------|-------------------|------------------------|------------------|
|                      | <b>Signature</b> | <b>Print Name</b> | <b>Company</b>         | <b>Date/Time</b> |
| <b>Logged in by:</b> | <i>K Murray</i>  | K Murray          | Alpha Analytical, Inc. | 10/12/07 0940    |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.  
 Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)                      Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**Billing Information:**

Name Stantec  
 Address 3330 Canyon Pl DR  
 City, State, Zip Canyon Pl  
 Phone Number 5306766004 Fax 5306766005



**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21  
 Sparks, Nevada 89431-5778  
 Phone (775) 355-1044  
 Fax (775) 355-0406

Samples Collected From Which State?  
 AZ \_\_\_ CA  NV \_\_\_ WA \_\_\_  
 ID \_\_\_ OR \_\_\_ OTHER \_\_\_

10303  
 Page # 1 of 1

| Client Name <u>USA 57</u>  |                 | P.O. #                |                                 | Job #                         |   |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
|--|-----------------|-----------------------|---------------------------------|-------------------------------|---|---------------------------|----|-----|----|--|--|--------------------|--|--|--|--|--|--|--|--|--|---|----|-----|----|--|--|--|--|--|--|---------------------------|--|--|--|-------------------|--|--|--|---------|--|--|--|--|--|--|--|--|--|
| Address  |                 | EMail Address         |                                 |                               |   |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
| City, State, Zip <u>Orland</u>   |                 | Phone #               |                                 | Fax #                         |   |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
| Time Sampled   | Date Sampled    | Matrix* See Key Below | Sampled by <u>CHILL</u>         | Report Attention <u>Scott</u> | Total and type of containers ** See below |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
|  |                 |                       | Lab ID Number (Office Use Only) | Sample Description            | TAT                                       |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
| <u>0635</u>  | <u>10/11/07</u> | <u>AR</u>             | <u>ST07101220-01</u>            | <u>USA57 W INF</u>            | <u>5H</u>                                 |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
| <u>0630</u>  |                 |                       | <u>02</u>                       | <u>USA57 W EPK</u>            | <u>5H</u>                                 |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
| <table border="1"> <thead> <tr> <th colspan="6">Analyses Required</th> <th colspan="4">Required QC Level?</th> </tr> <tr> <th colspan="6"></th> <th>I</th> <th>II</th> <th>III</th> <th>IV</th> </tr> </thead> <tbody> <tr> <td colspan="6" rowspan="2"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">                             GAO-5K<br/>                             15 days                         </div> </td> <td colspan="4">EDD / EDF? YES ___ NO ___</td> </tr> <tr> <td colspan="4">Global ID # _____</td> </tr> <tr> <td colspan="6">REMARKS</td> <td colspan="4"></td> </tr> </tbody> </table> |                 |                       |                                 |                               |   | Analyses Required         |    |     |    |  |  | Required QC Level? |  |  |  |  |  |  |  |  |  | I | II | III | IV | <div style="writing-mode: vertical-rl; transform: rotate(180deg);">                             GAO-5K<br/>                             15 days                         </div> |  |  |  |  |  | EDD / EDF? YES ___ NO ___ |  |  |  | Global ID # _____ |  |  |  | REMARKS |  |  |  |  |  |  |  |  |  |
| Analyses Required  |                 |                       |                                 |                               |   | Required QC Level?        |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
|  |                 |                       |                                 |                               |   | I                         | II | III | IV |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
| <div style="writing-mode: vertical-rl; transform: rotate(180deg);">                             GAO-5K<br/>                             15 days                         </div>   |                 |                       |                                 |                               |   | EDD / EDF? YES ___ NO ___ |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
|  |                 |                       |                                 |                               |   | Global ID # _____         |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |
| REMARKS  |                 |                       |                                 |                               |   |                           |    |     |    |  |  |                    |  |  |  |  |  |  |  |  |  |   |    |     |    |  |  |  |  |  |  |                           |  |  |  |                   |  |  |  |         |  |  |  |  |  |  |  |  |  |

**ADDITIONAL INSTRUCTIONS:**

| Signature       | Print Name          | Company        | Date            | Time        |
|-----------------|---------------------|----------------|-----------------|-------------|
|                 | <u>CHILL</u>        | <u>Stantec</u> | <u>10/11/07</u> | <u>1505</u> |
|                 | <u>Mike Hiltner</u> | <u>Stantec</u> | <u>10/11/07</u> | <u>1502</u> |
|                 | <u>K Murray</u>     | <u>AAI</u>     | <u>10/12/07</u> | <u>0935</u> |
| Relinquished by |                     |                |                 |             |
| Received by     |                     |                |                 |             |

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other  
 NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.



# Alpha Analytical, Inc.

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

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received 11/07/07

Job#: USA 57

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

|                 | Parameter                         | Concentration | Reporting Limit | Date     | Date     |          |
|-----------------|-----------------------------------|---------------|-----------------|----------|----------|----------|
|                 |                                   |               |                 | Sampled  | Analyzed |          |
| Client ID :     | TPH-P (GRO)                       | 430           | 200 µg/L        | 11/06/07 | 11/08/07 |          |
| 00057 W INF     | Tertiary Butyl Alcohol (TBA)      | 41            | 20 µg/L         | 11/06/07 | 11/08/07 |          |
| Lab ID :        | Methyl tert-butyl ether (MTBE)    | 9.0           | 1.0 µg/L        | 11/06/07 | 11/08/07 |          |
| STR07110726-01A | Di-isopropyl Ether (DIPE)         | ND            | V               | 2.0 µg/L | 11/06/07 | 11/08/07 |
|                 | Ethyl Tertiary Butyl Ether (ETBE) | ND            | V               | 2.0 µg/L | 11/06/07 | 11/08/07 |
|                 | Benzene                           | 140           |                 | 1.0 µg/L | 11/06/07 | 11/08/07 |
|                 | Tertiary Amyl Methyl Ether (TAME) | ND            | V               | 2.0 µg/L | 11/06/07 | 11/08/07 |
|                 | Toluene                           | 33            |                 | 1.0 µg/L | 11/06/07 | 11/08/07 |
|                 | Ethylbenzene                      | 9.6           |                 | 1.0 µg/L | 11/06/07 | 11/08/07 |
|                 | m,p-Xylene                        | 41            |                 | 1.0 µg/L | 11/06/07 | 11/08/07 |
|                 | o-Xylene                          | 20            |                 | 1.0 µg/L | 11/06/07 | 11/08/07 |
|                 | Client ID :                       | TPH-P (GRO)   | ND              | 50 µg/L  | 11/06/07 | 11/08/07 |
| 00057 W EFF     | Tertiary Butyl Alcohol (TBA)      | ND            | 10 µg/L         | 11/06/07 | 11/08/07 |          |
| Lab ID :        | Methyl tert-butyl ether (MTBE)    | ND            | 0.50 µg/L       | 11/06/07 | 11/08/07 |          |
| STR07110726-02A | Di-isopropyl Ether (DIPE)         | ND            | 1.0 µg/L        | 11/06/07 | 11/08/07 |          |
|                 | Ethyl Tertiary Butyl Ether (ETBE) | ND            | 1.0 µg/L        | 11/06/07 | 11/08/07 |          |
|                 | Benzene                           | ND            | 0.50 µg/L       | 11/06/07 | 11/08/07 |          |
|                 | Tertiary Amyl Methyl Ether (TAME) | ND            | 1.0 µg/L        | 11/06/07 | 11/08/07 |          |
|                 | Toluene                           | ND            | 0.50 µg/L       | 11/06/07 | 11/08/07 |          |
|                 | Ethylbenzene                      | ND            | 0.50 µg/L       | 11/06/07 | 11/08/07 |          |
|                 | m,p-Xylene                        | ND            | 0.50 µg/L       | 11/06/07 | 11/08/07 |          |
|                 | o-Xylene                          | ND            | 0.50 µg/L       | 11/06/07 | 11/08/07 |          |

### Gasoline Range Organics (GRO) C4-C13

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

ND = Not Detected

Reported in micrograms per Liter, per client request.

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

11/14/07

Report Date



# Alpha Analytical, Inc.

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

---

## VOC Sample Preservation Report

**Work Order:** STR07110726

**Project:** USA 57

---

| Alpha's Sample ID | Client's Sample ID | Matrix  | pH |
|-------------------|--------------------|---------|----|
| 07110726-01A      | 00057 W INF        | Aqueous | 2  |
| 07110726-02A      | 00057 W EFF        | Aqueous | 2  |

---

11/14/07  
**Report Date**



# Alpha Analytical, Inc.

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

Date:  
12-Nov-07

## QC Summary Report

Work Order:  
07110726

### Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B**

File ID: D:\HPCHEM\MS09\DATA\071108\07110804.D

Batch ID: **MS09W1108B**

Analysis Date: **11/08/2007 12:24**

Sample ID: **MBLK MS09W1108B**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | ND     | 50  |        |           |      |         |         |           |             |      |
| Surr: 1,2-Dichloroethane-d4 | 9.64   |     | 10     |           | 96   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 10.8   |     | 10     |           | 108  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 9.24   |     | 10     |           | 92   | 80      | 120     |           |             |      |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B**

File ID: D:\HPCHEM\MS09\DATA\071108\07110803.D

Batch ID: **MS09W1108B**

Analysis Date: **11/08/2007 12:01**

Sample ID: **GLCS MS09W1108B**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | 373    | 50  | 400    |           | 93   | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4 | 9.39   |     | 10     |           | 94   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 10.8   |     | 10     |           | 108  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 9.06   |     | 10     |           | 91   | 80      | 120     |           |             |      |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B**

File ID: D:\HPCHEM\MS09\DATA\071108\07110810.D

Batch ID: **MS09W1108B**

Analysis Date: **11/08/2007 14:40**

Sample ID: **07110726-02AGS**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| TPH-P (GRO)                 | 1420   | 250 | 2000   |           | 0    | 71      | 60      | 131       |             |      |
| Surr: 1,2-Dichloroethane-d4 | 47.6   |     | 50     |           | 95   | 75      | 128     |           |             |      |
| Surr: Toluene-d8            | 53.5   |     | 50     |           | 107  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene  | 45.3   |     | 50     |           | 91   | 80      | 120     |           |             |      |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B**

File ID: D:\HPCHEM\MS09\DATA\071108\07110811.D

Batch ID: **MS09W1108B**

Analysis Date: **11/08/2007 15:03**

Sample ID: **07110726-02AGSD**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                     | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual    |
|-----------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|---------|
| TPH-P (GRO)                 | 1490   | 250 | 2000   |           | 0    | 74      | 60      | 131       | 1424        | 4.4(20) |
| Surr: 1,2-Dichloroethane-d4 | 45.7   |     | 50     |           | 91   | 75      | 128     |           |             |         |
| Surr: Toluene-d8            | 54.5   |     | 50     |           | 109  | 80      | 120     |           |             |         |
| Surr: 4-Bromofluorobenzene  | 44.2   |     | 50     |           | 88   | 80      | 120     |           |             |         |

### Comments:

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

Reported in micrograms per Liter, per client request.



# Alpha Analytical, Inc.

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

Date:  
12-Nov-07

## OC Summary Report

Work Order:  
07110726

### Method Blank

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

File ID: D:\HPCHEM\MS09\DATA\071108\07110804.D

Batch ID: **MS09W1108A**

Analysis Date: **11/08/2007 12:24**

Sample ID: **MBLK MS09W1108A**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                           | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|-----------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Tertiary Butyl Alcohol (TBA)      | ND     | 10  |        |           |      |         |         |           |             |      |
| Methyl tert-butyl ether (MTBE)    | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Di-isopropyl Ether (DIPE)         | ND     | 1   |        |           |      |         |         |           |             |      |
| Ethyl Tertiary Butyl Ether (ETBE) | ND     | 1   |        |           |      |         |         |           |             |      |
| Benzene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Tertiary Amyl Methyl Ether (TAME) | ND     | 1   |        |           |      |         |         |           |             |      |
| Toluene                           | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Ethylbenzene                      | ND     | 0.5 |        |           |      |         |         |           |             |      |
| m,p-Xylene                        | ND     | 0.5 |        |           |      |         |         |           |             |      |
| o-Xylene                          | ND     | 0.5 |        |           |      |         |         |           |             |      |
| Surr: 1,2-Dichloroethane-d4       | 9.64   |     | 10     |           | 96   | 75      | 128     |           |             |      |
| Surr: Toluene-d8                  | 10.8   |     | 10     |           | 108  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene        | 9.24   |     | 10     |           | 92   | 80      | 120     |           |             |      |

### Laboratory Control Spike

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

File ID: D:\HPCHEM\MS09\DATA\071108\07110802.D

Batch ID: **MS09W1108A**

Analysis Date: **11/08/2007 11:39**

Sample ID: **LCS MS09W1108A**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 8.81   | 0.5 | 10     |           | 88   | 70      | 130     |           |             |      |
| Benzene                        | 8.88   | 0.5 | 10     |           | 89   | 70      | 130     |           |             |      |
| Toluene                        | 9.91   | 0.5 | 10     |           | 99   | 80      | 120     |           |             |      |
| Ethylbenzene                   | 10.5   | 0.5 | 10     |           | 105  | 80      | 120     |           |             |      |
| m,p-Xylene                     | 10.5   | 0.5 | 10     |           | 105  | 70      | 130     |           |             |      |
| o-Xylene                       | 10.8   | 0.5 | 10     |           | 108  | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 9.41   |     | 10     |           | 94   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 11     |     | 10     |           | 110  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 8.71   |     | 10     |           | 87   | 80      | 120     |           |             |      |

### Sample Matrix Spike

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

File ID: D:\HPCHEM\MS09\DATA\071108\07110808.D

Batch ID: **MS09W1108A**

Analysis Date: **11/08/2007 13:55**

Sample ID: **07110726-02AMS**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 51.8   | 1.3 | 50     | 0         | 104  | 62      | 139     |           |             |      |
| Benzene                        | 44.8   | 1.3 | 50     | 0         | 90   | 70      | 130     |           |             |      |
| Toluene                        | 48.8   | 1.3 | 50     | 0         | 98   | 67      | 130     |           |             |      |
| Ethylbenzene                   | 50.7   | 1.3 | 50     | 0         | 101  | 70      | 130     |           |             |      |
| m,p-Xylene                     | 51.1   | 1.3 | 50     | 0         | 102  | 69      | 130     |           |             |      |
| o-Xylene                       | 54     | 1.3 | 50     | 0         | 108  | 70      | 130     |           |             |      |
| Surr: 1,2-Dichloroethane-d4    | 47.1   |     | 50     |           | 94   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 54.3   |     | 50     |           | 109  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 43.2   |     | 50     |           | 86   | 80      | 120     |           |             |      |

### Sample Matrix Spike Duplicate

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

File ID: D:\HPCHEM\MS09\DATA\071108\07110809.D

Batch ID: **MS09W1108A**

Analysis Date: **11/08/2007 14:18**

Sample ID: **07110726-02AMSD**

Units: **µg/L**

Run ID: **MSD\_09\_071108A**

Prep Date: **11/08/2007**

| Analyte                        | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|--------------------------------|--------|-----|--------|-----------|------|---------|---------|-----------|-------------|------|
| Methyl tert-butyl ether (MTBE) | 51     | 1.3 | 50     | 0         | 102  | 62      | 139     | 51.81     | 1.6(20)     |      |
| Benzene                        | 44.3   | 1.3 | 50     | 0         | 89   | 70      | 130     | 44.79     | 1.2(20)     |      |
| Toluene                        | 48.6   | 1.3 | 50     | 0         | 97   | 67      | 130     | 48.76     | 0.3(20)     |      |
| Ethylbenzene                   | 50.5   | 1.3 | 50     | 0         | 101  | 70      | 130     | 50.69     | 0.3(20)     |      |
| m,p-Xylene                     | 50.8   | 1.3 | 50     | 0         | 102  | 69      | 130     | 51.14     | 0.7(20)     |      |
| o-Xylene                       | 53.3   | 1.3 | 50     | 0         | 107  | 70      | 130     | 54.02     | 1.3(20)     |      |
| Surr: 1,2-Dichloroethane-d4    | 46.4   |     | 50     |           | 93   | 75      | 128     |           |             |      |
| Surr: Toluene-d8               | 54.4   |     | 50     |           | 109  | 80      | 120     |           |             |      |
| Surr: 4-Bromofluorobenzene     | 43.3   |     | 50     |           | 87   | 80      | 120     |           |             |      |



# *Alpha Analytical, Inc.*

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

**Date:**  
*12-Nov-07*

## OC Summary Report

**Work Order:**  
07110726

**Comments:**

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

Billing Information :

# CHAIN-OF-CUSTODY RECORD

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

# CA

**WorkOrder : STR07110726**  
**Report Due By : 5:00 PM On : 15-Nov-07**

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

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

EDD Required : Yes

Sampled by : CHILL

PO :  
 Client's COC # : 18500                      Job : USA 57

| Cooler Temp | Samples Received | Date Printed |
|-------------|------------------|--------------|
| 4 °C        | 07-Nov-07        | 07-Nov-07    |

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

| Alpha Sample ID | Client Sample ID | Collection Matrix | Collection Date   | No. of Bottles |     |     | Requested Tests |               |  |  |  |  | Sample Remarks |  |  |  |
|-----------------|------------------|-------------------|-------------------|----------------|-----|-----|-----------------|---------------|--|--|--|--|----------------|--|--|--|
|                 |                  |                   |                   | Alpha          | Sub | TAT | TPH/P_W         | VOC_W         |  |  |  |  |                |  |  |  |
| STR07110726-01A | 00057 W INF      | AQ                | 11/06/07<br>07:35 | 5              | 0   | 6   | GAS-C           | BTEX/OXY<br>C |  |  |  |  |                |  |  |  |
| STR07110726-02A | 00057 W EFF      | AQ                | 11/06/07<br>07:30 | 5              | 0   | 6   | GAS-C           | BTEX/OXY<br>C |  |  |  |  |                |  |  |  |

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

| Signature       | Print Name | Company                | Date/Time    |
|-----------------|------------|------------------------|--------------|
| <i>K Murray</i> | K Murray   | Alpha Analytical, Inc. | 11/7/07 1120 |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.  
 The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.  
 Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)                      Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**Billing Information:**

Name Stratus ENV  
 Address 3330 Cummins Plc DR  
 City, State, Zip Cummins TN  
 Phone Number 5306266004 Fax 530676 6005



**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21  
 Sparks, Nevada 89431-5778  
 Phone (775) 355-1044  
 Fax (775) 355-0406

Samples Collected From Which State?  
 AZ \_\_\_ CA  NV \_\_\_ WA \_\_\_  
 ID \_\_\_ OR \_\_\_ OTHER \_\_\_

|                                 |                |                       |                                 |                               |            |                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------------|----------------|-----------------------|---------------------------------|-------------------------------|------------|----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Client Name <u>USA 57</u>       |                |                       | P.O. #                          |                               | Job #      |                | Analyses Required<br><div style="display: flex; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); border: 1px solid black; padding: 2px;">020-134x</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); border: 1px solid black; padding: 2px;">5045</div> </div> |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Address                         |                |                       | E-Mail Address                  |                               |            |                |   |  |  |  |  |  |  |  |  |  | Required QC Level?   |  |  |  |
| City, State, Zip <u>Oakland</u> |                |                       | Phone #                         |                               | Fax #      |                |   |  |  |  |  |  |  |  |  |  | I    II    III    IV<br>EDD / EDF? YES ___ NO ___<br>Global ID # _____ |  |  |  |
| Time Sampled                    | Date Sampled   | Matrix* See Key Below | Sampled by <u>CHILL</u>         | Report Attention <u>Scott</u> | TAT        | Field Filtered |   |  |  |  |  |  |  |  |  |  | Total and type of containers ** See below                              |  |  |  |
| <u>0735</u>                     | <u>11/8/07</u> | <u>AR</u>             | Lab ID Number (Office Use Only) | Sample Description            |            |                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <u>0770</u>                     | <u>11/8/07</u> | <u>AR</u>             | <u>STRO7110726-01</u>           | <u>00057 W INF</u>            | <u>STD</u> |                | <u>5-V</u>  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |                |                       | <u>0200057</u>                  | <u>W EFF</u>                  | <u>STD</u> |                | <u>5-V</u>  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**ADDITIONAL INSTRUCTIONS:**

| Signature | Print Name           | Company        | Date           | Time        |
|-----------|----------------------|----------------|----------------|-------------|
|           | <u>CHILL</u>         | <u>Stratus</u> | <u>11-607</u>  | <u>1430</u> |
|           | <u>Lisa de Silva</u> | <u>ALPHA</u>   | <u>11607</u>   | <u>1430</u> |
|           | <u>K Murray</u>      | <u>AA1</u>     | <u>11/7/07</u> | <u>1115</u> |
|           |                      |                |                |             |

\*Key: AQ - Aqueous    SO - Soil    WA - Waste    OT - Other    AR - Air    \*\*: L-Liter    V-Voa    S-Soil Jar    O-Orbo    T-Tedlar    B-Brass    P-Plastic    OT-Other

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