

**SUBSURFACE INVESTIGATION REPORT
TEXTRON LYCOMING
550 MAIN STREET
STRATFORD, CONNECTICUT**

Prepared By:

**Zecco, Inc.
M&E Tech
345 W. Main Street
Northboro, Massachusetts 01532**

Prepared For:

**Textron Lycoming/Subsidiary of
Textron, Inc.
Stratford Division
550 Main Street
Stratford, Connecticut 06497-2452**

MAY 23, 1990

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The information contained in this report and any opinions expressed herein are based upon Site conditions as they existed only at the time of the investigation. This report is dated May 23, 1990 and is signed by an individual who is duly authorized to do so.


Chris Knuth
Environmental Specialist

5-24-90
Date


Justine Whalen
Manager; Hydrogeological Engineering

5-24-90
Date

1.0 INTRODUCTION

In accordance with our proposal of November 7, 1989, we are pleased to submit the results of our subsurface investigation at your Stratford Connecticut facility.

Test borings were advanced and monitoring wells were installed in proximity to the fuel tank removal and installation area near building B-5. Subsequently, soil and groundwater samples were collected and analyzed to determine the extent of Total Petroleum Hydrocarbon and Volatile Organic Compound contamination.

2.0 SUBSURFACE INVESTIGATION

On March 14 and 15, 1990, a total of seven (7) test borings were advanced at the site. In four (4) of the test borings, we constructed monitoring wells to facilitate collection of groundwater samples. Each test boring was advanced at least five feet into the water table.

The wells were constructed using flush joint schedule 40 PVC pipe with an inside diameter of two (2) inches. Slotted PVC well screens were installed in each well at depths between ten (10) and thirteen (13) feet below grade. To enhance groundwater flow into the screens, sand filter packs were installed. Cement plugs and bentonite seals were installed above the sand packs to seal the screen from surface water intrusion. To protect the wells, six (6) inch flush mounted road boxes were installed and cemented into place.

See Figure 1 for well and boring locations.

2.1 Subsurface Geology

The soils encountered in each boring were comprised of fine to coarse sands. Lenses of fine silty sands were revealed at the boring sites of monitoring wells 2, 3 and 4. These existing conditions are typical of depositional patterns associated with beach and back dune environments. The test boring logs have been attached to this report in Appendix 1.

2.2 Soil Sampling and On-Site Analysis

Soil samples were collected at the surface (below pavement) and then at five (5) foot intervals. Each sample was field screened for total Volatile Organic Compounds (V.O.C.'s) associated with petroleum using a PhotoVac Tip II Photoionizer. Elevated VOC's were encountered in monitoring wells 2,3 and 4. The most elevated readings encountered in these wells consistently fell between 5 and 12 feet below grade. A maximum reading of 450 ppm was observed in monitoring well #3 at a depth between five (5) and seven (7) feet below grade. The second highest reading was observed in monitoring well #2, also at a depth between five (5) and seven (7) feet below grade. Please refer to the following table for all values identified. (P.I.D. Meter Values)

TABLE 1
Summary of Field Screening Results
From Soil Borings
in PPM

<u>BORING</u>	<u>DEPTH</u>	<u>VOC (ppm)</u>
TB-1	0-2'	0
	5-7'	0
	10-12'	9
	13-15'	.02
TB-2	0-2'	0
	5-7'	0
	10-12'	2
	14-15'	1.2
TB-3	0-2'	0
	5-7'	29.3
	10-12'	55.2
	13-15'	8.7
MW-1	0-2'	0
	5-7'	2
	10-12'	0
	14-15'	2

Table 1 continued

MW-2	0-2'	1.2
	5-7'	385
	10-12'	325
	14-15'	42
MW-3	0-2'	6.2
	5-7'	450
	10-12'	101
	14-15'	110
MW-4	0-2'	0
	5-7'	.2
	10-12'	53.7
	15-17'	70.1

2.3 Soil Sample Laboratory Analysis

At each boring location a composite sample was combined from soils collected at each sampling interval. These composite samples were laboratory tested for Total Petroleum Hydrocarbons (TPH). All of the borings except for TB-1 revealed elevated TPH levels. A maximum level of 5,500 ppm was found in MW-3. The second highest level, 3,200 ppm was found in MW-2. Please refer to the following Table for the TPH levels found at each test boring location. The laboratory analysis are also attached to this report in Appendix #2.

TABLE 2
TPH ANALYSIS OF COMPOSITE SOIL SAMPLES FROM EACH BORING
(PPM)

BORING	TPH (PPM)
TB-1	*
TB-2	230
TB-3	43
MW-1	140
MW-2	3,200
MW-3	5,500
MW-4	220

* Indicates this parameter is below the limit of detection.

2.4 Site Hydrogeology

On May 7, 1990, at low tide, groundwater was encountered between four (4) and eleven (11) feet below grade. On March 15, 1990, the well heads were surveyed and tied into a permanent benchmark with an assumed elevation of 100.00. From this information, water table elevations were calculated and illustrated on Figure #1. The groundwater flows perpendicular to the contour lines and moves from the highest to lowest elevation toward the intertidal zone.

The direction of groundwater movement flow on May 7, 1990 was toward the Housatonic estuary. The proximity of this site to this coastal zone suggests that the watertable is influenced by tidal fluctuation.

2.5 Evaluation of Groundwater Quality. Laboratory Analysis

On May 7, 1990, water samples were collected from the four (4) monitoring well locations. The samples were tested for Volatile Organic Compounds and Total Petroleum Hydrocarbons. Three well volumes were removed prior to sampling in order to insure that representative quality of groundwater was obtained. The sampling equipment was purged with de-ionized water, methanol and de-ionized water again to prevent cross

contamination. The samples were refrigerated and transported to a state certified laboratory for analysis via EPA methods 602 and [503 B&E(1)]. With the exception of well # 1, all of the wells revealed elevated levels of Total Petroleum Hydrocarbons and Volatile Organics.. These results appear consistent with the contamination levels found in the soil samples, as wells 2 and 3 show the highest contaminant concentration. The samples were accompanied by a chain of custody document which is attached to this report along with the analytical results. Please refer to Table 3 which summarizes these results. The laboratory analysis has been attached to this report in Appendix #3.

**TABLE 3
SUMMARY OF ANALYSIS OF GROUNDWATER FOR TPH AND BTEX IN
PPM**

WELL	TPH	B	T	E	X
1	*	*	*	*	*
2	15.0	.620	*	.077	.082
3	5.4	.260	*	.017	.086
4	2.9	.017	*	.049	.009
SDWA LIMITS	N/A	.005	2.000	0.700	1.00

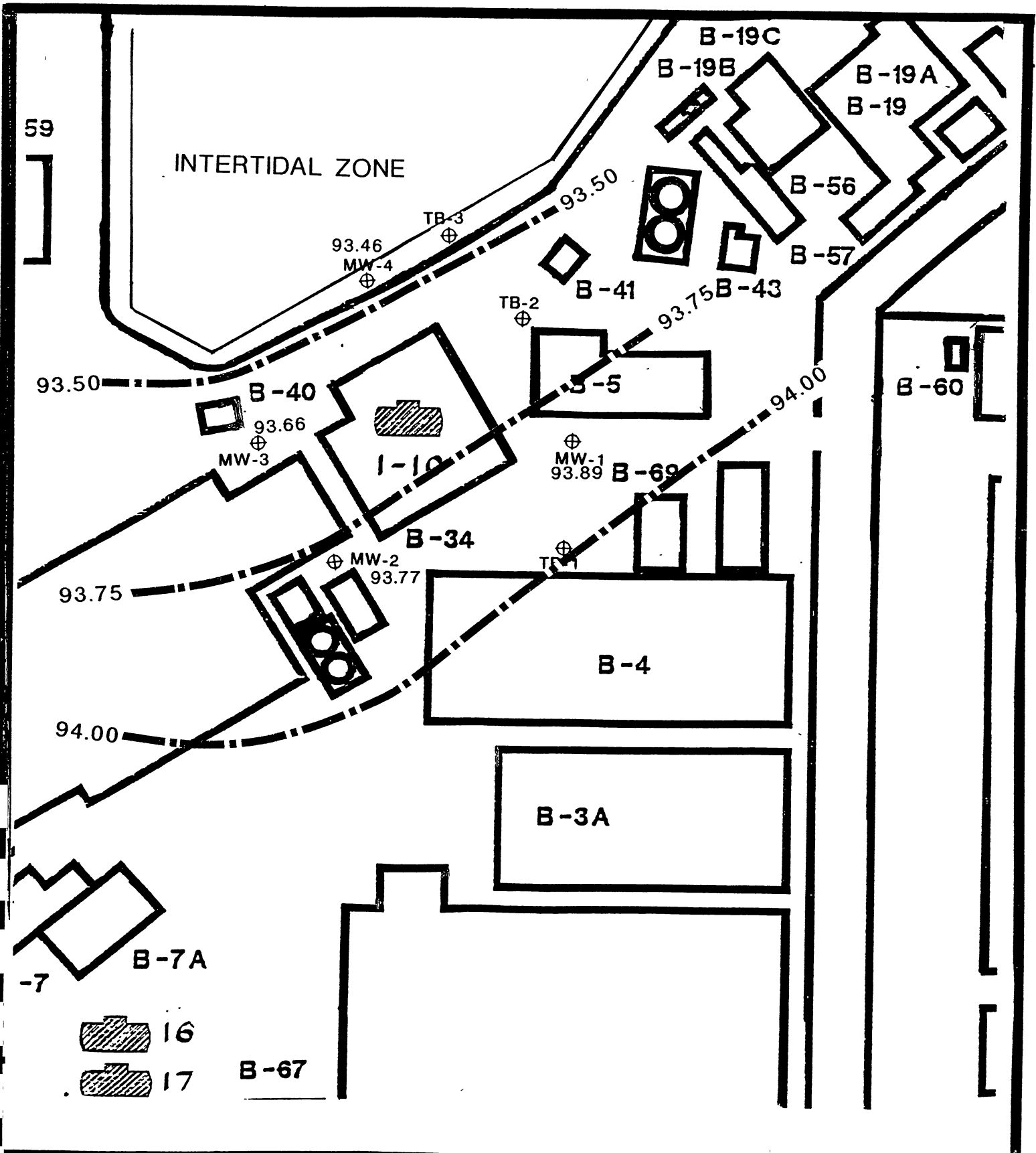
*If present, indicates this parameter is below limit of detection.

3.0 CONCLUSIONS AND SUMMARY

In accordance with our proposal we have focused our evaluation in the area of the underground storage tanks that were removed from an area near Building B-5. Our subsurface investigation and subsequent soil and groundwater analyses have revealed dissolved volatile organic compounds and total petroleum hydrocarbons in this area. Although there is no free product on the watertable, there is a plume of contaminants which is not defined.

FIGURE #1

GROUNDWATER CONTOUR MAP



GROUNDWATER CONTOUR MAP

Date:	5-9-90	Scale	NO SCALE	Drawn by	C.J.K.
-------	--------	-------	----------	----------	--------

TEXTRON LYCOMING
 550 MAIN STREET
 STRATFORD, CT

M&E Zecco, Inc.
 A Metcalf & Eddy Company

APPENDIX #1
TEST BORING LOGS

METCALF & EDDY/ZECCO, INC
345 WEST MAIN STREET
NORTHBORO, MA 01532
(508) 393-2537

SITE DATA
TEXTRON/LYCOMING
550 MAIN STREET
STRATFORD, CT

WELL #
MW-1

DRILLER: R.JACOBY **WELL DEPTH:** 15'
INSPECTOR: A. SEAMAN **RISER:** 2'
START DATE: 3/14/90 **SCREEN:** 13'
FINISH DATE: 3/14/90 **SIZE I.D.:** 2"

PAGE
1 OF 1

DEPTH	NO	RANGE	SAMPLER		OVA PPM	WATER TABLE	FIELD CLASSIFICATION AND REMARKS
			BLOWS	REC			
							2 - Asphalt
	1	0-2'	AUGER		0		BRN SAND WITH PEBBLES MED GRAIN, DRY, NO ODOR
5'	2	5-7'	8 10 13 18	8	2	4	LIKE ABOVE ONLY WET
10'	3	10-12'	13 22 21	10	0		SPOON FELL 6" COURSE BRN SAND AND ROCK FRAGS, WET, NO ODOR
15'	4	14-15	BOTTOM		2		LIKE ABOVE
20'							TD 15
25'							
30'							

METCALF & EDDY/ZECCO, INC
 345 WEST MAIN STREET
 NORTHBORO, MA 01532
 (508) 393-2537

SITE DATA
 TEXTRON/LYCOMING
 550 MAIN STREET
 STRATFORD, CT

WELL #
 MW-2

DRILLER: R.JACOBY **WELL DEPTH:** 15'
INSPECTOR: A. SEAMAN **RISER:** 2'
START DATE: 3/14/90 **SCREEN:** 13'
FINISH DATE: 3/14/90 **SIZE I.D.:** 2"

PAGE
 1 OF 1

DEPTH	NO	RANGE	SAMPLER		OVA PPM	WATER TABLE	FIELD CLASSIFICATION AND REMARKS
			BLOWS	REC			
							2 - Asphalt
	1	0-2'	AUGER		1.2		BRN SAND AND GRAVEL SOME COBBLES POORLY SORTED, FAINT ODOR
5'	2	5-7'	5 5 6 4	7.00	385	4	GRAY MED SAND TRACE OF PEBBLES, WET SHEEN, STRONG KEROSENE ODOR
10'	3	10-12'	8 9 15 14	9	325		COURSE BRN SAND RO FRAGS 10.4-10.5 BLACK SILT COURSE SAND LIKE ABOVE SHEEN NOTE: 13' BLACK SAND
15'	4	14-15	BOTTOM		42		LIKE ABOVE
							TD 15
20'							
25'							
30'							

METCALF & EDDY/ZECCO, INC
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(508) 393-2537

SITE DATA
TEXTRON/LYCOMING
550 MAIN STREET
STRATFORD, CT

WELL #
MW-4

DRILLER: R.JACOBY **WELL DEPTH:** 15'
INSPECTOR: A. SEAMAN **RISER:** 5'
START DATE: 3/14/90 **SCREEN:** 10'
FINISH DATE: 3/14/90 **SIZE I.D.:** 2"

PAGE
1 OF 1

DEPTH	NO	RANGE	SAMPLER		OVA PPM	WATER TABLE	FIELD CLASSIFICATION AND REMARKS
			BLOWS	REC			
							2 - Asphalt
	1	0-2'	AUGER		0		BRN SAND AND COBBLES FILL 2-3' BOULDERS FILL, TAN SAND
5'	2	5-7'	11-13-21-30	3	0.2		SCHIST WITH BRN SAND MATRIX FILL DRY, NO ODOR NOTE: 8.5 THROUGH FILL
10'	3	10-12'	32-14-9-7	10	53.7		NOTE: 10' BOULDER BRN SAND & RO FRAG, ODOR AT END OF SPOON, WET NOTE: 12' BLK CRS SAND, KEROSENE ODOR, SHEEN SPOON FELL 6 15.5-15.7 BLK CRS SAND SHEEN KEROSENE
15'	4	15-17	2 1 3	10	70.1		FAINT OFO15.7-17 BLACK SILT PLASTIC FAINT ODOR
20'							TD 17
25'							
30'							

APPENDIX #2

**LABORATORY ANALYSIS
OF SOIL SAMPLES**

H Y D R O S A M P L E L A B O R A T O R Y

Division of Zecco Incorporated
A Metcalf & Eddy Technologies Company
367 West Main Street, Northboro, MA 01532

Phone: (508) 393-7222 FAX: (508) 393-3074
Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron/Lycoming
550 Main Street
Stratford, CT 06497

DATE COLLECTED: 03/14/90
DATE RECEIVED : 03/19/90
DATE REPORTED : 03/30/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 8563

SAMPLE IDENTIFICATION: Textron, MW-1 Composite

MATRIX: Soil in glass

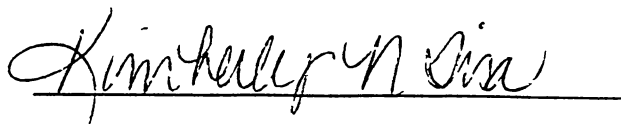
COLLECTED BY: Seaman

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	140	mg/KG	40	418.1(1)	03/29/90
Solids, total	88	Percent	1.0	160.3(1)	03/20/90

NOTE: *, if present, indicates this parameter is below the limit of detection. All results are based on wet weight analysis.

(1) Methods for Chemical Analysis of Water and Wastes, March 1983.

HYDROSAMPLE Division of Zecco, Inc.
A Metcalf & Eddy Technologies Company



STATE CERTIFIED LABORATORY / MASSACHUSETTS - MA097 : CONNECTICUT - PH0628

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HYDROSAMPLE LABORATORY

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A Metcalf & Eddy Technologies Company
367 West Main Street, Northboro, MA 01532

Phone: (508) 393-7222 FAX: (508) 393-3074
Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron/Lycoming
550 Main Street
Stratford, CT 06497

DATE COLLECTED: 03/14/90
DATE RECEIVED : 03/19/90
DATE REPORTED : 03/30/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 8564

SAMPLE IDENTIFICATION: Textron, MW-2 Composite

MATRIX: Soil in glass

COLLECTED BY: Seaman

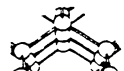
PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	3,200	mg/KG	100	418.1(1)	03/29/90
Solids, total	88	Percent	1.0	160.3(1)	03/20/90

NOTE: *, if present, indicates this parameter is below the limit of detection. All results are based on wet weight analysis.

(1) Methods for Chemical Analysis of Water and Wastes, March 1983.

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A Metcalf & Eddy Technologies Company

Kimberly N. Shea



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REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron/Lycoming
550 Main Street
Stratford, CT 06497

DATE COLLECTED: 03/14/90
DATE RECEIVED : 03/19/90
DATE REPORTED : 03/30/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 8565

SAMPLE IDENTIFICATION: Textron, MW-3 Composite

MATRIX: Soil in glass

COLLECTED BY: Seaman

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	5,500	mg/KG	200	418.1(1)	03/29/90
Solids, total	84	Percent	1.0	160.3(1)	03/20/90

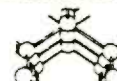
NOTE: *, if present, indicates this parameter is below the limit of detection. All results are based on wet weight analysis.

(1) Methods for Chemical Analysis of Water and Wastes, March 1983.

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Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron/Lycoming
550 Main Street
Stratford, CT 06497

DATE COLLECTED: 03/14/90
DATE RECEIVED : 03/19/90
DATE REPORTED : 03/30/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 8566

SAMPLE IDENTIFICATION: Textron, MW-4 Composite

MATRIX: Soil in glass

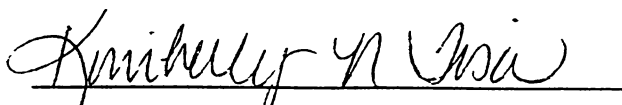
COLLECTED BY: Seaman

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	220	mg/KG	40	418.1(1)	03/29/90
Solids, total	90	Percent	1.0	160.3(1)	03/20/90

NOTE: *, if present, indicates this parameter is below the limit of detection. All results are based on wet weight analysis.

(1) Methods for Chemical Analysis of Water and Wastes, March 1983.

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Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron/Lycoming
550 Main Street
Stratford, CT 06497

DATE COLLECTED: 03/14/90
DATE RECEIVED : 03/19/90
DATE REPORTED : 03/30/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 8567

SAMPLE IDENTIFICATION: Textron, TB-1 Composite

MATRIX: Soil in glass

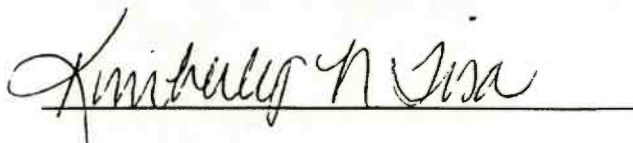
COLLECTED BY: Seaman

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	*	mg/KG	40	418.1(1)	03/29/90
Solids, total	87	Percent	1.0	160.3(1)	03/20/90

NOTE: *, if present, indicates this parameter is below the limit of detection. All results are based on wet weight analysis.

(1) Methods for Chemical Analysis of Water and Wastes, March 1983.

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Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron/Lycoming
550 Main Street
Stratford, CT 06497

DATE COLLECTED: 03/14/90
DATE RECEIVED : 03/19/90
DATE REPORTED : 03/30/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 8568

SAMPLE IDENTIFICATION: Textron, TB-2 Composite

MATRIX: Soil in glass

COLLECTED BY: Seaman

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	230	mg/KG	40	418.1(1)	03/29/90
Solids, total	89	Percent	1.0	160.3(1)	03/20/90

NOTE: *, if present, indicates this parameter is below the limit of detection. All results are based on wet weight analysis.

(1) Methods for Chemical Analysis of Water and Wastes, March 1983.

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HYDROSAMPLE LABORATORY

Division of Zecco Incorporated
A Metcalf & Eddy Technologies Company
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Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron/Lycoming
550 Main Street
Stratford, CT 06497

DATE COLLECTED: 03/15/90
DATE RECEIVED : 03/19/90
DATE REPORTED : 03/30/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 8569

SAMPLE IDENTIFICATION: Textron, TB-3 Composite

MATRIX: Soil in glass

COLLECTED BY: Seaman

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	43	mg/KG	40	418.1(1)	03/29/90
Solids, total	86	Percent	1.0	160.3(1)	03/20/90

NOTE: *, if present, indicates this parameter is below the limit of detection. All results are based on wet weight analysis.

(1) Methods for Chemical Analysis of Water and Wastes, March 1983.

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A Metcalf & Eddy Technologies Company

Kimberly N. Dusa

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HYDROSAMPLE



CHAIN OF CUSTODY RECORD

2 wks
4/3/90

BILL TO: _____

SITE LOCATION: 1st Street, Kings Ct

COLLECTED BY: Andy L...

24757378 CUSTOMER P.O.# _____

HYDROSAMPLE I.D. NUMBER	SAMPLE IDENTIFICATION	MATRIX	CONTAINER	DUPLICATES	COLLECTION TIME	COLLECTION DATE	PRESERVATIVE
8563	m111 1 Concrete	5	6		AM	19	
		TEST REQUESTED: <u>1/14</u>				COMMENTS:	
8564	m112 2 "	5	6		AM	19	
		TEST REQUESTED: <u>1/14</u>				COMMENTS:	
8565	m113 3 "	5	6		AM	19	
		TEST REQUESTED: <u>1/14</u>				COMMENTS:	
8566	m114 4 "	5	6		AM	19	
		TEST REQUESTED: <u>1/14</u>				COMMENTS:	
8567	T01 5 "	5	6		AM	19	
		TEST REQUESTED: <u>1/14</u>				COMMENTS:	
8568	T02 6 "	5	6		AM	19	
		TEST REQUESTED: <u>1/14</u>				COMMENTS:	
8569	T03 7 "	5	6		AM	19	
		TEST REQUESTED: <u>1/14</u>				COMMENTS:	
	8				AM	19	
		TEST REQUESTED:				COMMENTS:	
	9				AM	19	
		TEST REQUESTED:				COMMENTS:	
	10				AM	19	
		TEST REQUESTED:				COMMENTS:	

RELINQUISHED BY: _____

RECEIVED BY: Jane E Therouf

DATE: 5-19 19 90

TIME: 2:05 AM

APPENDIX #3

**LABORATORY ANALYSIS
OF GROUNDWATER SAMPLES
AND CHAIN OF CUSTODY DOCUMENT**

HYDROSAMPLE LABORATORY

Division of Zecco Incorporated
 A Metcalf & Eddy Technologies Company
 367 West Main Street, Northboro, MA 01532

Phone: (508)393-7222 FAX: (508) 393-3074
 Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
 602 Purgeables

CLIENT: Textron
 550 Main Street
 Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
 DATE RECEIVED : 05/08/90
 DATE REPORTED : 05/09/90
 PROJECT # : 253338

HYDROSAMPLE NUMBER: 9370

SAMPLE IDENTIFICATION: Textron, MW #1
 Stratford, CT

MATRIX: Water in glass

COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
BENZENE	*	ug/L	5.0	624(1)	05/08/90
CHLOROBENZENE	*	ug/L	5.0	624(1)	
ETHYL BENZENE	*	ug/L	5.0	624(1)	
TOLUENE	*	ug/L	5.0	624(1)	
total XYLENES	*	ug/L	5.0	624(1)	
1,2 DICHLOROBENZENE	*	ug/L	5.0	624(1)	
1,3 DICHLOROBENZENE	*	ug/L	5.0	624(1)	
1,4 DICHLOROBENZENE	*	ug/L	5.0	624(1)	

NOTE: *, if present, indicates this parameter is below the limit of detection.

(1) Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater EPA-600/4-82-057 July 1982.

HYDROSAMPLE, DIVISION of ZECCO, INC.
 A Metcalf & Eddy Technologies Company

Alan C. Ford

STATE CERTIFIED LABORATORY / MASSACHUSETTS - MA097 : CONNECTICUT - PH0628

HYDROSAMPLE



H Y D R O S A M P L E L A B O R A T O R Y

Division of Zecco Incorporated
 A Metcalf & Eddy Technologies Company
 367 West Main Street, Northboro, MA 01532

Phone: (508) 393-7222 FAX: (508) 393-3074
 Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
 602 Purgeables

CLIENT: Textron
 550 Main Street
 Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
 DATE RECEIVED : 05/08/90
 DATE REPORTED : 05/09/90
 PROJECT # : 253338

HYDROSAMPLE NUMBER: 9371

SAMPLE IDENTIFICATION: Textron, MW #2
 Stratford, CT

MATRIX: Water in glass

COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
BENZENE	620	ug/L	25	624 (1)	05/08/90
CHLOROBENZENE	*	ug/L	25	624 (1)	
ETHYL BENZENE	77	ug/L	25	624 (1)	
TOLUENE	*	ug/L	25	624 (1)	
total XYLENES	82	ug/L	25	624 (1)	
1,2 DICHLOROBENZENE	*	ug/L	25	624 (1)	
1,3 DICHLOROBENZENE	*	ug/L	25	624 (1)	
1,4 DICHLOROBENZENE	*	ug/L	25	624 (1)	

NOTE: *, if present, indicates this parameter is below the limit of detection.

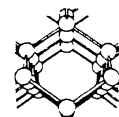
(1) Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater EPA-600/4-82-057 July 1982.

HYDROSAMPLE, DIVISION of ZECCO, INC.
 A Metcalf & Eddy Technologies Company

Kimberly N. Vira

STATE CERTIFIED LABORATORY / MASSACHUSETTS - MA097 : CONNECTICUT - PH0628

HYDROSAMPLE



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REPORT OF ANALYSIS
 602 Purgeables

CLIENT: Textron
 550 Main Street
 Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
 DATE RECEIVED : 05/08/90
 DATE REPORTED : 05/09/90
 PROJECT # : 253338

HYDROSAMPLE NUMBER: 9372

SAMPLE IDENTIFICATION: Textron, MW #3
 Stratford, CT

MATRIX: Water in glass

COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
BENZENE	260	ug/L	10	624 (1)	05/08/90
CHLOROBENZENE	*	ug/L	10	624 (1)	
EIHYL BENZENE	17	ug/L	10	624 (1)	
TOLUENE	*	ug/L	10	624 (1)	
total XYLENES	86	ug/L	10	624 (1)	
1,2 DICHLOROBENZENE	*	ug/L	10	624 (1)	
1,3 DICHLOROBENZENE	*	ug/L	10	624 (1)	
1,4 DICHLOROBENZENE	*	ug/L	10	624 (1)	

NOTE: *, if present, indicates this parameter is below the limit of detection.

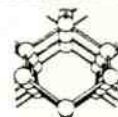
(1) Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater EPA-600/4-82-057 July 1982.

HYDROSAMPLE, DIVISION of ZECCO, INC.
 A Metcalf & Eddy Technologies Company

Kimberly N. Sim

STATE CERTIFIED LABORATORY / MASSACHUSETTS - MA097 : CONNECTICUT - PH0628

HYDROSAMPLE



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Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
602 Purgeables

CLIENT: Textron
550 Main Street
Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
DATE RECEIVED : 05/08/90
DATE REPORTED : 05/09/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 9373

SAMPLE IDENTIFICATION: Textron, MW #4
Stratford, CT

MATRIX: Water in glass

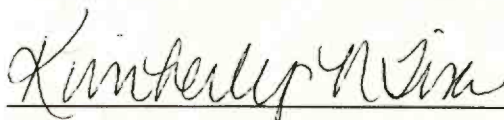
COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
BENZENE	17	ug/L	5.0	624(1)	05/08/90
CHLOROBENZENE	*	ug/L	5.0	624(1)	
ETHYL BENZENE	49	ug/L	5.0	624(1)	
TOLUENE	*	ug/L	5.0	624(1)	
total XYLENES	8.7	ug/L	5.0	624(1)	
1,2 DICHLOROBENZENE	*	ug/L	5.0	624(1)	
1,3 DICHLOROBENZENE	*	ug/L	5.0	624(1)	
1,4 DICHLOROBENZENE	*	ug/L	5.0	624(1)	

NOTE: *, if present, indicates this parameter is below the limit of detection.

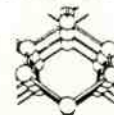
(1) Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater EPA-600/4-82-057 July 1982.

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367 West Main Street, Northboro, MA 01532

Phone: (508) 393-7222 FAX: (508) 393-3074
Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron
550 Main Street
Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
DATE RECEIVED : 05/08/90
DATE REPORTED : 05/09/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 9370

SAMPLE IDENTIFICATION: Textron, MW #1
Stratford, CT

MATRIX: Water in glass

COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	*	mg/L	1.0	503B&E(1)	05/08/90

NOTE: *, if present, indicates this parameter is below the limit of detection.

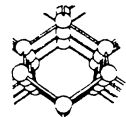
(1) Standard Methods for the Examination of Water and Wastewater
APHA, 16th edition, 1985

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A Metcalf & Eddy Technologies Company

Kimberly N. Ford

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Mr. Alan C. Ford, Laboratory Manager

REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron
550 Main Street
Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
DATE RECEIVED : 05/08/90
DATE REPORTED : 05/09/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 9371

SAMPLE IDENTIFICATION: Textron, MW #2
Stratford, CT

MATRIX: Water in glass

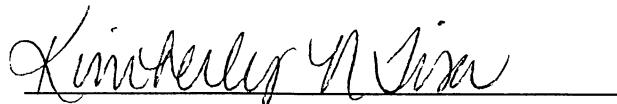
COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	15	mg/L	3.0	503B&E(1)	05/08/90

NOTE: *, if present, indicates this parameter is below the limit of detection.

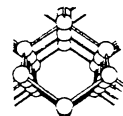
- (1) Standard Methods for the Examination of Water and Wastewater
APHA, 16th edition, 1985

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REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron
550 Main Street
Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
DATE RECEIVED : 05/08/90
DATE REPORTED : 05/09/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 9372

SAMPLE IDENTIFICATION: Textron, MW #3
Stratford, CT

MATRIX: Water in glass

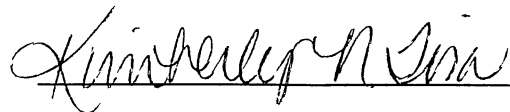
COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	5.4	mg/L	1.0	503B&E(1)	05/08/90

NOTE: *, if present, indicates this parameter is below the limit of detection.

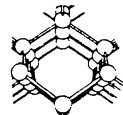
(1) Standard Methods for the Examination of Water and Wastewater
APHA, 16th edition, 1985

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REPORT OF ANALYSIS
TOTAL PETROLEUM HYDROCARBONS, IR

CLIENT: Textron
550 Main Street
Stratford, CT 06497-2452

DATE COLLECTED: 05/07/90
DATE RECEIVED : 05/08/90
DATE REPORTED : 05/09/90
PROJECT # : 253338

HYDROSAMPLE NUMBER: 9373

SAMPLE IDENTIFICATION: Textron, MW #4
Stratford, CT

MATRIX: Water in glass

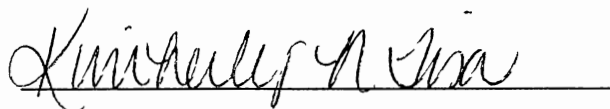
COLLECTED BY: Knuth

PARAMETER DESCRIPTION	RESULT	UNITS	DETECTION LIMIT	METHOD REFERENCE	DATE OF ANALYSIS
Total Petroleum Hydrocarbons IR quantitation	2.9	mg/L	1.0	503B&E(1)	05/08/90

NOTE: *, if present, indicates this parameter is below the limit of detection.

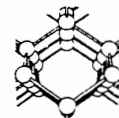
- (1) Standard Methods for the Examination of Water and Wastewater
APHA, 16th edition, 1985

HYDROSAMPLE Division of Zecco, Inc.
A Metcalf & Eddy Technologies Company



STATE CERTIFIED LABORATORY / MASSACHUSETTS - MA097 : CONNECTICUT - PH0628

HYDROSAMPLE



BILL TO: TEXTRON
550 MAIN ST.
STRATFORD, CONN. 06497-
2452

CHAIN OF CUSTODY RECORD

SITE LOCATION: TEXTRON - STRATFORD, CONN.

COLLECTED BY: C.J. KNUTH

Job #:
253338

CUSTOMER P.O.# _____

HYDROSAMPLE I.D. NUMBER	SAMPLE IDENTIFICATION	MATRIX			CONTAINER DUPLICATES		COLLECTION TIME		COLLECTION DATE		PRESERVATIVE
		L	G	I			AM	PM			
9370	MW #1	L	G	I			2:50		5-7	19 90	
		TEST REQUESTED: <u>TPH 602</u>							COMMENTS:		
9371	MW #2	L	G	I			5:20		5-7	19 90	
		TEST REQUESTED: <u>TPH 602</u>							COMMENTS:		
9372	MW #3	L	G	I			4:40		5-7	19 90	
		TEST REQUESTED: <u>TPH 602</u>							COMMENTS:		
9373	OW #4	L	G	I			3:45		5-7	19 90	
		TEST REQUESTED: <u>TPH 602</u>							COMMENTS:		
										19	
		TEST REQUESTED:							COMMENTS:		
										19	
		TEST REQUESTED:							COMMENTS:		
										19	
		TEST REQUESTED:							COMMENTS:		
										19	
		TEST REQUESTED:							COMMENTS:		
										19	
		TEST REQUESTED:							COMMENTS:		

RELINQUISHED BY:
Christopher J. Knuth

RECEIVED BY:
Julie Theroux

DATE: 5-8 19 90

TIME: 7:56 AM

19

19

19

AM
 PM
 AM
 PM