Fibertec
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Thursday, September 05, 2013

Fibertec Project Number:	57682
Project Identification:	PSC-PETRO-CHEM /11013-000191
Submittal Date:	08/28/2013

Ms. Kellie Wing
Bureau Veritas North America, Inc.
22345 Reothel
Novi, MI 48375

Dear Ms. Wing,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**TB-04**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**1**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-001** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/L	20	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
2. Acrylonitrile	U		µg/L	5.0	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
3. Benzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
4. Bromobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
5. Bromochloromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
6. Bromodichloromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
7. Bromoform	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
8. Bromomethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
9. t-Butanol (NN)	U		µg/L	50	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
10. 2-Butanone	U		µg/L	5.0	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
11. n-Butylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
12. sec-Butylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
13. tert-Butylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
14. Carbon Disulfide	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
15. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
16. Chlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
17. Chloroethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
18. Chloroform	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
19. Chloromethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
20. Cyclohexane (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
21. Dibromochloromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
23. Dibromomethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
24. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
25. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
26. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
28. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
29. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
30. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
31. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
32. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
33. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
34. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
35. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
36. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
37. Diethyl Ether	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
38. Diisopropyl Ether (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
39. ETBE (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-001

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**TB-04**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**1**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-001** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
40. Ethylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
41. Ethylene Dibromide	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
42. Hexachloroethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
43. 2-Hexanone	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
44. Isopropylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
45. 4-Isopropyltoluene (NN)	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
46. Methyl Iodide	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
47. Methylene Chloride	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
48. 2-Methylnaphthalene (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
49. 4-Methyl-2-pentanone	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
50. MTBE	U		µg/L	2.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
51. Naphthalene	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
52. n-Propylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
53. Styrene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
54. TAME (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
55. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
56. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
57. Tetrachloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
58. Tetrahydrofuran (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
59. Toluene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
60. 1,2,3-Trichlorobenzene	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
61. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
62. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
63. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
64. Trichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
65. Trichlorofluoromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
66. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
67. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
68. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
69. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
70. Vinyl Chloride	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
71. Xylenes	U		µg/L	3.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-002

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-24 (3-5)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**2**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-002A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	14		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-002** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
3. Benzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
4. Bromobenzene	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
7. Bromoform	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
8. Bromomethane	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	2500	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
10. 2-Butanone	U		µg/kg	582	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
11. n-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
12. sec-Butylbenzene	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
13. tert-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
14. Carbon Disulfide	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
17. Chloroethane	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
18. Chloroform	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
19. Chloromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
23. Dibromomethane	U		µg/kg	290	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

[redacted]

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-002

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-24 (3-5)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	2	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-002** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
40. Ethylbenzene	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
41. Ethylene Dibromide	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	290	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
46. Methyl Iodide	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	100	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
49. 4-Methyl-2-pentanone	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
50. MTBE	U		µg/kg	290	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
51. Naphthalene	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
52. n-Propylbenzene	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
53. Styrene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
54. TAME (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
57. Tetrachloroethene	**390**		µg/kg	58	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
58. Tetrahydrofuran (NN)	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
59. Toluene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
60. 1,2,3-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	291	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
64. Trichloroethene	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	58	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
68. 1,2,4-Trimethylbenzene	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
69. 1,3,5-Trimethylbenzene	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
70. Vinyl Chloride	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
71. Xylenes	U		µg/kg	174	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-003

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**DUP-06**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**3**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-003A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	**5.9**		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-003** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	21000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
3. Benzene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
4. Bromobenzene	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
7. Bromoform	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
8. Bromomethane	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	42000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
10. 2-Butanone	U		µg/kg	21000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
11. n-Butylbenzene	**57000**		µg/kg	1100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
12. sec-Butylbenzene	**24000**		µg/kg	2100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
13. tert-Butylbenzene	**3000**		µg/kg	1100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
14. Carbon Disulfide	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
17. Chloroethane	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
18. Chloroform	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
19. Chloromethane	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
23. Dibromomethane	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-003

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**DUP-06**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**3**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-003** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
40. Ethylbenzene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
41. Ethylene Dibromide	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	**32000**		µg/kg	4200	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
46. Methyl Iodide	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	**85000**		µg/kg	11000	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
49. 4-Methyl-2-pentanone	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
50. MTBE	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
51. Naphthalene	**60000**		µg/kg	11000	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
52. n-Propylbenzene	**15000**		µg/kg	2100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
53. Styrene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
54. TAME (NN)	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
57. Tetrachloroethene	**7400**		µg/kg	2100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
58. Tetrahydrofuran (NN)	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
59. Toluene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
60. 1,2,3-Trichlorobenzene	U		µg/kg	4200	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
64. Trichloroethene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	**120000**		µg/kg	4200	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
68. 1,2,4-Trimethylbenzene	**190000**		µg/kg	4200	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
69. 1,3,5-Trimethylbenzene	**67000**		µg/kg	4200	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
70. Vinyl Chloride	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
71. Xylenes	**23000**		µg/kg	6400	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-004

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-24 (7-11)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**4**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**11:08**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-004** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/L	20	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
2. Acrylonitrile	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
3. Benzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
4. Bromobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
5. Bromochloromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
6. Bromodichloromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
7. Bromoform	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
8. Bromomethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
9. t-Butanol (NN)	U		µg/L	50	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
10. 2-Butanone	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
11. n-Butylbenzene	1.0		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
12. sec-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
13. tert-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
14. Carbon Disulfide	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
15. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
16. Chlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
17. Chloroethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
18. Chloroform	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
19. Chloromethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
20. Cyclohexane (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
21. Dibromochloromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
23. Dibromomethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
24. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
25. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
26. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
28. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
29. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
30. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
31. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
32. cis-1,2-Dichloroethene	1.4		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
33. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
34. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
35. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
36. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
37. Diethyl Ether	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
38. Diisopropyl Ether (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
39. ETBE (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-24 (7-11)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**4**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**11:08**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-004** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
40. Ethylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
41. Ethylene Dibromide	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
42. Hexachloroethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
43. 2-Hexanone	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
44. Isopropylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
45. 4-Isopropyltoluene (NN)	**1.0**		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
46. Methyl Iodide	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
47. Methylene Chloride	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
48. 2-Methylnaphthalene (NN)	**7.4**		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
49. 4-Methyl-2-pentanone	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
50. MTBE	U		µg/L	2.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
51. Naphthalene	**6.9**		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
52. n-Propylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
53. Styrene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
54. TAME (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
55. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
56. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
57. Tetrachloroethene	**1.2**		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
58. Tetrahydrofuran (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
59. Toluene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
60. 1,2,3-Trichlorobenzene	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
61. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
62. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
63. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
64. Trichloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
65. Trichlorofluoromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
66. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
67. 1,2,3-Trimethylbenzene (NN)	**14**		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
68. 1,2,4-Trimethylbenzene	**17**		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
69. 1,3,5-Trimethylbenzene	**4.9**		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
70. Vinyl Chloride	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
71. Xylenes	**4.6**		µg/L	3.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-005

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-25 (3-5)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**5**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-005A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	11		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-005** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
3. Benzene	**120**		µg/kg	50	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
4. Bromobenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
7. Bromoform	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
8. Bromomethane	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	2500	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
10. 2-Butanone	U		µg/kg	559	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
11. n-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
12. sec-Butylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
13. tert-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
14. Carbon Disulfide	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
17. Chloroethane	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
18. Chloroform	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
19. Chloromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
23. Dibromomethane	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-005

Client Identification:	Bureau Veritas North America, Inc.	Sample Description:	BSB-25 (3-5)	Chain of Custody:	125649
Client Project Name:	PSC-PETRO-CHEM	Sample No:	5	Collect Date:	08/27/13
Client Project No:	11013-000191	Sample Matrix:	Soil/Solid	Collect Time:	11:45

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-005** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
40. Ethylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
41. Ethylene Dibromide	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
46. Methyl Iodide	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	100	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
49. 4-Methyl-2-pentanone	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
50. MTBE	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
51. Naphthalene	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
52. n-Propylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
53. Styrene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
54. TAME (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
57. Tetrachloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
58. Tetrahydrofuran (NN)	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
59. Toluene	**160**		µg/kg	50	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
60. 1,2,3-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	279	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
64. Trichloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
68. 1,2,4-Trimethylbenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
69. 1,3,5-Trimethylbenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
70. Vinyl Chloride	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
71. Xylenes	U		µg/kg	167	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-006

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-25 (5-7)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**6**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-006A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	**18**		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-006** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
3. Benzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
4. Bromobenzene	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
7. Bromoform	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
8. Bromomethane	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	2500	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
10. 2-Butanone	U		µg/kg	607	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
11. n-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
12. sec-Butylbenzene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
13. tert-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
14. Carbon Disulfide	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
17. Chloroethane	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
18. Chloroform	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
19. Chloromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
23. Dibromomethane	U		µg/kg	300	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-25 (5-7)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**6**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-006** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
40. Ethylbenzene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
41. Ethylene Dibromide	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	300	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
46. Methyl Iodide	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	100	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
49. 4-Methyl-2-pentanone	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
50. MTBE	U		µg/kg	300	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
51. Naphthalene	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
52. n-Propylbenzene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
53. Styrene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
54. TAME (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
57. Tetrachloroethene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
58. Tetrahydrofuran (NN)	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
59. Toluene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
60. 1,2,3-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	303	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
64. Trichloroethene	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	60	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
68. 1,2,4-Trimethylbenzene	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
69. 1,3,5-Trimethylbenzene	U		µg/kg	120	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
70. Vinyl Chloride	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
71. Xylenes	U		µg/kg	182	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-007

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-25 (7-11)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**7**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**12:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-007** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/L	20	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
2. Acrylonitrile	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
3. Benzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
4. Bromobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
5. Bromochloromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
6. Bromodichloromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
7. Bromoform	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
8. Bromomethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
9. t-Butanol (NN)	U		µg/L	50	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
10. 2-Butanone	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
11. n-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
12. sec-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
13. tert-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
14. Carbon Disulfide	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
15. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
16. Chlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
17. Chloroethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
18. Chloroform	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
19. Chloromethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
20. Cyclohexane (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
21. Dibromochloromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
23. Dibromomethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
24. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
25. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
26. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
28. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
29. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
30. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
31. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
32. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
33. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
34. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
35. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
36. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
37. Diethyl Ether	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
38. Diisopropyl Ether (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
39. ETBE (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-25 (7-11)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**7**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**12:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-007** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
40. Ethylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
41. Ethylene Dibromide	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
42. Hexachloroethane	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
43. 2-Hexanone	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
44. Isopropylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
45. 4-Isopropyltoluene (NN)	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
46. Methyl Iodide	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
47. Methylene Chloride	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
48. 2-Methylnaphthalene (NN)	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
49. 4-Methyl-2-pentanone	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
50. MTBE	**7.5**		µg/L	2.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
51. Naphthalene	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
52. n-Propylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
53. Styrene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
54. TAME (NN)	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
55. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
56. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
57. Tetrachloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
58. Tetrahydrofuran (NN)	**36**		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
59. Toluene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
60. 1,2,3-Trichlorobenzene	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
61. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
62. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
63. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
64. Trichloroethene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
65. Trichlorofluoromethane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
66. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
67. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
68. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
69. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
70. Vinyl Chloride	U		µg/L	1.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A
71. Xylenes	U		µg/L	3.0	1.0	08/30/13	VI13H30A	08/30/13	VI13H30A

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-008

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 (3-5)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**8**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) — **Aliquot ID: 57682-008A** — **Matrix: Soil/Solid** — **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	9.5		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) — **Aliquot ID: 57682-008** — **Matrix: Soil/Solid** — **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
3. Benzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
4. Bromobenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
7. Bromoform	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
8. Bromomethane	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	2500	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
10. 2-Butanone	U		µg/kg	552	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
11. n-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
12. sec-Butylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
13. tert-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
14. Carbon Disulfide	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
17. Chloroethane	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
18. Chloroform	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
19. Chloromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
23. Dibromomethane	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

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Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-008

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 (3-5)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**8**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-008** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
40. Ethylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
41. Ethylene Dibromide	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
46. Methyl Iodide	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	100	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
49. 4-Methyl-2-pentanone	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
50. MTBE	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
51. Naphthalene	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
52. n-Propylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
53. Styrene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
54. TAME (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
57. Tetrachloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
58. Tetrahydrofuran (NN)	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
59. Toluene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
60. 1,2,3-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
64. Trichloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
68. 1,2,4-Trimethylbenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
69. 1,3,5-Trimethylbenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
70. Vinyl Chloride	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
71. Xylenes	U		µg/kg	165	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

[redacted]

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-009

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 (5-7)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**9**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) — **Aliquot ID: 57682-009A** — **Matrix: Soil/Solid** — **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	3.4		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) — **Aliquot ID: 57682-009** — **Matrix: Soil/Solid** — **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	08/29/13	V913H29B	08/29/13	V913H29B
2. Acrylonitrile	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
3. Benzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
4. Bromobenzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
5. Bromochloromethane	U		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
6. Bromodichloromethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
7. Bromoform	U		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
8. Bromomethane	U		µg/kg	200	1.0	08/29/13	V913H29B	08/29/13	V913H29B
9. t-Butanol (NN)	U		µg/kg	2588	1.0	08/29/13	V913H29B	08/29/13	V913H29B
10. 2-Butanone	U		µg/kg	258	1.0	08/29/13	V913H29B	08/29/13	V913H29B
11. n-Butylbenzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
12. sec-Butylbenzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
13. tert-Butylbenzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
14. Carbon Disulfide	U		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
15. Carbon Tetrachloride	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
16. Chlorobenzene	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
17. Chloroethane	U		µg/kg	258	1.0	08/29/13	V913H29B	08/29/13	V913H29B
18. Chloroform	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
19. Chloromethane	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
20. Cyclohexane (NN)	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
21. Dibromochloromethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
23. Dibromomethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
24. 1,2-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
25. 1,3-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
26. 1,4-Dichlorobenzene	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
28. Dichlorodifluoromethane	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
29. 1,1-Dichloroethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
30. 1,2-Dichloroethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
31. 1,1-Dichloroethene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
32. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
33. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
34. 1,2-Dichloropropane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B

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Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 (5-7)**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	9	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-009** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
36. trans-1,3-Dichloropropene	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
37. Diethyl Ether	U		µg/kg	200	1.0	08/29/13	V913H29B	08/29/13	V913H29B
38. Diisopropyl Ether (NN)	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
39. ETBE (NN)	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
40. Ethylbenzene	**70**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
41. Ethylene Dibromide	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
42. Hexachloroethane	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
43. 2-Hexanone	U		µg/kg	258	1.0	08/29/13	V913H29B	08/29/13	V913H29B
44. Isopropylbenzene	U		µg/kg	66	1.0	08/29/13	V913H29B	08/29/13	V913H29B
45. 4-Isopropyltoluene (NN)	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
46. Methyl Iodide	U		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
47. Methylene Chloride	U		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
48. 2-Methylnaphthalene (NN)	U		µg/kg	280	1.0	08/29/13	V913H29B	08/29/13	V913H29B
49. 4-Methyl-2-pentanone	U		µg/kg	517	1.0	08/29/13	V913H29B	08/29/13	V913H29B
50. MTBE	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
51. Naphthalene	U		µg/kg	259	1.0	08/29/13	V913H29B	08/29/13	V913H29B
52. n-Propylbenzene	**71**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
53. Styrene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
54. TAME (NN)	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
57. Tetrachloroethene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
58. Tetrahydrofuran (NN)	U		µg/kg	258	1.0	08/29/13	V913H29B	08/29/13	V913H29B
59. Toluene	**190**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
60. 1,2,3-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
61. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
62. 1,1,1-Trichloroethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
63. 1,1,2-Trichloroethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
64. Trichloroethene	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
65. Trichlorofluoromethane	U		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
66. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
67. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	58	1.0	08/29/13	V913H29B	08/29/13	V913H29B
68. 1,2,4-Trimethylbenzene	**120**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
69. 1,3,5-Trimethylbenzene	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
70. Vinyl Chloride	U		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
71. Xylenes	**387**		µg/kg	150	1.0	08/29/13	V913H29B	08/29/13	V913H29B

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-010

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 MS**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**10**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-010A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	**4.3**		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-010** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	**4725**		µg/kg	1000	1.0	08/29/13	V913H29B	08/29/13	V913H29B
2. Acrylonitrile	**5100**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
3. Benzene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
4. Bromobenzene	**4400**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
5. Bromochloromethane	**4800**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
6. Bromodichloromethane	**4500**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
7. Bromoform	**4400**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
8. Bromomethane	**4400**		µg/kg	200	1.0	08/29/13	V913H29B	08/29/13	V913H29B
9. t-Butanol (NN)	**51000**		µg/kg	2611	1.0	08/29/13	V913H29B	08/29/13	V913H29B
10. 2-Butanone	**5100**		µg/kg	261	1.0	08/29/13	V913H29B	08/29/13	V913H29B
11. n-Butylbenzene	**5400**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
12. sec-Butylbenzene	**5000**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
13. tert-Butylbenzene	**4900**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
14. Carbon Disulfide	**4800**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
15. Carbon Tetrachloride	**4800**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
16. Chlorobenzene	**4700**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
17. Chloroethane	**5100**		µg/kg	261	1.0	08/29/13	V913H29B	08/29/13	V913H29B
18. Chloroform	**4300**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
19. Chloromethane	**4800**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
20. Cyclohexane (NN)	**5200**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
21. Dibromochloromethane	**5200**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
22. 1,2-Dibromo-3-chloropropane (SIM) (N	**5100**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
23. Dibromomethane	**4300**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
24. 1,2-Dichlorobenzene	**4600**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
25. 1,3-Dichlorobenzene	**4600**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
26. 1,4-Dichlorobenzene	**4500**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
27. trans-1,4-Dichloro-2-butene (SIM)	**5200**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
28. Dichlorodifluoromethane	**4900**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
29. 1,1-Dichloroethane	**4400**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
30. 1,2-Dichloroethane	**4100**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
31. 1,1-Dichloroethene	**4600**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
32. cis-1,2-Dichloroethene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
33. trans-1,2-Dichloroethene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
34. 1,2-Dichloropropane	**4700**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 MS**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**10**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-010** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	**4900**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
36. trans-1,3-Dichloropropene	**5000**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
37. Diethyl Ether	**4900**		µg/kg	200	1.0	08/29/13	V913H29B	08/29/13	V913H29B
38. Diisopropyl Ether (NN)	**5300**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
39. ETBE (NN)	**5100**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
40. Ethylbenzene	**4600**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
41. Ethylene Dibromide	**4900**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
42. Hexachloroethane	**5600**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
43. 2-Hexanone	**5400**		µg/kg	261	1.0	08/29/13	V913H29B	08/29/13	V913H29B
44. Isopropylbenzene	**4800**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
45. 4-Isopropyltoluene (NN)	**5100**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
46. Methyl Iodide	**4600**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
47. Methylene Chloride	**4400**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
48. 2-Methylnaphthalene (NN)	**5100**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
49. 4-Methyl-2-pentanone	**5100**		µg/kg	522	1.0	08/29/13	V913H29B	08/29/13	V913H29B
50. MTBE	**4900**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
51. Naphthalene	**4800**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
52. n-Propylbenzene	**4800**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
53. Styrene	**4900**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
54. TAME (NN)	**4700**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
55. 1,1,1,2-Tetrachloroethane	**5100**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
56. 1,1,2,2-Tetrachloroethane	**4900**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
57. Tetrachloroethene	**4800**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
58. Tetrahydrofuran (NN)	**4500**		µg/kg	261	1.0	08/29/13	V913H29B	08/29/13	V913H29B
59. Toluene	**4300**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
60. 1,2,3-Trichlorobenzene	**4800**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
61. 1,2,4-Trichlorobenzene	**4700**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
62. 1,1,1-Trichloroethane	**4400**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
63. 1,1,2-Trichloroethane	**4900**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
64. Trichloroethene	**4600**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
65. Trichlorofluoromethane	**5100**		µg/kg	52	1.0	08/29/13	V913H29B	08/29/13	V913H29B
66. 1,2,3-Trichloropropane	**4700**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
67. 1,2,3-Trimethylbenzene (NN)	**4700**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
68. 1,2,4-Trimethylbenzene	**4900**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
69. 1,3,5-Trimethylbenzene	**4900**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
70. Vinyl Chloride	**4800**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
71. Xylenes	**14000**		µg/kg	150	1.0	08/29/13	V913H29B	08/29/13	V913H29B

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 MSD**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**11**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-011A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	3.8		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-011** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	**4567**		µg/kg	1000	1.0	08/29/13	V913H29B	08/29/13	V913H29B
2. Acrylonitrile	**4800**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
3. Benzene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
4. Bromobenzene	**4400**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
5. Bromochloromethane	**4600**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
6. Bromodichloromethane	**4500**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
7. Bromoform	**4400**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
8. Bromomethane	**4400**		µg/kg	200	1.0	08/29/13	V913H29B	08/29/13	V913H29B
9. t-Butanol (NN)	**48000**		µg/kg	2599	1.0	08/29/13	V913H29B	08/29/13	V913H29B
10. 2-Butanone	**5000**		µg/kg	259	1.0	08/29/13	V913H29B	08/29/13	V913H29B
11. n-Butylbenzene	**5500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
12. sec-Butylbenzene	**5000**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
13. tert-Butylbenzene	**4800**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
14. Carbon Disulfide	**4800**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
15. Carbon Tetrachloride	**4800**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
16. Chlorobenzene	**4700**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
17. Chloroethane	**5200**		µg/kg	259	1.0	08/29/13	V913H29B	08/29/13	V913H29B
18. Chloroform	**4200**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
19. Chloromethane	**4600**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
20. Cyclohexane (NN)	**5200**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
21. Dibromochloromethane	**5200**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
22. 1,2-Dibromo-3-chloropropane (SIM) (N	**4900**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
23. Dibromomethane	**4200**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
24. 1,2-Dichlorobenzene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
25. 1,3-Dichlorobenzene	**4600**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
26. 1,4-Dichlorobenzene	**4500**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
27. trans-1,4-Dichloro-2-butene (SIM)	**5100**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
28. Dichlorodifluoromethane	**4700**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
29. 1,1-Dichloroethane	**4400**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
30. 1,2-Dichloroethane	**4000**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
31. 1,1-Dichloroethene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
32. cis-1,2-Dichloroethene	**4400**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
33. trans-1,2-Dichloroethene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
34. 1,2-Dichloropropane	**4700**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 MSD**	Chain of Custody:	**125649**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**11**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:00**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-011** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	**4900**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
36. trans-1,3-Dichloropropene	**5000**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
37. Diethyl Ether	**4700**		µg/kg	200	1.0	08/29/13	V913H29B	08/29/13	V913H29B
38. Diisopropyl Ether (NN)	**5200**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
39. ETBE (NN)	**5000**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
40. Ethylbenzene	**4700**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
41. Ethylene Dibromide	**4700**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
42. Hexachloroethane	**5700**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
43. 2-Hexanone	**5200**		µg/kg	259	1.0	08/29/13	V913H29B	08/29/13	V913H29B
44. Isopropylbenzene	**4900**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
45. 4-Isopropyltoluene (NN)	**5100**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
46. Methyl Iodide	**4700**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
47. Methylene Chloride	**4200**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
48. 2-Methylnaphthalene (NN)	**5200**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
49. 4-Methyl-2-pentanone	**5300**		µg/kg	519	1.0	08/29/13	V913H29B	08/29/13	V913H29B
50. MTBE	**4700**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
51. Naphthalene	**4900**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
52. n-Propylbenzene	**4800**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
53. Styrene	**4900**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
54. TAME (NN)	**4700**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
55. 1,1,1,2-Tetrachloroethane	**5100**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
56. 1,1,2,2-Tetrachloroethane	**4700**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
57. Tetrachloroethene	**4800**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
58. Tetrahydrofuran (NN)	**4300**		µg/kg	259	1.0	08/29/13	V913H29B	08/29/13	V913H29B
59. Toluene	**4500**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
60. 1,2,3-Trichlorobenzene	**4700**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
61. 1,2,4-Trichlorobenzene	**4600**		µg/kg	250	1.0	08/29/13	V913H29B	08/29/13	V913H29B
62. 1,1,1-Trichloroethane	**4400**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
63. 1,1,2-Trichloroethane	**4800**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
64. Trichloroethene	**4700**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
65. Trichlorofluoromethane	**5000**		µg/kg	51	1.0	08/29/13	V913H29B	08/29/13	V913H29B
66. 1,2,3-Trichloropropane	**4600**		µg/kg	100	1.0	08/29/13	V913H29B	08/29/13	V913H29B
67. 1,2,3-Trimethylbenzene (NN)	**4700**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
68. 1,2,4-Trimethylbenzene	**5000**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
69. 1,3,5-Trimethylbenzene	**4900**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
70. Vinyl Chloride	**4600**		µg/kg	50	1.0	08/29/13	V913H29B	08/29/13	V913H29B
71. Xylenes	**14000**		µg/kg	150	1.0	08/29/13	V913H29B	08/29/13	V913H29B

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-012

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 (8-12)**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**12**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**13:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-012** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/L	20	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
2. Acrylonitrile	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
3. Benzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
4. Bromobenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
5. Bromochloromethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
6. Bromodichloromethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
7. Bromoform	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
8. Bromomethane	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
9. t-Butanol (NN)	U		µg/L	50	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
10. 2-Butanone	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
11. n-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
12. sec-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
13. tert-Butylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
14. Carbon Disulfide	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
15. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
16. Chlorobenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
17. Chloroethane	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
18. Chloroform	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
19. Chloromethane	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
20. Cyclohexane (NN)	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
21. Dibromochloromethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
23. Dibromomethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
24. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
25. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
26. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
28. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
29. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
30. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
31. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
32. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
33. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
34. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
35. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
36. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
37. Diethyl Ether	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
38. Diisopropyl Ether (NN)	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
39. ETBE (NN)	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B

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Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-26 (8-12)**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**12**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**13:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-012** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
40. Ethylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
41. Ethylene Dibromide	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
42. Hexachloroethane	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
43. 2-Hexanone	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
44. Isopropylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
45. 4-Isopropyltoluene (NN)	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
46. Methyl Iodide	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
47. Methylene Chloride	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
48. 2-Methylnaphthalene (NN)	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
49. 4-Methyl-2-pentanone	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
50. MTBE	U		µg/L	2.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
51. Naphthalene	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
52. n-Propylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
53. Styrene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
54. TAME (NN)	U	J,V-	µg/L	5.0	1.0	08/30/13	VB13H30A	08/30/13	VB13H30A
55. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
56. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
57. Tetrachloroethene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
58. Tetrahydrofuran (NN)	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
59. Toluene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
60. 1,2,3-Trichlorobenzene	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
61. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
62. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
63. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
64. Trichloroethene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
65. Trichlorofluoromethane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
66. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
67. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
68. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
69. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
70. Vinyl Chloride	U		µg/L	1.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B
71. Xylenes	U		µg/L	3.0	1.0	08/30/13	VH13H30B	08/31/13	VH13H30B

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Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**RB-02**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**13**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-013** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/L	21	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
2. Acrylonitrile	U		µg/L	5.0	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
3. Benzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
4. Bromobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
5. Bromochloromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
6. Bromodichloromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
7. Bromoform	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
8. Bromomethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
9. t-Butanol (NN)	U		µg/L	50	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
10. 2-Butanone	U		µg/L	5.0	1.0	08/30/13	VH13H30A	08/30/13	VH13H30A
11. n-Butylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
12. sec-Butylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
13. tert-Butylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
14. Carbon Disulfide	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
15. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
16. Chlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
17. Chloroethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
18. Chloroform	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
19. Chloromethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
20. Cyclohexane (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
21. Dibromochloromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
23. Dibromomethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
24. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
25. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
26. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
28. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
29. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
30. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
31. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
32. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
33. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
34. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
35. cis-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
36. trans-1,3-Dichloropropene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
37. Diethyl Ether	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
38. Diisopropyl Ether (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
39. ETBE (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B

Client Identification:	Bureau Veritas North America, Inc.	Sample Description:	RB-02	Chain of Custody:	125650
Client Project Name:	PSC-PETRO-CHEM	Sample No:	13	Collect Date:	08/27/13
Client Project No:	11013-000191	Sample Matrix:	Ground Water	Collect Time:	13:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) **Aliquot ID: 57682-013** **Matrix: Ground Water** **Analyst: JPL**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
40. Ethylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
41. Ethylene Dibromide	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
42. Hexachloroethane	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
43. 2-Hexanone	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
44. Isopropylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
45. 4-Isopropyltoluene (NN)	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
46. Methyl Iodide	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
47. Methylene Chloride	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
48. 2-Methylnaphthalene (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
49. 4-Methyl-2-pentanone	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
50. MTBE	U		µg/L	2.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
51. Naphthalene	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
52. n-Propylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
53. Styrene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
54. TAME (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
55. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
56. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
57. Tetrachloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
58. Tetrahydrofuran (NN)	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
59. Toluene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
60. 1,2,3-Trichlorobenzene	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
61. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
62. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
63. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
64. Trichloroethene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
65. Trichlorofluoromethane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
66. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
67. 1,2,3-Trimethylbenzene (NN)	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
68. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
69. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
70. Vinyl Chloride	U		µg/L	1.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B
71. Xylenes	U		µg/L	3.0	1.0	08/29/13	VI13H29B	08/30/13	VI13H29B

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-014

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-27 (3-5)**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**14**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:35**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-014A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	9.5		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-014** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
3. Benzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
4. Bromobenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
7. Bromoform	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
8. Bromomethane	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	2500	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
10. 2-Butanone	U		µg/kg	552	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
11. n-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
12. sec-Butylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
13. tert-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
14. Carbon Disulfide	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
17. Chloroethane	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
18. Chloroform	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
19. Chloromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
23. Dibromomethane	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-27 (3-5)**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**14**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:35**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-014** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
40. Ethylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
41. Ethylene Dibromide	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
46. Methyl Iodide	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	100	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
49. 4-Methyl-2-pentanone	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
50. MTBE	U		µg/kg	280	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
51. Naphthalene	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
52. n-Propylbenzene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
53. Styrene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
54. TAME (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
57. Tetrachloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
58. Tetrahydrofuran (NN)	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
59. Toluene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
60. 1,2,3-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	276	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
64. Trichloroethene	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	55	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
68. 1,2,4-Trimethylbenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
69. 1,3,5-Trimethylbenzene	U		µg/kg	110	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
70. Vinyl Chloride	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
71. Xylenes	U		µg/kg	165	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-27 (5-7)**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**15**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-015A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	27		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-015** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	1000	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
3. Benzene	U		µg/kg	64	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
4. Bromobenzene	U		µg/kg	140	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
7. Bromoform	U		µg/kg	140	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
8. Bromomethane	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	2500	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
10. 2-Butanone	U		µg/kg	687	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
11. n-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
12. sec-Butylbenzene	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
13. tert-Butylbenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
14. Carbon Disulfide	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
17. Chloroethane	U		µg/kg	343	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
18. Chloroform	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
19. Chloromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	343	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	140	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
23. Dibromomethane	U		µg/kg	340	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-015

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-27 (5-7)**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**15**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-015** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	200	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
40. Ethylbenzene	**250**		µg/kg	68	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
41. Ethylene Dibromide	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	343	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	340	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	U		µg/kg	140	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
46. Methyl Iodide	U		µg/kg	140	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	100	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	**1400**		µg/kg	343	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
49. 4-Methyl-2-pentanone	U		µg/kg	343	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
50. MTBE	U		µg/kg	340	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
51. Naphthalene	**8600**		µg/kg	343	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
52. n-Propylbenzene	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
53. Styrene	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
54. TAME (NN)	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
57. Tetrachloroethene	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
58. Tetrahydrofuran (NN)	U		µg/kg	343	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
59. Toluene	**240**		µg/kg	50	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
60. 1,2,3-Trichlorobenzene	U		µg/kg	250	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	343	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
64. Trichloroethene	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	68	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	U		µg/kg	140	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
68. 1,2,4-Trimethylbenzene	**230**		µg/kg	140	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A
69. 1,3,5-Trimethylbenzene	U		µg/kg	140	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
70. Vinyl Chloride	U		µg/kg	50	1.0	08/29/13	VJ13H29C	08/29/13	VJ13H29C
71. Xylenes	**761**		µg/kg	206	1.0	08/30/13	VJ13H30A	08/30/13	VJ13H30A

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Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-016

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-24 (7.5-8.5')**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**16**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87) **Aliquot ID: 57682-016A** **Matrix: Soil/Solid** **Analyst: BMG**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	**6.7**		%	0.1	1.0	08/30/13	MC130830	09/03/13	MC130830

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-016** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Acetone	U		µg/kg	21000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
2. Acrylonitrile	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
3. Benzene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
4. Bromobenzene	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
5. Bromochloromethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
6. Bromodichloromethane	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
7. Bromoform	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
8. Bromomethane	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
9. t-Butanol (NN)	U		µg/kg	43000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
10. 2-Butanone	U		µg/kg	21000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
11. n-Butylbenzene	**69000**		µg/kg	1100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
12. sec-Butylbenzene	**28000**		µg/kg	2100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
13. tert-Butylbenzene	**3500**		µg/kg	1100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
14. Carbon Disulfide	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
15. Carbon Tetrachloride	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
16. Chlorobenzene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
17. Chloroethane	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
18. Chloroform	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
19. Chloromethane	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
20. Cyclohexane (NN)	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
21. Dibromochloromethane	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
22. 1,2-Dibromo-3-chloropropane (SIM) (N	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
23. Dibromomethane	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
24. 1,2-Dichlorobenzene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
25. 1,3-Dichlorobenzene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
26. 1,4-Dichlorobenzene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
27. trans-1,4-Dichloro-2-butene (SIM)	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
28. Dichlorodifluoromethane	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
29. 1,1-Dichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
30. 1,2-Dichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
31. 1,1-Dichloroethene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
32. cis-1,2-Dichloroethene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
33. trans-1,2-Dichloroethene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
34. 1,2-Dichloropropane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C

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Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 57682
Laboratory Sample Number: 57682-016

Client Identification:	**Bureau Veritas North America, Inc.**	Sample Description:	**BSB-24 (7.5-8.5')**	Chain of Custody:	**125650**
Client Project Name:	**PSC-PETRO-CHEM**	Sample No:	**16**	Collect Date:	**08/27/13**
Client Project No:	**11013-000191**	Sample Matrix:	**Soil/Solid**	Collect Time:	**NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Aliquot ID: 57682-016** **Matrix: Soil/Solid** **Analyst: CCD**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
35. cis-1,3-Dichloropropene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
36. trans-1,3-Dichloropropene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
37. Diethyl Ether	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
38. Diisopropyl Ether (NN)	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
39. ETBE (NN)	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
40. Ethylbenzene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
41. Ethylene Dibromide	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
42. Hexachloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
43. 2-Hexanone	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
44. Isopropylbenzene	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
45. 4-Isopropyltoluene (NN)	**36000**		µg/kg	4300	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
46. Methyl Iodide	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
47. Methylene Chloride	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
48. 2-Methylnaphthalene (NN)	**88000**		µg/kg	11000	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
49. 4-Methyl-2-pentanone	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
50. MTBE	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
51. Naphthalene	**70000**		µg/kg	11000	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
52. n-Propylbenzene	**17000**		µg/kg	2100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
53. Styrene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
54. TAME (NN)	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
55. 1,1,1,2-Tetrachloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
56. 1,1,2,2-Tetrachloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
57. Tetrachloroethene	**8000**		µg/kg	2100	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
58. Tetrahydrofuran (NN)	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
59. Toluene	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
60. 1,2,3-Trichlorobenzene	U		µg/kg	4300	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
61. 1,2,4-Trichlorobenzene	U		µg/kg	11000	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
62. 1,1,1-Trichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
63. 1,1,2-Trichloroethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
64. Trichloroethene	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
65. Trichlorofluoromethane	U		µg/kg	2100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
66. 1,2,3-Trichloropropane	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
67. 1,2,3-Trimethylbenzene (NN)	**140000**		µg/kg	4300	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
68. 1,2,4-Trimethylbenzene	**220000**		µg/kg	4300	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
69. 1,3,5-Trimethylbenzene	**74000**		µg/kg	4300	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A
70. Vinyl Chloride	U		µg/kg	1100	40	08/29/13	VJ13H29C	08/30/13	VJ13H29C
71. Xylenes	**25000**		µg/kg	6400	40	08/30/13	VJ13H30A	08/30/13	VJ13H30A

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Definitions/ Qualifiers:

- **A:** Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- **E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- **J:** The concentration is an estimated value.
- **M:** Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- **X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- **W:** Results reported on a wet-weight basis.
- ***:** Value reported is outside QA limits

Exception Summary:

V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.

Accreditation Number:

E-10395

Fibertec environmental services

Quality Control Report
Matrix Spike Summary
Laboratory Project Number: 57682

Client Identification:	**Bureau Veritas North America, Inc.**	Client Project Name:	**PSC-PETRO-CHEM**	Client Project No:	**11013-000191**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Matrix: Soil/Solid**

Parent Sample:	**57682-009**	Description:	**BSB-26 (5-7)**	Sample No:	**9**	Collect Date:	**08/27/13**	**12:50**
MS Sample ID:	**57682-010**	Description:	**BSB-26 MS**	Sample No:	**10**	Collect Date:	**08/27/13**	**13:00**
MSD Sample ID:	**57682-011**	Description:	**BSB-26 MSD**	Sample No:	**11**	Collect Date:	**08/27/13**	**13:00**

Parameter(s)	Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	MS/MSD LCL - UCL	RPD %	RPD UCL
1. Acetone	<315	µg/kg(wet)	5,000	4,525	4,393	90	88	40 - 207	2	20
2. Acrylonitrile	<50.0	µg/kg(wet)	5,000	4,868	4,576	97	92	45 - 180	5	20
3. Benzene	<45.7	µg/kg(wet)	5,000	4,271	4,288	85	86	63 - 141	1	20
4. Bromobenzene	<25.0	µg/kg(wet)	5,000	4,208	4,187	84	84	70 - 144	0	20
5. Bromochloromethane	<100	µg/kg(wet)	5,000	4,576	4,380	92	88	42 - 161	4	20
6. Bromodichloromethane	<50.0	µg/kg(wet)	5,000	4,304	4,318	86	86	60 - 150	0	20
7. Bromoform	<100	µg/kg(wet)	5,000	4,234	4,262	85	85	50 - 117	0	20
8. Bromomethane	<100	µg/kg(wet)	5,000	4,256	4,203	85	84	58 - 217	1	20
9. t-Butanol	<2,500	µg/kg(wet)	50,000	49,047	46,009	98	92	42 - 156	6	20
10. 2-Butanone	<250	µg/kg(wet)	5,000	4,837	4,793	97	96	42 - 193	1	20
11. n-Butylbenzene	<27.6	µg/kg(wet)	5,000	5,207	5,247	104	105	65 - 151	1	20
12. sec-Butylbenzene	<26.9	µg/kg(wet)	5,000	4,776	4,817	96	96	68 - 147	0	20
13. tert-Butylbenzene	<25.0	µg/kg(wet)	5,000	4,679	4,658	94	93	68 - 140	1	20
14. Carbon Disulfide	<100	µg/kg(wet)	5,000	4,638	4,591	93	92	36 - 143	1	20
15. Carbon Tetrachloride	<50.0	µg/kg(wet)	5,000	4,635	4,653	93	93	50 - 159	0	20
16. Chlorobenzene	<50.0	µg/kg(wet)	5,000	4,480	4,515	90	90	72 - 135	0	20
17. Chloroethane	<250	µg/kg(wet)	5,000	4,906	4,970	98	99	16 - 207	1	20
18. Chloroform	<50.0	µg/kg(wet)	5,000	4,083	4,001	82	80	47 - 159	2	20
19. Chloromethane	<50.0	µg/kg(wet)	5,000	4,568	4,406	91	88	14 - 185	3	20
20. Cyclohexane	**103**	µg/kg(wet)	5,000	4,984	4,991	98	98	52 - 195	0	20
21. Dibromochloromethane	<50.0	µg/kg(wet)	5,000	4,992	5,019	100	100	59 - 130	0	20
22. 1,2-Dibromo-3-chloropropane (SIM)	<25.0	µg/kg(wet)	5,000	4,861	4,743	97	95	34 - 164	2	20
23. Dibromomethane	<50.0	µg/kg(wet)	5,000	4,131	4,039	83	81	66 - 134	2	20
24. 1,2-Dichlorobenzene	<25.0	µg/kg(wet)	5,000	4,377	4,297	88	86	76 - 128	2	20
25. 1,3-Dichlorobenzene	<25.0	µg/kg(wet)	5,000	4,399	4,406	88	88	72 - 136	0	20
26. 1,4-Dichlorobenzene	<50.0	µg/kg(wet)	5,000	4,350	4,299	87	86	74 - 127	1	20
27. trans-1,4-Dichloro-2-butene (SIM)	<25.0	µg/kg(wet)	5,000	4,981	4,859	100	97	56 - 153	3	
28. Dichlorodifluoromethane	<125	µg/kg(wet)	5,000	4,714	4,509	94	90	10 - 207	4	20
29. 1,1-Dichloroethane	<50.0	µg/kg(wet)	5,000	4,241	4,186	85	84	42 - 157	1	20
30. 1,2-Dichloroethane	<50.0	µg/kg(wet)	5,000	3,892	3,863	78	77	56 - 146	1	20
31. 1,1-Dichloroethene	<25.0	µg/kg(wet)	5,000	4,392	4,371	88	87	34 - 165	1	20
32. cis-1,2-Dichloroethene	<25.0	µg/kg(wet)	5,000	4,271	4,243	85	85	43 - 170	0	20
33. trans-1,2-Dichloroethene	<25.0	µg/kg(wet)	5,000	4,275	4,291	86	86	49 - 162	0	20
34. 1,2-Dichloropropane	<50.0	µg/kg(wet)	5,000	4,454	4,519	89	90	62 - 151	1	20
35. cis-1,3-Dichloropropene	<50.0	µg/kg(wet)	5,000	4,646	4,714	93	94	45 - 156	1	20
36. trans-1,3-Dichloropropene	<50.0	µg/kg(wet)	5,000	4,799	4,803	96	96	40 - 157	0	20
37. Diethyl Ether	<50.0	µg/kg(wet)	5,000	4,650	4,498	93	90	30 - 167	3	20
38. Diisopropyl Ether	<25.0	µg/kg(wet)	5,000	5,037	4,978	101	100	38 - 167	1	20

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Quality Control Report
Matrix Spike Summary
Laboratory Project Number: 57682

Client Identification: **Bureau Veritas North America, Inc.** Client Project Name: **PSC-PETRO-CHEM** Client Project No: **11013-000191**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable

Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) **Matrix: Soil/Solid**

Parent Sample:	**57682-009**	Description:	**BSB-26 (5-7)**	Sample No:	**9**	Collect Date:	**08/27/13 12:50**
MS Sample ID:	**57682-010**	Description:	**BSB-26 MS**	Sample No:	**10**	Collect Date:	**08/27/13 13:00**
MSD Sample ID:	**57682-011**	Description:	**BSB-26 MSD**	Sample No:	**11**	Collect Date:	**08/27/13 13:00**

Parameter(s)	Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	MS/MSD LCL - UCL	RPD %	RPD UCL
39. ETBE	<25.0	µg/kg(wet)	5,000	4,857	4,770	97	95	40 - 159	2	20
40. Ethylbenzene	**68.1**	µg/kg(wet)	5,000	4,384	4,507	86	89	76 - 137	3	20
41. Ethylene Dibromide	<50.0	µg/kg(wet)	5,000	4,650	4,537	93	91	71 - 133	2	20
42. Hexachloroethane	<100	µg/kg(wet)	5,000	5,384	5,491	108	110	42 - 151	2	20
43. 2-Hexanone	<250	µg/kg(wet)	5,000	5,134	5,026	103	101	29 - 211	2	20
44. Isopropylbenzene	<64.6	µg/kg(wet)	5,000	4,598	4,716	92	94	68 - 153	2	20
45. 4-Isopropyltoluene	<25.0	µg/kg(wet)	5,000	4,892	4,926	98	99	75 - 139	1	20
46. Methyl Iodide	<100	µg/kg(wet)	5,000	4,446	4,480	89	90	17 - 150	1	20
47. Methylene Chloride	<25.0	µg/kg(wet)	5,000	4,210	4,058	84	81	38 - 180	4	20
48. 2-Methylnaphthalene	<271	µg/kg(wet)	5,000	4,893	5,024	98	100	42 - 202	2	20
49. 4-Methyl-2-pentanone	<500	µg/kg(wet)	5,000	4,886	5,079	98	102	55 - 161	4	20
50. MTBE	<50.0	µg/kg(wet)	5,000	4,667	4,563	93	91	58 - 147	2	20
51. Naphthalene	<250	µg/kg(wet)	5,000	4,604	4,695	92	94	45 - 180	2	20
52. n-Propylbenzene	**68.7**	µg/kg(wet)	5,000	4,579	4,639	90	91	71 - 146	1	20
53. Styrene	<25.0	µg/kg(wet)	5,000	4,663	4,696	93	94	72 - 138	1	20
54. TAME	<100	µg/kg(wet)	5,000	4,474	4,554	89	91	51 - 135	2	20
55. 1,1,1,2-Tetrachloroethane	<50.0	µg/kg(wet)	5,000	4,885	4,921	98	98	61 - 131	0	20
56. 1,1,2,2-Tetrachloroethane	<50.0	µg/kg(wet)	5,000	4,713	4,553	94	91	72 - 145	3	20
57. Tetrachloroethene	<25.0	µg/kg(wet)	5,000	4,575	4,612	92	92	50 - 151	0	20
58. Tetrahydrofuran	<250	µg/kg(wet)	5,000	4,311	4,091	86	82	28 - 169	5	20
59. Toluene	**187**	µg/kg(wet)	5,000	4,098	4,293	78	82	65 - 144	5	20
60. 1,2,3-Trichlorobenzene	<50.0	µg/kg(wet)	5,000	4,632	4,480	93	90	50 - 161	3	20
61. 1,2,4-Trichlorobenzene	<50.0	µg/kg(wet)	5,000	4,454	4,397	89	88	54 - 152	1	20
62. 1,1,1-Trichloroethane	<50.0	µg/kg(wet)	5,000	4,175	4,199	83	84	46 - 156	1	20
63. 1,1,2-Trichloroethane	<50.0	µg/kg(wet)	5,000	4,692	4,655	94	93	80 - 129	1	20
64. Trichloroethene	<50.0	µg/kg(wet)	5,000	4,399	4,479	88	90	65 - 144	2	20
65. Trichlorofluoromethane	<50.0	µg/kg(wet)	5,000	4,872	4,803	97	96	31 - 226	1	20
66. 1,2,3-Trichloropropane	<100	µg/kg(wet)	5,000	4,522	4,410	90	88	74 - 139	2	20
67. 1,2,3-Trimethylbenzene	<56.5	µg/kg(wet)	5,000	4,457	4,521	89	90	77 - 133	1	20
68. 1,2,4-Trimethylbenzene	**112**	µg/kg(wet)	5,000	4,673	4,770	91	93	71 - 139	2	20
69. 1,3,5-Trimethylbenzene	<25.0	µg/kg(wet)	5,000	4,689	4,741	94	95	71 - 138	1	20
70. Vinyl Chloride	<25.0	µg/kg(wet)	5,000	4,600	4,467	92	89	25 - 189	3	20
71. m&p-Xylene	**191**	µg/kg(wet)	10,000	8,720	8,984	85	88	69 - 134	3	20
72. o-Xylene	**183**	µg/kg(wet)	5,000	4,421	4,621	85	89	69 - 134	5	20

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QA limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Laboratory Approval:

Daryl Strandbergh
Laboratory Approval

Daryl P. Strandbergh
Laboratory Director

Holly Law
Laboratory Approval

Holly L. Law
Quality Assurance Officer

Accredited in accordance with nelac

Accreditation Number:

E-10395

[redacted]
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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VI13H29B **Preparation Date: 08/29/13**

Parameter | Method Blank (MB) Result µg/L | PQL µg/L | Q | Laboratory Control Sample (LCS) Result µg/L | Spike µg/L | Rec. % | LCL - UCL % | Q | LCS Duplicate (LCD) Rec. % | RPD % | UCL % | Q | Run Code MB | LCS | L

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	L
1. Acetone	U	10.0		99.0	100	99	19 - 165		64	43	20	*	MB-1	LCS-1	LC
2. Acrylonitrile	U	2.00		110	100	110	43 - 155		82	29	20	*	MB-1	LCS-1	LCD-
3. Benzene	U	1.00		95.4	100	95	69 - 137		93	2	20		MB-1	LCS-1	LCD-
4. Bromobenzene	U	1.00		90.1	100	90	65 - 140		92	2	20		MB-1	LCS-1	LC
5. Bromochloromethane	U	1.00		83.2	100	83	83 - 141		74	11	20		MB-1	LCS-1	LC
6. Bromodichloromethane	U	1.00		101	100	101	84 - 144		98	3	20		MB-1	LCS-1	LCD-
7. Bromoform	U	1.00		78.2	100	78	66 - 136		71	9	20		MB-1	LCS-1	LCD-
8. Bromomethane	U	5.00		131	100	131	56 - 172		114	14	20		MB-1	LCS-1	LC
9. 1-Butanol	U	10.0		1,005	1,000	101	25 - 157		74	31	20	*	MB-1	LCS-1	LC
10. 2-Butanone	U	5.00		106	100	106	28 - 176		86	21	20	*	MB-1	LCS-1	LCD-
11. n-Butylbenzene	U	1.00		102	100	102	63 - 149		108	6	20		MB-1	LCS-1	LCD-
12. sec-Butylbenzene	U	1.00		99.0	100	99	61 - 143		101	2	20		MB-1	LCS-1	LC
13. tert-Butylbenzene	U	1.00		99.8	100	100	70 - 139		101	1	20		MB-1	LCS-1	LC
14. Carbon Disulfide	U	1.00		90.7	100	91	27 - 166		88	3	20		MB-1	LCS-1	LCD-
15. Carbon Tetrachloride	U	1.00		108	100	108	70 - 140		103	5	20		MB-1	LCS-1	LCD-1
16. Chlorobenzene	U	1.00		96.3	100	96	88 - 126		96	0	20		MB-1	LCS-1	LC
17. Chloroethane	U	5.00		79.8	100	80	33 - 172		74	8	20		MB-1	LCS-1	LC
18. Chloroform	U	1.00		90.0	100	90	66 - 138		89	1	20		MB-1	LCS-1	LCD-1
19. Chloromethane	U	2.00		99.2	100	99	45 - 153		89	11	20		MB-1	LCS-1	LCD-1
20. 2-Chlorotoluene	U	1.00		92.8	100	93	75 - 137		95	2	20		MB-1	LCS-1	LC
21. Cyclohexane	U	1.00		96.7	100	97	42 - 156		96	1	20		MB-1	LCS-1	LC
22. Dibromochloromethane	U	1.00		108	100	108	83 - 127		113	5	20		MB-1	LCS-1	LCD-1
23. 1,2-Dibromo-3-chloropropane (SIM)	U	1.00		114	100	114	56 - 134		111	3	20		MB-1	LCS-1	LCD-1
24. Dibromomethane	U	1.00		108	100	108	67 - 148		102	6	20		MB-1	LCS-1	LC
25. 1,2-Dichlorobenzene	U	1.00		103	100	103	71 - 154		103	0	20		MB-1	LCS-1	LC
26. 1,3-Dichlorobenzene	U	1.00		97.1	100	97	74 - 156		97	0	20		MB-1	LCS-1	LCD-1
27. 1,4-Dichlorobenzene	U	1.00		94.6	100	95	89 - 121		96	1	20		MB-1	LCS-1	LCD-1
28. trans-1,4-Dichloro-2-butene (SIM)	U	1.00		108	100	108	47 - 164		104	4	20		MB-1	LCS-1	LC
29. Dichlorodifluoromethane	U	5.00		105	100	105	44 - 188		105	0	20		MB-1	LCS-1	LC
30. 1,1-Dichloroethane	U	1.00		90.3	100	90	59 - 145		89	1	20		MB-1	LCS-1	LCD-1
31. 1,2-Dichloroethane	U	1.00		95.7	100	96	68 - 143		91	5	20		MB-1	LCS-1	LCD-1
32. 1,1-Dichloroethene	U	1.00		87.3	100	87	56 - 163		85	2	20		MB-1	LCS-1	LC
33. cis-1,2-Dichloroethene	U	1.00		90.8	100	91	54 - 161		88	3	20		MB-1	LCS-1	LC
34. trans-1,2-Dichloroethene	U	1.00		88.0	100	88	56 - 153		88	0	20		MB-1	LCS-1	LCD-1
35. 1,2-Dichloropropane	U	1.00		98.2	100	98	66 - 135		95	3	20		MB-1	LCS-1	LCD-1
36. 1,3-Dichloropropane	U	1.00		101	100	101	75 - 136		104	3	20		MB-1	LCS-1	LC
37. 2,2-Dichloropropane	U	1.00		98.1	100	98	53 - 176		96	2	20		MB-1	LCS-1	LC
38. 1,1-Dichloropropene	U	1.00		94.7	100	95	62 - 152		93	2	20		MB-1	LCS-1	LCD-1
39. cis-1,3-Dichloropropene	U	1.00		105	100	105	81 - 144		101	4	20		MB-1	LCS-1	LCD-1
40. trans-1,3-Dichloropropene	U	1.00		106	100	106	66 - 150		101	5	20		MB-1	LCS-1	LC
41. Diethyl Ether	U	2.00		90.9	100	91	37 - 153		89	2	20		MB-1	LCS-1	LC
42. Diisopropyl Ether	U	1.00		94.5	100	95	42 - 156		93	2	20		MB-1	LCS-1	LCD-1
43. ETBE	U	1.00		94.1	100	94	49 - 150		93	1	20		MB-1	LCS-1	LCD-1
44. Ethylbenzene	U	1.00		97.1	100	97	88 - 131		97	0	20		MB-1	LCS-1	LC
45. Ethylene Dibromide	U	1.00		103	100	103	86 - 131		104	1	20		MB-1	LCS-1	LC
46. Hexachlorobutadiene	U	5.00		117	100	117	72 - 144		138	16	20		MB-1	LCS-1	LCD-1
47. Hexachloroethane	U	1.00		104	100	104	87 - 171		104	0	20		MB-1	LCS-1	LCD-1
48. 2-Hexanone	U	5.00		112	100	112	37 - 183		102	9	20		MB-1	LCS-1	LC
49. Isopropylbenzene	U	1.00		100	100	100	89 - 148		95	5	20		MB-1	LCS-1	LC

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VI13H29B **Preparation Date:** 08/29/13

Method Blank (MB) Laboratory Control Sample (LCS) LCS Duplicate (LCD) Run Code
Parameter Result µg/L PQL µg/L Q Result µg/L Spike µg/L Rec. % LCL - UCL % Q Rec. % RPD % UCL % Q MB LCS LCD

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
50. 4-Isopropyltoluene	U	1.00		105	100	105	86 - 142		108	3	20		MB-1	LCS-1	LCD-1
51. Methyl Iodide	U	1.00		95.0	100	95	38 - 159		100	5	20		MB-1	LCS-1	LCD-1
52. Methylene Chloride	U	5.00		85.3	100	85	38 - 149		77	10	20		MB-1	LCS-1	LCD-1
53. 2-Methylnaphthalene	U	5.00		120	100	120	49 - 157		133	10	20		MB-1	LCS-1	LCD-1
54. 4-Methyl-2-pentanone	U	5.00		113	100	113	60 - 152		98	14	20		MB-1	LCS-1	LCD-1
55. MTBE	U	2.00		96.1	100	96	54 - 144		94	2	20		MB-1	LCS-1	LCD-1
56. Naphthalene	U	5.00		114	100	114	64 - 158		123	8	20		MB-1	LCS-1	LCD-1
57. n-Propylbenzene	U	1.00		96.3	100	96	64 - 146		98	2	20		MB-1	LCS-1	LCD-1
58. Styrene	U	1.00		91.7	100	92	79 - 129		86	7	20		MB-1	LCS-1	LCD-1
59. TAME	U	1.00		100	100	100	66 - 133		97	3	20		MB-1	LCS-1	LCD-1
60. 1,1,1,2-Tetrachloroethane	U	1.00		103	100	103	84 - 135		101	2	20		MB-1	LCS-1	LCD-1
61. 1,1,2,2-Tetrachloroethane	U	1.00		105	100	105	69 - 141		102	3	20		MB-1	LCS-1	LCD-1
62. Tetrachloroethene	U	1.00		98.8	100	99	81 - 145		104	5	20		MB-1	LCS-1	LCD-1
63. Tetrahydrofuran	U	5.00		100	100	100	33 - 148		82	20	20		MB-1	LCS-1	LCD-1
64. Toluene	U	1.00		95.1	100	95	77 - 135		92	3	20		MB-1	LCS-1	LCD-1
65. 1,2,3-Trichlorobenzene	U	5.00		113	100	113	74 - 147		130	14	20		MB-1	LCS-1	LCD-1
66. 1,2,4-Trichlorobenzene	U	5.00		109	100	109	73 - 152		125	14	20		MB-1	LCS-1	LCD-1
67. 1,1,1-Trichloroethane	U	1.00		92.5	100	92	69 - 143		92	0	20		MB-1	LCS-1	LCD-1
68. 1,1,2-Trichloroethane	U	1.00		101	100	101	84 - 122		104	3	20		MB-1	LCS-1	LCD-1
69. Trichloroethene	U	1.00		101	100	101	72 - 143		98	3	20		MB-1	LCS-1	LCD-1
70. Trichlorofluoromethane	U	1.00		88.0	100	88	41 - 181		88	0	20		MB-1	LCS-1	LCD-1
71. 1,2,3-Trichloropropane	U	1.00		99.6	100	100	82 - 127		97	3	20		MB-1	LCS-1	LCD-1
72. 1,2,3-Trimethylbenzene	U	1.00		97.7	100	98	80 - 133		100	2	20		MB-1	LCS-1	LCD-1
73. 1,2,4-Trimethylbenzene	U	1.00		101	100	101	81 - 140		102	1	20		MB-1	LCS-1	LCD-1
74. 1,3,5-Trimethylbenzene	U	1.00		100	100	100	82 - 140		102	2	20		MB-1	LCS-1	LCD-1
75. Vinyl Chloride	U	1.00		86.2	100	86	40 - 174		84	2	20		MB-1	LCS-1	LCD-1
76. m&p-Xylene	U	1.00		195	200	98	86 - 133		96	2	20		MB-1	LCS-1	LCD-1
77. o-Xylene	U	1.00		90.3	100	90	85 - 131		87	3	20		MB-1	LCS-1	LCD-1

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VI13H29B **Preparation Date:** 08/29/13

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

System Monitoring Compounds (Surrogates):	Method Blank (MB) Result µg/L	Spike µg/L	Rec. %	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
1. Dibromofluoromethane(S)	47.0	50.0	94		46.4	50.0	93	67 - 130		92	1	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	47.6	50.0	95		46.4	50.0	93	58 - 133		88	6	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	48.7	50.0	97		48.1	50.0	96	77 - 114		93	3	20		MB-1	LCS-1	LCD-1
4. 4-Bromofluorobenzene(S)	48.6	50.0	97		47.9	50.0	96	65 - 115		89	8	20		MB-1	LCS-1	LCD-1

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	VI13H29B	08/30/13 00:02
LCS-1	VI13H29B	08/29/13 22:42
LCD-1	VI13H29B	08/29/13 23:09

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Jeffrey LeClair

Jeffrey LeClair
Chemist, Volatile Organics
Tuesday, September 03, 2013
11:32:01 AM

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: VJ13H30A **Preparation Date:** 08/30/13

Method Blank (MB) Laboratory Control Sample (LCS) LCS Duplicate (LCD) Run Code
Parameter Result µg/kg PQL µg/kg Q Result µg/kg Spike µg/kg Rec. % LCL - UCL % Q Rec. % RPD % UCL % Q MB LCS LCD

	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
Parameter	Result µg/kg	PQL µg/kg	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Acetone	U	500		4,231	5,000	85	40 - 207		82	4	20		MB-1	LCS-1	LCD-1
2. Acrylonitrile	U	50.0		5,335	5,000	107	45 - 180		107	0	20		MB-1	LCS-1	LCD-1
3. Benzene	U	25.0		5,189	5,000	104	63 - 141		97	7	20		MB-1	LCS-1	LCD-1
4. Bromobenzene	U	100		5,690	5,000	114	70 - 144		107	6	20		MB-1	LCS-1	LCD-1
5. Bromochloromethane	U	50.0		5,058	5,000	101	42 - 161		99	2	20		MB-1	LCS-1	LCD-1
6. Bromodichloromethane	U	25.0		5,498	5,000	110	60 - 150		105	5	20		MB-1	LCS-1	LCD-1
7. Bromoform	U	100		4,967	5,000	99	50 - 117		99	0	20		MB-1	LCS-1	LCD-1
8. Bromomethane	U	100		5,348	5,000	107	58 - 217		102	5	20		MB-1	LCS-1	LCD-1
9. t-Butanol	U	1,000		51,431	50,000	103	42 - 156		91	12	20		MB-1	LCS-1	LCD-1
10. 2-Butanone	U	500		5,307	5,000	106	42 - 193		104	2	20		MB-1	LCS-1	LCD-1
11. n-Butylbenzene	U	25.0		6,024	5,000	120	65 - 151		115	4	20		MB-1	LCS-1	LCD-1
12. sec-Butylbenzene	U	50.0		5,776	5,000	116	68 - 147		110	5	20		MB-1	LCS-1	LCD-1
13. tert-Butylbenzene	U	25.0		5,887	5,000	118	68 - 140		110	7	20		MB-1	LCS-1	LCD-1
14. Carbon Disulfide	U	50.0		4,816	5,000	96	36 - 143		90	6	20		MB-1	LCS-1	LCD-1
15. Carbon Tetrachloride	U	50.0		6,610	5,000	132	50 - 159		123	7	20		MB-1	LCS-1	LCD-1
16. Chlorobenzene	U	50.0		5,116	5,000	102	72 - 135		99	3	20		MB-1	LCS-1	LCD-1
17. Chloroethane	U	250		5,413	5,000	108	16 - 207		107	1	20		MB-1	LCS-1	LCD-1
18. Chloroform	U	25.0		5,128	5,000	103	47 - 159		99	4	20		MB-1	LCS-1	LCD-1
19. Chloromethane	U	100		5,316	5,000	106	14 - 185		100	6	20		MB-1	LCS-1	LCD-1
20. 2-Chlorotoluene	U	50.0		5,612	5,000	112	73 - 141		106	6	20		MB-1	LCS-1	LCD-1
21. Cyclohexane	U	250		5,318	5,000	106	52 - 195		101	5	20		MB-1	LCS-1	LCD-1
22. Dibromochloromethane	U	100		5,427	5,000	109	59 - 130		104	5	20		MB-1	LCS-1	LCD-1
23. 1,2-Dibromo-3-chloropropane (SIM)	U	25.0		5,509	5,000	110	34 - 164		107	3	20		MB-1	LCS-1	LCD-1
24. Dibromomethane	U	250		4,536	5,000	91	66 - 134		86	6	20		MB-1	LCS-1	LCD-1
25. 1,2-Dichlorobenzene	U	25.0		5,374	5,000	107	76 - 128		102	5	20		MB-1	LCS-1	LCD-1
26. 1,3-Dichlorobenzene	U	25.0		5,276	5,000	106	72 - 136		100	6	20		MB-1	LCS-1	LCD-1
27. 1,4-Dichlorobenzene	U	50.0		4,996	5,000	100	74 - 127		95	5	20		MB-1	LCS-1	LCD-1
28. trans-1,4-Dichloro-2-butene (SIM)	U	25.0		7,035	5,000	141	56 - 153		135	4	20		MB-1	LCS-1	LCD-1
29. Dichlorodifluoromethane	U	100		5,416	5,000	108	10 - 207		102	6	20		MB-1	LCS-1	LCD-1
30. 1,1-Dichloroethane	U	50.0		5,286	5,000	106	42 - 157		101	5	20		MB-1	LCS-1	LCD-1
31. 1,2-Dichloroethane	U	50.0		5,737	5,000	115	58 - 146		111	4	20		MB-1	LCS-1	LCD-1
32. 1,1-Dichloroethene	U	50.0		5,574	5,000	111	34 - 165		106	5	20		MB-1	LCS-1	LCD-1
33. cis-1,2-Dichloroethene	U	25.0		5,440	5,000	109	43 - 170		103	6	20		MB-1	LCS-1	LCD-1
34. trans-1,2-Dichloroethene	U	25.0		5,481	5,000	110	49 - 162		101	9	20		MB-1	LCS-1	LCD-1
35. 1,2-Dichloropropane	U	50.0		5,367	5,000	107	62 - 151		102	5	20		MB-1	LCS-1	LCD-1
36. 1,3-Dichloropropane	U	25.0		5,489	5,000	110	77 - 132		110	0	20		MB-1	LCS-1	LCD-1
37. 2,2-Dichloropropane	U	25.0		7,547	5,000	151	52 - 169		140	8	20		MB-1	LCS-1	LCD-1
38. 1,1-Dichloropropene	U	50.0		5,491	5,000	110	52 - 153		103	7	20		MB-1	LCS-1	LCD-1
39. cis-1,3-Dichloropropene	U	25.0		5,852	5,000	117	45 - 156		110	6	20		MB-1	LCS-1	LCD-1
40. trans-1,3-Dichloropropene	U	25.0		5,918	5,000	118	40 - 157		115	3	20		MB-1	LCS-1	LCD-1
41. Diethyl Ether	U	50.0		5,165	5,000	103	30 - 167		99	4	20		MB-1	LCS-1	LCD-1
42. Diisopropyl Ether	U	25.0		5,757	5,000	115	38 - 167		111	4	20		MB-1	LCS-1	LCD-1
43. ETBE	U	50.0		5,747	5,000	115	40 - 159		111	4	20		MB-1	LCS-1	LCD-1
44. Ethylbenzene	U	50.0		5,588	5,000	112	76 - 137		106	6	20		MB-1	LCS-1	LCD-1
45. Ethylene Dibromide	U	50.0		5,161	5,000	103	71 - 133		100	3	20		MB-1	LCS-1	LCD-1
46. Hexachlorobutadiene	U	250		5,093	5,000	102	79 - 142		101	1	20		MB-1	LCS-1	LCD-1
47. Hexachloroethane	U	50.0		5,738	5,000	115	42 - 151		108	6	20		MB-1	LCS-1	LCD-1
48. 2-Hexanone	U	250		6,202	5,000	124	29 - 211		126	2	20		MB-1	LCS-1	LCD-1
49. Isopropylbenzene	U	250		5,342	5,000	107	68 - 153		104	3	20		MB-1	LCS-1	LCD-1

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8660 S. Mackinaw Trail *Cadillac, MI 49601* *T: (231) 775-8368* *F: (231) 775-8584*

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: VJ13H30A **Preparation Date:** 08/30/13

Parameter	Method Blank (MB) Result µg/kg	PQL µg/kg	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
50. 4-Isopropyltoluene	U	100		5,693	5,000	114	75 - 139		110	4	20		MB-1	LCS-1	LCD-1
51. Methyl Iodide	U	100		5,030	5,000	101	17 - 150		96	5	20		MB-1	LCS-1	LCD-1
52. Methylene Chloride	U	50.0		5,184	5,000	104	38 - 180		100	4	20		MB-1	LCS-1	LCD-1
53. 2-Methylnaphthalene	U	250		4,186	5,000	84	42 - 202		89	6	20		MB-1	LCS-1	LCD-1
54. 4-Methyl-2-pentanone	U	250		5,677	5,000	114	55 - 161		112	2	20		MB-1	LCS-1	LCD-1
55. MTBE	U	250		5,462	5,000	109	58 - 147		107	2	20		MB-1	LCS-1	LCD-1
56. Naphthalene	U	250		5,651	5,000	113	45 - 180		112	1	20		MB-1	LCS-1	LCD-1
57. n-Propylbenzene	U	50.0		5,822	5,000	116	71 - 146		109	6	20		MB-1	LCS-1	LCD-1
58. Styrene	U	25.0		5,688	5,000	114	72 - 138		110	4	20		MB-1	LCS-1	LCD-1
59. TAME	U	50.0		5,618	5,000	112	51 - 135		109	3	20		MB-1	LCS-1	LCD-1
60. 1,1,1,2-Tetrachloroethane	U	50.0		5,289	5,000	106	61 - 131		101	5	20		MB-1	LCS-1	LCD-1
61. 1,1,2,2-Tetrachloroethane	U	50.0		5,359	5,000	107	72 - 145		104	3	20		MB-1	LCS-1	LCD-1
62. Tetrachloroethene	U	50.0		4,734	5,000	95	50 - 151		90	5	20		MB-1	LCS-1	LCD-1
63. Tetrahydrofuran	U	250		5,177	5,000	104	28 - 169		96	8	20		MB-1	LCS-1	LCD-1
64. Toluene	U	25.0		5,254	5,000	105	65 - 144		99	6	20		MB-1	LCS-1	LCD-1
65. 1,2,3-Trichlorobenzene	U	100		5,251	5,000	105	50 - 161		105	0	20		MB-1	LCS-1	LCD-1
66. 1,2,4-Trichlorobenzene	U	250		5,425	5,000	108	54 - 152		108	0	20		MB-1	LCS-1	LCD-1
67. 1,1,1-Trichloroethane	U	50.0		5,452	5,000	109	46 - 156		104	5	20		MB-1	LCS-1	LCD-1
68. 1,1,2-Trichloroethane	U	50.0		5,073	5,000	101	80 - 129		100	1	20		MB-1	LCS-1	LCD-1
69. Trichloroethene	U	50.0		5,017	5,000	100	65 - 144		94	6	20		MB-1	LCS-1	LCD-1
70. Trichlorofluoromethane	U	50.0		6,201	5,000	124	31 - 226		121	2	20		MB-1	LCS-1	LCD-1
71. 1,2,3-Trichloropropane	U	25.0		5,955	5,000	119	74 - 139		106	12	20		MB-1	LCS-1	LCD-1
72. 1,2,3-Trimethylbenzene	U	100		5,772	5,000	115	77 - 133		111	4	20		MB-1	LCS-1	LCD-1
73. 1,2,4-Trimethylbenzene	U	100		5,857	5,000	117	71 - 139		112	4	20		MB-1	LCS-1	LCD-1
74. 1,3,5-Trimethylbenzene	U	100		5,861	5,000	117	71 - 138		110	6	20		MB-1	LCS-1	LCD-1
75. Vinyl Chloride	U	25.0		5,343	5,000	107	25 - 189		100	7	20		MB-1	LCS-1	LCD-1
76. m&p-Xylene	U	100		11,539	10,000	115	69 - 134		111	4	20		MB-1	LCS-1	LCD-1
77. o-Xylene	U	50.0		5,698	5,000	114	69 - 134		111	3	20		MB-1	LCS-1	LCD-1

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: VJ13H30A **Preparation Date: 08/30/13**

Parameter	Method Blank (MB) Result µg/kg	PQL µg/kg	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

System Monitoring Compounds (Surrogates):	Method Blank (MB) Result µg/kg	Spike µg/kg	Rec. %	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
1. Dibromofluoromethane(S)	2,558	2,500	102		2,387	2,500	95	53 - 139		97	2	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	3,079	2,500	123		2,977	2,500	119	64 - 135		119	0	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	2,548	2,500	102		2,537	2,500	101	70 - 130		101	0	20		MB-1	LCS-1	LCD-1
4. 4-Bromofluorobenzene(S)	2,565	2,500	103		2,658	2,500	106	71 - 129		106	0	20		MB-1	LCS-1	LCD-1

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	VJ13H30A	08/30/13 12:00
LCS-1	VJ13H30A	08/30/13 09:49
LCD-1	VJ13H30A	08/30/13 10:15

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Carine Dempsey

Carine Dempsey
Chemist, Volatile Organics
Tuesday, September 03, 2013
11:19:29 AM

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

DW
09-03-13

Preparation Batch: VH13H30B **Preparation Date: 08/30/13**

Method Blank (MB) Laboratory Control Sample (LCS) LCS Duplicate (LCD) Run Code
Result µg/L PQL µg/L Q Result µg/L Spike µg/L Rec. % LCL - UCL % Q Rec. % RPD % UCL % Q MB LCS LCD
Parameter

	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
Parameter	Result µg/L	PQL µg/L	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Acetone	U	10.0		117	100	117	19 - 165		129	10	20		MB-1	LCS-1	LCD
2. Acrylonitrile	U	1.00		122	100	122	43 - 155		129	6	20		MB-1	LCS-1	LCD-1
3. Benzene	U	1.00		108	100	108	69 - 137		99	9	20		MB-1	LCS-1	LCD
4. Bromobenzene	U	1.00		107	100	107	65 - 140		102	5	20		MB-1	LCS-1	LCD
5. Bromochloromethane	U	1.00		95.7	100	96	33 - 141		90	6	20		MB-1	LCS-1	LCD
6. Bromodichloromethane	U	1.00		128	100	128	84 - 144		120	6	20		MB-1	LCS-1	LCD-1
7. Bromoform	U	1.00		129	100	129	66 - 136		133	3	20		MB-1	LCS-1	LCD
8. Bromomethane	U	2.00		122	100	122	56 - 172		95	25	20	*	MB-1	LCS-1	LCD
9. t-Butanol	U	5.00		898	1,000	90	25 - 157		112	22	20	*	MB-1	LCS-1	LCD
10. 2-Butanone	U	5.00		86.4	100	86	28 - 176		96	11	20		MB-1	LCS-1	LCD-1
11. n-Butylbenzene	U	1.00		135	100	135	63 - 149		126	7	20		MB-1	LCS-1	LCD
12. sec-Butylbenzene	U	1.00		119	100	119	61 - 143		110	8	20		MB-1	LCS-1	LCD
13. tert-Butylbenzene	U	1.00		122	100	122	70 - 139		114	7	20		MB-1	LCS-1	LCD
14. Carbon Disulfide	U	0.500		115	100	115	27 - 166		99	15	20		MB-1	LCS-1	LCD-1
15. Carbon Tetrachloride	U	1.00		115	100	115	70 - 140		102	12	20		MB-1	LCS-1	LCD
16. Chlorobenzene	U	1.00		98.9	100	99	88 - 126		93	6	20		MB-1	LCS-1	LCD
17. Chloroethane	U	2.00		166	100	166	33 - 172		155	7	20		MB-1	LCS-1	LCD
18. Chloroform	U	1.00		112	100	112	66 - 138		103	8	20		MB-1	LCS-1	LCD-1
19. Chloromethane	U	1.06		115	100	115	45 - 153		103	11	20		MB-1	LCS-1	LCD
20. 2-Chlorotoluene	U	0.864		117	100	117	75 - 137		110	6	20		MB-1	LCS-1	LCD
21. 4-Chlorotoluene	U	1.00		117	100	117	79 - 137		112	4	20		MB-1	LCS-1	LCD
22. Cyclohexane	U	0.973		125	100	125	42 - 156		114	9	20		MB-1	LCS-1	LCD-1
23. Dibromochloromethane	U	1.00		125	100	125	83 - 127		122	2	20		MB-1	LCS-1	LCD
24. 1,2-Dibromo-3-chloropropane (SIM)	U	1.00		140	100	140	66 - 134	*	157	11	20		MB-1	LCS-1	LCD
25. Dibromomethane	U	1.00		104	100	104	67 - 148		104	0	20		MB-1	LCS-1	LCD
26. 1,2-Dichlorobenzene	U	1.00		112	100	112	71 - 154		108	4	20		MB-1	LCS-1	LCD-1
27. 1,3-Dichlorobenzene	U	1.00		112	100	112	74 - 156		106	6	20		MB-1	LCS-1	LCD
28. 1,4-Dichlorobenzene	U	1.00		99.3	100	99	89 - 121		94	5	20		MB-1	LCS-1	LCD
29. trans-1,4-Dichloro-2-butene (SIM)	U	1.00		142	100	142	47 - 164		146	3	20		MB-1	LCS-1	LCD
30. Dichlorodifluoromethane	U	1.33		118	100	118	44 - 188		106	11	20		MB-1	LCS-1	LCD-1
31. 1,1-Dichloroethane	U	1.00		100	100	100	59 - 145		93	7	20		MB-1	LCS-1	LCD
32. 1,2-Dichloroethane	U	0.820		104	100	104	68 - 143		99	5	20		MB-1	LCS-1	LCD
33. 1,1-Dichloroethene	U	1.00		119	100	119	56 - 163		103	14	20		MB-1	LCS-1	LCD
34. cis-1,2-Dichloroethene	U	1.00		109	100	109	54 - 161		101	8	20		MB-1	LCS-1	LCD-1
35. trans-1,2-Dichloroethene	U	1.00		108	100	108	56 - 153		98	10	20		MB-1	LCS-1	LCD-1
36. 1,2-Dichloropropane	U	1.00		104	100	104	86 - 135		98	6	20		MB-1	LCS-1	LCD
37. 1,3-Dichloropropane	U	1.00		111	100	111	75 - 136		109	2	20		MB-1	LCS-1	LCD
38. 2,2-Dichloropropane	U	1.00		90.1	100	90	53 - 176		78	14	20		MB-1	LCS-1	LCD-1
39. 1,1-Dichloropropene	U	1.00		105	100	105	62 - 152		95	10	20		MB-1	LCS-1	LCD-1
40. cis-1,3-Dichloropropene	U	1.00		118	100	118	81 - 144		111	6	20		MB-1	LCS-1	LCD
41. trans-1,3-Dichloropropene	U	1.00		122	100	122	66 - 150		116	5	20		MB-1	LCS-1	LCD
42. Diethyl Ether	U	1.00		120	100	120	37 - 153		112	7	20		MB-1	LCS-1	LCD-1
43. Diisopropyl Ether	U	1.00		90.6	100	91	42 - 156		84	8	20		MB-1	LCS-1	LCD-1
44. ETBE	U	1.00		83.5	100	83	49 - 150		81	2	20		MB-1	LCS-1	LCD
45. Ethylbenzene	U	1.00		112	100	112	88 - 131		105	6	20		MB-1	LCS-1	LCD
46. Ethylene Dibromide	U	0.863		103	100	103	86 - 131		104	1	20		MB-1	LCS-1	LCD-1
47. Hexachlorobutadiene	U	2.50		115	100	115	72 - 144		108	6	20		MB-1	LCS-1	LCD-1
48. Hexachloroethane	U	1.00		125	100	125	37 - 171		117	7	20		MB-1	LCS-1	LCD
49. 2-Hexanone	U	2.00		104	100	104	37 - 183		120	14	20		MB-1	LCS-1	LCD

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VH13H30B **Preparation Date: 08/30/13**

	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
Parameter	Result µg/L	PQL µg/L	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
50. Isopropylbenzene	U	0.852		117	100	117	89 - 148		109	7	20		MB-1	LCS-1	LCD-
51. 4-Isopropyltoluene	U	0.634		128	100	128	86 - 142		119	7	20		MB-1	LCS-1	LCD-
52. Methyl Iodide	U	0.540		113	100	113	38 - 159		96	16	20		MB-1	LCS-1	LCD-
53. Methylene Chloride	U	1.00		94.9	100	95	38 - 149		87	9	20		MB-1	LCS-1	LCD-
54. 2-Methylnaphthalene	4.78	1.00	*	105	100	105	49 - 157		122	15	20		MB-1	LCS-1	LCD-
55. 4-Methyl-2-pentanone	U	1.05		131	100	131	60 - 152		147	12	20		MB-1	LCS-1	LCD-
56. MTBE	U	2.00		72.1	100	72	54 - 144		71	1	20		MB-1	LCS-1	LCD-
57. Naphthalene	U	1.00		130	100	130	64 - 158		138	6	20		MB-1	LCS-1	LCD-
58. n-Propylbenzene	U	1.00		118	100	118	64 - 146		110	7	20		MB-1	LCS-1	LCD-
59. Styrene	U	1.00		117	100	117	79 - 129		112	4	20		MB-1	LCS-1	LCD-
60. TAME	U	1.00		63.3	100	63	66 - 133	*	62	2	20		MB-1	LCS-1	LCD-
61. 1,1,1,2-Tetrachloroethane	U	1.00		115	100	115	84 - 135		110	4	20		MB-1	LCS-1	LCD-
62. 1,1,2,2-Tetrachloroethane	U	1.00		117	100	117	69 - 141		124	6	20		MB-1	LCS-1	LCD-
63. Tetrachloroethene	U	1.00		110	100	110	81 - 145		103	7	20		MB-1	LCS-1	LCD-
64. Tetrahydrofuran	U	5.00		85.9	100	86	33 - 148		96	11	20		MB-1	LCS-1	LCD-
65. Toluene	U	1.00		107	100	107	77 - 135		99	8	20		MB-1	LCS-1	LCD-
66. 1,2,3-Trichlorobenzene	U	1.00		117	100	117	74 - 147		116	1	20		MB-1	LCS-1	LCD-
67. 1,2,4-Trichlorobenzene	U	1.00		118	100	118	73 - 152		116	3	20		MB-1	LCS-1	LCD-
68. 1,1,1-Trichloroethane	U	1.00		101	100	101	69 - 143		91	10	20		MB-1	LCS-1	LCD-
69. 1,1,2-Trichloroethane	U	1.00		100	100	100	84 - 122		99	1	20		MB-1	LCS-1	LCD-
70. Trichloroethene	U	1.00		108	100	108	72 - 143		102	6	20		MB-1	LCS-1	LCD-
71. Trichlorofluoromethane	U	1.00		152	100	152	41 - 181		128	17	20		MB-1	LCS-1	LCD-
72. 1,2,3-Trichloropropane	U	1.00		99.7	100	100	82 - 127		106	6	20		MB-1	LCS-1	LCD-
73. 1,2,3-Trimethylbenzene	U	1.00		114	100	114	80 - 133		107	6	20		MB-1	LCS-1	LCD-
74. 1,2,4-Trimethylbenzene	U	1.00		120	100	120	81 - 140		113	6	20		MB-1	LCS-1	LCD-
75. 1,3,5-Trimethylbenzene	U	1.00		118	100	118	82 - 140		110	7	20		MB-1	LCS-1	LCD-
76. Vinyl Chloride	U	1.00		114	100	114	40 - 174		88	26	20	*	MB-1	LCS-1	LCD-
77. m&p-Xylene	U	1.00		230	200	115	86 - 133		108	6	20		MB-1	LCS-1	LCD-
78. o-Xylene	U	1.00		120	100	120	85 - 131		113	6	20		MB-1	LCS-1	LCD-

Fibertec environmental services

Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VH13H30B **Preparation Date:** 08/30/13

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

System Monitoring Compounds (Surrogates):	Method Blank (MB) Result µg/L	Spike µg/L	Rec. %	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LC
1. Dibromofluoromethane(S)	98.6	100	99		99.4	100	99	67 - 130		98	1	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	108	100	108		106	100	106	58 - 133		106	0	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	109	100	109		109	100	109	77 - 114		110	1	20		MB-1	LCS-1	LCD
4. 4-Bromofluorobenzene(S)	109	100	109		107	100	107	65 - 115		106	1	20		MB-1	LCS-1	LCD

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	VH13H30B	08/31/13 04:08
LCS-1	VH13H30B	08/31/13 02:47
LCD-1	VH13H30B	08/31/13 03:14

Exception Summary:

Exceptions have been properly noted on reported results or effected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Douglas Holmes

Douglas Holmes
Vice President
Tuesday, September 03, 2013
3:59:53 PM

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OH
09-03-13

Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VH13H30A **Preparation Date: 08/30/13**

	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
Parameter	Result µg/L	PQL µg/L	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Acetone	U	10.0		110	100	110	19 - 165		111	1	20		MB-1	LCS-1	LCD-1
2. Acrylonitrile	U	1.00		125	100	125	43 - 155		123	2	20		MB-1	LCS-1	LCD-1
3. Benzene	U	1.00		107	100	107	69 - 137		103	4	20		MB-1	LCS-1	LCD-1
4. Bromobenzene	U	1.00		108	100	108	65 - 140		99	9	20		MB-1	LCS-1	LCD-1
5. Bromochloromethane	U	1.00		98.5	100	98	33 - 141		94	4	20		MB-1	LCS-1	LCD-1
6. Bromodichloromethane	U	1.00		129	100	129	84 - 144		120	7	20		MB-1	LCS-1	LCD-1
7. Bromoform	U	1.00		135	100	135	66 - 136		125	8	20		MB-1	LCS-1	LCD-1
8. Bromomethane	U	2.00		113	100	113	56 - 172		96	16	20		MB-1	LCS-1	LCD-1
9. t-Butanol	U	5.00		849	1,000	85	25 - 157		82	4	20		MB-1	LCS-1	LCD-1
10. 2-Butanone	U	5.00		86.8	100	87	28 - 176		86	1	20		MB-1	LCS-1	LCD-1
11. n-Butylbenzene	U	1.00		140	100	140	63 - 149		129	8	20		MB-1	LCS-1	LCD-1
12. sec-Butylbenzene	U	1.00		116	100	116	61 - 143		105	10	20		MB-1	LCS-1	LCD-1
13. tert-Butylbenzene	U	1.00		121	100	121	70 - 139		114	6	20		MB-1	LCS-1	LCD-1
14. Carbon Disulfide	U	0.500		116	100	116	27 - 166		113	3	20		MB-1	LCS-1	LCD-1
15. Carbon Tetrachloride	U	1.00		115	100	115	70 - 140		109	5	20		MB-1	LCS-1	LCD-1
16. Chlorobenzene	U	1.00		99.6	100	100	88 - 126		93	7	20		MB-1	LCS-1	LCD-1
17. Chloroethane	U	2.00		176	100	176	33 - 172	*	181	3	20		MB-1	LCS-1	LCD-1
18. Chloroform	U	1.00		113	100	113	66 - 138		106	6	20		MB-1	LCS-1	LCD-1
19. Chloromethane	U	1.06		112	100	112	45 - 153		107	5	20		MB-1	LCS-1	LCD-1
20. 2-Chlorotoluene	U	0.864		118	100	118	75 - 137		109	8	20		MB-1	LCS-1	LCD-1
21. 4-Chlorotoluene	U	1.00		118	100	118	79 - 137		111	6	20		MB-1	LCS-1	LCD-1
22. Cyclohexane	U	0.973		122	100	122	42 - 156		118	3	20		MB-1	LCS-1	LCD-1
23. Dibromochloromethane	U	1.00		127	100	127	83 - 127		118	7	20		MB-1	LCS-1	LCD-1
24. 1,2-Dibromo-3-chloropropane (SIM)	U	1.00		140	100	140	66 - 134	*	133	5	20		MB-1	LCS-1	LCD-1
25. Dibromomethane	U	1.00		105	100	105	67 - 148		98	7	20		MB-1	LCS-1	LCD-1
26. 1,2-Dichlorobenzene	U	1.00		113	100	113	71 - 154		105	7	20		MB-1	LCS-1	LCD-1
27. 1,3-Dichlorobenzene	U	1.00		113	100	113	74 - 156		106	6	20		MB-1	LCS-1	LCD-1
28. 1,4-Dichlorobenzene	U	1.00		100	100	100	89 - 121		94	6	20		MB-1	LCS-1	LCD-1
29. trans-1,4-Dichloro-2-butene (SIM)	U	1.00		150	100	150	47 - 164		141	6	20		MB-1	LCS-1	LCD-1
30. Dichlorodifluoromethane	U	1.33		109	100	109	44 - 188		103	6	20		MB-1	LCS-1	LCD-1
31. 1,1-Dichloroethane	U	1.00		101	100	101	69 - 145		94	7	20		MB-1	LCS-1	LCD-1
32. 1,2-Dichloroethane	U	0.820		107	100	107	68 - 143		100	7	20		MB-1	LCS-1	LCD-1
33. 1,1-Dichloroethene	U	1.00		118	100	118	56 - 163		116	2	20		MB-1	LCS-1	LCD-1
34. cis-1,2-Dichloroethene	U	1.00		109	100	109	54 - 161		102	7	20		MB-1	LCS-1	LCD-1
35. trans-1,2-Dichloroethene	U	1.00		108	100	108	66 - 153		101	7	20		MB-1	LCS-1	LCD-1
36. 1,2-Dichloropropane	U	1.00		104	100	104	66 - 135		96	8	20		MB-1	LCS-1	LCD-1
37. 1,3-Dichloropropane	U	1.00		112	100	112	75 - 136		104	7	20		MB-1	LCS-1	LCD-1
38. 2,2-Dichloropropane	U	1.00		116	100	116	53 - 176		103	12	20		MB-1	LCS-1	LCD-1
39. 1,1-Dichloropropene	U	1.00		105	100	105	62 - 152		98	7	20		MB-1	LCS-1	LCD-1
40. cis-1,3-Dichloropropene	U	1.00		124	100	124	81 - 144		113	9	20		MB-1	LCS-1	LCD-1
41. trans-1,3-Dichloropropene	U	1.00		130	100	130	66 - 150		121	7	20		MB-1	LCS-1	LCD-1
42. Diethyl Ether	U	1.00		122	100	122	37 - 153		120	2	20		MB-1	LCS-1	LCD-1
43. Diisopropyl Ether	U	1.00		89.5	100	90	42 - 156		82	9	20		MB-1	LCS-1	LCD-1
44. ETBE	U	1.00		75.6	100	76	49 - 150		70	8	20		MB-1	LCS-1	LCD-1
45. Ethylbenzene	U	1.00		113	100	113	88 - 131		104	8	20		MB-1	LCS-1	LCD-1
46. Ethylene Dibromide	U	0.863		104	100	103	86 - 131		96	7	20		MB-1	LCS-1	LCD-1
47. Hexachlorobutadiene	U	2.50		122	100	122	72 - 144		113	8	20		MB-1	LCS-1	LCD-1
48. Hexachloroethane	U	1.00		130	100	130	37 - 171		120	8	20		MB-1	LCS-1	LCD-1
49. 2-Hexanone	U	2.00		106	100	106	37 - 183		101	5	20		MB-1	LCS-1	LCD-1

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VH13H30A **Preparation Date:** 08/30/13

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
50. Isopropylbenzene	U	0.852		117	100	117	89 - 148		108	8	20		MB-1	LCS-1	LCD-1
51. 4-Isopropyltoluene	U	0.634		129	100	129	86 - 142		119	8	20		MB-1	LCS-1	LCD-1
52. Methyl Iodide	U	0.540		109	100	109	38 - 159		102	7	20		MB-1	LCS-1	LCD
53. Methylene Chloride	U	1.00		95.3	100	95	38 - 149		91	4	20		MB-1	LCS-1	LCD
54. 2-Methylnaphthalene	4.80	1.00	*	110	100	110	49 - 157		105	5	20		MB-1	LCS-1	LCD
55. 4-Methyl-2-pentanone	U	1.05		133	100	133	60 - 152		128	4	20		MB-1	LCS-1	LCD-1
56. MTBE	U	2.00		66.4	100	66	54 - 144		62	6	20		MB-1	LCS-1	LCD
57. Naphthalene	U	1.00		131	100	131	64 - 158		123	6	20		MB-1	LCS-1	LCD
58. n-Propylbenzene	U	1.00		119	100	119	64 - 146		111	7	20		MB-1	LCS-1	LCD
59. Styrene	U	1.00		117	100	117	79 - 129		109	7	20		MB-1	LCS-1	LCD-1
60. TAME	U	1.00		57.8	100	58	66 - 133	*	54	7	20		MB-1	LCS-1	LCD
61. 1,1,1,2-Tetrachloroethane	U	1.00		118	100	118	84 - 135		109	8	20		MB-1	LCS-1	LCD
62. 1,1,2,2-Tetrachloroethane	U	1.00		119	100	119	69 - 141		111	7	20		MB-1	LCS-1	LCD
63. Tetrachloroethene	U	1.00		111	100	111	81 - 145		103	7	20		MB-1	LCS-1	LCD-1
64. Tetrahydrofuran	U	5.00		87.0	100	87	33 - 148		83	5	20		MB-1	LCS-1	LCD
65. Toluene	U	1.00		107	100	107	77 - 135		99	8	20		MB-1	LCS-1	LCD
66. 1,2,3-Trichlorobenzene	U	1.00		119	100	119	74 - 147		112	6	20		MB-1	LCS-1	LCD
67. 1,2,4-Trichlorobenzene	U	1.00		122	100	122	73 - 152		113	8	20		MB-1	LCS-1	LCD-1
68. 1,1,1-Trichloroethane	U	1.00		102	100	102	69 - 143		94	8	20		MB-1	LCS-1	LCD
69. 1,1,2-Trichloroethane	U	1.00		101	100	101	84 - 122		91	10	20		MB-1	LCS-1	LCD
70. Trichloroethene	U	1.00		108	100	108	72 - 143		100	8	20		MB-1	LCS-1	LCD
71. Trichlorofluoromethane	U	1.00		150	100	150	41 - 181		145	3	20		MB-1	LCS-1	LCD-1
72. 1,2,3-Trichloropropane	U	1.00		103	100	102	82 - 127		98	4	20		MB-1	LCS-1	LCD
73. 1,2,3-Trimethylbenzene	U	1.00		115	100	115	80 - 133		106	8	20		MB-1	LCS-1	LCD
74. 1,2,4-Trimethylbenzene	U	1.00		122	100	122	81 - 140		111	9	20		MB-1	LCS-1	LCD
75. 1,3,5-Trimethylbenzene	U	1.00		118	100	118	82 - 140		110	7	20		MB-1	LCS-1	LCD-1
76. Vinyl Chloride	U	1.00		97.2	100	97	40 - 174		91	6	20		MB-1	LCS-1	LCD
77. m&p-Xylene	U	1.00		231	200	116	86 - 133		108	7	20		MB-1	LCS-1	LCD
78. o-Xylene	U	1.00		121	100	121	85 - 131		112	8	20		MB-1	LCS-1	LCD

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VH13H30A **Preparation Date: 08/30/13**

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

System Monitoring Compounds (Surrogates):	Method Blank (MB) Result µg/L	Spike µg/L	Rec. %	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
1. Dibromofluoromethane(S)	108	100	108		101	100	100	67 - 130		102	2	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	110	100	110		110	100	110	58 - 133		109	1	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	109	100	109		109	100	109	77 - 114		108	1	20		MB-1	LCS-1	LCD-1
4. 4-Bromofluorobenzene(S)	111	100	111		107	100	107	65 - 115		106	1	20		MB-1	LCS-1	LCD-1

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	VH13H30A	08/30/13 15:07
LCS-1	VH13H30A	08/30/13 13:00
LCD-1	VH13H30A	08/30/13 14:13

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Douglas Holmes

Douglas Holmes
Vice President
Tuesday, September 03, 2013
3:41:08 PM

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VI13H30A **Preparation Date:** 08/30/13

Method Blank (MB) | Laboratory Control Sample (LCS) | LCS Duplicate (LCD) | Run Code
Parameter | Result µg/L | PQL µg/L | Q | Result µg/L | Spike µg/L | Rec. % | LCL - UCL % | Q | Rec. % | RPD % | UCL % | Q | MB | LCS | LC

	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
Parameter	Result µg/L	PQL µg/L	Q	Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LC
1. Acetone	U	10.0		77.0	100	77	19 - 165		85	10	20		MB-1	LCS-1	LC
2. Acrylonitrile	U	2.00		96.5	100	97	43 - 155		107	10	20		MB-1	LCS-1	LCD-
3. Benzene	U	1.00		95.5	100	96	69 - 137		100	4	20		MB-1	LCS-1	LC
4. Bromobenzene	U	1.00		93.9	100	94	65 - 140		96	2	20		MB-1	LCS-1	LC
5. Bromochloromethane	U	1.00		87.8	100	88	33 - 141		90	2	20		MB-1	LCS-1	LC
6. Bromodichloromethane	U	1.00		102	100	102	84 - 144		105	3	20		MB-1	LCS-1	LCD-
7. Bromoform	U	1.00		72.6	100	73	66 - 135		80	9	20		MB-1	LCS-1	LC
8. Bromomethane	U	5.00		150	100	150	56 - 172		146	3	20		MB-1	LCS-1	LC
9. t-Butanol	U	10.0		464	1,000	46	25 - 157		63	31	20	*	MB-1	LCS-1	LC
10. 2-Butanone	U	5.00		83.1	100	83	28 - 176		97	16	20		MB-1	LCS-1	LCD-
11. n-Butylbenzene	U	1.00		103	100	103	63 - 149		107	4	20		MB-1	LCS-1	LC
12. sec-Butylbenzene	U	1.00		99.5	100	99	61 - 143		104	5	20		MB-1	LCS-1	LC
13. tert-Butylbenzene	U	1.00		100	100	100	70 - 139		105	5	20		MB-1	LCS-1	LC
14. Carbon Disulfide	U	1.00		90.4	100	90	27 - 166		95	5	20		MB-1	LCS-1	LCD-
15. Carbon Tetrachloride	U	1.00		106	100	106	70 - 140		111	5	20		MB-1	LCS-1	LC
16. Chlorobenzene	U	1.00		98.0	100	98	88 - 126		101	3	20		MB-1	LCS-1	LC
17. Chloroethane	U	5.00		81.4	100	81	33 - 172		86	6	20		MB-1	LCS-1	LC
18. Chloroform	U	1.00		92.1	100	92	66 - 138		97	5	20		MB-1	LCS-1	LCD-
19. Chloromethane	U	2.00		90.9	100	91	45 - 153		107	16	20		MB-1	LCS-1	LC
20. 2-Chlorotoluene	U	1.00		96.5	100	96	75 - 137		101	5	20		MB-1	LCS-1	LC
21. Cyclohexane	U	1.00		91.3	100	91	42 - 156		97	6	20		MB-1	LCS-1	LC
22. Dibromochloromethane	U	1.00		111	100	111	83 - 127		115	4	20		MB-1	LCS-1	LCD-
23. 1,2-Dibromo-3-chloropropane (SIM)	U	1.00		94.2	100	94	66 - 134		108	14	20		MB-1	LCS-1	LC
24. Dibromomethane	U	1.00		105	100	105	67 - 148		109	4	20		MB-1	LCS-1	LC
25. 1,2-Dichlorobenzene	U	1.00		103	100	103	71 - 154		109	6	20		MB-1	LCS-1	LC
26. 1,3-Dichlorobenzene	U	1.00		99.4	100	99	74 - 156		103	4	20		MB-1	LCS-1	LCD-
27. 1,4-Dichlorobenzene	U	1.00		95.8	100	96	89 - 121		101	5	20		MB-1	LCS-1	LC
28. trans-1,4-Dichloro-2-butene (SIM)	U	1.00		105	100	105	47 - 164		115	9	20		MB-1	LCS-1	LC
29. Dichlorodifluoromethane	U	5.00		102	100	102	44 - 188		106	4	20		MB-1	LCS-1	LC
30. 1,1-Dichloroethane	U	1.00		92.1	100	92	59 - 145		98	6	20		MB-1	LCS-1	LCD-
31. 1,2-Dichloroethane	U	1.00		96.6	100	97	68 - 143		99	2	20		MB-1	LCS-1	LC
32. 1,1-Dichloroethene	U	1.00		86.8	100	87	56 - 163		91	4	20		MB-1	LCS-1	LC
33. cis-1,2-Dichloroethene	U	1.00		93.0	100	93	54 - 161		97	4	20		MB-1	LCS-1	LC
34. trans-1,2-Dichloroethene	U	1.00		90.1	100	90	56 - 153		94	4	20		MB-1	LCS-1	LCD-
35. 1,2-Dichloropropane	U	1.00		98.2	100	98	66 - 135		103	5	20		MB-1	LCS-1	LCD
36. 1,3-Dichloropropane	U	1.00		102	100	102	75 - 136		107	5	20		MB-1	LCS-1	LC
37. 2,2-Dichloropropane	U	1.00		105	100	105	53 - 176		110	5	20		MB-1	LCS-1	LC
38. 1,1-Dichloropropene	U	1.00		94.2	100	94	62 - 152		101	7	20		MB-1	LCS-1	LCD-
39. cis-1,3-Dichloropropene	U	1.00		107	100	107	81 - 144		110	3	20		MB-1	LCS-1	LCD
40. trans-1,3-Dichloropropene	U	1.00		108	100	108	66 - 150		112	4	20		MB-1	LCS-1	LC
41. Diethyl Ether	U	2.00		91.8	100	92	37 - 153		96	4	20		MB-1	LCS-1	LC
42. Diisopropyl Ether	U	1.00		96.3	100	96	42 - 156		101	5	20		MB-1	LCS-1	LCD
43. ETBE	U	1.00		95.0	100	95	49 - 150		99	4	20		MB-1	LCS-1	LCD
44. Ethylbenzene	U	1.00		100	100	100	88 - 131		104	4	20		MB-1	LCS-1	LC
45. Ethylene Dibromide	U	1.00		102	100	102	86 - 131		107	5	20		MB-1	LCS-1	LC
46. Hexachlorobutadiene	U	5.00		119	100	119	72 - 144		122	2	20		MB-1	LCS-1	LCD-
47. Hexachloroethane	U	1.00		104	100	104	37 - 171		109	5	20		MB-1	LCS-1	LCD
48. 2-Hexanone	U	5.00		89.0	100	89	37 - 183		104	16	20		MB-1	LCS-1	LC
49. Isopropylbenzene	U	1.00		101	100	101	89 - 148		106	4	20		MB-1	LCS-1	LC

Fibertec environmental services

Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VI13H30A **Preparation Date: 08/30/13**

Parameter	Method Blank (MB) Result µg/L	MB PQL µg/L	MB Q	Laboratory Control Sample (LCS) Result µg/L	LCS Spike µg/L	LCS Rec. %	LCS LCL - UCL %	LCS Q	LCS Duplicate (LCD) Rec. %	LCD RPD %	LCD UCL %	LCD Q	Run Code MB	Run Code LCS	Run Code LCD
50. 4-Isopropyltoluene	U	1.00		106	100	106	86 - 142		110	4	20		MB-1	LCS-1	LCD-
51. Methyl Iodide	U	1.00		107	100	107	38 - 159		109	2	20		MB-1	LCS-1	LCD-
52. Methylene Chloride	U	5.00		88.6	100	89	38 - 149		92	3	20		MB-1	LCS-1	LCD-
53. 2-Methylnaphthalene	U	5.00		76.5	100	76	49 - 157		103	30	20	*	MB-1	LCS-1	LCD-
54. 4-Methyl-2-pentanone	U	5.00		92.2	100	92	60 - 152		104	12	20		MB-1	LCS-1	LCD-
55. MTBE	U	2.00		94.6	100	95	54 - 144		101	6	20		MB-1	LCS-1	LCD-
56. Naphthalene	U	5.00		99.3	100	99	64 - 158		113	13	20		MB-1	LCS-1	LCD-
57. n-Propylbenzene	U	1.00		99.0	100	99	64 - 146		103	4	20		MB-1	LCS-1	LCD-
58. Styrene	U	1.00		89.7	100	90	79 - 129		97	7	20		MB-1	LCS-1	LCD-
59. TAME	U	1.00		98.8	100	99	66 - 133		103	4	20		MB-1	LCS-1	LCD-
60. 1,1,1,2-Tetrachloroethane	U	1.00		105	100	105	84 - 135		107	2	20		MB-1	LCS-1	LCD-
61. 1,1,2,2-Tetrachloroethane	U	1.00		98.0	100	98	69 - 141		108	10	20		MB-1	LCS-1	LCD-
62. Tetrachloroethene	U	1.00		101	100	101	81 - 145		104	3	20		MB-1	LCS-1	LCD-
63. Tetrahydrofuran	U	5.00		79.3	100	79	33 - 148		84	17	20		MB-1	LCS-1	LCD-
64. Toluene	U	1.00		95.8	100	96	77 - 135		99	3	20		MB-1	LCS-1	LCD-
65. 1,2,3-Trichlorobenzene	U	5.00		106	100	106	74 - 147		116	9	20		MB-1	LCS-1	LCD-
66. 1,2,4-Trichlorobenzene	U	5.00		111	100	111	73 - 152		117	5	20		MB-1	LCS-1	LCD-
67. 1,1,1-Trichloroethane	U	1.00		93.1	100	93	69 - 143		99	6	20		MB-1	LCS-1	LCD-
68. 1,1,2-Trichloroethane	U	1.00		103	100	103	84 - 122		107	4	20		MB-1	LCS-1	LCD-
69. Trichloroethene	U	1.00		100	100	100	72 - 143		105	5	20		MB-1	LCS-1	LCD-
70. Trichlorofluoromethane	U	1.00		86.3	100	86	41 - 181		91	6	20		MB-1	LCS-1	LCD-
71. 1,2,3-Trichloropropane	U	1.00		93.6	100	94	82 - 127		103	9	20		MB-1	LCS-1	LCD-
72. 1,2,3-Trimethylbenzene	U	1.00		99.1	100	99	80 - 133		105	6	20		MB-1	LCS-1	LCD-
73. 1,2,4-Trimethylbenzene	U	1.00		103	100	103	81 - 140		108	5	20		MB-1	LCS-1	LCD-
74. 1,3,5-Trimethylbenzene	U	1.00		103	100	103	82 - 140		107	4	20		MB-1	LCS-1	LCD-
75. Vinyl Chloride	U	1.00		88.3	100	88	40 - 174		92	4	20		MB-1	LCS-1	LCD-
76. m&p-Xylene	U	1.00		200	200	100	86 - 133		105	5	20		MB-1	LCS-1	LCD-
77. o-Xylene	U	1.00		92.5	100	92	85 - 131		95	3	20		MB-1	LCS-1	LCD-

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VI13H30A **Preparation Date:** 08/30/13

Parameter	Method Blank (MB) Result µg/L	PQL µg/L		Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

System Monitoring Compounds (Surrogates):	Method Blank (MB) Result µg/L	Spike µg/L	Rec. %	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LC
1. Dibromofluoromethane(S)	47.6	50.0	95		47.8	50.0	96	67 - 130		95	1	20		MB-1	LCS-1	LCD-
2. 1,2-Dichloroethane-d4(S)	47.7	50.0	95		46.0	50.0	92	58 - 133		92	0	20		MB-1	LCS-1	LCD-
3. Toluene-d8(S)	48.1	50.0	96		47.6	50.0	95	77 - 114		96	1	20		MB-1	LCS-1	LCI
4. 4-Bromofluorobenzene(S)	47.2	50.0	94		48.0	50.0	96	65 - 115		96	0	20		MB-1	LCS-1	LCI

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
***:** Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	VI13H30A	08/30/13 12:22
LCS-1	VI13H30A	08/30/13 11:02
LCD-1	VI13H30A	08/30/13 11:29

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Jeffrey LeClair

Jeffrey LeClair
Chemist, Volatile Organics
Tuesday, September 03, 2013
9:53:16 AM

Fibertec environmental services

Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: V913H29B **Preparation Date:** 08/29/13

Method Blank (MB) Laboratory Control Sample (LCS) LCS Duplicate (LCD) Run Code
Parameter Result µg/kg PQL µg/kg Q Result µg/kg Spike µg/kg Rec. % LCL - UCL % Q Rec. % RPD % UCL % Q MB LCS LCD

	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
Parameter	Result µg/kg	PQL µg/kg	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Acetone	U	315		4,378	5,000	88	40 - 207		91	3	20		MB-1	LCS-1	LCD-1
2. Acrylonitrile	U	50.0		4,875	5,000	97	45 - 180		99	2	20		MB-1	LCS-1	LCD-1
3. Benzene	U	25.0		4,351	5,000	87	63 - 141		86	1	20		MB-1	LCS-1	LCD-1
4. Bromobenzene	U	25.0		4,403	5,000	88	70 - 144		88	0	20		MB-1	LCS-1	LCD-1
5. Bromochloromethane	U	100		4,661	5,000	93	42 - 161		92	1	20		MB-1	LCS-1	LCD-1
6. Bromodichloromethane	U	50.0		4,472	5,000	89	60 - 150		90	1	20		MB-1	LCS-1	LCD-1
7. Bromoform	U	100		4,468	5,000	89	50 - 117		91	2	20		MB-1	LCS-1	LCD-1
8. Bromomethane	U	100		3,933	5,000	79	58 - 217		79	0	20		MB-1	LCS-1	LCD-1
9. t-Butanol	U	2,500		50,779	50,000	102	42 - 156		102	0	20		MB-1	LCS-1	LCD-1
10. 2-Butanone	U	250		4,803	5,000	96	42 - 193		97	1	20		MB-1	LCS-1	LCD-1
11. n-Butylbenzene	U	25.0		5,305	5,000	106	65 - 151		104	2	20		MB-1	LCS-1	LCD-1
12. sec-Butylbenzene	U	25.0		4,938	5,000	99	68 - 147		98	1	20		MB-1	LCS-1	LCD-1
13. tert-Butylbenzene	U	25.0		4,779	5,000	96	68 - 140		96	0	20		MB-1	LCS-1	LCD-1
14. Carbon Disulfide	U	100		4,449	5,000	89	36 - 143		86	3	20		MB-1	LCS-1	LCD-1
15. Carbon Tetrachloride	U	50.0		4,660	5,000	93	50 - 159		92	1	20		MB-1	LCS-1	LCD-1
16. Chlorobenzene	U	50.0		4,673	5,000	93	72 - 135		93	0	20		MB-1	LCS-1	LCD-1
17. Chloroethane	U	250		5,019	5,000	100	16 - 207		96	4	20		MB-1	LCS-1	LCD-1
18. Chloroform	U	50.0		4,160	5,000	83	47 - 159		82	1	20		MB-1	LCS-1	LCD-
19. Chloromethane	U	50.0		4,521	5,000	90	14 - 185		88	2	20		MB-1	LCS-1	LCD-1
20. 2-Chlorotoluene	U	25.0		4,572	5,000	91	73 - 141		91	0	20		MB-1	LCS-1	LCD-1
21. Cyclohexane	U	50.0		4,976	5,000	100	52 - 195		96	4	20		MB-1	LCS-1	LCD-1
22. Dibromochloromethane	U	50.0		5,224	5,000	104	59 - 130		104	0	20		MB-1	LCS-1	LCD-1
23. 1,2-Dibromo-3-chloropropane (SIM)	U	25.0		4,895	5,000	98	34 - 164		101	3	20		MB-1	LCS-1	LCD-1
24. Dibromomethane	U	50.0		4,163	5,000	83	66 - 134		86	4	20		MB-1	LCS-1	LCD-1
25. 1,2-Dichlorobenzene	U	25.0		4,561	5,000	91	76 - 128		91	0	20		MB-1	LCS-1	LCD-1
26. 1,3-Dichlorobenzene	U	25.0		4,536	5,000	91	72 - 136		91	0	20		MB-1	LCS-1	LCD-1
27. 1,4-Dichlorobenzene	U	50.0		4,511	5,000	90	74 - 127		90	0	20		MB-1	LCS-1	LCD-1
28. trans-1,4-Dichloro-2-butene (SIM)	U	25.0		5,054	5,000	101	56 - 153		104	3	20		MB-1	LCS-1	LCD-1
29. Dichlorodifluoromethane	U	125		4,618	5,000	92	10 - 207		89	3	20		MB-1	LCS-1	LCD-1
30. 1,1-Dichloroethane	U	50.0		4,431	5,000	89	42 - 157		85	5	20		MB-1	LCS-1	LCD-1
31. 1,2-Dichloroethane	U	50.0		3,974	5,000	79	56 - 146		80	1	20		MB-1	LCS-1	LCD-1
32. 1,1-Dichloroethene	U	25.0		4,391	5,000	88	34 - 165		86	2	20		MB-1	LCS-1	LCD-1
33. cis-1,2-Dichloroethene	U	25.0		4,408	5,000	88	43 - 170		85	3	20		MB-1	LCS-1	LCD-1
34. trans-1,2-Dichloroethene	U	25.0		4,340	5,000	87	49 - 162		84	4	20		MB-1	LCS-1	LCD-1
35. 1,2-Dichloropropane	U	50.0		4,691	5,000	94	62 - 151		93	1	20		MB-1	LCS-1	LCD-1
36. 1,3-Dichloropropane	U	25.0		4,863	5,000	97	77 - 132		99	2	20		MB-1	LCS-1	LCD-1
37. 2,2-Dichloropropane	U	50.0		5,280	5,000	106	52 - 169		103	3	20		MB-1	LCS-1	LCD-1
38. 1,1-Dichloropropene	U	50.0		4,671	5,000	93	52 - 153		90	3	20		MB-1	LCS-1	LCD-1
39. cis-1,3-Dichloropropene	U	50.0		4,836	5,000	97	45 - 156		96	1	20		MB-1	LCS-1	LCD-1
40. trans-1,3-Dichloropropene	U	50.0		4,937	5,000	99	40 - 157		100	1	20		MB-1	LCS-1	LCD-1
41. Diethyl Ether	U	50.0		4,548	5,000	91	30 - 167		93	2	20		MB-1	LCS-1	LCD-1
42. Diisopropyl Ether	U	25.0		5,228	5,000	105	38 - 167		103	2	20		MB-1	LCS-1	LCD-1
43. ETBE	U	25.0		5,014	5,000	100	40 - 159		100	0	20		MB-1	LCS-1	LCD-1
44. Ethylbenzene	U	25.0		4,539	5,000	91	76 - 137		90	1	20		MB-1	LCS-1	LCD-1
45. Ethylene Dibromide	U	50.0		4,721	5,000	94	71 - 133		95	1	20		MB-1	LCS-1	LCD-1
46. Hexachlorobutadiene	U	100		5,228	5,000	105	79 - 142		105	0	20		MB-1	LCS-1	LCD-
47. Hexachloroethane	U	100		5,665	5,000	113	42 - 151		111	2	20		MB-1	LCS-1	LCD-
48. 2-Hexanone	U	250		5,055	5,000	101	29 - 211		103	2	20		MB-1	LCS-1	LCD-
49. Isopropylbenzene	U	25.0		4,748	5,000	95	68 - 153		94	1	20		MB-1	LCS-1	LCD-

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: V913H29B **Preparation Date:** 08/29/13

Parameter	Method Blank (MB) Result µg/kg	PQL µg/kg	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
50. 4-Isopropyltoluene	U	25.0		5,099	5,000	102	75 - 139		101	1	20		MB-1	LCS-1	LCD-
51. Methyl Iodide	U	100		4,630	5,000	93	17 - 150		91	2	20		MB-1	LCS-1	LCD-1
52. Methylene Chloride	U	25.0		4,275	5,000	85	38 - 180		83	2	20		MB-1	LCS-1	LCD-1
53. 2-Methylnaphthalene	30.8	25.0	*	4,683	5,000	94	42 - 202		96	2	20		MB-1	LCS-1	LCD-
54. 4-Methyl-2-pentanone	U	500		5,054	5,000	101	55 - 161		102	1	20		MB-1	LCS-1	LCD-
55. MTBE	U	50.0		4,779	5,000	96	58 - 147		96	0	20		MB-1	LCS-1	LCD-1
56. Naphthalene	U	25.0		4,595	5,000	92	45 - 180		94	2	20		MB-1	LCS-1	LCD-1
57. n-Propylbenzene	U	25.0		4,710	5,000	94	71 - 146		94	0	20		MB-1	LCS-1	LCD-
58. Styrene	U	25.0		4,885	5,000	98	72 - 138		97	1	20		MB-1	LCS-1	LCD-
59. TAME	U	100		4,667	5,000	93	51 - 135		95	2	20		MB-1	LCS-1	LCD-1
60. 1,1,1,2-Tetrachloroethane	U	50.0		5,099	5,000	102	61 - 131		103	1	20		MB-1	LCS-1	LCD-1
61. 1,1,2,2-Tetrachloroethane	U	50.0		4,792	5,000	96	72 - 145		99	3	20		MB-1	LCS-1	LCD
62. Tetrachloroethene	U	25.0		4,650	5,000	93	50 - 151		92	1	20		MB-1	LCS-1	LCD
63. Tetrahydrofuran	U	250		4,273	5,000	85	28 - 169		88	3	20		MB-1	LCS-1	LCD-1
64. Toluene	U	25.0		4,209	5,000	84	65 - 144		84	0	20		MB-1	LCS-1	LCD-1
65. 1,2,3-Trichlorobenzene	U	50.0		4,647	5,000	93	50 - 161		95	2	20		MB-1	LCS-1	LCD
66. 1,2,4-Trichlorobenzene	U	50.0		4,508	5,000	90	54 - 152		92	2	20		MB-1	LCS-1	LCD
67. 1,1,1-Trichloroethane	U	50.0		4,272	5,000	85	46 - 156		83	2	20		MB-1	LCS-1	LCD-1
68. 1,1,2-Trichloroethane	U	50.0		4,804	5,000	96	80 - 129		97	1	20		MB-1	LCS-1	LCD-1
69. Trichloroethene	U	50.0		4,455	5,000	89	65 - 144		89	0	20		MB-1	LCS-1	LCD
70. Trichlorofluoromethane	U	50.0		4,957	5,000	99	31 - 226		95	4	20		MB-1	LCS-1	LCD
71. 1,2,3-Trichloropropane	U	100		4,557	5,000	91	74 - 139		94	3	20		MB-1	LCS-1	LCD-1
72. 1,2,3-Trimethylbenzene	U	25.0		4,634	5,000	93	77 - 133		93	0	20		MB-1	LCS-1	LCD-1
73. 1,2,4-Trimethylbenzene	U	25.0		4,841	5,000	97	71 - 139		97	0	20		MB-1	LCS-1	LCD
74. 1,3,5-Trimethylbenzene	U	25.0		4,829	5,000	97	71 - 138		98	1	20		MB-1	LCS-1	LCD
75. Vinyl Chloride	U	25.0		4,554	5,000	91	25 - 189		89	2	20		MB-1	LCS-1	LCD-1
76. m&p-Xylene	U	50.0		8,963	10,000	90	69 - 134		89	1	20		MB-1	LCS-1	LCD-1
77. o-Xylene	U	25.0		4,490	5,000	90	69 - 134		90	0	20		MB-1	LCS-1	LCD

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: V913H29B **Preparation Date: 08/29/13**

	Method Blank (MB)			Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
Parameter	Result µg/kg	PQL µg/kg	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD

	Method Blank (MB)				Laboratory Control Sample (LCS)					LCS Duplicate (LCD)				Run Code		
System Monitoring Compounds (Surrogates):	Result µg/kg	Spike µg/kg	Rec. %	Q	Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	Rec. %	RPD %	UCL %	Q	MB	LCS	LCD
1. Dibromofluoromethane(S)	2,416	2,500	97		2,280	2,500	91	53 - 139		90	1	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	2,273	2,500	91		2,140	2,500	86	64 - 135		85	1	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	2,374	2,500	95		2,338	2,500	94	70 - 130		94	0	20		MB-1	LCS-1	LCD-1
4. 4-Bromofluorobenzene(S)	2,400	2,500	96		2,318	2,500	93	71 - 129		94	1	20		MB-1	LCS-1	LCD-1

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	V913H29B	08/29/13 12:57
LCS-1	V913H29B	08/29/13 10:41
LCD-1	V913H29B	08/29/13 11:09

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Carine Dempsey

Carine Dempsey
Chemist, Volatile Organics
Friday, August 30, 2013
9:06:30 AM

Fibertec environmental services

Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: VJ13H29C **Preparation Date:** 08/29/13

Parameter	Method Blank (MB) Result µg/kg	PQL µg/kg	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

Parameter	Method Blank (MB) Result µg/kg	PQL µg/kg	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

1. Acetone	U	500		4,835	5,000	97	40 - 207		92	5	20		MB-1	LCS-1	LCD-
2. Acrylonitrile	U	50.0		6,282	5,000	126	45 - 180		125	1	20		MB-1	LCS-1	LCD-1
3. Benzene	U	25.0		5,597	5,000	112	63 - 141		107	5	20		MB-1	LCS-1	LCD-1
4. Bromobenzene	U	100		5,728	5,000	115	70 - 144		116	1	20		MB-1	LCS-1	LCD-
5. Bromochloromethane	U	50.0		5,816	5,000	116	42 - 161		115	1	20		MB-1	LCS-1	LCD-
6. Bromodichloromethane	U	25.0		5,925	5,000	119	60 - 150		117	2	20		MB-1	LCS-1	LCD-1
7. Bromoform	U	100		5,167	5,000	103	50 - 117		105	2	20		MB-1	LCS-1	LCD-1
8. Bromomethane	U	100		6,017	5,000	120	58 - 217		122	2	20		MB-1	LCS-1	LCD-
9. t-Butanol	U	1,000		57,339	50,000	115	42 - 156		103	11	20		MB-1	LCS-1	LCD-
10. 2-Butanone	U	500		6,134	5,000	123	42 - 193		121	2	20		MB-1	LCS-1	LCD-1
11. n-Butylbenzene	U	25.0		6,336	5,000	127	65 - 151		123	3	20		MB-1	LCS-1	LCD-1
12. sec-Butylbenzene	U	50.0		5,991	5,000	120	68 - 147		117	3	20		MB-1	LCS-1	LCD-
13. tert-Butylbenzene	U	25.0		6,073	5,000	121	68 - 140		118	3	20		MB-1	LCS-1	LCD-
14. Carbon Disulfide	U	50.0		5,686	5,000	114	36 - 143		107	6	20		MB-1	LCS-1	LCD-1
15. Carbon Tetrachloride	U	50.0		7,226	5,000	145	50 - 159		137	6	20		MB-1	LCS-1	LCD-1
16. Chlorobenzene	U	50.0		5,311	5,000	106	72 - 135		104	2	20		MB-1	LCS-1	LCD-
17. Chloroethane	U	250		6,264	5,000	125	16 - 207		118	6	20		MB-1	LCS-1	LCD-
18. Chloroform	U	25.0		5,932	5,000	119	47 - 159		114	4	20		MB-1	LCS-1	LCD-1
19. Chloromethane	U	100		5,824	5,000	116	14 - 185		113	3	20		MB-1	LCS-1	LCD-1
20. 2-Chlorotoluene	U	50.0		5,664	5,000	113	73 - 141		115	2	20		MB-1	LCS-1	LCD-
21. Cyclohexane	U	250		6,124	5,000	122	52 - 195		116	5	20		MB-1	LCS-1	LCD-
22. Dibromochloromethane	U	100		5,738	5,000	115	59 - 130		114	1	20		MB-1	LCS-1	LCD-
23. 1,2-Dibromo-3-chloropropane (SIM)	U	25.0		5,522	5,000	110	34 - 164		112	2	20		MB-1	LCS-1	LCD-1
24. Dibromomethane	U	250		4,812	5,000	96	66 - 134		93	3	20		MB-1	LCS-1	LCD
25. 1,2-Dichlorobenzene	U	25.0		5,522	5,000	110	76 - 128		109	1	20		MB-1	LCS-1	LCD
26. 1,3-Dichlorobenzene	U	25.0		5,397	5,000	108	72 - 136		108	0	20		MB-1	LCS-1	LCD-
27. 1,4-Dichlorobenzene	U	50.0		5,114	5,000	102	74 - 127		104	2	20		MB-1	LCS-1	LCD-1
28. trans-1,4-Dichloro-2-butene (SIM)	U	25.0		7,591	5,000	152	56 - 153		155	2	20		MB-1	LCS-1	LCD
29. Dichlorodifluoromethane	U	100		6,285	5,000	126	10 - 207		116	8	20		MB-1	LCS-1	LCD
30. 1,1-Dichloroethane	U	50.0		6,143	5,000	123	42 - 157		117	5	20		MB-1	LCS-1	LCD-
31. 1,2-Dichloroethane	U	50.0		6,414	5,000	128	56 - 146		126	2	20		MB-1	LCS-1	LCD-1
32. 1,1-Dichloroethene	U	50.0		6,517	5,000	130	34 - 165		123	6	20		MB-1	LCS-1	LCD
33. cis-1,2-Dichloroethene	U	25.0		6,173	5,000	123	43 - 170		120	2	20		MB-1	LCS-1	LCD
34. trans-1,2-Dichloroethene	U	25.0		6,254	5,000	125	49 - 162		119	5	20		MB-1	LCS-1	LCD-
35. 1,2-Dichloropropane	U	50.0		5,748	5,000	115	62 - 151		110	4	20		MB-1	LCS-1	LCD-1
36. 1,3-Dichloropropane	U	25.0		5,771	5,000	115	77 - 132		114	1	20		MB-1	LCS-1	LCD
37. 2,2-Dichloropropane	U	25.0		8,442	5,000	169	52 - 169		158	7	20		MB-1	LCS-1	LCD
38. 1,1-Dichloropropene	U	50.0		6,109	5,000	122	52 - 153		116	5	20		MB-1	LCS-1	LCD-
39. cis-1,3-Dichloropropene	U	25.0		6,188	5,000	124	45 - 156		120	3	20		MB-1	LCS-1	LCD-1
40. trans-1,3-Dichloropropene	U	25.0		6,473	5,000	129	40 - 157		126	2	20		MB-1	LCS-1	LCD
41. Diethyl Ether	U	50.0		6,012	5,000	120	30 - 167		117	3	20		MB-1	LCS-1	LCD
42. Diisopropyl Ether	U	25.0		6,563	5,000	131	38 - 167		128	2	20		MB-1	LCS-1	LCD-
43. ETBE	U	50.0		6,594	5,000	132	40 - 159		128	3	20		MB-1	LCS-1	LCD-1
44. Ethylbenzene	U	50.0		5,827	5,000	117	76 - 137		113	3	20		MB-1	LCS-1	LCD-
45. Ethylene Dibromide	U	50.0		5,310	5,000	106	71 - 133		106	0	20		MB-1	LCS-1	LCD
46. Hexachlorobutadiene	U	250		5,586	5,000	112	79 - 142		103	8	20		MB-1	LCS-1	LCD
47. Hexachloroethane	U	50.0		6,027	5,000	121	42 - 151		118	3	20		MB-1	LCS-1	LCD-1
48. 2-Hexanone	U	250		6,689	5,000	134	29 - 211		132	2	20		MB-1	LCS-1	LCD-
49. Isopropylbenzene	U	250		5,571	5,000	111	68 - 153		108	3	20		MB-1	LCS-1	LCD

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: VJ13H29C **Preparation Date:** 08/29/13

Parameter	Method Blank (MB) Result µg/kg	Method Blank (MB) PQL µg/kg	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	Run Code LCS	Run Code LCD
50. 4-Isopropyltoluene	U	100		6,004	5,000	120	75 - 139		119	1	20		MB-1	LCS-1	LCD-1
51. Methyl Iodide	U	100		5,980	5,000	120	17 - 150		113	6	20		MB-1	LCS-1	LCD-1
52. Methylene Chloride	U	50.0		5,936	5,000	119	38 - 180		116	3	20		MB-1	LCS-1	LCD-1
53. 2-Methylnaphthalene	U	250		4,520	5,000	90	42 - 202		89	1	20		MB-1	LCS-1	LCD-1
54. 4-Methyl-2-pentanone	U	250		6,077	5,000	122	55 - 161		122	0	20		MB-1	LCS-1	LCD-1
55. MTBE	U	250		6,285	5,000	126	58 - 147		123	2	20		MB-1	LCS-1	LCD-1
56. Naphthalene	U	250		5,811	5,000	116	45 - 180		116	0	20		MB-1	LCS-1	LCD-1
57. n-Propylbenzene	U	50.0		5,928	5,000	119	71 - 146		117	2	20		MB-1	LCS-1	LCD-1
58. Styrene	U	25.0		5,935	5,000	119	72 - 138		116	3	20		MB-1	LCS-1	LCD-1
59. TAME	U	50.0		6,166	5,000	123	51 - 135		122	1	20		MB-1	LCS-1	LCD-1
60. 1,1,1,2-Tetrachloroethane	U	50.0		5,515	5,000	110	61 - 131		108	2	20		MB-1	LCS-1	LCD-1
61. 1,1,2,2-Tetrachloroethane	U	50.0		5,391	5,000	108	72 - 145		113	5	20		MB-1	LCS-1	LCD-1
62. Tetrachloroethene	U	50.0		4,827	5,000	97	50 - 151		95	2	20		MB-1	LCS-1	LCD-1
63. Tetrahydrofuran	U	250		5,797	5,000	116	28 - 169		112	4	20		MB-1	LCS-1	LCD-1
64. Toluene	U	25.0		5,604	5,000	112	65 - 144		107	5	20		MB-1	LCS-1	LCD-1
65. 1,2,3-Trichlorobenzene	U	100		5,534	5,000	111	50 - 161		106	5	20		MB-1	LCS-1	LCD-1
66. 1,2,4-Trichlorobenzene	U	250		5,665	5,000	113	54 - 152		108	5	20		MB-1	LCS-1	LCD-1
67. 1,1,1-Trichloroethane	U	50.0		6,224	5,000	124	46 - 156		120	3	20		MB-1	LCS-1	LCD-1
68. 1,1,2-Trichloroethane	U	50.0		5,334	5,000	107	80 - 129		106	1	20		MB-1	LCS-1	LCD-1
69. Trichloroethene	U	50.0		5,225	5,000	105	65 - 144		101	4	20		MB-1	LCS-1	LCD-1
70. Trichlorofluoromethane	U	50.0		7,297	5,000	146	31 - 226		145	1	20		MB-1	LCS-1	LCD-1
71. 1,2,3-Trichloropropane	U	25.0		5,521	5,000	110	74 - 139		116	5	20		MB-1	LCS-1	LCD-1
72. 1,2,3-Trimethylbenzene	U	100		6,069	5,000	121	77 - 133		120	1	20		MB-1	LCS-1	LCD-1
73. 1,2,4-Trimethylbenzene	U	100		6,034	5,000	121	71 - 139		121	0	20		MB-1	LCS-1	LCD-1
74. 1,3,5-Trimethylbenzene	U	100		6,003	5,000	120	71 - 138		119	1	20		MB-1	LCS-1	LCD-1
75. Vinyl Chloride	U	25.0		5,980	5,000	120	25 - 189		113	6	20		MB-1	LCS-1	LCD-1
76. m&p-Xylene	U	100		12,044	10,000	120	69 - 134		117	3	20		MB-1	LCS-1	LCD-1
77. o-Xylene	U	50.0		6,011	5,000	120	69 - 134		117	3	20		MB-1	LCS-1	LCD-1

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Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Soil/Solid

Preparation Batch: VJ13H29C **Preparation Date: 08/29/13**

Parameter	Method Blank (MB) Result µg/kg	PQL µg/kg	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD

System Monitoring Compounds (Surrogates):	Method Blank (MB) Result µg/kg	Spike µg/kg	Rec. %	Q	Laboratory Control Sample (LCS) Result µg/kg	Spike µg/kg	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
1. Dibromofluoromethane(S)	2,744	2,500	110		2,615	2,500	105	53 - 139		108	3	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	3,209	2,500	128		3,189	2,500	128	64 - 135		127	1	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	2,585	2,500	103		2,579	2,500	103	70 - 130		103	0	20		MB-1	LCS-1	LCD-1
4. 4-Bromofluorobenzene(S)	2,599	2,500	104		2,653	2,500	106	71 - 129		106	0	20		MB-1	LCS-1	LCD-1

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
*: Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	VJ13H29C	08/29/13 20:30
LCS-1	VJ13H29C	08/29/13 18:20
LCD-1	VJ13H29C	08/29/13 18:46

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Carine Dempsey

Carine Dempsey
Chemist, Volatile Organics
Friday, August 30, 2013
11:41:45 AM

Fibertec environmental services

Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VB13H30A **Preparation Date:** 08/30/13

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
1. Acetone	U	10.0		114	100	114	19 - 165		125	9	20		MB-1	LCS-1	LCD-1
2. Acrylonitrile	U	5.00		108	100	108	43 - 155		116	7	20		MB-1	LCS-1	LCD-1
3. Benzene	U	1.00		101	100	101	69 - 137		103	2	20		MB-1	LCS-1	LCD-1
4. Bromobenzene	U	1.00		98.4	100	98	65 - 140		102	4	20		MB-1	LCS-1	LCD-1
5. Bromochloromethane	U	1.00		96.2	100	96	33 - 141		101	5	20		MB-1	LCS-1	LCD-1
6. Bromodichloromethane	U	1.00		104	100	104	84 - 144		106	2	20		MB-1	LCS-1	LCD-1
7. Bromoform	U	1.00		116	100	116	66 - 136		120	3	20		MB-1	LCS-1	LCD-1
8. Bromomethane	U	5.00		75.9	100	76	56 - 172		74	3	20		MB-1	LCS-1	LCD-1
9. t-Butanol	U	50.0		1,770	1,000	177	25 - 157	*	251	35	20	*	MB-1	LCS-1	LCD-1
10. n-Butylbenzene	U	1.00		109	100	109	63 - 149		114	4	20		MB-1	LCS-1	LCD-1
11. sec-Butylbenzene	U	1.00		105	100	105	61 - 143		109	4	20		MB-1	LCS-1	LCD-1
12. tert-Butylbenzene	U	1.00		104	100	104	70 - 139		108	4	20		MB-1	LCS-1	LCD-1
13. Carbon Disulfide	U	1.00		99.0	100	99	27 - 166		104	5	20		MB-1	LCS-1	LCD-1
14. Carbon Tetrachloride	U	1.00		106	100	106	70 - 140		110	4	20		MB-1	LCS-1	LCD-1
15. Chlorobenzene	U	1.00		105	100	105	88 - 126		108	3	20		MB-1	LCS-1	LCD-1
16. Chloroethane	U	1.00		100	100	100	33 - 172		107	7	20		MB-1	LCS-1	LCD-1
17. Chloroform	U	1.00		92.5	100	92	66 - 138		98	6	20		MB-1	LCS-1	LCD-1
18. Chloromethane	U	5.00		75.6	100	76	45 - 153		80	5	20		MB-1	LCS-1	LCD-1
19. 2-Chlorotoluene	U	1.00		99.1	100	99	75 - 137		103	4	20		MB-1	LCS-1	LCD-1
20. Cyclohexane	U	1.00		103	100	103	42 - 156		112	8	20		MB-1	LCS-1	LCD-1
21. Dibromochloromethane	U	1.00		114	100	114	83 - 127		116	2	20		MB-1	LCS-1	LCD-1
22. 1,2-Dibromo-3-chloropropane (SIM)	U	1.00		112	100	112	66 - 134		125	11	20		MB-1	LCS-1	LCD-1
23. Dibromomethane	U	1.00		110	100	110	67 - 148		112	2	20		MB-1	LCS-1	LCD-1
24. 1,2-Dichlorobenzene	U	1.00		105	100	105	71 - 154		108	3	20		MB-1	LCS-1	LCD-1
25. 1,3-Dichlorobenzene	U	1.00		102	100	102	74 - 156		106	4	20		MB-1	LCS-1	LCD-1
26. 1,4-Dichlorobenzene	U	1.00		97.5	100	97	89 - 121		100	3	20		MB-1	LCS-1	LCD-1
27. trans-1,4-Dichloro-2-butene	U	2.00		105	100	105	47 - 164		112	6	20		MB-1	LCS-1	LCD-1
28. 1,1-Dichloroethane	U	1.00		98.0	100	98	59 - 145		104	6	20		MB-1	LCS-1	LCD-1
29. 1,2-Dichloroethane	U	1.00		96.8	100	97	68 - 143		98	1	20		MB-1	LCS-1	LCD-1
30. 1,1-Dichloroethene	U	1.00		97.6	100	98	56 - 163		103	5	20		MB-1	LCS-1	LCD-1
31. cis-1,2-Dichloroethene	U	1.00		96.4	100	96	54 - 161		101	5	20		MB-1	LCS-1	LCD-1
32. trans-1,2-Dichloroethene	U	1.00		103	100	103	56 - 153		107	4	20		MB-1	LCS-1	LCD-1
33. 1,2-Dichloropropane	U	1.00		105	100	105	66 - 135		108	3	20		MB-1	LCS-1	LCD-1
34. 1,3-Dichloropropane	U	1.00		108	100	108	75 - 136		113	5	20		MB-1	LCS-1	LCD-1
35. 2,2-Dichloropropane	U	1.00		161	100	161	53 - 176		171	6	20		MB-1	LCS-1	LCD-1
36. 1,1-Dichloropropene	U	1.00		100	100	100	62 - 152		107	7	20		MB-1	LCS-1	LCD-1
37. cis-1,3-Dichloropropene	U	1.00		114	100	114	81 - 144		116	2	20		MB-1	LCS-1	LCD-1
38. trans-1,3-Dichloropropene	U	1.00		113	100	113	66 - 150		116	3	20		MB-1	LCS-1	LCD-1
39. Diethyl Ether	U	2.00		97.5	100	97	37 - 153		100	3	20		MB-1	LCS-1	LCD-1
40. Diisopropyl Ether	U	1.00		97.3	100	97	42 - 156		102	5	20		MB-1	LCS-1	LCD-1
41. ETBE	U	1.00		97.4	100	97	49 - 150		103	6	20		MB-1	LCS-1	LCD-1
42. Ethylbenzene	U	1.00		102	100	102	88 - 131		106	4	20		MB-1	LCS-1	LCD-1
43. Ethylene Dibromide	U	1.00		107	100	107	86 - 131		112	5	20		MB-1	LCS-1	LCD-1
44. Hexachlorobutadiene	U	2.00		114	100	114	72 - 144		123	8	20		MB-1	LCS-1	LCD-1
45. Hexachloroethane	U	1.00		111	100	111	37 - 171		117	5	20		MB-1	LCS-1	LCD-1
46. 2-Hexanone	U	5.00		108	100	108	37 - 183		121	11	20		MB-1	LCS-1	LCD-1
47. Isopropylbenzene	U	1.00		107	100	107	89 - 148		110	3	20		MB-1	LCS-1	LCD-1
48. 4-Isopropyltoluene	U	1.00		108	100	108	86 - 142		112	4	20		MB-1	LCS-1	LCD-1
49. Methyl Iodide	U	5.00		92.4	100	92	38 - 159		83	10	20		MB-1	LCS-1	LCD-1

Fibertec environmental services

Quality Control Report
Preparation Batch QC Summary
Volatile Organics by GC/MS
Aqueous

Preparation Batch: VB13H30A **Preparation Date:** 08/30/13

Parameter	Method Blank (MB) Result µg/L	PQL µg/L	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
50. Methylene Chloride	U	1.00		90.1	100	90	38 - 149		93	3	20		MB-1	LCS-1	LCD-1
51. 2-Methylnaphthalene	U	5.00		134	100	134	49 - 157		174	26	20	*	MB-1	LCS-1	LCD-1
52. 4-Methyl-2-pentanone	U	5.00		107	100	107	60 - 152		116	8	20		MB-1	LCS-1	LCD-1
53. MTBE	U	2.00		98.1	100	98	54 - 144		105	7	20		MB-1	LCS-1	LCD-1
54. Naphthalene	U	5.00		110	100	110	64 - 158		126	14	20		MB-1	LCS-1	LCD-1
55. n-Propylbenzene	U	1.00		102	100	102	64 - 146		106	4	20		MB-1	LCS-1	LCD-1
56. Styrene	U	1.00		111	100	111	79 - 129		115	4	20		MB-1	LCS-1	LCD-1
57. TAME	U	1.00		98.7	100	99	66 - 133		103	4	20		MB-1	LCS-1	LCD-1
58. 1,1,1,2-Tetrachloroethane	U	1.00		111	100	111	84 - 135		114	3	20		MB-1	LCS-1	LCD-1
59. 1,1,2,2-Tetrachloroethane	U	1.00		101	100	101	69 - 141		107	6	20		MB-1	LCS-1	LCD-1
60. Tetrachloroethene	U	1.00		108	100	108	81 - 145		112	4	20		MB-1	LCS-1	LCD-1
61. Tetrahydrofuran	U	5.00		108	100	108	33 - 148		115	6	20		MB-1	LCS-1	LCD-1
62. Toluene	U	1.00		101	100	101	77 - 135		103	2	20		MB-1	LCS-1	LCD-1
63. 1,2,3-Trichlorobenzene	U	5.00		119	100	119	74 - 147		137	14	20		MB-1	LCS-1	LCD-1
64. 1,2,4-Trichlorobenzene	U	5.00		121	100	121	73 - 152		129	6	20		MB-1	LCS-1	LCD-1
65. 1,1,1-Trichloroethane	U	1.00		95.7	100	96	69 - 143		102	6	20		MB-1	LCS-1	LCD-1
66. 1,1,2-Trichloroethane	U	1.00		107	100	107	84 - 122		111	4	20		MB-1	LCS-1	LCD-1
67. Trichloroethene	U	1.00		109	100	109	72 - 143		114	4	20		MB-1	LCS-1	LCD-1
68. Trichlorofluoromethane	U	1.00		101	100	101	41 - 181		107	6	20		MB-1	LCS-1	LCD-1
69. 1,2,3-Trichloropropane	U	1.00		99.8	100	100	82 - 127		105	5	20		MB-1	LCS-1	LCD-1
70. 1,2,3-Trimethylbenzene	U	1.00		106	100	106	80 - 133		107	1	20		MB-1	LCS-1	LCD-1
71. 1,2,4-Trimethylbenzene	U	1.00		104	100	104	81 - 140		108	4	20		MB-1	LCS-1	LCD-1
72. 1,3,5-Trimethylbenzene	U	1.00		106	100	106	82 - 140		109	3	20		MB-1	LCS-1	LCD-1
73. Vinyl Chloride	U	1.00		101	100	101	40 - 174		105	4	20		MB-1	LCS-1	LCD-1
74. m&p-Xylene	U	1.00		205	200	102	86 - 133		106	4	20		MB-1	LCS-1	LCD-1
75. o-Xylene	U	1.00		104	100	104	85 - 131		107	3	20		MB-1	LCS-1	LCD-1

System Monitoring Compounds (Surrogates):	Method Blank (MB) Result µg/L	Spike µg/L	Rec. %	Q	Laboratory Control Sample (LCS) Result µg/L	Spike µg/L	Rec. %	LCL - UCL %	Q	LCS Duplicate (LCD) Rec. %	RPD %	UCL %	Q	Run Code MB	LCS	LCD
1. Dibromofluoromethane(S)	48.9	50.0	98		46.0	50.0	92	67 - 130		95	3	20		MB-1	LCS-1	LCD-1
2. 1,2-Dichloroethane-d4(S)	48.0	50.0	96		45.2	50.0	90	58 - 133		90	0	20		MB-1	LCS-1	LCD-1
3. Toluene-d8(S)	49.5	50.0	99		49.4	50.0	99	77 - 114		97	2	20		MB-1	LCS-1	LCD-1
4. 4-Bromofluorobenzene(S)	49.5	50.0	99		50.9	50.0	102	65 - 115		101	1	20		MB-1	LCS-1	LCD-1

Definitions/ Qualifiers:

U: The analyte was not detected at or above the PQL.
***:** Value reported is outside QC limits

Run Code (Analysis Sequence/Run Time):

MB-1	VB13H30A	08/30/13 12:07
LCS-1	VB13H30A	08/30/13 10:45
LCD-1	VB13H30A	08/30/13 11:12

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Jeffrey LeClair

Jeffrey LeClair
Chemist, Volatile Organics
Tuesday, September 03, 2013
4:12:59 PM

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive, Holt, MI 48842, Phone: 517 699 0345, Fax: 517 699 0388, email: lab@fibertec.us
8660 S. Mackinaw Trail, Cadillac, MI 49601, Phone: 231 775 8368, Fax: 231 775 8584

Industrial Hygiene Services, Inc.
1914 Holloway Drive, Holt, MI 48842, Phone: 517 699 0345, Fax: 517 699 0382, email: asbestos@fibertec.us

Geoprobe
11766 E. Grand River, Brighton, MI 48116, Phone: 810 220 3300, Fax: 810 220 3311

Chain of Custody # 125649
PAGE 1 of 2

Client Name: Bureau Veritas
Contact Person: Kaliewing
Project Name/ Number: PSC-Petro-Chem 11013-000191
QUOTE#
Purchase Order#

Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	VOCs 8260B
	8/27/13			TB-011	GW	2	Y	X
	8/27/13	1045		BSB-24 (3-5)	S	2	Y	X
	8/27/13	1050		DUP-06	S	2	Y	X
	8/27/13	1100		BSB-24 (7-11)	GW	3	Y	X
	8/27/13	1145		BSB-25 (3-5)	S	2	Y	X
	8/27/13	1150		BSB-25 (5-7)	S	2	Y	X
	8/27/13	1200		BSB-25 (7-11)	GW	3	Y	X
	8/27/13	1245		BSB-26 (3-5)	S	2	Y	X
	8/27/13	1250		BSB-26 (5-7)	S	2	Y	X
	8/27/13	1300		BSB-26 (ms/msd)	S	3	Y	X

Turnaround:
- [ ] 24 hour RUSH (surcharge applies)
- [ ] 48 hour RUSH (surcharge applies)
- [ ] 72 hour RUSH (surcharge applies)
- [X] Standard (5-7 bus. days)
- [ ] Other: Specify

Remarks:

Matrix Code: S Soil, GW Ground Water, A Air, SW Surface Water, O Oil, WW Waste Water, P Wipe, X Other: Specify

☐ FES Drilling Services

Deliverables: ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ EDD

Comments: MOGR of MeOH Gov'd Reused LOOS

Relinquished By:	Date/ Time	Received By:
[signature]	8/27/13 1645	[signature] 8/28/13 12:30
[signature]	8/28/13 3:23	[signature]
RCV'D ON		Received By Laboratory:

LAB USE ONLY:
Fibertec project number:
Laboratory Tracking: ICE
Temperature at Receipt: 4.6

COC Revision: February, 2013

TERMS & CONDITIONS ON BACK

57082

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive, Holt, MI 48842
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Geoprobe
11766 E. Grand River, Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 125650

PAGE 2 of 2

Client Name: Bureau Veritas

Contact Person: Kalie Wing

Project Name/ Number: BC-Petrochem 11013-000191

QUOTE#

Purchase Order#

Lab Sample #	Date	Time	Client Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	VOCs 8260B
	8/27/13	1310		BSB-26 (8-12)	GW	3	Y	X
	8/27/13	1320		RB-02	GW	2	Y	X
	8/27/13	1333		BSB-27 (3-5)	S	2	Y	X
	8/27/13	1340		BSB-27 (5-7)	S	2	Y	X

Turnaround:
- ☐ 24 hour RUSH (surcharge applies)
- ☐ 48 hour RUSH (surcharge applies)
- ☐ 72 hour RUSH (surcharge applies)
- ☒ Standard (5-7 bus. days)
- ☐ Other: Specify

Remarks:

Matrix Code: S Soil; GW Ground Water; A Air; SW Surface Water; O Oil; WW Waste Water; P Wipe; X Other: Specify

☐ FES Drilling Services

Deliverables: ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ EDD

Comments: MDEQ OP memo GGN-8 revised LODs

Relinquished By:	Date/ Time	Received By:
[signature]	8/27/13 1645	[signature] 8/28/13 12:30
[signature]	8/28/13 3:23	[signature]
		Received By Laboratory:

LAB USE ONLY:
Fibertec project number:
Laboratory Tracking:
Temperature at Receipt:

RCV'D ON ICE 4.4

COC Revision: February, 2013

TERMS & CONDITIONS ON BACK