

APPENDIX A
LABORATORY TEST RESULTS

REFERENCE NO.

mei

MEI-

CHARLTON, INC.

ENGINEERING AND APPLIED SCIENCES working with MATERIALS ENVIRONMENT INDUSTRIAL PRODUCTS AND PROCESSES

RECEIVED
AUG 04 1982
FOUNDATION SCIENCES, INC.

2233 S.W. CANYON ROAD
PORTLAND, OREGON 97201
503/228-9663

TO: Foundation Sciences, Inc.
Attention: John Creveling
1630 S. W. Morrison Street
Portland, OR 97205

CLIENT NO.:

REFERENCE NO.: 4802011

DATE: 4 August 1982

SUBJECT: ANALYSIS OF WATER SAMPLE SUBMITTED
FOR XYLENE, N-BUTYL ACETATE
AND 1,1,1-TRICHLOROETHANE

	Specification		Sample Identification		
	Method	Material	Water Sample submitted		
Analysis :	Gas Chromatography	Not Given	41 Aug 1982		
Xylene , as Parts Per Million	Flame Ionization Detector with		9		
N-Butyl Acetate , as Parts Per Million	Solvent Extraction		< 2		
1,1,1-Trichloroethane , as Parts Per Million	"		4		

Tested on: 5 Aug 1982 - BK/AH

MEI-Charlton, Inc.

Don Valley
Don Valley, P.E. (CA)
Account Director

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Testing Laboratories, Inc.

940 South Harney Street, Seattle, Washington 98108 (206) 767-5060

Chemistry, Microbiology, and Technical Services



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Certificate

CLIENT Foundation Sciences
1630 S. W. Morrison
Portland, OR 97205

REPORT ON GROUND WATER

SAMPLE IDENTIFICATION Marked: 1) WB-1
2) WB-2
3) WB-3
4) WB-4
TESTS PERFORMED AND RESULTS: 5) WB-5

FOUNDATION SCIENCES, INC.

DOCUMENT NO. _____			
ROUTING	ACTION	INFO	SIG
RKD			
DDD			
DAG			
HSK			
REPLY NO. _____			

LABORATORY NO. 77497

DATE August 17, 1982

The samples were analyzed 8-16-82 by purge and trap gas chromatography-mass spectrometry. Compounds analyzed for and quantitated were 1,1,1-trichloroethane, ortho-, meta- and para-xylene, and n-butyl acetate. The results are as follows:

	ug/L						
	1	1 DUP	2	3	4	5	FB
1,1,1-trichloroethane	140	140	ND	360	ND	ND	ND
Butyl acetate	ND	ND	ND	ND	ND	ND	ND
Ortho-xylene	130	130	ND	ND	ND	ND	ND
Meta-xylene	ND	ND	ND	ND	ND	ND	ND
Para-xylene	ND	ND	ND	ND	ND	ND	ND

Two additional volatile peaks were found in sample #3 and identified by the computer library as 1,1,2-trichloro-1,2,2-trifluoroethane and 1,1-dichloroethane.

Key

ND = none detected (less than 1 ug/L)

Respectfully submitted,

Mike Nelson
Mike Nelson

MN:ks



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ENGINEERS AND SCIENTISTS solving problems in MATERIALS ENVIRONMENT INDUSTRIAL PRODUCTS AND PROCESSES

TO: Foundation Sciences, Inc.
Attention: John Creveling
1630 S.W. Morrison Street
Portland, OR 97205

CLIENT NO.:

REFERENCE NO.: 4802007

DATE: 19 Aug 1982

SUBJECT: ANALYSES OF 15 SOIL SAMPLES
SUBMITTED FOR XYLENE, N-BUTYL
ACETATE AND 1,1,1-TRICHLOROETHANE

Memorandum Report

from Brian Knopf
Chemist

You requested that MEI-Charlton, Inc. determine Xylene, n-Butyl Acetate, and 1,1,1-Trichloroethane contamination in soil samples. Initially, seven soil samples were submitted 14 July 1982; the results were reported in MEI-C report Reference No. 4801048. As your investigation continued, 15 additional soil samples were submitted 3 August 1982 for subsequent analyses. Our results are reported in the attached Table I.

An analysis was performed on the vapor spaces in the sample containers immediately after the receipt of the soil samples to determine qualitatively the presence of volatile organics. The concentration of volatile organics was then determined quantitatively in the soil matrix by a thermal desorption (purge and trap) gas chromatographic method.

Four of the seven soil samples initially submitted contained significant amounts of the volatile organic compounds Xylene, n-Butyl Acetate, and 1,1,1-Trichloroethane. However, our present analyses of the 15 additional soil samples had negative results by both vapor space and purge and trap methods of analyses. The results are reported as less than our minimum detection limit for each compound.

If additional analyses or further information are desired, please contact us.

Don Valley, P.E. (CA)
Account Director

BK:jg
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TO: Foundation Sciences, Inc.
 SUBJECT: ANALYSES OF 15 SOIL SAMPLES
 REF.NO.: 4802007

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Table I. Summary of Results

	Specification		Sample Identification			
	Method	Material				
Analysis: Volatile Organics in Soil	Gas Chroma- tography	Not Given	Boring WB-1 Sample S-2 Depth 7.5-9	Boring WB-1 Sample S-5 Depth 22.5- 22.5-24	Boring WB-1 Sample S-8 Depth 42.5- 42.5-44	Boring WB-2 Sample S-2 Depth 7.5-9
Xylene, parts per million	Purge and trap		<0.03	<0.03	<0.03	<0.03
n-Butyl Acetate, parts per million	Purge and trap		<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane parts per million	Purge and trap		<0.4	<0.4	<0.4	<0.4

	Specification		Sample Identification			
	Method	Material				
Analysis: Volatile Organics in Soil	Gas Chroma- tography	Not Given	Boring WB-2 Sample S-4 Depth 17.5-19	Boring WB-2 Sample S-8 Depth 37.5-39	Boring WB-3 Sample S-3 Depth 12.5-14	Boring WB-3 Sample S-5 Depth 22.5-24
Xylene, parts per million	Purge and trap		<0.03	<0.03	<0.03	<0.03
N-Butyl Acetate, parts per million	Purge and trap		<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane parts per million	Purge and trap		<0.4	<0.4	<0.4	<0.4

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 SUBJECT: ANALYSES OF 15 SOIL SAMPLES
 REF.NO.: 4802007

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Table I. Summary of Results (Continued)

	Specification		Sample Identification			
	Method	Material				
Analysis: Volatile Organics in Soil	Gas Chroma- tography	Not Given	Boring WB-3 Sample S-9 Depth (not given)	Boring WB-4 Sample S-2 Depth 7-8.5	Boring WB-4 Sample S-4 Depth 17-18.5	Boring WB-4 Sample S-7 Depth 32-32.5
Xylene, parts per million	Purge and trap		<0.03	<0.03	<0.03	<0.03
N-Butyl Acetate, parts per million	Purge and trap		<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane parts per million	Purge and trap		<0.4	<0.4	<0.4	<0.4

	Specification		Sample Identification		
	Method	Material			
Analysis: Volatile Organics in Soil	Gas Chroma- tography	Not Given	Boring WB-5 Sample S-3 Depth 13.0	Boring WB-5 Sample S-6 Depth 28	Boring WB-5 Sample S-8 Depth 38
Xylene, parts per million	Purge and trap		<0.03	<0.03	<0.03
N-Butyl Acetate, parts per million	Purge and trap		<0.05	<0.05	<0.05
1,1,1-Trichloroethane parts per million	Purge and trap		<0.4	<0.4	<0.4