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CleanHarbors
ANALYTICAL SERVICES
325 WOOD ROAD, BRAINTREE, MA 02184
(617) 849-6070

REPORT OF ANALYSIS

O. H. Materials
16406 U. S. Route 224E
Findlay, OH 45839-2600

Attn: Mr. Blake Gilley

Job Identification: Salem Acres

Water Sample

Date Received: 11/03/87

CHAS Lab #: 202946

P.O. #: Ankstitus

Enclosed are the results for the sample(s) delivered to our laboratory on the date indicated above.

Should you have any questions concerning this work, please do not hesitate to contact me.

This laboratory follows quality assurance/quality control procedures outlined in EPA Publication EPA 600/4-79-019, "Handbook for Analytical Quality Control in Water and Wastewater Laboratories", March 1979, and specific QA/QC requirements of the procedures used.

The information contained in this report is, to the best of my knowledge, accurate and complete.

Per/Date: A. W. Schultheis 11/9/87 3:30PM
Alex Schultheis
Laboratory Director

CleanHarbors

Client: O.H. Materials
Sample Station: #87380 Lag Water

CHAS Lab #: 202946
Date Received: 11/03/87

Parameter	MDL	Result	Units	Analysis Date	Method Number and Reference
Arsenic - Total	0.002	0.003	mg/l	11/05/87	4.1.3/206.2 (a)
Barium - Total	0.2	0.3	mg/l	11/05/87	4.1.3/200.7 (a)
Cadmium - Total	0.01	ND	mg/l	11/05/87	4.1.3/200.7 (a)
Chromium - Total	0.05	0.10	mg/l	11/05/87	4.1.3/200.7 (a)
Chromium - Hexavalent	0.005	ND	mg/l	11/05/87	4.1.3/218.4 (a)
Copper - Total	0.02	0.02	mg/l	11/05/87	4.1.3/200.7 (a)
Iron - Total	0.02	7.0	mg/l	11/05/87	4.1.3/236.1 ( )
Lead - Total	0.1	ND	mg/l	11/05/87	4.1.3/236.1 (a)
Manganese - Total	0.02	0.24	mg/l	11/05/87	4.1.3/200.7 (a)
Mercury - Total	0.0002	0.0004	mg/l	11/06/87	245.1 (a)
Nickel - Total	0.04	ND	mg/l	11/05/87	4.1.3/200.7 (a)
Selenium - Total	0.002	ND	mg/l	11/04/87	270.2 (a)
Silver - Total	0.01	0.02	mg/l	11/04/87	4.1.3/272.1 (a)
Thallium - Total	0.2	0.3	mg/l	11/04/87	4.1.3/200.7 (a)
Zinc - Total	0.01	0.13	mg/l	11/05/87	4.1.3/200.7 (a)
Cyanide - Total	0.02	ND	mg/l	11/05/87	335.2 (a)
Amenable Cyanide	0.02	ND	mg/l	11/05/87	335.1 (a)
Sulfide	0.10	0.80	mg/l	11/04/87	427C (2)
Phenols	0.001	0.189	mg/l	11/06/87	420.1 (a)
Ammomia	0.05	0.19	mg/l	11/04/87	350.2 (a)
Density	--	1.0	g/ml	11/06/87	ASTM D14-29-76
Color	5	15	Color Units	11/03/87	204A (b)
Flashpoint	--	>200	°F	11/04/87	1010 (c)
pH	--	6.7	--	11/03/87	150.1 (a)
Total Solids	10	890	mg/l	11/05/87	209A (b)
Total Suspended Solids	4.0	100	mg/l	11/05/87	209D (b)
Total Dissolved Solids	10.0	830	mg/l	11/05/87	209B (b)
Alkalinity	2.0	510	mg/l	11/06/87	310.1 (a)
Total Organic Carbon		200	mg/l		

Notes: ND = Below minimum detectable level (MDL)

CleanHarbors

Client: O.H. Materials
Sample Station: #87380 Lag Water

CHAS Lab #: 202946
Date Received: 11/03/87

Volatile Organic Analysis
by EPA Method 8240

Analysis Date: 11/04/87

Compound	MDL*	Conc.*	Compound	MDL*	Conc.*
Chloromethane	50	ND	cis-1,3-Dichloropropene	25	ND
Bromomethane	50	ND	Trichloroethene	25	ND
Vinyl Chloride	50	ND	Benzene	25	ND
Chloroethane	50	ND	Dibromochloromethane	25	ND
Methylene Chloride	25	ND	1,1,2-Trichloroethane	25	ND
Trichlorofluoromethane	25	ND	trans-1,3-Dichloropropene	25	ND
1,1-Dichloroethene	25	ND	2-Chloroethylvinyl Ether	50	ND
1,1-Dichloroethane	25	ND	Bromoform	25	ND
trans-1,2-Dichloroethene	25	30	1,1,2,2-Tetrachloroethane	25	ND
Chloroform	25	ND	Tetrachloroethene	25	ND
1,2-Dichloroethane	25	ND	Toluene	25	35
1,1,1-Trichloroethane	25	ND	Chlorobenzene	25	ND
Carbon Tetrachloride	25	ND	Ethylbenzene	25	35
Bromodichloromethane	25	ND	Total Xylenes	25	420
1,2-Dichloropropane	25	ND			
			Acetone	100	ND
			Carbon Disulfide	50	ND
			2-Butanone	100	ND
			Vinyl Acetate	50	ND
			4-Methyl-2-Pentanone	25	ND
			2-Hexanone	25	ND
			Styrene	25	ND

QA/QC Surrogate Recoveries:
1,2-Dichloroethane: 99%
D-8 Toluene: 98%
p-BFB: 111%

Notes: ND = Below minimum detectable level (MDL)
* = ug/l

Hydrocarbon background present in sample.

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Method References

(a) "Methods for Chemical Analysis of Water and Wastes," Publication EPA-600/4-79-020, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, 1979, revised March 1983.

(b) "Standard Methods for the Examination of Water and Wastewater," 16th ed., American Public Health Association, American Water Works Association, Water Pollution Control Federation, Washington, D.C., 1985.

(c) "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods," 2nd ed., U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C., July 1982.

(d) "The Determination of Polychlorinated Biphenyls in Transformer Fluid and Waste Oils," Publication EPA-600/4-81-045, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, 1981.

(e) "EPA-CLP Organic Analyses of Low and Medium Hazardous Waste Sample (Water and Soil) Procedures Revision," U.S. Environmental Protection Agency, July 1985.

(f) "Test Procedures for Analyses of Organic Pollutants," Code of Federal Regulations, Appendix A, Part 136, July 1, 1985.

(g) "Measurement of Purgeable Organic Compounds in Drinking Water by Gas Chromatography/Mass Spectrometry," Method 524, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati.

(h) "Prescribed Procedures for Measurement of Radioactivity in Drinking Water," Publication EPA-600/4-80-032, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, August 1980.

(i) "Clean Harbors Radiological Environmental Analytical Procedures," Clean Harbors Analytical Services, Braintree, MA, October 1985.

(j) "Methods for Chlorinated Phenoxy Acid Herbicides in Industrial Effluents," MDQARL, Cincinnati, November 23, 1973.

(k) "Annual Book of Standards," Section 11: Water and Environmental Technology, Vols. 11.01-11.04, American Society for Testing and Materials, Philadelphia, 1983, 1984, 1985.

(l) "Methods for Benzidine, Chlorinated Organic Compounds, Pentachlorophenol and Pesticides in Water and Wastewater," U.S. Environmental Protection Agency, September 1978.

(m) "Methods for Organochlorine Pesticides in Industrial Effluents," MDQARL, Environmental Protection Agency, Cincinnati, November 28, 1973.

(n) "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," Techniques of Water-Resources Investigation of the U.S. Geological Survey, Book 5, Chapter A-1, U.S. Department of the Interior, 1979.

(o) "Measurement of Trihalomethanes in Drinking Water by Gas Chromatography/Mass Spectrometry and Selected Ion Monitoring," Method 501.3, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati.

(p) "The Analysis of Trihalomethanes in Finished Waters by the Purge and Trap Method," U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati.

(q) "The Analysis of Trihalomethanes in Drinking Water by Liquid/Liquid Extraction," U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati.

(r) "Official Methods of Analysis," Association of Official Analytical Chemists, 14th ed., 1984.

(s) "Hach Handbook of Water Analysis," Hach Chemical Company, Loveland, CO, 1979.

(t) H.M. Prichard and T.F. Gesell, "Rapid Measurement of Rn-222 Concentrations in Water with a Commercial Liquid Scintillation Counter," Health Physics, Vol. 33, 1977, pp. 577-581.

(u) "Petroleum Products and Lubricants (I): D56-D1660," Annual Book of ASTM Standards, Volume 5.01, American Society for Testing and Materials, Philadelphia, 1985.

(v) "Petroleum Products and Lubricants (III): D2981-Latest; Catalysts," Annual Book of ASTM Standards, Volume 5.03, American Society for Testing and Materials, Philadelphia, 1985.

B&B

CHAIN OF CUSTODY RECORD

LEXI

PROJ. NO.	PROJECT NAME
	SALEM ACRES, MA

SAMPLERS: (Signature) Robert J. Ambrotta

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA 601 / 602	WASTE WATER ANALYSIS SEE ATTACHED FORM				REMARKS
1	87/11/2	1423		✓	WA-1 Lag Dewater	6	✓	✓				# 87380 202946
											-01-02-03	8240 ✓
											-04	TOC Sent OUT
										R1	-05	RNA
										SF	-06	METALS
											-07	TOT CN⁻ / AMENABLE CN⁻
											08	SULF. 05
											-09	PHENOLS / AMMONIA
											-10	DENSITY, COLOR, FLASHPOINT, PH, TS
												TSS, TDS, ACIDITY, ALKALINITY

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
R. Ambrotta	11/2/87 1800	John Comeau			
John Comeau	11/3/87 0700	Anthony Ward			
Anthony Ward		Received for Laboratory by: (Signature) Kelley Ann McGarr	Date / Time 11-3-87 9:30am	Remarks	

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