

Client Project ID:
Group I & II

ENVIRONMENTAL LABORATORIES, Ltd

Client:
Volcanic Minerals

Ref: R16400_IOC
Sampled: 03/09/09
Received: 03/09/09
Matrix: Water
Units: mg/L*
Analyst: EW, LW, ZT, CC
Reported: 03/18/09

Laboratory Results of Analysis for Title 22
General Mineral/Physical/Inorganic Chemicals

General Min/Phy./Inorg. Analyte	Result mg/L	Dilution Factor	Detection Limits	Prep Date	Analysis Date	Method
Group I						
pH	7.24	1.0	unit	03/09/09	03/09/09	SM 4500 H ⁺ B
Nitrate (as NO ₃)	0.430	1.0	0.1 mg/L	03/10/09	03/10/09	EPA353.2
Nitrate (as Nitrogen)	0.100	1.0	0.1 mg/L	03/10/09	03/10/09	EPA353.2
Nitrite (as Nitrogen)	0.010	1.0	0.01mg/L	03/10/09	03/10/09	EPA353.2
Cyanide	ND	1.0	0.005 mg/L	03/13/09	03/13/09	SM 4500 CN C
Fluoride	ND	1.0	0.05 mg/L	03/10/09	03/10/09	SM 4500 F C
Bicarbonate Alk. (as Ca CO ₃)	466	1.0	10 mg/L	03/18/09	03/18/09	SM 2320 B
Carbonate Alk. (as CaCO ₃)	ND	1.0	10 mg/L	03/18/09	03/18/09	SM 2320 B
Color	ND	1.0	5 CU	03/10/09	03/10/09	SM 2120 B
Turbidity	0.230	1.0	0.2 NTU	03/10/09	03/10/09	SM 2130 B
Odor	ND	1.0	1 TON	03/10/09	03/10/09	SM 2150 B
TDS	386	1.0	1.0 mg/L	03/18/09	03/18/09	SM 2540 C
Group II						
Silver	ND	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Arsenic	ND	1.0	0.0004mg/L	03/10/09	03/10/09	SM 3114B
Barium	0.00949	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Beryllium	ND	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Cadmium	ND	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Cobalt	ND	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Chromium (total)	0.0358	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Copper	0.0211	1.0	0.02 mg/L	03/10/09	03/10/09	EPA200.7
Mercury	ND	1.0	0.0002 mg/L	03/12/09	03/12/09	EPA 245.1
Molybdenum	ND	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Nickel	0.00356	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Lead	ND	1.0	0.001mg/L	03/10/09	03/10/09	EPA 200.7
Antimony	0.00139	1.0	0.0002mg/L	03/10/09	03/10/09	EPA 200.9
Selenium	ND	1.0	0.001 mg/L	03/10/09	03/10/09	SM 3114B
Thallium	0.00917	1.0	0.0003 mg/L	03/10/09	03/10/09	EPA 200.9
Vanadium	ND	1.0	0.010mg/L	03/10/09	03/10/09	EPA200.7
Zinc	4.45	1.0	0.02 mg/L	03/10/09	03/10/09	EPA 200.7
Iron	ND	1.0	0.05 mg/L	03/10/09	03/10/09	EPA200.7
Manganese	ND	1.0	0.03 mg/L	03/10/09	03/10/09	EPA200.7
Aluminum	0.0524	1.0	0.0075mg/L	03/10/09	03/10/09	EPA 200.7
Calcium	2.67	1.0	0.3 mg/L	03/10/09	03/10/09	EPA200.7
Magnesium	124	1.0	0.3 mg/L	03/10/09	03/10/09	EPA200.7
Potassium	ND	1.0	0.3 mg/L	03/10/09	03/10/09	EPA200.7
Sodium	3.31	1.0	0.3 mg/L	03/10/09	03/10/09	EPA200.7

ND: Not Detected

*All units are in mg/L otherwise the units are specified for the corresponding analytes.


H. Khoshkhoo Ph.D.,
Laboratory Director/President

Client:
Volcanic Minerals

Client Project ID:
Group III

Ref: R16400_100w
Sampled: 03/09/09
Received: 03/09/09
Matrix: Water
Units: ug/L
Analyst: LW
Reported: 03/16/09

*** Laboratory Results of Analysis for Title 22 Organic Compounds**

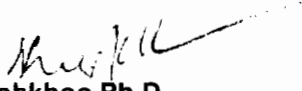
VOC

Analyte	Result ug/L	Dilution Factor	Detection Limits	Prep Date	Analysis Date	Method
Benzene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Carbon Tetrachloride	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,2-Dichlorobenzene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,3-Dichlorobenzene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,4-Dichlorobenzene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,2-Dibromoethane	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
cis-1,2-Dichloroethene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
trans-1,2-Dichloroethene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Methylene Chloride	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,2-Dichloropropane	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Ethylbenzene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Chlorobenzene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Styrene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Tetrachloroethene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Toluene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,2,4-Trichlorobenzene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,1,1-Trichloroethane	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
1,1,2-Trichloroethane	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Trichloroethene	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Vinyl Chloride	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Xylenes, Total	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Bromodichloromethane	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Bromoform	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Chloroform	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Dibromochloromethane	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2
Total THM	ND	1.0	0.5	03/12/09	03/12/09	EPA 524.2

ND: Not detected at detection limit for reporting

Note 1: THM parameters included.

Note 2: MTBE included.


H. Khoshkhoo Ph.D.,
Laboratory Director/President

Client:
Volcanic Minerals

Client Project ID:
Group IV

Ref: R16400_SOC
Sampled: 03/09/09
Received: 03/09/09
Matrix: Water
Units: ug/L
Analyst: LW, EW, NCL
Reported: 03/25/09

Laboratory Results of Analysis for Title 22 , SOC

Synthetic Organic Compounds

Analyte	Result ug/L	Dilution Factor	Detection Limits	Prep Date	Analysis Date	Method
Dibromchloropropane, DBCP	ND	1.0	0.01 ug/L	03/13/09	03/13/09	EPA 504
Ethylenedibromide, EDB	ND	1.0	0.02 ug/L	03/13/09	03/13/09	EPA 504
Chlordane	ND	1.0	0.1 ug/L	03/12/09	03/13/09	EPA 508.1
Endrin	ND	1.0	0.01 ug/L	03/12/09	03/12/09	EPA 508.1
Heptachlor	ND	1.0	0.01 ug/L	03/12/09	03/12/09	EPA 508.1
Heptachlor epoxie	ND	1.0	0.01 ug/L	03/12/09	03/12/09	EPA 508.1
Hexachlorobenzene	ND	1.0	0.01 ug/L	03/12/09	03/12/09	EPA 508.1
Hexachlorocyclopentadiene	ND	1.0	0.01 ug/L	03/12/09	03/12/09	EPA 508.1
Lindane, g-BHC	ND	1.0	0.01 ug/L	03/12/09	03/12/09	EPA 508.1
4,4'-Methoxychlor	ND	1.0	0.05 ug/L	03/12/09	03/12/09	EPA 508.1
PCBs Arochlor Screen	ND	1.0	0.1 ug/L	03/12/09	03/12/09	EPA 508.1
Toxaphene	ND	1.0	0.1 ug/L	03/12/09	03/12/09	EPA 508.1
Dalapon	ND	1.0	0.5 ug/L	03/16/09	03/22/09	EPA 515.3
2,4-D	ND	1.0	10 ug/L	03/16/09	03/22/09	EPA 515.3
Dinoseb (DNBP)	ND	1.0	2.0 ug/L	03/16/09	03/22/09	EPA 515.3
Pentachlorophenol (PCP)	ND	1.0	0.2 ug/L	03/16/09	03/22/09	EPA 515.3
Picloram	ND	1.0	1.0 ug/L	03/16/09	03/22/09	EPA 515.3
2,4,5-TP (Silvex)	ND	1.0	1.0 ug/L	03/16/09	03/22/09	EPA 515.3
Alachlor (Alanex)	ND	1.0	1.0 ug/L	03/18/09	03/18/09	EPA 525
Atrazine (AAtrex)	ND	1.0	0.1 ug/L	03/18/09	03/18/09	EPA 525
Benzo(a)pyrene	ND	1.0	0.05 ug/L	03/18/09	03/18/09	EPA 525
Di(2-ethyl hexyl) adipate	ND	1.0	1.0 ug/L	03/18/09	03/18/09	EPA 525
Simazine (Princep)	ND	1.0	0.5 ug/L	03/18/09	03/18/09	EPA 525
Carbofuran	ND	1.0	5.0 ug/L	03/25/09	03/26/09	EPA 531.1
Oxamyl	ND	1.0	5.0 ug/L	03/25/09	03/26/09	EPA 531.1
Glyphosate	ND	1.0	10 ug/L	03/22/09	03/23/09	EPA 547
Endothall	ND	1.0	45 ug/L	03/12/09	03/14/09	EPA 548.1
Diquat	ND	1.0	0.4 ug/L	03/12/09	03/16/09	EPA 549.2

ND: Not Detected

All units are in ug/L otherwise the units are specified for the corresponding analytes.


H. Khoshkhoo PhD.,
Laboratory Director/President

Client:

Volcanic Minerals

Client Project ID:

Group IV

Ref: R16400_TCDD

Sampled: 03/09/09

Received: 03/09/09

Analyzed: 03/23/09

Reported: 03/23/09

Analyst: TestAmerica

Matrix: Water

Units: pg/L

↓ **Laboratory Report of Analysis for Dioxins/Furans**

Analyte	Detection Limit	Results	Date of Analysis	Method
		Sample ID		
		16400		
		Volcanic Mineral #1		
2,3,7,8 TCDD	3.0 pg/L	ND	03/23/09	EPA-5 1613-B
	Recovery Limit	Percent Recovery		
Internal Standard ¹³ C-2,3,7,8-TCDD	25-164	47.0	03/23/09	EPA-5 1613-B
Surrogate ³⁷ Cl ₁₄ -2,3,7,8-TCDD	35-197	78.0	03/23/09	EPA-5 1613-B

ND: Not Detected


 H. Khoshkhoo PhD.,
 Laboratory Director/President

Client:
Volcanic Minerals

Client Project #:
Group VI

Ref # R16400R_Coliform
BioVir
Matrix Water
Sampled 03/24/09
Received 03/24/09
Reported 03/31/09
Analyzed 03/24/09-03/26/09

*** Laboratory Results of Analysis for Total Coliform**

Coliform, Total, and E. Coli Assay:
(SM 9221B)

Analysis date:
03/24/09-03/26/09

Time:
16:26

Sample ID	Lab ID	Total Coliform MPN/100 mL	E. Coli MPN/100 mL	Fecal Coliform MPN/100 mL
Volcanic Minerals	16400R	<1.1	<1.1	<1.1

Sample Evaluation Performance Criteria. The precise rate of recovery of organisms from environmental samples can not be determined. The Laboratory analyzed your sample in accordance with the method described with each analyte above. However, due to inherent limitation of these methods organisms may avoid detection. For additional information this limitations please call us at 1-800-747-6082

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H. Khoshkhoo, Ph.D.,
Laboratory Director/President