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March 08, 2013

Scott Rissi
CTRA
11270 Cascade Rd.
Lowell, MI 49331

TEL: (616) 299-8117
FAX (616) 868-1130
RE: 6454 T

Dear Scott Rissi:

Order No.: 1303004

BIO-CHEM Laboratories, Inc. received 1 sample on 3/1/2013 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Please note that unless otherwise instructed, residual samples will be held for sixty (60) days from the original report date. At that time, all non-hazardous samples will be disposed of in accordance with federal, state and local regulations and ordinances, and hazardous samples shall be returned to you. Please contact the laboratory within thirty (30) days if other arrangements for sample retention need to be made.

Sincerely,

Cindy Euwema
Office Manager

1049 28th Street SE
Grand Rapids, MI 49508
PH: (616) 248-4900
Toll Free: 800-362-LABS
FAX: (616) 248-4904



Chain of Custody

1303004

Firm Name CTRA		Turn around time			Project Name		Date		Date Due		Project Number		
Firm Address 11270 Cascade Rd		State Samples Taken From 6454 T			Contact Person SCOTT RISSI		Number of Containers		Analysis Desired (One per line)		Remarks		
City, State, Zip Dowell MI 49331		Fax 616-868-1130			Sample Description (sample type: water, soil, other)		Containers		MICHIGAN TO MEMPHIS VOCs Field Kit Total Inorganics 617057179				
Phone 616-299-8117		Client Sample Number	Date Taken	Time Taken									
Lab I.D.													
1	6454-1	3-1-13	9:36A			4		X	X	X	X		
2	6454-2	3-1-13	9:36A										
3	6454-3	3-1-13	9:36A										
4													
5													
6													
7													
8													
9													
10													
Released by		Received by		Date		Time		Laboratory use only					
<i>SR</i>		Cindy Ewema		3-1-13		10:10		<input type="checkbox"/> Blue Ice <input checked="" type="checkbox"/> Regular Ice <input type="checkbox"/> No Coolant		Scott Rissi@6Mail.com cc: Tim Dixon			
										Drop off			

CLIENT: CTRA
Project: 6454 T
Lab Order: 1303004

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received
1303004-01A	6454	Aqueous	3/1/2013	3/1/2013

CLIENT: CTRA
Project: 6454 T
Lab Order: 1303004

CASE NARRATIVE

Samples are routinely analyzed using methods outlined in the following references:

- (SW) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Ed.
- (E) Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020.
- (A) Standard Methods for the Examination of Water and Wastewater, APHA, 18th Ed.
- (D) Annual Book of ASTM Standards.

Specific methods utilized for this project are provided in the analytical report and are identified by the reference document abbreviation () followed by the method number.

All QA/QC and sample analyses met method, laboratory and/or regulatory data quality objectives unless otherwise specified below.

No data qualifications required.

CLIENT: CTRA
Lab Order: 1303004
Project: 6454 T
Lab Sample ID: 1303004-01A

Project Number: N/A
Client Sample ID: 6454
Collection Date: 3/1/2013
Matrix: AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Alcohols by GC/FID								
1. Ethylene Glycol	SW8015B	< 2,000		2,000	µg/L	1	KLM	3/6/2013
2. Propylene Glycol	SW8015B	< 2,000		2,000	µg/L	1	KLM	3/6/2013
Anions by Ion Chromatography								
1. Nitrogen, Nitrate (As N)	E300.0	< 0.10		0.10	mg/L	1	RHS	3/2/2013
2. Nitrogen, Nitrite (As N)	E300.0	< 0.10		0.10	mg/L	1	RHS	3/2/2013
Total Mercury by CVAA								
1. Mercury	SW7470A	< 0.20		0.20	µg/L	1	RHS	3/8/2013
Total Metal(s) by ICP								
1. Arsenic	SW6010B	< 5.0		5.0	µg/L	1	RHS	3/7/2013
2. Barium	SW6010B	160		100	µg/L	1	RHS	3/7/2013
3. Cadmium	SW6010B	< 0.50		0.50	µg/L	1	RHS	3/7/2013
4. Chromium	SW6010B	< 10		10	µg/L	1	RHS	3/7/2013
5. Copper	SW6010B	< 4.0		4.0	µg/L	1	RHS	3/7/2013
6. Lead	SW6010B	< 3.0		3.0	µg/L	1	RHS	3/7/2013
7. Magnesium	SW6010B	78,000		1,000	µg/L	1	RHS	3/7/2013
8. Manganese	SW6010B	120		50	µg/L	1	RHS	3/7/2013
9. Nickel	SW6010B	< 20		20	µg/L	1	RHS	3/7/2013
10. Silver	SW6010B	< 0.50		0.50	µg/L	1	RHS	3/7/2013
11. Zinc	SW6010B	20		20	µg/L	1	RHS	3/7/2013
Total Selenium by NaBHR								
1. Selenium	SW7742	< 5.0		5.0	µg/L	1	RHS	3/7/2013

Definitions: PQL - Practical Quantitation Limit
 DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
 S - Spike Recovery Outside Acceptance Limits
 B - Analyte detected in associated Method Blank
 N - See case narrative for explanation

CLIENT: CTRA
Lab Order: 1303004
Project: 6454 T
Lab Sample ID: 1303004-01A

Project Number: N/A
Client Sample ID: 6454
Collection Date: 3/1/2013
Matrix: AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Volatiles by GC/MS								
1. 1,1,1,2-Tetrachloroethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
2. 1,1,1-Trichloroethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
3. 1,1,2,2-Tetrachloroethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
4. 1,1,2-Trichloroethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
5. 1,1-Dichloroethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
6. 1,1-Dichloroethene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
7. 1,1-Dichloropropene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
8. 1,2,3-Trichlorobenzene	SW8260B	< 5.0		5.0	µg/L	1	JJH	3/1/2013
9. 1,2,3-Trichloropropane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
10. 1,2,4-Trichlorobenzene	SW8260B	< 5.0		5.0	µg/L	1	JJH	3/1/2013
11. 1,2,4-Trimethylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
12. 1,2-Dibromo-3-chloropropane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
13. 1,2-Dibromoethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
14. 1,2-Dichlorobenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
15. 1,2-Dichloroethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
16. 1,2-Dichloropropane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
17. 1,3,5-Trimethylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
18. 1,3-Dichlorobenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
19. 1,3-Dichloropropane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
20. 1,4-Dichlorobenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
21. 2,2-Dichloropropane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
22. 2-Butanone	SW8260B	< 50		50	µg/L	1	JJH	3/1/2013
23. 2-Chlorotoluene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
24. 2-Hexanone	SW8260B	< 50		50	µg/L	1	JJH	3/1/2013
25. 4-Chlorotoluene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
26. 4-Isopropyltoluene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
27. 4-Methyl-2-pentanone	SW8260B	< 50		50	µg/L	1	JJH	3/1/2013
28. Acetone	SW8260B	< 100		100	µg/L	1	JJH	3/1/2013
29. Benzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
30. Bromobenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
31. Bromochloromethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
32. Bromodichloromethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
33. Bromoform	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
34. Bromomethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
35. Carbon disulfide	SW8260B	< 50		50	µg/L	1	JJH	3/1/2013
36. Carbon tetrachloride	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
37. Chlorobenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
38. Chloroethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
39. Chloroform	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
40. Chloromethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013

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CLIENT: CTRA
Lab Order: 1303004
Project: 6454 T
Lab Sample ID: 1303004-01A

Project Number: N/A
Client Sample ID: 6454
Collection Date: 3/1/2013
Matrix: AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
41. cis-1,2-Dichloroethene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
42. cis-1,3-Dichloropropene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
43. Dibromochloromethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
44. Dibromomethane	SW8260B	< 5.0		5.0	µg/L	1	JJH	3/1/2013
45. Dichlorodifluoromethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
46. Diethyl ether	SW8260B	< 50		50	µg/L	1	JJH	3/1/2013
47. Ethylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
48. Hexachlorobutadiene	SW8260B	< 5.0		5.0	µg/L	1	JJH	3/1/2013
49. Hexachloroethane	SW8260B	< 5.0		5.0	µg/L	1	JJH	3/1/2013
50. Iodomethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
51. Isopropylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
52. m,p-Xylene	SW8260B	< 2.0		2.0	µg/L	1	JJH	3/1/2013
53. Methyl tert-butyl ether	SW8260B	< 4.0		4.0	µg/L	1	JJH	3/1/2013
54. Methylene chloride	SW8260B	< 5.0		5.0	µg/L	1	JJH	3/1/2013
55. n-Butylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
56. n-Propylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
57. o-Xylene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
58. sec-Butylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
59. Styrene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
60. tert-Butylbenzene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
61. Tetrachloroethene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
62. Toluene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
63. trans-1,2-Dichloroethene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
64. trans-1,3-Dichloropropene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
65. trans-1,4-Dichloro-2-butene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
66. Trichloroethene	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
67. Trichlorofluoromethane	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013
68. Vinyl chloride	SW8260B	< 1.0		1.0	µg/L	1	JJH	3/1/2013

Ammonia Nitrogen

1. Nitrogen, Ammonia (As N)	E350.3	0.15		0.025	mg/L	1	KLM	3/6/2013
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Total Inorganic Nitrogen

1. Total Inorganic Nitrogen	NA	0.15		0.10	mg/L	1	KLM	3/6/2013
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Lab Order: 1303004
Client: CTRA
Project: 6454 T

ANALYTICAL DETAIL REPORT

Sample ID	Client Sample ID	Matrix	Test Name	Date Sampled	TCLP/SPLP Date	Prep Date	QC Batch	Analysis Date	Analytical Batch
1303004-01A	6454	Aqueous	Alcohols by GC/FID	3/1/2013		3/5/2013	34897	3/6/2013	GC_J_FID_130306A
	6454	Aqueous	Alcohols by GC/FID	3/1/2013		3/5/2013	34897	3/6/2013	GC_J_FID_130306A
	6454	Aqueous	Alcohols by GC/FID	3/1/2013		3/5/2013	34897	3/6/2013	GC_J_FID_130306A
	6454	Aqueous	Ammonia Nitrogen	3/1/2013		3/6/2013	R74956	3/6/2013	POTENTIAL_130306A
	6454	Aqueous	Ammonia Nitrogen	3/1/2013		3/6/2013	R74956	3/6/2013	POTENTIAL_130306A
	6454	Aqueous	Anions by Ion Chromatography	3/1/2013			R74932	3/2/2013	IC_A_130302A
	6454	Aqueous	Total Inorganic Nitrogen	3/1/2013		3/6/2013	R74956	3/6/2013	POTENTIAL_130306A
	6454	Aqueous	Total Mercury by CVAA	3/1/2013		3/8/2013	34908	3/8/2013	MTL_D_HY_130308A
	6454	Aqueous	Total Metal(s) by ICP	3/1/2013		3/5/2013	34894	3/7/2013	MTL_G_ICP_130307A
	6454	Aqueous	Total Selenium by NaBHR	3/1/2013		3/5/2013	34894	3/7/2013	MTL_C_FL_130307A
	6454	Aqueous	Volatiles by GC/MS	3/1/2013			R74931	3/1/2013	GCMS_Q_130301A