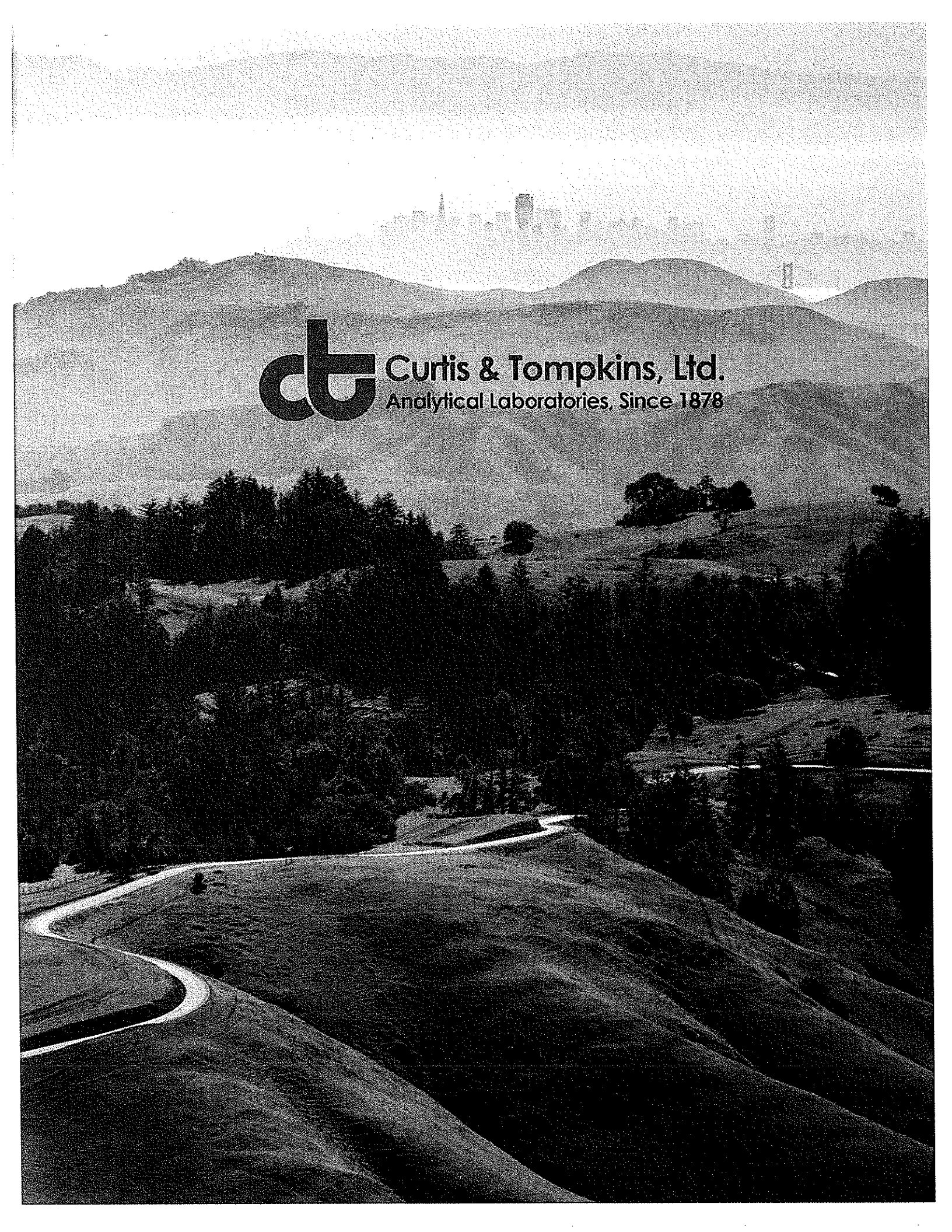
Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 232744**
**ANALYTICAL REPORT**

| | |
|---|---|
| Rockridge Geotechnical | Project : AYC |
| 4379 Piedmont Ave. | Location : Ashland Youth Center |
| Oakland, CA 94611 | Level : II |

| Sample ID | Lab ID |
|---|---|
| VW-1 | 232744-001 |
| VW-2 | 232744-002 |

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 11/16/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

# CASE NARRATIVE

| | |
|---|---|
| Laboratory number: | **232744** |
| Client: | **Rockridge Geotechnical** |
| Project: | **AYC** |
| Location: | **Ashland Youth Center** |
| Request Date: | **11/14/11** |
| Samples Received: | **11/14/11** |

This data package contains sample and QC results for two water samples, requested for the above referenced project on 11/14/11. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B):**
No analytical problems were encountered.

**TPH-Extractables by GC (EPA 8015B):**
No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**
Low recovery was observed for trichloroethene in the MSD for batch 181298; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. VW-1 (lab # 232744-001) had pH greater than 2. No other analytical problems were encountered.

**PCBs (EPA 8082):**
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

CORNERSTONE EARTH GROUP

# Chain of Custody Record

232744

Rockridge Geotechnical

| | | | |
|---|---|---|---|
| Cornerstone Earth Group, Inc. | Project Manager: Logan Medeiros | Site Contact: | Date: 11/14/11 |
| 2737 North Main St., Suite #10 | Tel/Fax: 510-520-4329 | Lab Contact: | Carrier: |
| Walnut Creek, California 94597 | Analysis Turnaround Time | | COC No: 1 of 1 COCs |
| (925) 988-9500 Phone | ASAP | | Laboratory's Job No. |
| (925) 988-9501 FAX | TAT if different from Below | | |
| Project Name: | ☐ 1 week | | |
| Site: Ashland Youth Center | ☐ 3 days | | |
| Project Number: (AYC) | ☐ 2 days | | |
| | ☐ 1 day | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Filtered Sample | TPH-d w/silica gel | TPH-mo w/silica gel | TPHg | VOCs | PCBs | Laboratory's Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-1 | 11/14 | 1400 | Bottle | Water | 9 | | X | X | X | X | X | |
| VW-2 | 11/14 | 1430 | " | Water | 9 | | X | X | X | X | X | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

*Sample Disposal*
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

**Special Instructions/QC Requirements & Comments:**

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | CEG | 11/14/11 3:00PM | [signature] | Rockridge Geo. | 11/14/11 3:00 PM |
| [signature] | Rockridge Geo. | 11/14/11 4:15PM | [signature] | C&T | 11/14/11 1615 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |

**COOLER RECEIPT CHECKLIST** Curtis & Tompkins, Ltd.

Login # 232744 Date Received 11/14/11 Number of coolers 1
Client ~~Cornerstone Trust Group~~ Rockridge Geotechnical Project Ashland Youth Center (AYC)
Date Opened 11/14/11 By (print) David Soderberg (sign) [signature]
Date Logged in _____ By (print) _____ (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) —

☒ Samples Received on ice & cold without a temperature blank

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 9, 10/11

Curtis & Tompkins, Ltd.

## Total Volatile Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8015B |
| Matrix: | Water | Batch#: | 181268 |
| Units: | ug/L | Sampled: | 11/14/11 |
| Diln Fac: | 1.000 | Received: | 11/14/11 |

Field ID: VW-1 Lab ID: 232744-001
Type: SAMPLE Analyzed: 11/15/11

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Bromofluorobenzene (FID) | 103 | 78-123 |

Field ID: VW-2 Lab ID: 232744-002
Type: SAMPLE Analyzed: 11/15/11

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 1,700 Y | 50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Bromofluorobenzene (FID) | 107 | 78-123 |

Type: BLANK Analyzed: 11/14/11
Lab ID: QC618600

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Bromofluorobenzene (FID) | 104 | 78-123 |

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Volatile Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8015B |
| Type: | LCS | Diln Fac: | 1.000 |
| Lab ID: | QC618599 | Batch#: | 181268 |
| Matrix: | Water | Analyzed: | 11/14/11 |
| Units: | ug/L | | |

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,052 | 105 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Bromofluorobenzene (FID) | 112 | 78-123 |

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Volatile Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8015B |
| Field ID: | ZZZZZZZZZZ | Batch#: | 181268 |
| MSS Lab ID: | 232709-001 | Sampled: | 11/11/11 |
| Matrix: | Water | Received: | 11/11/11 |
| Units: | ug/L | Analyzed: | 11/14/11 |
| Diln Fac: | 1.000 | | |

Type: MS Lab ID: QC618601

| Analyte | MSS Result | Spiked | Result | %REC | Limits |
|---|---|---|---|---|---|
| Gasoline C7-C12 | 225.1 | 2,000 | 2,145 | 96 | 66-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Bromofluorobenzene (FID) | 114 | 78-123 |

Type: MSD Lab ID: QC618602

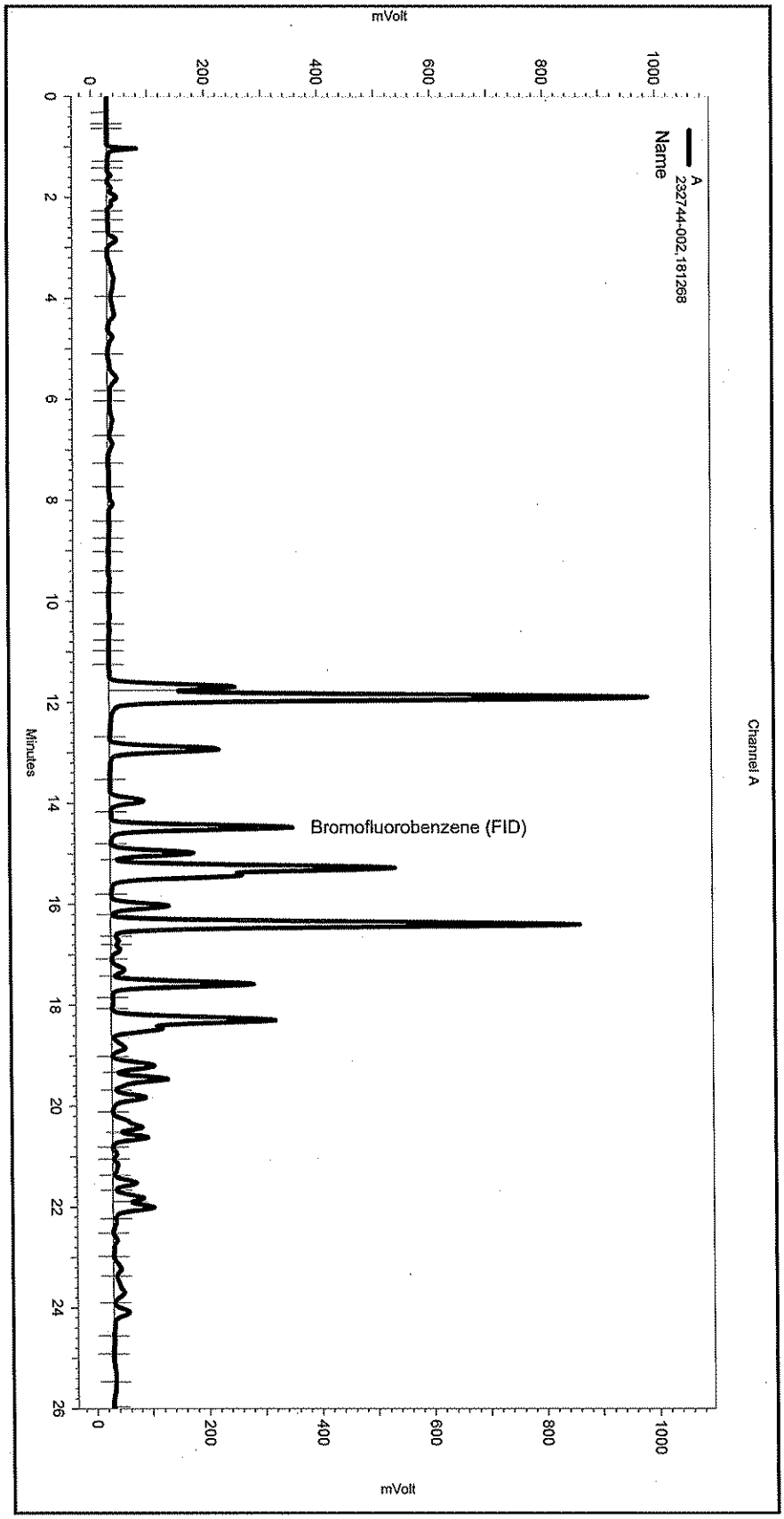
| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 2,000 | 2,261 | 102 | 66-120 | 5 | 25 |

| Surrogate | %REC | Limits |
|---|---|---|
| Bromofluorobenzene (FID) | 119 | 78-123 |

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\318.seq**
Sample Name: **232744-002,181268**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\318-012**
Instrument: GC04 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe313r.met

Software Version 3.1.7
Run Date: 11/15/2011 12:38:47 AM
Analysis Date: 11/15/2011 1:08:15 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a1.0




---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

| Enabled | Event Type | Start (Minutes) | Stop (Minutes) | Value |
|---|---|---|---|---|
| Yes | Width | 0 | 0 | 0.2 |
| Yes | Threshold | 0 | 0 | 50 |

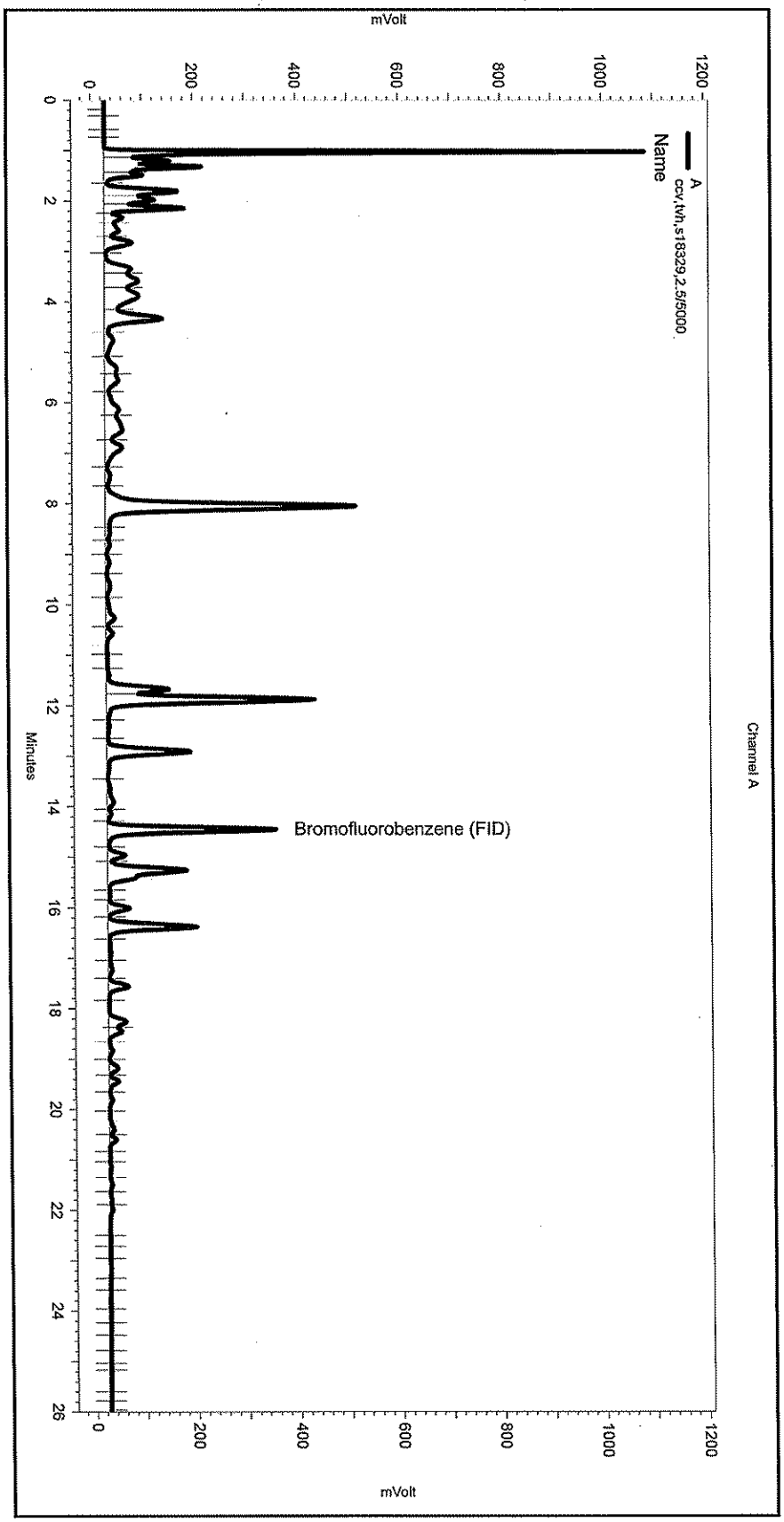
Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10047\318-012_656E.tmp

| Enabled | Event Type | Start (Minutes) | Stop (Minutes) | Value |
|---|---|---|---|---|
| None | | | | |

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\318.seq**
Sample Name: **ccv,tvh,s18329,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\318-002**
Instrument: GC04 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe313r.met

Software Version 3.1.7
Run Date: 11/14/2011 12:48:17 PM
Analysis Date: 11/14/2011 1:17:50 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}




---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

| Enabled | Event Type | Start (Minutes) | Stop (Minutes) | Value |
|---|---|---|---|---|
| Yes | Width | 0 | 0 | 0.2 |
| Yes | Threshold | 0 | 0 | 50 |

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10047\318-002_6564.tmp

| Enabled | Event Type | Start (Minutes) | Stop (Minutes) | Value |
|---|---|---|---|---|

None

Curtis & Tompkins, Ltd.

## Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 3520C |
| Project#: | AYC | Analysis: | EPA 8015B |
| Matrix: | Water | Sampled: | 11/14/11 |
| Units: | ug/L | Received: | 11/14/11 |
| Diln Fac: | 1.000 | Prepared: | 11/14/11 |
| Batch#: | 181269 | | |

Field ID: VW-1
Type: SAMPLE
Lab ID: 232744-001

Analyzed: 11/15/11
Cleanup Method: EPA 3630C

| Analyte | Result | RL |
|---|---|---|
| Diesel C10-C24 | ND | 50 |
| Motor Oil C24-C36 | ND | 300 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 81 | 68-120 |

Field ID: VW-2
Type: SAMPLE
Lab ID: 232744-002

Analyzed: 11/15/11
Cleanup Method: EPA 3630C

| Analyte | Result | RL |
|---|---|---|
| Diesel C10-C24 | 440 Y | 50 |
| Motor Oil C24-C36 | ND | 300 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 79 | 68-120 |

Type: BLANK
Lab ID: QC618606

Analyzed: 11/16/11
Cleanup Method: EPA 3630C

| Analyte | Result | RL |
|---|---|---|
| Diesel C10-C24 | ND | 50 |
| Motor Oil C24-C36 | ND | 300 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 88 | 68-120 |

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 3520C |
| Project#: | AYC | Analysis: | EPA 8015B |
| Matrix: | Water | Batch#: | 181269 |
| Units: | ug/L | Prepared: | 11/14/11 |
| Diln Fac: | 1.000 | Analyzed: | 11/16/11 |

Type: BS
Lab ID: QC618607
Cleanup Method: EPA 3630C

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 1,930 | 77 | 61-120 |

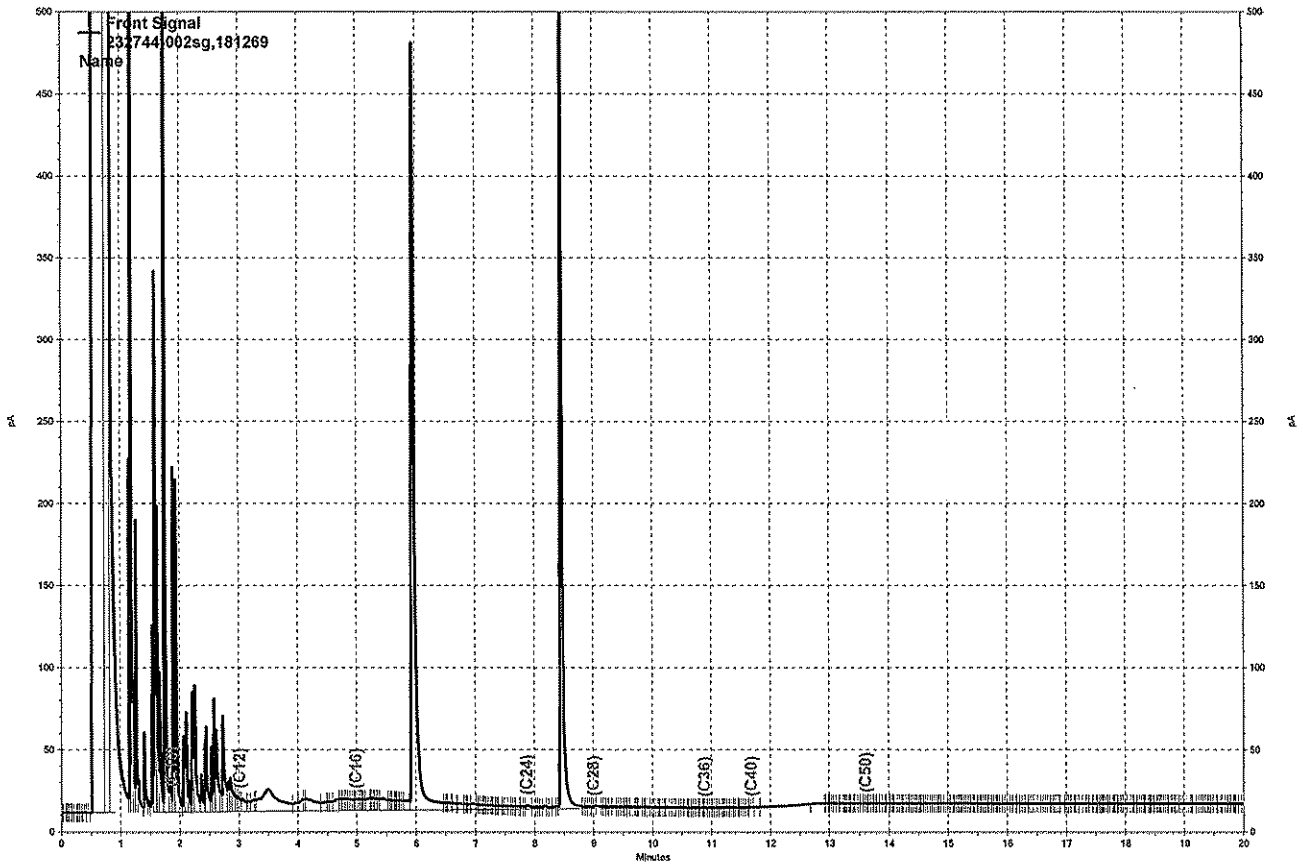
| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 103 | 68-120 |

Type: BSD
Lab ID: QC618608
Cleanup Method: EPA 3630C

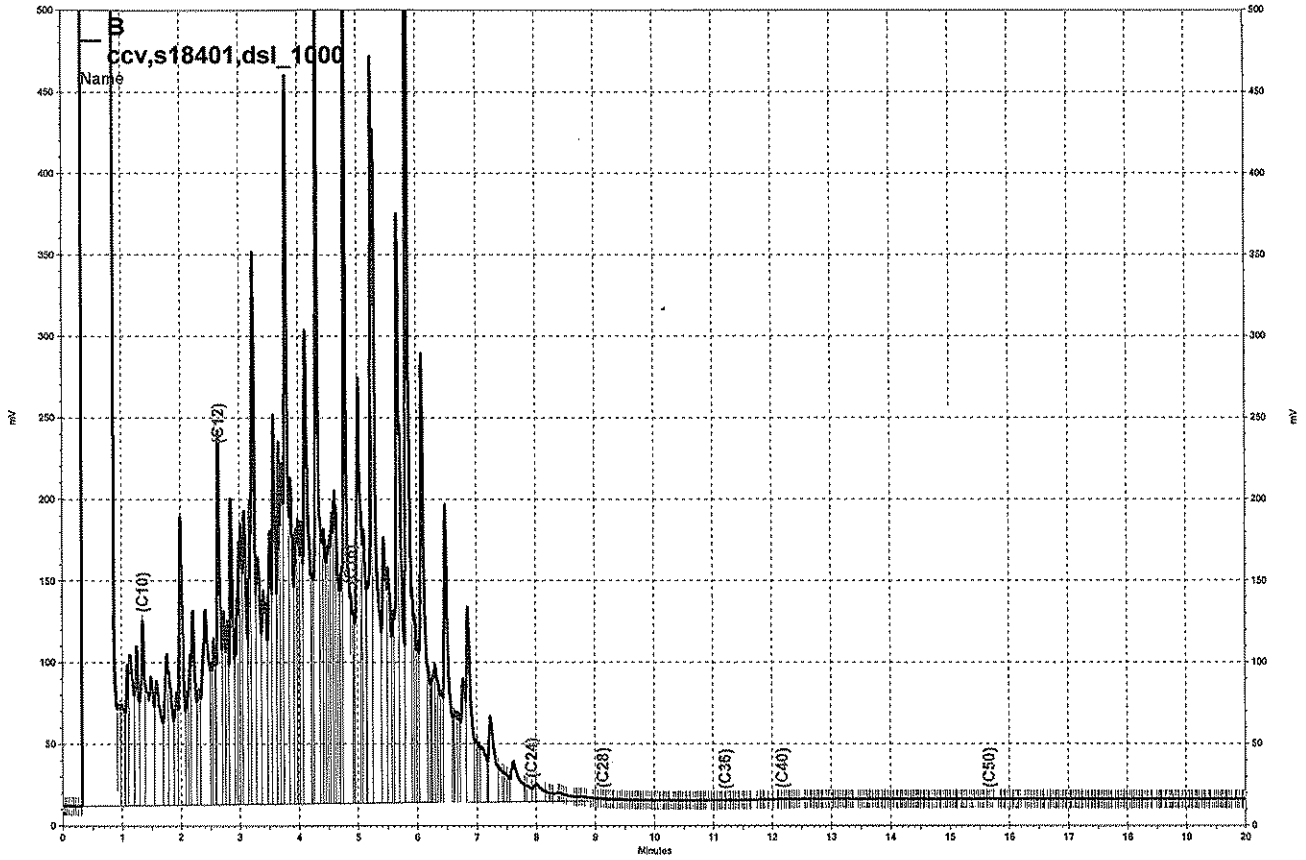
| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 1,871 | 75 | 61-120 | 3 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 102 | 68-120 |

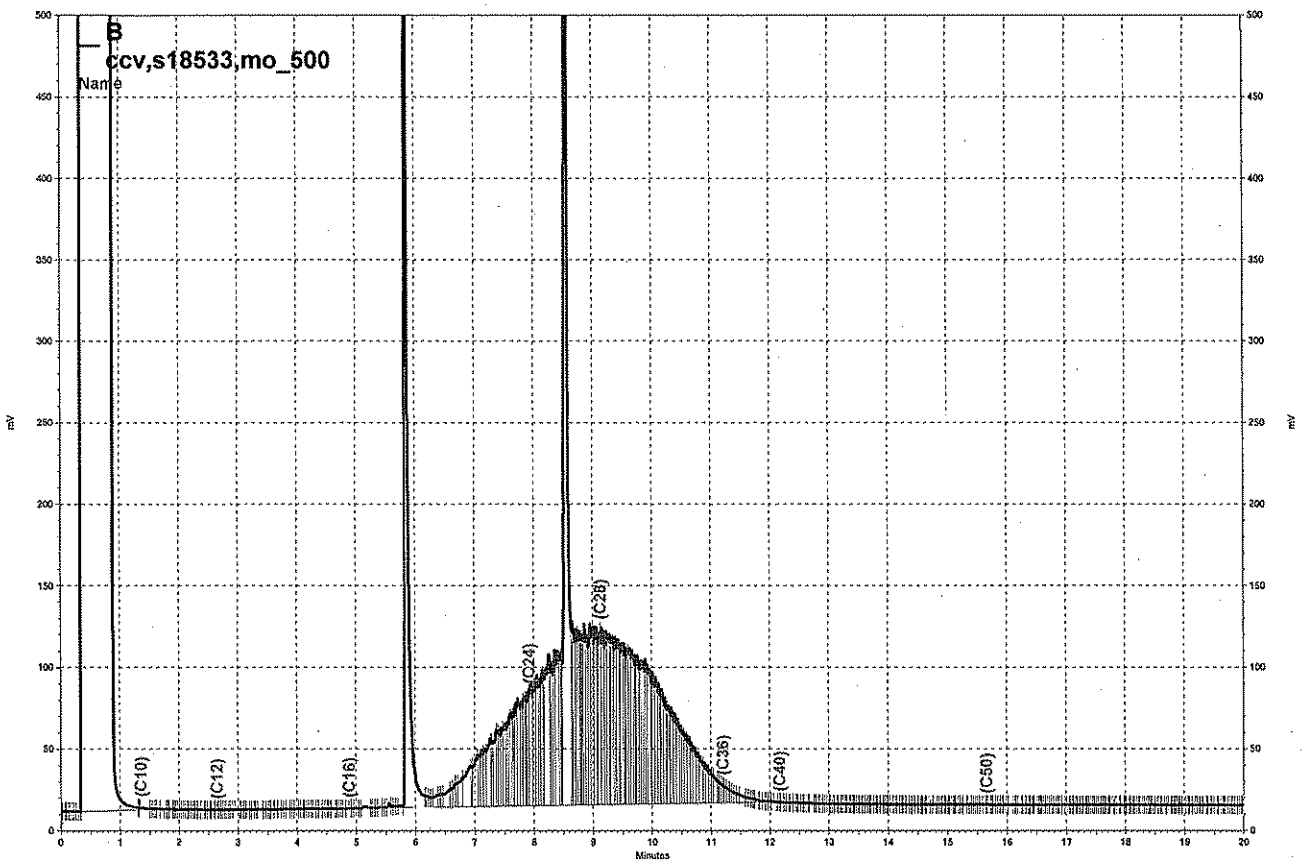
RPD= Relative Percent Difference




\\lims\gdrive\ezchrom\Projects\GC27\Data\319a019.dat, Front Signal




\\Lims\gdrive\ezchrom\Projects\GC14B\Data\318b073, B




\\Lims\gdrive\ezchrom\Projects\GC14B\Data\318b074, B

Curtis & Tompkins, Ltd.

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Field ID: | VW-1 | Batch#: | 181297 |
| Lab ID: | 232744-001 | Sampled: | 11/14/11 |
| Matrix: | Water | Received: | 11/14/11 |
| Units: | ug/L | Analyzed: | 11/15/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Freon 12 | ND | 1.0 |
| Chloromethane | ND | 1.0 |
| Vinyl Chloride | ND | 0.5 |
| Bromomethane | ND | 1.0 |
| Chloroethane | ND | 1.0 |
| Trichlorofluoromethane | ND | 1.0 |
| Acetone | ND | 10 |
| Freon 113 | ND | 2.0 |
| 1,1-Dichloroethene | ND | 0.5 |
| Methylene Chloride | ND | 10 |
| Carbon Disulfide | ND | 0.5 |
| MTBE | ND | 0.5 |
| trans-1,2-Dichloroethene | ND | 0.5 |
| Vinyl Acetate | ND | 10 |
| 1,1-Dichloroethane | ND | 0.5 |
| 2-Butanone | ND | 10 |
| cis-1,2-Dichloroethene | ND | 0.5 |
| 2,2-Dichloropropane | ND | 0.5 |
| Chloroform | ND | 0.5 |
| Bromochloromethane | ND | 0.5 |
| 1,1,1-Trichloroethane | ND | 0.5 |
| 1,1-Dichloropropene | ND | 0.5 |
| Carbon Tetrachloride | ND | 0.5 |
| 1,2-Dichloroethane | ND | 0.5 |
| Benzene | ND | 0.5 |
| Trichloroethene | ND | 0.5 |
| 1,2-Dichloropropane | ND | 0.5 |
| Bromodichloromethane | ND | 0.5 |
| Dibromomethane | ND | 0.5 |
| 4-Methyl-2-Pentanone | ND | 10 |
| cis-1,3-Dichloropropene | ND | 0.5 |
| Toluene | ND | 0.5 |
| trans-1,3-Dichloropropene | ND | 0.5 |
| 1,1,2-Trichloroethane | ND | 0.5 |
| 2-Hexanone | ND | 10 |
| 1,3-Dichloropropane | ND | 0.5 |
| Tetrachloroethene | ND | 0.5 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Field ID: | VW-1 | Batch#: | 181297 |
| Lab ID: | 232744-001 | Sampled: | 11/14/11 |
| Matrix: | Water | Received: | 11/14/11 |
| Units: | ug/L | Analyzed: | 11/15/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Dibromochloromethane | ND | 0.5 |
| 1,2-Dibromoethane | ND | 0.5 |
| Chlorobenzene | ND | 0.5 |
| 1,1,1,2-Tetrachloroethane | ND | 0.5 |
| Ethylbenzene | ND | 0.5 |
| m,p-Xylenes | ND | 0.5 |
| o-Xylene | ND | 0.5 |
| Styrene | ND | 0.5 |
| Bromoform | ND | 1.0 |
| Isopropylbenzene | ND | 0.5 |
| 1,1,2,2-Tetrachloroethane | ND | 0.5 |
| 1,2,3-Trichloropropane | ND | 0.5 |
| Propylbenzene | ND | 0.5 |
| Bromobenzene | ND | 0.5 |
| 1,3,5-Trimethylbenzene | ND | 0.5 |
| 2-Chlorotoluene | ND | 0.5 |
| 4-Chlorotoluene | ND | 0.5 |
| tert-Butylbenzene | ND | 0.5 |
| 1,2,4-Trimethylbenzene | ND | 0.5 |
| sec-Butylbenzene | ND | 0.5 |
| para-Isopropyl Toluene | ND | 0.5 |
| 1,3-Dichlorobenzene | ND | 0.5 |
| 1,4-Dichlorobenzene | ND | 0.5 |
| n-Butylbenzene | ND | 0.5 |
| 1,2-Dichlorobenzene | ND | 0.5 |
| 1,2-Dibromo-3-Chloropropane | ND | 2.0 |
| 1,2,4-Trichlorobenzene | ND | 0.5 |
| Hexachlorobutadiene | ND | 2.0 |
| Naphthalene | ND | 2.0 |
| 1,2,3-Trichlorobenzene | ND | 0.5 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 102 | 80-127 |
| 1,2-Dichloroethane-d4 | 103 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 116 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Field ID: | VW-2 | Batch#: | 181298 |
| Lab ID: | 232744-002 | Sampled: | 11/14/11 |
| Matrix: | Water | Received: | 11/14/11 |
| Units: | ug/L | Analyzed: | 11/15/11 |
| Diln Fac: | 1.667 | | |

| Analyte | Result | RL |
|---|---|---|
| Freon 12 | ND | 1.7 |
| Chloromethane | ND | 1.7 |
| Vinyl Chloride | ND | 0.8 |
| Bromomethane | ND | 1.7 |
| Chloroethane | ND | 1.7 |
| Trichlorofluoromethane | ND | 1.7 |
| Acetone | ND | 17 |
| Freon 113 | ND | 3.3 |
| 1,1-Dichloroethene | ND | 0.8 |
| Methylene Chloride | ND | 17 |
| Carbon Disulfide | ND | 0.8 |
| MTBE | ND | 0.8 |
| trans-1,2-Dichloroethene | ND | 0.8 |
| Vinyl Acetate | ND | 17 |
| 1,1-Dichloroethane | ND | 0.8 |
| 2-Butanone | ND | 17 |
| cis-1,2-Dichloroethene | ND | 0.8 |
| 2,2-Dichloropropane | ND | 0.8 |
| Chloroform | ND | 0.8 |
| Bromochloromethane | ND | 0.8 |
| 1,1,1-Trichloroethane | ND | 0.8 |
| 1,1-Dichloropropene | ND | 0.8 |
| Carbon Tetrachloride | ND | 0.8 |
| 1,2-Dichloroethane | ND | 0.8 |
| Benzene | ND | 0.8 |
| Trichloroethene | 0.8 | 0.8 |
| 1,2-Dichloropropane | ND | 0.8 |
| Bromodichloromethane | ND | 0.8 |
| Dibromomethane | ND | 0.8 |
| 4-Methyl-2-Pentanone | ND | 17 |
| cis-1,3-Dichloropropene | ND | 0.8 |
| Toluene | 1.3 | 0.8 |
| trans-1,3-Dichloropropene | ND | 0.8 |
| 1,1,2-Trichloroethane | ND | 0.8 |
| 2-Hexanone | ND | 17 |
| 1,3-Dichloropropane | ND | 0.8 |
| Tetrachloroethene | ND | 0.8 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Field ID: | VW-2 | Batch#: | 181298 |
| Lab ID: | 232744-002 | Sampled: | 11/14/11 |
| Matrix: | Water | Received: | 11/14/11 |
| Units: | ug/L | Analyzed: | 11/15/11 |
| Diln Fac: | 1.667 | | |

| Analyte | Result | RL |
|---|---|---|
| Dibromochloromethane | ND | 0.8 |
| 1,2-Dibromoethane | ND | 0.8 |
| Chlorobenzene | ND | 0.8 |
| 1,1,1,2-Tetrachloroethane | ND | 0.8 |
| Ethylbenzene | 41 | 0.8 |
| m,p-Xylenes | 170 | 0.8 |
| o-Xylene | 37 | 0.8 |
| Styrene | ND | 0.8 |
| Bromoform | ND | 1.7 |
| Isopropylbenzene | 12 | 0.8 |
| 1,1,2,2-Tetrachloroethane | ND | 0.8 |
| 1,2,3-Trichloropropane | ND | 0.8 |
| Propylbenzene | 28 | 0.8 |
| Bromobenzene | ND | 0.8 |
| 1,3,5-Trimethylbenzene | 45 | 0.8 |
| 2-Chlorotoluene | ND | 0.8 |
| 4-Chlorotoluene | ND | 0.8 |
| tert-Butylbenzene | ND | 0.8 |
| 1,2,4-Trimethylbenzene | 150 | 0.8 |
| sec-Butylbenzene | 3.1 | 0.8 |
| para-Isopropyl Toluene | 2.4 | 0.8 |
| 1,3-Dichlorobenzene | ND | 0.8 |
| 1,4-Dichlorobenzene | ND | 0.8 |
| n-Butylbenzene | 14 | 0.8 |
| 1,2-Dichlorobenzene | ND | 0.8 |
| 1,2-Dibromo-3-Chloropropane | ND | 3.3 |
| 1,2,4-Trichlorobenzene | ND | 0.8 |
| Hexachlorobutadiene | ND | 3.3 |
| Naphthalene | 23 | 3.3 |
| 1,2,3-Trichlorobenzene | ND | 0.8 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 104 | 80-127 |
| 1,2-Dichloroethane-d4 | 101 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 95 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 181297 |
| Units: | ug/L | Analyzed: | 11/15/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC618745

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| 1,1-Dichloroethene | 25.00 | 26.39 | 106 | 64-133 |
| Benzene | 25.00 | 26.86 | 107 | 80-122 |
| Trichloroethene | 25.00 | 25.26 | 101 | 78-120 |
| Toluene | 25.00 | 26.32 | 105 | 80-120 |
| Chlorobenzene | 25.00 | 25.39 | 102 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 103 | 80-127 |
| 1,2-Dichloroethane-d4 | 101 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 102 | 80-120 |

Type: BSD Lab ID: QC618746

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 25.00 | 26.39 | 106 | 64-133 | 0 | 20 |
| Benzene | 25.00 | 27.21 | 109 | 80-122 | 1 | 20 |
| Trichloroethene | 25.00 | 25.55 | 102 | 78-120 | 1 | 20 |
| Toluene | 25.00 | 26.73 | 107 | 80-120 | 2 | 20 |
| Chlorobenzene | 25.00 | 25.89 | 104 | 80-120 | 2 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 102 | 80-127 |
| 1,2-Dichloroethane-d4 | 103 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 102 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Type: | BLANK | Diln Fac: | 1.000 |
| Lab ID: | QC618747 | Batch#: | 181297 |
| Matrix: | Water | Analyzed: | 11/15/11 |
| Units: | ug/L | | |

| Analyte | Result | RL |
|---|---|---|
| Freon 12 | ND | 1.0 |
| Chloromethane | ND | 1.0 |
| Vinyl Chloride | ND | 0.5 |
| Bromomethane | ND | 1.0 |
| Chloroethane | ND | 1.0 |
| Trichlorofluoromethane | ND | 1.0 |
| Acetone | ND | 10 |
| Freon 113 | ND | 2.0 |
| 1,1-Dichloroethene | ND | 0.5 |
| Methylene Chloride | ND | 10 |
| Carbon Disulfide | ND | 0.5 |
| MTBE | ND | 0.5 |
| trans-1,2-Dichloroethene | ND | 0.5 |
| Vinyl Acetate | ND | 10 |
| 1,1-Dichloroethane | ND | 0.5 |
| 2-Butanone | ND | 10 |
| cis-1,2-Dichloroethene | ND | 0.5 |
| 2,2-Dichloropropane | ND | 0.5 |
| Chloroform | ND | 0.5 |
| Bromochloromethane | ND | 0.5 |
| 1,1,1-Trichloroethane | ND | 0.5 |
| 1,1-Dichloropropene | ND | 0.5 |
| Carbon Tetrachloride | ND | 0.5 |
| 1,2-Dichloroethane | ND | 0.5 |
| Benzene | ND | 0.5 |
| Trichloroethene | ND | 0.5 |
| 1,2-Dichloropropane | ND | 0.5 |
| Bromodichloromethane | ND | 0.5 |
| Dibromomethane | ND | 0.5 |
| 4-Methyl-2-Pentanone | ND | 10 |
| cis-1,3-Dichloropropene | ND | 0.5 |
| Toluene | ND | 0.5 |
| trans-1,3-Dichloropropene | ND | 0.5 |
| 1,1,2-Trichloroethane | ND | 0.5 |
| 2-Hexanone | ND | 10 |
| 1,3-Dichloropropane | ND | 0.5 |
| Tetrachloroethene | ND | 0.5 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Type: | BLANK | Diln Fac: | 1.000 |
| Lab ID: | QC618747 | Batch#: | 181297 |
| Matrix: | Water | Analyzed: | 11/15/11 |
| Units: | ug/L | | |

| Analyte | Result | RL |
|---|---|---|
| Dibromochloromethane | ND | 0.5 |
| 1,2-Dibromoethane | ND | 0.5 |
| Chlorobenzene | ND | 0.5 |
| 1,1,1,2-Tetrachloroethane | ND | 0.5 |
| Ethylbenzene | ND | 0.5 |
| m,p-Xylenes | ND | 0.5 |
| o-Xylene | ND | 0.5 |
| Styrene | ND | 0.5 |
| Bromoform | ND | 1.0 |
| Isopropylbenzene | ND | 0.5 |
| 1,1,2,2-Tetrachloroethane | ND | 0.5 |
| 1,2,3-Trichloropropane | ND | 0.5 |
| Propylbenzene | ND | 0.5 |
| Bromobenzene | ND | 0.5 |
| 1,3,5-Trimethylbenzene | ND | 0.5 |
| 2-Chlorotoluene | ND | 0.5 |
| 4-Chlorotoluene | ND | 0.5 |
| tert-Butylbenzene | ND | 0.5 |
| 1,2,4-Trimethylbenzene | ND | 0.5 |
| sec-Butylbenzene | ND | 0.5 |
| para-Isopropyl Toluene | ND | 0.5 |
| 1,3-Dichlorobenzene | ND | 0.5 |
| 1,4-Dichlorobenzene | ND | 0.5 |
| n-Butylbenzene | ND | 0.5 |
| 1,2-Dichlorobenzene | ND | 0.5 |
| 1,2-Dibromo-3-Chloropropane | ND | 2.0 |
| 1,2,4-Trichlorobenzene | ND | 0.5 |
| Hexachlorobutadiene | ND | 2.0 |
| Naphthalene | ND | 2.0 |
| 1,2,3-Trichlorobenzene | ND | 0.5 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 103 | 80-127 |
| 1,2-Dichloroethane-d4 | 104 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 115 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 181298 |
| Units: | ug/L | Analyzed: | 11/15/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC618748

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| 1,1-Dichloroethene | 25.00 | 20.97 | 84 | 64-133 |
| Benzene | 25.00 | 23.02 | 92 | 80-122 |
| Trichloroethene | 25.00 | 22.70 | 91 | 78-120 |
| Toluene | 25.00 | 23.59 | 94 | 80-120 |
| Chlorobenzene | 25.00 | 25.70 | 103 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 107 | 80-127 |
| 1,2-Dichloroethane-d4 | 102 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

Type: BSD Lab ID: QC618749

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 25.00 | 20.52 | 82 | 64-133 | 2 | 20 |
| Benzene | 25.00 | 22.72 | 91 | 80-122 | 1 | 20 |
| Trichloroethene | 25.00 | 22.24 | 89 | 78-120 | 2 | 20 |
| Toluene | 25.00 | 21.86 | 87 | 80-120 | 8 | 20 |
| Chlorobenzene | 25.00 | 25.45 | 102 | 80-120 | 1 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 106 | 80-127 |
| 1,2-Dichloroethane-d4 | 100 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 99 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Type: | BLANK | Diln Fac: | 1.000 |
| Lab ID: | QC618750 | Batch#: | 181298 |
| Matrix: | Water | Analyzed: | 11/15/11 |
| Units: | ug/L | | |

| Analyte | Result | RL |
|---|---|---|
| Freon 12 | ND | 1.0 |
| Chloromethane | ND | 1.0 |
| Vinyl Chloride | ND | 0.5 |
| Bromomethane | ND | 1.0 |
| Chloroethane | ND | 1.0 |
| Trichlorofluoromethane | ND | 1.0 |
| Acetone | ND | 10 |
| Freon 113 | ND | 2.0 |
| 1,1-Dichloroethene | ND | 0.5 |
| Methylene Chloride | ND | 10 |
| Carbon Disulfide | ND | 0.5 |
| MTBE | ND | 0.5 |
| trans-1,2-Dichloroethene | ND | 0.5 |
| Vinyl Acetate | ND | 10 |
| 1,1-Dichloroethane | ND | 0.5 |
| 2-Butanone | ND | 10 |
| cis-1,2-Dichloroethene | ND | 0.5 |
| 2,2-Dichloropropane | ND | 0.5 |
| Chloroform | ND | 0.5 |
| Bromochloromethane | ND | 0.5 |
| 1,1,1-Trichloroethane | ND | 0.5 |
| 1,1-Dichloropropene | ND | 0.5 |
| Carbon Tetrachloride | ND | 0.5 |
| 1,2-Dichloroethane | ND | 0.5 |
| Benzene | ND | 0.5 |
| Trichloroethene | ND | 0.5 |
| 1,2-Dichloropropane | ND | 0.5 |
| Bromodichloromethane | ND | 0.5 |
| Dibromomethane | ND | 0.5 |
| 4-Methyl-2-Pentanone | ND | 10 |
| cis-1,3-Dichloropropene | ND | 0.5 |
| Toluene | ND | 0.5 |
| trans-1,3-Dichloropropene | ND | 0.5 |
| 1,1,2-Trichloroethane | ND | 0.5 |
| 2-Hexanone | ND | 10 |
| 1,3-Dichloropropane | ND | 0.5 |
| Tetrachloroethene | ND | 0.5 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Type: | BLANK | Diln Fac: | 1.000 |
| Lab ID: | QC618750 | Batch#: | 181298 |
| Matrix: | Water | Analyzed: | 11/15/11 |
| Units: | ug/L | | |

| Analyte | Result | RL |
|---|---|---|
| Dibromochloromethane | ND | 0.5 |
| 1,2-Dibromoethane | ND | 0.5 |
| Chlorobenzene | ND | 0.5 |
| 1,1,1,2-Tetrachloroethane | ND | 0.5 |
| Ethylbenzene | ND | 0.5 |
| m,p-Xylenes | ND | 0.5 |
| o-Xylene | ND | 0.5 |
| Styrene | ND | 0.5 |
| Bromoform | ND | 1.0 |
| Isopropylbenzene | ND | 0.5 |
| 1,1,2,2-Tetrachloroethane | ND | 0.5 |
| 1,2,3-Trichloropropane | ND | 0.5 |
| Propylbenzene | ND | 0.5 |
| Bromobenzene | ND | 0.5 |
| 1,3,5-Trimethylbenzene | ND | 0.5 |
| 2-Chlorotoluene | ND | 0.5 |
| 4-Chlorotoluene | ND | 0.5 |
| tert-Butylbenzene | ND | 0.5 |
| 1,2,4-Trimethylbenzene | ND | 0.5 |
| sec-Butylbenzene | ND | 0.5 |
| para-Isopropyl Toluene | ND | 0.5 |
| 1,3-Dichlorobenzene | ND | 0.5 |
| 1,4-Dichlorobenzene | ND | 0.5 |
| n-Butylbenzene | ND | 0.5 |
| 1,2-Dichlorobenzene | ND | 0.5 |
| 1,2-Dibromo-3-Chloropropane | ND | 2.0 |
| 1,2,4-Trichlorobenzene | ND | 0.5 |
| Hexachlorobutadiene | ND | 2.0 |
| Naphthalene | ND | 2.0 |
| 1,2,3-Trichlorobenzene | ND | 0.5 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 102 | 80-127 |
| 1,2-Dichloroethane-d4 | 107 | 73-145 |
| Toluene-d8 | 97 | 80-120 |
| Bromofluorobenzene | 104 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 5030B |
| Project#: | AYC | Analysis: | EPA 8260B |
| Field ID: | ZZZZZZZZZZ | Batch#: | 181298 |
| MSS Lab ID: | 232566-013 | Sampled: | 11/04/11 |
| Matrix: | Water | Received: | 11/07/11 |
| Units: | ug/L | Analyzed: | 11/15/11 |
| Diln Fac: | 1.000 | | |

Type: MS Lab ID: QC618841

| Analyte | MSS Result | Spiked | Result | %REC | Limits |
|---|---|---|---|---|---|
| 1,1-Dichloroethene | 0.2673 | 25.00 | 21.19 | 84 | 73-126 |
| Benzene | <0.1000 | 25.00 | 23.03 | 92 | 80-120 |
| Trichloroethene | 45.98 | 25.00 | 65.45 | 78 | 69-122 |
| Toluene | <0.1000 | 25.00 | 23.61 | 94 | 80-120 |
| Chlorobenzene | <0.1296 | 25.00 | 25.70 | 103 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 105 | 80-127 |
| 1,2-Dichloroethane-d4 | 103 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 102 | 80-120 |

Type: MSD Lab ID: QC618842

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 25.00 | 22.13 | 87 | 73-126 | 4 | 20 |
| Benzene | 25.00 | 23.71 | 95 | 80-120 | 3 | 20 |
| Trichloroethene | 25.00 | 63.11 | 68 * | 69-122 | 4 | 20 |
| Toluene | 25.00 | 22.92 | 92 | 80-120 | 3 | 20 |
| Chlorobenzene | 25.00 | 25.59 | 102 | 80-120 | 0 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 106 | 80-127 |
| 1,2-Dichloroethane-d4 | 104 | 73-145 |
| Toluene-d8 | 103 | 80-120 |
| Bromofluorobenzene | 98 | 80-120 |

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

## Polychlorinated Biphenyls (PCBs)

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 3520C |
| Project#: | AYC | Analysis: | EPA 8082 |
| Matrix: | Water | Sampled: | 11/14/11 |
| Units: | ug/L | Received: | 11/14/11 |
| Diln Fac: | 1.000 | Prepared: | 11/14/11 |
| Batch#: | 181273 | Analyzed: | 11/15/11 |

Field ID: VW-1 Lab ID: 232744-001
Type: SAMPLE

| Analyte | Result | RL |
|---|---|---|
| Aroclor-1016 | ND | 0.50 |
| Aroclor-1221 | ND | 1.0 |
| Aroclor-1232 | ND | 0.50 |
| Aroclor-1242 | ND | 0.50 |
| Aroclor-1248 | ND | 0.50 |
| Aroclor-1254 | ND | 0.50 |
| Aroclor-1260 | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| TCMX | 85 | 47-120 |
| Decachlorobiphenyl | 73 | 35-120 |

Field ID: VW-2 Lab ID: 232744-002
Type: SAMPLE

| Analyte | Result | RL |
|---|---|---|
| Aroclor-1016 | ND | 0.50 |
| Aroclor-1221 | ND | 1.0 |
| Aroclor-1232 | ND | 0.50 |
| Aroclor-1242 | ND | 0.50 |
| Aroclor-1248 | ND | 0.50 |
| Aroclor-1254 | ND | 0.50 |
| Aroclor-1260 | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| TCMX | 78 | 47-120 |
| Decachlorobiphenyl | 61 | 35-120 |

Type: BLANK Lab ID: QC618620

| Analyte | Result | RL |
|---|---|---|
| Aroclor-1016 | ND | 0.50 |
| Aroclor-1221 | ND | 1.0 |
| Aroclor-1232 | ND | 0.50 |
| Aroclor-1242 | ND | 0.50 |
| Aroclor-1248 | ND | 0.50 |
| Aroclor-1254 | ND | 0.50 |
| Aroclor-1260 | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| TCMX | 96 | 47-120 |
| Decachlorobiphenyl | 108 | 35-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Polychlorinated Biphenyls (PCBs)

| | | | |
|---|---|---|---|
| Lab #: | 232744 | Location: | Ashland Youth Center |
| Client: | Rockridge Geotechnical | Prep: | EPA 3520C |
| Project#: | AYC | Analysis: | EPA 8082 |
| Matrix: | Water | Batch#: | 181273 |
| Units: | ug/L | Prepared: | 11/14/11 |
| Diln Fac: | 1.000 | Analyzed: | 11/15/11 |

Type: BS Lab ID: QC618621

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Aroclor-1016 | 5.000 | 4.508 | 90 | 64-132 |
| Aroclor-1260 | 5.000 | 4.171 | 83 | 60-137 |

| Surrogate | %REC | Limits |
|---|---|---|
| TCMX | 83 | 47-120 |
| Decachlorobiphenyl | 75 | 35-120 |

Type: BSD Lab ID: QC618622

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Aroclor-1016 | 5.000 | 4.764 | 95 | 64-132 | 6 | 30 |
| Aroclor-1260 | 5.000 | 4.559 | 91 | 60-137 | 9 | 35 |

| Surrogate | %REC | Limits |
|---|---|---|
| TCMX | 88 | 47-120 |
| Decachlorobiphenyl | 83 | 35-120 |

RPD= Relative Percent Difference