Report, expool67, 2001-04-00, phose II and soil sampling

.



# Letter of Transmittal

To: Attentio	n:	NYSEI Div. of 625 Bro Albany Vivek I	RDA Envi oadw , NY Natta	ronmental l ay 12233 nmai	Rem	ediation			Date: Re:	Jul Un	y 17, 2006 ion St. & So. College St. Properties
We are s	ending yo	ou	X	Enclosed	. •	□ Under separate o	cover	via 🗆	Mail		Messenger, the following items:
	shop drav	wings				prints		data sheets			
	specifica	tions				sketches		brochures		<u></u>	

Our action relative to items submitted for approval has been noted on the drawings.

COPIES	PREPARED BY	<b>REFERENCE NO.</b>	DESCRIPTION			
1			Soil Sampling Results 250 and 252 Union St. December 13			
1			Soil Sampling Results 250 and 252 Union St. April 12, 2001			
1			Phase II Env. Investigation Report – Union St. & S. College St.			
1 S.			Properties – March 22, 2001			
	1					
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	· · ·					
		·				
	<u></u>					

### THESE ARE TRANSMITTED AS CHECKED BELOW:

X As requested

- □ For your use
- □ For review & comment

□ For your information

Remarks:

43 British American Blvd. Latham, New York 12110 (518) 782-2100 Fax: (518) 782-0500 Very truly yours,

□ Approved

- □ Approved as Corrected
- □ Revise and Resubmit
- □ Not Approved

Resubmit \_\_\_\_\_ copies for approval
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Copies: 0533076 (closed)

Bruce R. Nelson / ck+



MALCOLM PIRNIE, INC. INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS & CONSULTANTS

January 8, 2002

Mr. David R. Atkins Commissioner of Planning Schenectady County Planning Department Schaffer Heights, 107 Nott Terrace, Suite 303 Schenectady, New York

Re: Soil Sampling Union Street and South College Street Properties

Dear Mr. Atkins:

Malcolm Pirnie, Inc. (Malcolm Pirnie) is pleased to present Schenectady County with the results of the additional soil sampling performed at 250 Union Street and 252 Union Street, Schenectady, New York. As presented in our proposal dated November 28, 2001, this investigation was conducted to evaluate lead concentrations in soil beneath the asphalt on the properties as requested by the New York State Department of Environmental Conservation.

### SOIL SAMPLING

Soil sampling was conducted on December 13, 2001. Three shallow soil borings, designated SLS-1, SLS-2, and SLS-3, were advanced beneath the asphalt at the site using a hand auger. In accordance with our proposal, two soil samples were collected from each boring at depths of 0-6 inches below asphalt and 12-18 inches below asphalt, respectively. Each sample was analyzed for lead by Hudson Environmental. The locations of the additional soil borings are shown on Figure 1.

### RESULTS

Analytical results for the soil samples collected in December 2001 are presented in Table 1. For comparison, analytical results for all previous soil samples collected from the site are also presented in Table 1. As shown in the table, lead concentrations in the soil samples collected beneath the asphalt ranged from a maximum of 557 milligrams per kilogram (mg/kg) at soil boring SLS-1 (0-6 inches below asphalt) to 10.3 mg/kg at soil boring SLS-2 (12-18 inches below asphalt). As shown in Table 1, these lead concentrations are significantly less than for samples collected in areas not paved with asphalt.



January 8, 2002 Page 2

RECYCLED PAPER

We appreciate the opportunity to assist the County with this project. If you have any questions concerning this report or require any additional information, please feel free to call me at (518) 786-7349.

Very truly yours,

MALCOLM PIRNIE, INC.

Ban Z. Neer

Bruce R. Nelson, C.P.G. Associate

caw

Attachments F:\PROJECT\0533076\DOC\ATKINS7.DOC



### Summary of Surface Soil and Soil Boring Sampling Results Phase II Environmental Site Assessment, 250 and 252 Union Street Schenectady, NY

Sample Location Depth	Recommended Soil Cleanun	SB-1 0-2'	SB-2 0-1'	SB-3 0-0.5'	SB-4 0-1'	SS-1	<b>SS-2</b>	SS-3	SS-4
Sample Date	Objective	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01
Volatile Organic Compounds (ug/kg)									042401
n-Propylbenzene		ND	ND	ND	20	NA	NA	NA	NA
Benzene	60	ND	ND	43	ND	NA	NA	NA	NA
1,2,4-Trimethylbenzene		ND	ND	ND	122	NA	NA	NA	NA
Toluene	1,500	ND	ND	149	86	NA	NA	NA	NA
Ethylbenzene	5,500	ND	ND ·	17	48	NA	NA	NA	NA
o-Xylene	1,200	ND	16	ND ·	44	NA	NA	NA	NA
m/p-Xylene	1,200	ND	ND	23	134	NA	NA	NA	ŇA
МТВЕ	120	ND	ND	144	94	NA	NA	NA	NA
Semivolatile Organic Compounds (ug/kg)		ND	ND	ND	ND	NA	NA	NA	NA
RCRA Metals (mg/kg)					<u></u>	· · ·			
Arsenic	7.5	NA	NA	NA	NA	8.8	8.1	3.7	8.6
Barium	300	NA	NA	NA	NA	397	619	580	968
Cadmium	. 1	NA	NA	NĂ	NA	6.4	2.8	3.5	3.5
Chromium	10	NA	NA	NĀ	NA	31	37	17	22
Lead	200-500*	NA	NA	NA	NA	4,030	3,250	2,360	4,740
Mercury	0.1	NA	NA	NA	NA	0.3	1.8	1.1	0.3
Selenium	2	NA	NA	NA	NA	0.1	0.2	ND	0.3
Silver		NA	NA	NA	NA NA	ND	ND	ND	ND

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ND - Not detected

NA - Not Analyzed

Average background concentration in metropolitan or sburban areas or near highways.

Summary of Surface Soil and Soil Boring Sampling Results Phase II Environmental Site Assessment, 250 and 252 Union Street Schenectady, NY

Sample Location	Recommended	SS-1	SS-1	SS-1	SS-1
Sample Date	Soil Cleanup Objective	6-12" 03/30/01	12-18"	18-24"	30-36"
	objective	03/30/01	03/30/01	03/30/01	03/30/01
Lead	200-500*	1,350	3,170	758	110

Sample Location	Recommended	SS-2	SS-2	SS-2	<b>SS-2</b>
Depth	Soil Cleanup	6-12"	12-18"	18-24"	30-36"
Sample Date	Objective	03/30/01	03/30/01	03/30/01	03/30/01
Lead	200-500*	533	1,040	211	199

Sample Location	Recommended	SS-4	SS-4	SS-4	SS-4
Depth	Soil Cleanup	6-12"	12-18"	18-24"	30-36"
Sample Date	Objective	03/30/01	03/30/01	03/30/01	03/30/01
Lead	200-500*	1,190	1,290	779	50

Sample Location	Recommended	SLS-1A	SLS-1B	SLS-2A	SLS-2B
Depth	Soil Cleanup	0-6" (a)	12-18" (a)	0-6" (a)	12-18" (a)
Sample Date	Objective	12/13/01	12/13/01	12/13/01	12/13/01
Lead	200-500*	557	202	212	10.3

Sample Location	Recommended	SLS-3A	SLS-3B
Depth	Soil Cleanup	0-6" (a)	12-18" (a)
Sample Date	Objective	12/13/01	12/13/01
Lead	200-500*	379	198

Notes:

(a) Depth below asphalt

\* - Average background concentration in metropolitan or suburban areas or near highways.



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

### ANALYTICAL TEST RESULTS N.Y.S.D.O.H. LAB ID#11140

<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SLS-1A <u>MATRIX</u>: Soil <u>LOCATION:</u> Not Specified <u>H.E.S. #:</u> 011214D01 DATE SAMPLED: 12/13/01 DATE SAMPLE RECD: 12/14/01 TIME SAMPLED:0930 TYPE SAMPLE: Composite SAMPLER:A.Bobar/Malcolm Pirnie

PARAME!	TER	 METHOD	-	RESULT	UNITS	-	TEST DATE
Lead		SW846-7420		557	mg/kg		12/19/01
Total S	Solids	EPA 160.3		79	*		12/18/01





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<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SLS-1B <u>MATRIX</u>: Soil <u>LOCATION:</u> Not Specified <u>H.E.S. #:</u> 011214D02 DATE SAMPLED: 12/13/01 DATE SAMPLE RECD: 12/14/01 TIME SAMPLED:0930 TYPE SAMPLE: Composite SAMPLER:A.Bobar/Malcolm Pirnie

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Lead	SW846-7420	- 202	mg/kg	12/19/01
Total Solids	EPA 160.3	85	%	12/18/01



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<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SLS-2A <u>MATRIX</u>: Soil <u>LOCATION:</u> Not Specified <u>H.E.S. #:</u> 011214D03 DATE SAMPLED: 12/13/01 DATE SAMPLE RECD: 12/14/01 TIME SAMPLED:0940 TYPE SAMPLE: Composite SAMPLER:A.Bobar/Malcolm Pirnie

PARAMETER	METHOD	RESULT	UNITS	TEST DATE	-
Lead	SW846-7420	212	mg/kg~-	12/19/01	
Total Solids	EPA 160.3	96	£	12/18/01	



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<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SLS-2B <u>MATRIX</u>: Soil <u>LOCATION:</u> Not Specified <u>H.E.S. #:</u> 011214D04 DATE SAMPLED: 12/13/01 DATE SAMPLE RECD: 12/14/01 TIME SAMPLED:0940 TYPE SAMPLE: Composite

SAMPLER: A. Bobar/Malcolm Pirnie

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Lead	-SW846-7420 -	10.3	mg/kg	12/19/01
Total Solids	EPA 160.3	95	£	12/18/01



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SLS-3A <u>MATRIX</u>: Soil <u>LOCATION:</u> Not Specified <u>H.E.S. #:</u> 011214D05 DATE SAMPLED: 12/13/01 DATE SAMPLE RECD: 12/14/01 TIME SAMPLED:0950 TYPE SAMPLE: Composite SAMPLER:A.Bobar/Malcolm Pirnie

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Lead	SW846-7420	- 379	mg/kg	12/19/01
Total Solids	EPA 160.3	88	8	12/18/01



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SLS-3B <u>MATRIX</u>: Soil <u>LOCATION:</u> Not Specified <u>H.E.S. #:</u> 011214D06 DATE SAMPLED: 12/13/01 DATE SAMPLE RECD: 12/14/01 TIME SAMPLED:0950 TYPE SAMPLE: Composite

SAMPLER: A. Bobar/Malcolm Pirnie

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Lead	SW846-7420	198	mg/kg	12/19/01
Total Solids	EPA 160.3	86	÷	12/18/01

### Results on a dry weight basis.

Approval By Date: 1302

Hudson Environmental Services, Inc. certifies that the services provided were performed in accordance with the New York State Department of Health, Environmental Laboratory Approval Program certification manual. In the event of an error, HES's sole responsibility will be to perform reanalysis at its own expense. HES, Inc. assumes no other liability for damages incurred from the interpretation or use of the analysis provided.

Client: MALCOLM PILLUTE	Job #:		Job# Quote#	PO#
dress: 15 CORNELL KD	Project Manager:	BRUCE NEL JON	Shaded areas for office use	Comments
LATHAM, NY 12110	) Work ID:		Analysis Requested Check analysis and specify method	(Special Instructions)
Phone: 512-776-7347Fax: 512-72	26-7647 Contact:	BRUCENELSON	and analytes in comments section. For example:	
Requested Turn Around Time Business Day Rush	Regulatory Cla NPDES Drinkir	nssification – Please Specify	500-series for drinking water 600-series for waste water	ANALYZE ALL
Business Day Other	RCRA MCP (	GW1 Other	Use comments section to further define	JAMPLES
W - Wellwater W - Wastewater SW - SL V - Raw Water GW - Groundwater PW - Pu - Solid SL - Sludge O - Oil A - Air 7 - 7 -	urfacewater LW - Labwater Public Water SO - Soil - Other	O Preservative   SS T		FCR
Sample ID			iles sticide lies circh lies sticide gical	TOTAL LEAD
Use one line per container	Time A	Comp. Comp. Plastic (P Plastic (P HaHSO4/ HOO3 to P- HCI to P- HCI to P- HCI to P- Chier (P P- Chier (P) Chier (P) C	Cladures Semivolat PH Metals Acteriolo CBacteriolo Cheneral C	1/JENG
515-1A 011214001 30	12/13/01	XIG		MJEPA JURYE
5L5.1B   Doz	18 12/13/6/	XIG		ANALY ISCAL
515-2A D03	AC 12/13/C/	XIG III A		METHEDS
5L5-2B D04	B 12/12/01	XIC		
568-3A DUS	AP 12/13/6/	XIG		
515-3B V DOB	AB 12/13/01 0950			
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MALCOLM PIRNIE, INC. INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS & CONSULTANTS

March 22, 2001

Mr. David R. Atkins Commissioner of Planning Schenectady County Planning Department Schaffer Heights, 107 Nott Terrace, Suite 303 Schenectady, New York



Re: Phase II Environmental Investigation Union Street and South College Street Properties

Dear Mr. Atkins:

Malcolm Pirnie, Inc. (Malcolm Pirnie) is pleased to present Schenectady County with the results of the Phase II Environmental Investigation performed at 250 Union Street and 252 Union Street, Schenectady, New York. As presented in our scope of work, dated December 22, 2000 this investigation was conducted to evaluate environmental conditions in and around the properties. This letter presents a summary of the evaluation conducted by Malcolm Pirnie and presents recommendations and conclusions.

### SITE DESCRIPTION

As shown on Figure 1, 250 and 252 Union Street are located approximately 2,000 feet to the southeast of the Mohawk River. As shown on Figure 2, the properties are to the south of Union Street and 252 Union is bordered to the west by South College Street. They are located at the eastern end of Schenectady's Stockade District and to the west of the former Erie Canal, now Erie Boulevard. Each parcel is occupied by a two-story wood-framed structure that dates to the 19<sup>th</sup> Century. The foundations of the buildings are constructed of stone and the basement floors are predominantly earthen. A 250-gallon aboveground heating oil tank is present in the basement of 252 Union Street. The properties are served by municipal water and sewer. Surface water runoff flows into the municipal storm sewer system which flows to the Mohawk River.

The parcels are immediately to the west of the site of the former Ladd's Gas Station which operated from approximately 1922 through 1986. As shown on Figure 3, Grossmans Texaco Service Station, which operated from approximately 1949 through sometime in the 1970s, was located approximately 200 feet to the southeast. A Gulf Oil Service Station, which operated from approximately 1956 through 1969 was located at the corner of Erie Boulevard and Liberty Street, approximately 250 feet to the south. The area of the former Gulf Oil Service Station is now occupied by a Burger King restaurant.







WUEBKERS (193?-1989)

# LEGEND

$\Theta$	1" PVC GEOPROBE MONITORING WELL
•	2" PVC MONITORING WELL
<b>H</b>	2" HAND AUGER WELL
•	4" PVC MONITORING WELL
۲	RECOVERY WELL LOCATION
	FORMER SERVICE STATION
	GROUNDWATER FLOW DIRECTION
91.5 ——	POTENTIOMETRIC SURFACE CONTOUR
92.02	GROUNDWATER ELEVATION (FEET)



Summary Groundwater Sampling Results

Phase II Environmental Site Assessment, 250 and 252 Union Street

Schenectady, NY

Well ID Sample Date	NYSDEC Class GA Standard	88-5 7/22/98	88-5 2/26/01	MW-10 7/21/98	MW-10 2/26/01	MW-11 7/22/98	MW-11 2/26/01	MW-14 7/22/98	MW-14 2/26/01
Volatile Organic Compounds (ug/l)						<u> </u>			
Chloromethane	5	500 U	100 U	10 U	NS	10 U	100 U	100 U	100 U
Acetone	50	500 U	100 U	25 J	NS	17 J	100 U	100 U	100 U
Chloroform	7	500 U	50 U	10 U	NS	10 U	50 U	100 U	50 U
Benzene	1	8,000	2,456	920 D	NS	830 J	9,414	2,800 D	1,260
Trichloroethene	5	500 U	50 U	10 U	NS	10 U	50 U	100 U	50 U
Bromodichloromethane	50	500 U	50 U	10 U	NS	10 U	50 U	100 U	50 U
Toluene	5	13,800 D	1,041	17	NS	140 J	18,646	3,700 D	336
Ethylbenzene	5	3,800	361	80	NS	210 J	2,853	560	123
Xylenes (total)	5	12,500	1,101	330	NS	230 J	7,132	2,400	164
PCBs (ugA)	0.09	NA	0.1 U	NA	NŚ	NA	0.1 U	NA	0.1 U
Metals (ug/l)									
Lead	25	NA	141	NA	NS	NA	107	NA	103

U - Not detected at listed quantitation limit.

J - Estimated value.

D - Analyzed at a secondary dilution factor.

NS - Not sampled, well dry

NA - Not analyzed

Shaded areas indicates reported values exceeded NYSDEC Class GA Standard

Summary of Surface Soil and Soil Boring Sampling Results Phase II Environmental Site Assessment, 250 and 252 Union Street Schenectady, NY

Sample Location	Recommended	SB-1	SB-2	SB-3	SB-4	SS-1	SS-2	SS-3	<b>SS-4</b>
Depth	Soil Cleanup	0-2'	0-1'	0-0.5'	0-1'				
Sample Date	Objective	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01	02/26/01
Volatile Organic Compounds (ug/kg)									
n-Propylbenzene		ND	ND	ND	20	NA	NA	NA	NA
Benzene	60	ND	ND	43	ND	NA	NA	NA	NA
1,2,4-Trimethylbenzene		ND	ND	ND	122	NA	NA	NA	NA
Toluene	1,500	ND	ND	149	86	NA	NA	NA	NA
Ethylbenzene	5,500	ND	ND	17	48	NA	NA	NA	NA
o-Xylene	1,200	ND	16	ND	44	NA	NA	NA	NA
m/p-Xylene	1,200	ND -	ND	23	134	NA	NA	NA	NA
МТВЕ	120	ND	ND	144	94	NA	NA	NA	NA
Semivolatile Organic Compounds (ug/kg)		ND	ND	ND	ND	NA	NA	NA	NA
RCRA Metals (mg/kg)						<u>`````````````````````````````````</u>			
Arsenic	7.5	NA	NA	NA	NA	8.8	8.1	3.7	8.6
Barium	300	NA	NA	NA	NA	397	619	580	968
Cadmium	1	NA	NÀ	NA	NA	6.4	2.8	3.5	3.5
Chromium	10	NA	NA	NA	NA	31	37	17	22
Lead	200-500*	NA	NA	NA	NA	4,030	3,250	2,360	4,740
Mercury	0.1	NA	NA	NA	NA	0.3	1.8	1.1	0.3
Selenium	2	NA	NA	NA	NA	0.1	0.2	ND	0.3
Silver		NA	NA	NA	NA	ND	ND	ND	ND

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ND - Not detected

NA - Not Analyzed

\* - Average background concentration in metropolitan or sburban areas or near highways. Shaded areas indicates reported values exceeded recommended soil cleanup objectives.

Page 2 of 3

### Summary of Basement and Ambient Air Sampling Results Phase II Environmental Site Assessment, 250 and 252 Union Street Schenectady, NY

Sample ID	Ambient	250 Union Street	250 Union Street	252 Union Street	USEPA Region III RBC	NYSDOH 95th Percentile (a)			NYSDOH	IYSDOH Median Concentration (a)		
Date	8/13-14/98	8/13-14/98	2/26-2/27/01	2/26-2/27/01		Basment	Living Area	Outside	Basment	Living Area	Outside	
BTEX (ug/L)												
Benzene	ND	ND	ND	ND				_				
Toluene	0.0097	0.012	ND	ND	0.42	0.049	0.045	0.058	0.010	0.015	< 0.0056	
Ethylbenzene	ND	ND	ND	ND		·	—					
Xylenes (total)	0.012	0.011	ND	ND	7.3	0.018*	0.022*	0.013*	0.005*	0.0048*	0.0044*	

All samples analyzed for BTEX compounds by EPA Method TO-3.

(a) Per NYSDOH Background Indoor/Outdoor Air Levels of Volatile Organic Compounds in Homes Sampled by the NYSDOH (1989-1996).

\* For m and p-xylenes only.

ug/L - micrograms per liter

ND - Not Detected

March 22, 2001 Page 2

The parcels are located within the Mohawk River Flood Plain deposits (Caldwell, et al., 1987). Overburden soil is predominantly alluvial silty sands with occasional clay lenses. The thickness of the overburden is unknown, however, soil borings in the area have not encountered bedrock within 30 feet of the ground surface (Malcolm Pirnie, 2000). The depth to groundwater in the area of the parcels is approximately eight to 10 feet below ground surface (bgs). Groundwater flow is generally to the west, toward the Mohawk River (Malcolm Pirnie, 2000) as shown on Figure 3. Environmental investigations associated with the former Ladd's Gas Station have documented the presence of a plume of groundwater containing petroleum compounds that extends from the former station approximately 500 feet to the west, including the area of 250 and 252 Union Street.

### **GROUNDWATER SAMPLING**

On February 26, 2001 Malcolm Pirnie collected groundwater samples from three monitoring wells (MW-11, MW-14, and 88-5) which are located around the properties. Monitoring well MW-10 could not be sampled as it was dry. Monitoring well purge logs are included as Attachment 1. The locations of the monitoring wells are shown on the Figure 2. Prior to groundwater sampling, groundwater levels were measured in each well using an oil-water interface probe. Light Non-Aqueous Phase Liquids (LNAPL), or free product, was not present in any of the monitoring wells sampled. Although LNAPL was not present in monitoring well 88-5, its presence or absence on the adjacent water table could not be confirmed as the water level in 88-5 was above the top of the screened interval for this well. Monitoring well construction and groundwater elevations are summarized in Table 1. Groundwater samples were collected utilizing the United States Environmental Protection Agency (USEPA) Low-Flow Sampling Protocol. Groundwater samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) including methyl tertiary butyl ether (MTBE), polychlorinated biphenyls (PCBs), and lead by Hudson Environmental Services Inc. (Hudson Environmental) using USEPA SW846 analytical methods. Analytical results are summarized in Table 2 and the analytical reporting forms are included as Attachment 2.

### SURFACE SOIL SAMPLING

Four surface soil samples were collected by Malcolm Pirnie to evaluate potential impacts to surface soils from metal-based paints and analyzed for the eight Resource Conservation and Recovery Act (RCRA)-listed metals by Hudson Environmental. The results of these samples are summarized in Table 3. Surface soil sampling locations are shown on Figure 2.

### Table 1 Groundwater Monitoring Well Information Phase II Union Street Schenectady, New York

Well	1998	Previous	Constructed	Measured	Screen	Diameter	Well	1	2/07/94	(	07/20/98		09/03/98	02/2	26/01
	Reference	Reference	Total Depth	Total Depth	Interval		Material	DTW	Groundwater	DTW	Groundwater	DTW	Groundwater	DTW	Groundwater
	Elevation (a)	Elevation (b)	(feet, bgs) (b)	(feet, bgs)	(feet, bgs) (c)			(feet)	Elevation (feet)						
88-5	101.00	100.67	20.0	16.7	10 - 20	2-inch	PVC	9.92	91.08	8.92	92.08	9.27	91.73	9.15	91.85
MW-10	99.88	99.88	15.0	8.4	5 - 15	2-inch	PVC	Dry		7.56	92.32	8.13	91.75	Dry	
MW-11	100.14	99.93	15.0	14.4	5 - 15	2-inch	PVC	9.08	91.06	8.05	92.09	8.45	91.69	9.29	90.85
MW-14	100.45	100.21	15.0	12.4	5 - 15	2-inch	PVC	9.03	91.42	8.35	92.10	8.71	91.74	9.16	91.29

Notes: (a) September 1998 survey. (b) As reported by Lincoln Applied Geology.

### F\P\0533076\F\Wellinfo.xls

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March 22, 2001 Page 3

### BASEMENT SOIL SAMPLING

Two shallow soil borings were advanced in the basements of 250 and 252 Union Street using a stainless steel hand auger. Soil collected from the borings was screened for volatile organic vapors with a photoionization detector (PID) and visually inspected for discoloration. No volatile organic compounds were detected with the PID and no staining was observed. One soil sample was collected from each boring and analyzed for New York State Spill Technology and Remediation Series Memorandum No. 1 (STARS) VOCs and Semi-Volatile Organic Compounds (SVOCs) by Hudson Environmental. Soil sampling results are summarized in Table 3. Soil boring locations are shown on Figure 2.

### AMBIENT AIR SAMPLING

Ambient air samples were collected from the basement of 250 Union Street and 252 Union Street over a 24-hour period using 6-liter stainless steel Summa canister sampling devices. Air sampling locations are shown in Figure 2. Air samples were analyzed by Air Toxics Ltd. (Air Toxics) for the petroleum constituents benzene, toluene ethylbenzene, and xylene (BTEX) using USEPA Method TO-3. Results of the air sampling are summarized in Table 4 and Air Toxics reporting forms are included as Attachment 3.

### ASBESTOS AND LEAD-BASED PAINT SURVEY

An asbestos and lead-based paint survey was conducted at each of the properties by Testwell Laboratories, Inc. (Testwell) under subcontract to Malcolm Pirnie. This survey included visual inspection of the structures and the analysis of building materials for asbestos and lead-based paint. The results of this survey are included in Testwell's report, which is included as Attachment 4.

### FINDINGS

### Groundwater Sampling

As shown in Table 2, several petroleum-related VOCs (benzene, toluene, ethylbenzene, and xylenes, [BTEX]) were present in groundwater samples at concentrations above their respective New York State Department of Environmental Conservation (NYSDEC) Class GA Standard. In some instances the concentration of compounds exceeded the Class GA Standard by as much as four orders of magnitude. For comparison, Table 2 also presents the analytical results for groundwater samples collected in 1998. The concentration of petroleum compounds generally decreased in samples from monitoring wells 88-5 and MW-14 and increased in the sample from monitoring well MW-11. However, present



Mr. David R. Atkins

Schenectady County Planning Department

March 22, 2001 Page 4

concentrations of BTEX are still significantly above Class GA Standards in the groundwater samples from all three wells.

Groundwater samples did not contain detectable concentrations of PCBs.

Lead was present in groundwater samples collected from the three monitoring wells at concentrations above the Class GA Standard. Lead concentrations ranged from 103  $\mu$ g/l in MW-14 to 141  $\mu$ g/l in 88-5 as compared to the Class GA Standard of 25  $\mu$ g/l. As mentioned previously, the Ladd's Gas Station operated from approximately 1922 through 1986. During most of this period lead was commonly used as an additive to gasoline. The most likely source of the lead in these groundwater samples is the gasoline released from the Ladd's site.

### Soil Sampling

As shown in Table 3, several petroleum-related VOCs were present in some of the soil samples collected from the building's basements. In 252 Union Street, the sample from soil boring SB-1 did not contain any detectable VOCs or SVOCs. The sample from soil boring SB-2 contained only one VOC, o-xylene, at a concentration of 16 µg/kg which is below the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) No. 4046 Recommended Soil Cleanup Objective of 1,200 µg/kg. As shown in Table 3, in the basement of 250 Union Street, samples from soil borings SB-3 and SB-4 contained several petroleum-related VOCs. No SVOCs were present in these samples. Of the VOCs present in these soil samples, only one, MTBE, was present at a concentration greater than its respective TAGM value. The concentration of MTBE in SB-3 was 144 µg/kg, compared to the TAGM value of 120 µg/kg. MTBE was not detected in any of the groundwater samples collected during this investigation, nor was MTBE detected in petroleum-contaminated soil samples collected as part of a previous environmental investigation of the Ladd's site (Malcolm Pirnie, 2000). This suggests that the MTBE in soil samples from soil borings SB-3 and SB-4 may not be related to the former Ladd's Gas Station.

As shown in Table 3, five of the eight RCRA metals (barium, cadmium, chromium, lead, mercury, and selenium) were present in all four of the surface soil samples at concentrations greater than their respective TAGM Recommended Soil Cleanup Objective. Arsenic was present in three of the four surface soil samples at concentrations greater than its respective TAGM Recommended Soil Cleanup Objective. Elevated concentrations of these metals are likely related to paints that have been applied to the siding of the 250 and 252 Union Street buildings. A portion of the lead in the surface soils may also be from automobile emissions when leaded gasoline was in use.



March 22, 2001 Page 5

- Lead concentrations ranged from 2,360 to 4,740 mg/kg compared to average background concentrations for metropolitan and suburban areas of 200 to 500 mg/kg. Lead concentrations were also greater than USEPA recommendations (USEPA, 1996). The USEPA guidance for non-residential exposures ranges from approximately 850 to 1500 mg/kg.
- Arsenic concentrations ranged from 3.7 to 8.8 mg/kg compared to its TAGM value of 7.5 mg/kg.
- Barium concentrations ranged from 387 to 968 mg/kg compared to its TAGM value of 300 mg/kg.
- Cadmium concentrations ranged from 2.8 to 6.4 mg/kg compared to its TAGM value of 1 mg/kg.
- Chromium concentrations ranged from 17 to 37 mg/kg compared to its TAGM value of 10 mg/kg.
- Mercury concentrations ranged from 0.3 to 1.8 mg/kg compared to its TAGM value of 0.1 mg/kg.

### Air Sampling

Analytical results for basement air sampling are summarized in Table 4. No VOCs were detected in the air samples. For comparison, Table 4 also presents the results of basement air sampling conducted in 1998 in 250 Union Street. In 1998, toluene and xylenes were present in the air sample. As shown in Table 4, these compounds were present at concentrations similar to a sample of ambient outdoor air collected at the same time. The concentrations of toluene and xylenes were also less than USEPA Risk Based Concentrations and within the range of background or ambient' concentrations detected by the New York State Department of Health (NYSDOH, 1997).

### Asbestos and Lead-based Paint Survey

Testwell collected and analyzed 11 building material samples of suspect asbestos containing materials (ACM) from 250 Union Street and 10 samples from 252 Union Street. Three of the 11 samples from 250 Union Street contained asbestos fibers. These samples were of exterior transite siding, exterior roofing materials, and interior linoleum flooring. One of the 10 samples from 252 Union Street contained asbestos fibers. This sample was of pipe insulation in the basement crawl space. Testwell estimated asbestos removal costs of \$20,500 and \$8,500 for 250 and 252 Union Streets, respectively.



Testwell collected and analyzed 12 paint samples from 250 Union Street and nine samples from 252 Union Street. For the samples from 250 Union Street the lead percentage by weight ranged from less than 0.05 to 23.9. Ten of the 12 samples contained greater than 0.5 percent lead, the level at which Housing and Urban Development recommends abatement. For the samples from 252 Union Street the lead percentage by weight ranged from less than 0.05 to 50.7. Seven of the nine samples contained greater than 0.5 percent lead.

### CONCLUSIONS

The properties at 250 and 252 Union Street are underlain by groundwater that has been adversely affected by a release of gasoline from the former Ladd's Gas Station. As a result, the concentration of BTEX compounds in the groundwater under these properties is as much as four orders of magnitude greater than the NYSDEC Class GA Standard. Previous investigations (Malcolm Pirnie, 2000) have demonstrated that natural attenuation of the BTEX compounds is occurring, however, groundwater quality is not likely to reach Class GA Standards in the short-term as a result of natural attenuation. Under current- and likely future-use scenarios, human contact with the groundwater beneath the properties is unlikely.

Based on visual inspection and soil sampling conducted in the basements of both 250 and 252 Union Street, heating oil has not been released to the environment at either of these locations. The absence of SVOCs, which are common constituents of heating oil, indicates that a release of heating oil has not occurred in these basements. Thus, these properties do not appear to have contributed to the presence of petroleum-related compounds present in groundwater samples collected from nearby monitoring wells. The low concentrations of several VOCs in soil samples SB-2 through SB-4 do not represent a significant environmental concern. Based on the sampling results, it is unlikely that the NYSDEC would require any remedial action for these soils.

Due to the presence of elevated concentrations of metals in the surface soil on the 250 and 252 Union Street parcels, it is recommended that this soil be removed or isolated by the installation of a barrier to prevent casual contact. Any such activities should be coordinated with the NYSDOH and the NYSDEC. Based on the concentration of lead in the soil samples, disposal of this soil should include testing by the Toxicity Characteristic Leaching Procedure (TCLP) for metals to evaluate if the soil is characteristically a hazardous waste in accordance with 40 CFR Part 261.

Air quality in the basements of the structures at 250 and 252 Union Street is consistent with ambient air quality in the neighborhood and with ambient air quality in background settings sampled by the NYDOH. However, due to the presence of a BTEX groundwater



March 22, 2001 Page 7

plume beneath the properties, it is recommended that any renovation or reuse of the buildings include measures to reduce the potential for the infiltration of volatile petroleum compounds into the structures. Such vapors can be controlled by the use of impermeable barriers and, as necessary, passive or active venting.

Abatement of the identified asbestos and lead-based paint is not a regulatory requirement, unless these materials are removed or disturbed during the renovation of the buildings. If asbestos of lead-based painted materials are removed, this material should be disposed of appropriately permitted facilities. Testing of lead-based painted materials that are removed is recommended to confirm that they are not characteristically hazardous due to lead. Based on the analytical results disposal costs can be minimized.

We appreciate the opportunity to assist the County with this project. If you have any questions concerning this report or require any additional information, please feel free to call me<sup>-</sup>at (518) 786-7349.

Very truly yours,

MALCOLM PIRNIE, INC Bruce R. Nelson, C.P.G.

Associate

caw Attachments F:\project\0533076\DOC\REPORT\ATKINS.DOC

RECYCLED PAPER

## **ATTACHMENT 1**

# Monitoring Well Purge Logs

### Monitoring Well Development/Purging Log

Well No. 88-5

PROJECT NAME:	Phase II Union Street and South College Street								
PROJECT LOCATION:	Schenectady, New York								
PROJECT NUMBER:	533076								
DATE:	02/26/2000	•			,				
SAMPLER(S):	M. Bokus								
			4						
A Total Casing and Scr	een Length (ft.)	·····							
B Casing Internal Diam	eter (in.)				-				
C Water Level Below Te	op of Casing (ft.)	9.15							
D Volume of Water in C	asing - includes annulus (gal.)				•				

PARAMETER	ACCUMULATED VOLUME PURGED									
Date										1
Tíme	1045	1050	1055	1100	1105	1110	-			
Conductivity (ms/sec)	2.31	2.25	2.12	2.01	1.97	1.96				
Dissolved Oxygen (ppm)	0.68	0.18	0.03	0.00	0.00	0.00				
pH (S.U.s)	6.64	6.88	6.92	6.95	6.95	6.97				
Temp (C)	9.32	9.56	9.57	9.52	9.46	9.42				
Turbidity (NTUs)	3.2	2.7	0.5	0.8	0.9	1.0				
ORP	-4	-88	-124	-143	-149	-150				

PHOTO TAKEN

YES Photo Number: NO

PID READING:

X

NR

COMMENTS:	Begin purging at 1043							
	Flow rate 150 ml/min							
	Collect sample at 1112							
	Purge water clear with strong odor							

### Monitoring Well Development/Purging Log

Well No. MW-11

PROJECT NAME:	Phase II Union Stre	eet and South College	e Street						
PROJECT LOCATION:	Schenectady, New	York							
PROJECT NUMBER:	533076								
DATE:	02/26/2000								
SAMPLER(S):	M. Bokus	M. Bokus							
						· · ·			
A Total Casing and So	creen Length (ft.)								
B Casing Internal Diar	neter (in.)								
C Water Level Below 1	Top of Casing (ft.)		9.29						
		•							
D Volume of Water in	Casing - includes annu	ılus (gal.)							

PARAMETER	ACCUMULATED VOLUME PURGED														
Date															
Time	1147	1153	1158	1203	1208										
Conductivity (ms/sec)	1.73	1.50	1.43	1.39	1.37										
Dissolved Oxygen (ppm)	0.00	0.00	0.00	0.00	0.00										
oH (S.U.s)	7.02	7.12	7.15	7.16	7.18										
Гетр (C)	9.03	9.16	9.00	9.11	9.23										
urbidity (NTUs)	8.7	2.2	1.0	1.1	1.5	. •									
ORP	-73	-94	-102	-108	-111										

PHOTO TAKEN

YES Photo Number: NO

X

NR

PID READING:

.

COMMENTS:	Begin purging at 1142										
	Flow rate 120 ml/min										
	Collect sample at 1212										
	Purge water clear, trace amount of suspended particles, slight odor.										

### Monitoring Well Development/Purging Log

Well No. <u>MW-14</u>

PROJECT NAME:	Phase II Union Street and South Colleg	ge Street		•
PROJECT LOCATION:	Schenectady, New York			
PROJECT NUMBER:	533076			
DATE:	02/26/2000			
SAMPLER(S):	M. Bokus			
- -	· · · · ·	)		
A Total Casing and Scr	een Length (ft.)		•	
B Casing Internal Diam	eter (in.)			
C Water Level Below To	op of Casing (ft.)	9.16		
D Volume of Water in C	asing - includes annulus (gal.)			8

PARAMETER	ACCUMULATED VOLUME PURGED													
Date														
Time	1245	1250	1255	1300	1305	1310	1315							
Conductivity (ms/sec)	3.21	3.35	3.34	3.26	3.27	3.25	3.21							
Dissolved Oxygen (ppm)	0.19	0.05	0.10	0.10	0.07	0.06	0.04							
pH (S.U.s)	6.85	6.82	6.84	6.89	6.93	6.95	6.98							
Temp (C)	8.94	9.30	9.29	9.53	9.80	9.82	9.79							
Turbidity (NTUs)	6.9	2.7	4.4	8.3	8.5	9.0	9.2							
ORP	-47	-52	-72	-84	-90	-94	-97							

	PHOTO TAKEN	X	YES NO	Photo Number:		,	
	PID READING:	NR					
COMMENTS:	Begin purging at 1242						
	Flow rate 120 ml/min					<u>_</u>	· · · · · · · · · · · · · · · · · · ·
	Collect sample at 1318				····	·······	
	Purge water clear, sligh	t odor.					

## ATTACHMENT 2

# Analytical Results

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

### ANALYTICAL TEST RESULTS N.Y.S.D.O.H. LAB ID#11140

CLIENT: Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> MW-11 <u>MATRIX:</u> Groundwater <u>LOCATION:</u> Phase II Union Street <u>H.E.S.#:</u> 010227101

MAR 1 5 2001

MALCOLA PIPNE

533076

HES

DATE SAMPLED: 02/26/01 TIME SAMPLED: 1142 DATE SAMPLE RECD: 02/27/01 TYPE SAMPLE: Not Specified SAMPLER: M.Bocus/Malcolm Pirnie

	METHOD	RESULT	UNITS	TEST DATE
PARAMETER	SW846-8260B	<100	ug/1	03/08/01
Chloromethane	SW846-8260B	<100	ug/l	03/08/01
Vinyl Chloride	SW846-8260B	<100	ug/l	03/08/01
Bromomethane	SW846-8260B	<100	ug/l	03/08/01
Chloroethane	SW846-8260B	<50	ug/l	03/08/01
1,1-Dichloroethene	SW846-8260B	<100	$u\alpha/1$	03/08/01
Acetone	SW846-8260B	<50	ug/1	03/08/01
Carbon Disulfide	SW040-0200D	< 50	$u\sigma/1$	03/08/01
Methylene Chloride	SW040-0200D	< 50	$\frac{ug}{1}$	03/08/01
1,2-Dichloroethene trans	SW040-0200D	<50	$\frac{ug}{1}$	03/08/01
cis-1,2-Dichloroethene	SW040-0200D	<50	ug/1	03/08/01
1,1-Dichloroethane	SW040-0200D	<100	ug/1	03/08/01
2-Butanone	SW840-8200D	- <100-	ug/1	03/08/01
Chloroform	SW040-0200D	<50	ug/1	03/08/01
1,1,1-Trichloroethane	SW846-8260D	<50	ug/1	03/08/01
Carbon Tetrachloride	SW846-8260B	0 414	ug/1	03/08/01
Benzene	SW846-8260B	9,414	ug/1	03/08/01
1,2-Dichloroethane	SW846-8260B	<50	ug/1	03/08/01
Trichloroethene	SW846-8260B	<50	ug/1	03/08/01
1,2-Dichloropropane	SW846-8260B	<50	ug/1	03/08/01
Bromodichloromethane	SW846-8260B	<50	ug/1	03/08/01
cis-1,3-Dichloropropene	SW846-8260B	< 100	ug/1	03/08/01
4-Methyl-2-Pentanone	SW846-8260B	<100	ug/1	03/08/01
2-Hexanone	SW846-8260B		ug/1	03/00/01
Toluene	SW846-8260B	18,646	ug/1	03/00/01
trans-1,3-Dichloropropene	SW846-8260B	<50	ug/1	03/00/01
1,1,2-Trichloroethane	SW846-8260B	<50	ug/1	03/08/01
Tetrachloroethene	SW846-8260B	<50	ug/1	03/00/01
Dibromochloromethane	SW846-8260B	<50	ug/1	03/08/01
Chlorobenzene	SW846-8260B	<50	ug/1	03/08/01
Ethylbenzene	SW846-8260B	2,853	ug/l	03/08/01
m-Xylene/p-Xylene	SW846-8260B	4,788	ug/l	03/08/01
o-Xvlene	SW846-8260B	2,344	ug/1	03/08/01
Styrene	SW846-8260B	<50	ug/l	03/08/01
Bromoform	SW846-8260B	<50	ug/l	03/08/01
1.1.2.2-Tetrachloroethane	SW846-8260B	<50	ug/l	03/08/01
MTRF	SW846-8260B	<50	ug/l	03/08/01
11100				

Total	PCB's	SW846-8082	<0.1	ug/l	03/12/01
Lead	RECENCO	EPA 239.2	107	ug/l	02/28/01

HES	
	1

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Malcolm Pirnie

SAMPLE DESCRIPTION: MW-14

MATRIX: Groundwater

LOCATION: Phase II Union Street

TYPE SAMPLE: Not Specified DATE SAMPLE RECD: 02/27/01 TIME SAMPLED: 1318

DATE SAMPLED: 02/26/01

Lead	Total PCB's	1, 1, 2, 2-Telfaciii Oroeciiaiie MTBE	Bromoform	Styrene	o-Xylene	m-Xylene/p-Xylene	Ethylbenzene	Chlorobenzene	Dibromochloromethane	Tetrachloroethene	1.1.2-Trichloroethane	trans-1.3-Dichloropropene	Toluene	2-Hexanone	4-Methvl-2-Pentanone	cis-1,3-Dichloropropene	Bromodichloromethane	1,2-Dichloropropane	Trichloroethene	1,2-Dichloroethane	Benzene	Carbon Tetrachloride	1, 1, 1-Trichloroethane	Chloroform	2-Butanone	1,1-Dichloroethane	cis-1,2-Dichloroethene	1.2-Dichloroethene trans	Methylene Chloride	Carbon Disulfide	-Acetone	1.1-Dichloroethene	Chloroethane	Bromomethane	Vinvl Chloride	Chloromethane	DARAMETER	H.E.S.#: 010227I02
EPA 239.2	SW846-8082	SW846-8260B	SW846~8260B	SW846~8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846~8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846~8260B	SW846~8260B	SW846-8260B	SW846~8260B	SW846~8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846~8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846~8260B	SW846-8260B	SW846-8260B	SW846-8260B	SW846-8260B	METHOD	
103	<0.1	<50	\ <u>\</u> 50	<50	<50	164	123	<50	<50	<50	<50	<50	336	<100	<100	<50	. <50	<50	<50	<50	1,206	<50	<50	<50	<100	<50	<50	<50	<50	<50	<100	<50	<100	<100	<100	<100	RESULT	SAMPL
ug/l	ug/1	ug/1	1/bn	1/bn	ug/1	ug/1	ug/1	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/1	ug/l	ug/1	ug/l	ug/l	ug/l	ug/l	ug/1	ug/1	ug/l	ug/l	ug/1	ug/l	ug/1	ug/l	ug/l	ug/1	ug/l	ug/1	ug/l	ug/1	ug/l	ug/1	UNITS	ER: M.Bocus
02/28/01	03/12/01	03/08/01	10/80/E0 T0/80/E0	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	10/80/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	03/08/01	TEST DATE	/Malcolm Pirnie

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# HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> 88-5 <u>MATRIX:</u> Groundwater

LOCATION: Phase II Union Street

H.E.S.#: 010227103

# PARAMETER

METHOD

RESULT

UNITS

TEST

DATE

Lead MTBE H Total trans-1, 3-Dichloropropene 1, 1, 2-Trichloroethane Tetrachloroethene Bromoform Styrene o-Xylene Ethylbenzene Bromodichloromethane Chloroform Methylene Chloride Acetone Chloroethane Bromomethane. Vinyl Chloride Chloromethane Chlorobenzene Dibromochloromethane Toluene 2-Hexanone 4-Methyl-2-Pentanone cis-1,3-Dichloropropene Trichloroethene Benzene Carbon 2-Butanone -sto Carbon 5 , 1, 2, 2-Tetrachloroethane ,2-Dichloropropane N Xylene/p-Xylene s-1,2-Dichloroethene 1-Dichloroethane 1-Dichloroethene 2-Dichloroethane 1-Trichloroethane on Tetrachloride Dichloroethene PCB's Disulfide trans SW846-8260B SW846 SW846-8260B SW846 SWEPA SW8 SM8 SM8 SW8 SW8 SW8 SW846-8082 8MS MS SM8 æ 846-8260B 239.2 <100 1,041 <50 2,456 <50 <50 <50 <50 <100 <100 <100 <50 <50 141 <100 <100 <100 ~50 <50 ~50 ~50 804 297 <50 361 <50 <u></u> <50 \$50 j\_ ug/l ug/l t./ɓn l/gu gu gu gu g 'n /ɓn /gu ľ/ɓn T/bn 1/bn l/gu l/bn рn /ɓn bn bn gu gu бn ĥ Бn g g ĝ ğ ĥn g gu ĥ ĥ gu g 1/bn ug/l 03/08/ 03/08/ 03/08/ 03/08/ 03/08/ 03/08/ 03/08/ 03/08/ 03/08/ 03/08/ 03/08 03/08 03/08 03/08 03/08 03/08 03/08/01 03/08, 03/08, 03/08 02/28/01 03/12/01 03/08 03/08 03/08 03/08 03/08/0 03/08 03/08 03/08/0 03/08 2 2 6 6 6  $\geq$ 202 0 20 0 0 6 0 20 20 20/ 2 0 20 20 2 0 6 2 2 6 0 20 6 20

DATE SAMPLED: 02/26/01

TIME SAMPLED: 1112

DATE SAMPLE RECD: 02/27/01 TYPE SAMPLE: Not Specified

SAMPLER: M.Bocus/Malcolm Pirnie

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Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SS-1 <u>MATRIX:</u> Soil <u>LOCATION:</u> Phase II Union Street <u>H.E.S.#:</u> 010227I04 DATE SAMPLED: 02/26/01 <u>TIME SAMPLED:</u> 1057 <u>DATE SAMPLE RECD:</u> 02/27/01 <u>TYPE SAMPLE:</u> Grab <u>SAMPLER:</u> M.Bocus/Malcolm Pirnie

PARAMETER	METHOD	RESULT*	UNITS	TEST DATE
_Total_Solids	EPA 160.3	86	8	03/09/01
Arsenic	SW846-7060A	8.8	mg/kg	03/07/01
Barium	SW846-7080A	. 397	mg/kg	03/08/01
Cadmium	SW846-7130	6.4	mg/kg	02/28/01
Chromium	SW846-7190	31	mg/kg _	03/01/01
Lead	SW846-7420	4,030	mg/kg	02/28/01
Mercury	SW846-7471A	0.3	mg/kg	03/09/01
Selenium	SW846-7740	0.1	mg/kg	03/07/01
Silver	SW846-7760A	<1.2	mg/kg	03/07/01



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SS-2 <u>MATRIX:</u> Soil <u>LOCATION:</u> Phase II Union Street <u>H.E.S.#:</u> 010227105 DATE SAMPLED: 02/26/01 <u>TIME SAMPLED:</u> 1103 <u>DATE SAMPLE RECD:</u> 02/27/01 <u>TYPE SAMPLE:</u> Grab

SAMPLER: M.Bocus/Malcolm Pirnie

PARAMETER	METHOD	RESULT*	UNITS	TEST DATE
Total Solids	EPA 160.3	71	8	03/09/01
Arsenic	SW846-7060A	8.1	mg/kg	03/07/01
Barium	SW846-7080A	619	mg/kg	03/08/01
Cadmium	SW846-7130	2.8	mg/kg	02/28/01
Chromium	SW846-7190	37	mg/kg	03/01/01
Lead	SW846-7420	3,250	mg/kg	02/28/01
Mercury	SW846-7471A	1.8	mg/kg	03/09/01
Selenium	SW846-7740	0.2	mg/kg	03/07/01
Silver	SW846-7760A	<1.4	mg/kg	03/07/01



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

<u>CLIENT:</u> Malcolm Pirnie <u>SAMPLE DESCRIPTION:</u> SS-3 <u>MATRIX:</u> Soil <u>LOCATION:</u> Phase II Union Street <u>H.E.S.#:</u> 010227I06 DATE SAMPLED: 02/26/01 <u>TIME SAMPLED:</u> 1126 <u>DATE SAMPLE RECD:</u> 02/27/01 <u>TYPE SAMPLE:</u> Grab <u>SAMPLER:</u> M.Bocus/Malcolm Pirnie

PARAMETER	METHOD	RESULT*	UNITS	TEST DATE
Total Solids	EPA 160.3	72	¥	03/09/01
Arsenic	SW846-7060A	3.7	mg/kg	03/07/01
Barium	SW846-7080A	580	mg/kg	03/08/01
Cadmium	SW846-7130	3.5	mg/kg	02/28/01
Chromium	SW846-7190	. 17	mg/kg	03/01/01
Lead	SW846-7420	2,360	mg/kg	02/28/01
Mercury	SW846-7471A	1.1	mg/kg	03/09/01
Selenium	SW846-7740	<0.1	mg/kg	03/07/01
Silver	SW846-7760A	<1.4	mg/kg	03/07/01
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Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

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<u>CLIENT:</u> Malcolm Pirnie
SAMPLE DESCRIPTION: SS-4
MATRIX: Soil
LOCATION: Phase II Union Street
H.E.S.#: 010227107

DATE SAMPLED: 02/26/01 <u>TIME SAMPLED:</u> 1130 <u>DATE SAMPLE RECD:</u> 02/27/01 <u>TYPE SAMPLE:</u> Grab SAMPLER: M.Bocus/Malcolm Pirnie

	the second s			
PARAMETER	METHOD	RESULT*	UNITS	TEST DATE
Total Solids	EPA 160.3	- 78	8	.03/09/01
Arsenic	SW846-7060A	8.6	mg/kg	03/07/01
Barium	SW846-7080A	968	mg/kg	03/08/01
Cadmium	SW846-7130	3.5	mg/kg	02/28/01
Chromium	SW846-7190	22	mg/kg	03/01/01
Lead	SW846-7420	4,740	mg/kg	02/28/01
Mercury	SW846-7471A	0.3	mg/kg	03/09/01
Selenium	SW846-7740	0.2	mg/kg	03/07/01
Silver	SW846-7760A	<1.6	mg/kg	03/07/01



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Malcolm Pirnie

SAMPLE DESCRIPTION: SB-1(0-2')

MATRIX: Soil

LOCATION: Phase II Union Street

<u>H.E.S.#:</u> 010227I08

DATE SAMPLED: 02/26/01 TIME SAMPLED: 0928 DATE SAMPLE RECD: 02/27/01 TYPE SAMPLE: Not Specified

SAMPLER: M.Bocus/Malcolm Pirnie

PARAMETER MTBE	<u>METHOD</u> SW846-8021B	RESULT* <5.9	<u>UNITS</u> ug/kg	<u>TEST DATE</u> 03/01/01
Benzene	SW846-8021B	<5.9	ug/kg	03/01/01
Toluene	SW846-8021B	<5.9	ug/kg	03/01/01
Ethylbenzene	SW846-8021B	<5.9	ug/kg	03/01/01
m-Xylene\p-Xylene	SW846-8021B	<5.9	ug/kg	03/01/01
o-Xylene	SW846-8021B	<5.9	ug/kg	03/01/01
Isopropylbenzene	SW846-8021B	<5.9	ug/kg	03/01/01
n-Propylbenzene	SW846-8021B	<5.9 -	ug/kg	03/01/01
1,3,5-Trimethylbenzene	SW846-8021B	<5.9	ug/kg	03/01/01
tert,Butylbenzene	SW846-8021B	<5.9	ug/kg	03/01/01
1,2,4-Trimethylbenzene	SW846-8021B	<5.9	ug/kg	03/01/01
sec-Butylbenzene	SW846-8021B	<5.9	ug/kg	03/01/01
p-Isopropyltoluene	SW846-8021B	<5.9	ug/kg	03/01/01
n-Butylbenzene	SW846-8021B	<5.9	ug/kg	03/01/01
Naphthalene	SW846-8270C	<393	ug/kg	02/28/01
Acenaphthene	SW846-8270C	<393	ug/kg	02/28/01
Fluorene	SW846-8270C	<393	ug/kg	02/28/01
Phenanthrene	SW846-8270C	<393	ug/kg	02/28/01
Anthracene	SW846-8270C	<393	ug/kg	02/28/01
Fluoranthene	SW846-8270C	<393	ug/kg	02/28/01
Pyrene	SW846-8270C	<393	ug/kg	02/28/01
Benzo (a) anthracene	SW846-8270C	<393	ug/kg	02/28/01
Chrysene	SW846-8270C 🔿	<393	ug/kg	02/28/01
Benzo (b) fluoranthene	SW846-8270C	<393	ug/kg	02/28/01
Benzo (k) fluoranthene	SW846-8270C	<393	ug/kg	02/28/01
Benzo (a) pyrene	SW846-8270C	<393	ug/kg	02/28/01
Indeno (1,2,3-CD) pyrene	SW846-8270C	<393	ug/kg	02/28/01
Dibenz (a,h) anthracene	SW846-8270C	<393	ug/kg	02/28/01
Benzo (g,h,i) perylene	SW846-8270C	- <393	ug/kg	02/28/01
Total Solids	EPA 160.3	84	8	02/28/01

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Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Malcolm Pirnie

SAMPLE DESCRIPTION: SB-2(0-1')

MATRIX: Soil

LOCATION: Phase II Union Street

H.E.S.#: 010227109

DATE SAMPLED: 02/26/01 TIME SAMPLED: 0928 DATE SAMPLE RECD: 02/27/01 TYPE SAMPLE: Not Specified SAMPLER: M.Bocus/Malcolm Pirnie

PARAMETER MTBE	METHOD SW846-8021B	RESULT*	UNITS ug/kg	<u>TEST DATE</u> 03/01/01
Benzene	SW846-8021B	<5.6	ug/kg	03/01/01
Toluene	SW846-8021B	<5.6	ug/kg	03/01/01
Ethylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
m-Xylene\p-Xylene	SW846-8021B	<5.6	ug/kg	03/01/01
o-Xylene	SW846-8021B	16	ug/kg	03/01/01
Isopropylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
- n-Propylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
1,3,5-Trimethylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
tert,Butylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
1,2,4-Trimethylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
sec-Butylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
p-Isopropyltoluene	SW846-8021B	<5.6	ug/kg	03/01/01
n-Butylbenzene	SW846-8021B	<5.6	ug/kg	03/01/01
Naphthalene	SW846-8270C	<384	ug/kg	02/28/01
Acenaphthene	SW846-8270C	<384	ug/kg	02/28/01
Fluorene	SW846-8270C	<384	ug/kg	02/28/01
Phenanthrene	SW846-8270C	<384	ug/kg	02/28/01
Anthracene	SW846-8270C	<384	ug/kg	02/28/01
Fluoranthene	SW846-8270C	<384	ug/kg	02/28/01
Pyrene	SW846-8270C	<384	ug/kg	02/28/01
Benzo (a) anthracene	SW846-8270C	<384	ug/kg	02/28/01
Chrysene	SW846-8270C	<384	ug/kg	02/28/01
Benzo (b) fluoranthene	SW846-8270C	<384	ug/kg	02/28/01
Benzo (k) fluoranthene	SW846-8270C	<384	ug/kg	02/28/01
Benzo (a) pyrene	SW846-8270C	<384	ug/kg	02/28/01
Indeno (1,2,3-CD) pyrene	SW846-8270C	<384	ug/kg	02/28/01
Dibenz (a,h) anthracene	SW846-8270C	<384	ug/kg	02/28/01
Benzo (g,h,i) perylene	SW846-8270C	<384	ug/kg	02/28/01
Total Solids	EPA 160.3	89	8	02/28/01



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Malcolm Pirnie

SAMPLE DESCRIPTION: SB-3(0-6')

MATRIX: Soil

LOCATION: Phase II Union Street

H.E.S.#: 010227I10

DATE SAMPLED: 02/26/01

TIME SAMPLED: 1000

DATE SAMPLE RECD: 02/27/01

TYPE SAMPLE: Not Specified

#### SAMPLER: M.Bocus/Malcolm Pirnie

PARAMETER MTBE	<u>METHOD</u> SW846-8021B	RESULT*	<u>UNITS</u> ug/kg	<u>TEST DATE</u> 03/01/01
Benzene	SW846-8021B	43	ug/kg	03/01/01
Toluene	SW846-8021B	149	ug/kg	03/01/01
Ethylbenzene	SW846-8021B	17	ug/kg	03/01/01
m-Xylene\p-Xylene	SW846-8021B	23	ug/kg	03/01/01
o-Xylene	SW846-8021B	<6.0	ug/kg	03/01/01
Isopropylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
n-Propylbenzene –	-SW846-8021B	<6.0	ug/kg	. 03/01/01
1,3,5-Trimethylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
tert,Butylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
1,2,4-Trimethylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
sec-Butylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
p-Isopropyltoluene	SW846-8021B	<6.0	ug/kg	03/01/01
n-Butylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
Naphthalene	SW846-8270C	<398	ug/kg	02/28/01
Acenaphthene	SW846-8270C	<398	ug/kg	02/28/01
Fluorene	SW846-8270C	<398	ug/kg	02/28/01
Phenanthrene	SW846-8270C	<398	ug/kg	02/28/01
Anthracene	SW846-8270C	<398	ug/kg	02/28/01
Fluoranthene	SW846-8270C	<398	ug/kġ	02/28/01
Pyrene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (a) anthracene	SW846-8270C	<398	ug/kg	02/28/01
Chrysene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (b) fluoranthene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (k) fluoranthene	SW846-8270C	<398	ug/kg	,02/28/01
Benzo (a) pyrene	SW846-8270C	<398	ug/kg	02/28/01
Indeno (1,2,3-CD) pyrene	SW846-8270C	<398	ug/kg	02/28/01
Dibenz (a,h) anthracene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (g,h,i) perylene	SW846-8270C	<398	ug/kg	02/28/01
Total Solids	EPA 160.3	83	÷	02/28/01



Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803 Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803 Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Malcolm Pirnie	Ĩ	DATE SAMPLED: 02/26/01
SAMPLE DESCRIPTION: SB-4(0-1')	Ĩ	IME SAMPLED: 1015
MATRIX: Soil	Ē	DATE SAMPLE RECD: 02/27/01
LOCATION: Phase II Union Street	, <u>1</u>	YPE SAMPLE: Not Specified
<u>H.E.S.#:</u> 010227I11	5	AMPLER: M.Bocus/Malcolm Pirnie

PARAMETER MTBE	<u>METHOD</u> SW846-8021B	RESULT*	$\frac{\text{UNITS}}{\text{ug/kg}}$	$\frac{\text{TEST} \text{ DATE}}{03/01/01}$
Benzene	SW846-8021B	<6.0	ua/ka	03/01/01
Toluene	SW846-8021B	86		03/01/01
Ethylbenzene	SW846-8021B	48	ua/ka	03/01/01
m-Xvlene\p-Xvlene	SW846-8021B	134	ug/kg	03/01/01
o-Xvlene	SW846-8021B	44	ug/kg	03/01/01
Isopropylbenzene	SW846-8021B	<6.0	ua/ka	03/01/01
n-Propylbenzene	SW846-8021B	20	ug/kg	03/01/01
1,3,5-Trimethylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
tert,Butylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
1,2,4-Trimethylbenzene	SW846-8021B-	122	ug/kg	03/01/01
sec-Butylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
p-Isopropyltoluene	SW846-8021B	<6.0	ug/kg	03/01/01
n-Butylbenzene	SW846-8021B	<6.0	ug/kg	03/01/01
Naphthalene	SW846-8270C	<398	ug/kg	02/28/01
Acenaphthene	SW846-8270C	<398	ug/kg	02/28/01
Fluorene	SW846-8270C	<398	ug/kg	02/28/01
Phenanthrene	SW846-8270C	<398	ug/kg	02/28/01
Anthracene	SW846-8270C	<398	ug/kg	02/28/01
Fluoranthene	SW846-8270C	<398	ug/kg	02/28/01
Pyrene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (a) anthracene	SW846-8270C	<398	ug/kg	02/28/01
Chrysene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (b) fluoranthene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (k) fluoranthene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (a) pyrene	SW846-8270C	<398	ug/kg	02/28/01
Indeno (1,2,3-CD) pyrene	SW846-8270C	<398	ug/kg	02/28/01
Dibenz (a,h) anthracene	SW846-8270C	<398	ug/kg	02/28/01
Benzo (g,h,i) perylene	SW846-8270C	<398	ug/kg	02/28/01
Total Solids	EPA 160.3	83	¥	02/28/01

\*All soil results on a dry weight basis. <u>Approval By:</u> M-Hzm-<u>Date:</u> 3/13/01 Hudson Environmental Services, Inc. certifies that the services provided were performed in accordance with the New York State Department of Health, Environmental Laboratory Approval Program certification manual. In the event of an error, HES's sole responsibility will be to perform reanalysis at its own expense. HES, Inc. assumes no other liability for damages incurred from the interpretation or use of the analysis provided.

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Client $\underline{\mathcal{M}_{o}}$	t/Person #	Mott	Bekus	· · · · · · · · · · · · · · · · · · ·		· · ·	M	ail A	ddi	ress _/ 	5 (orn	N	RJ Y 12110	,	HES Use Only
roject Locat urchase Orc IES Contact	ion <u>1365</u> der		nion Stre			···	Pł	none	e #	[5]	1E) 786	- 73	349		Samples Were: 1. Shipped or Hand Delivered NOTES:
HES Use Only Lab ID		Sample ID / Des	cription	Date Collect	e Ti ted A= P=	IME a.m.	SAMPL C=Cor G=1	E TYP nposit Grab	E ie	# Conts.	· · · · · · · · · · · · · · · · · · ·	ANALYS	IS REQUIRED		<ol> <li>Ambient or Chilled NOTES:</li> <li>Received Broken/ Lockies (Improved Internet)</li> </ol>
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YELLOW - Sampler Copy

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HES	HUI Mail De	SON ENV 22 Hudson F livery: 211 Fe Phone: 5	<b>TRONMEN</b> alls Road, So erry Blvd., Sou 18/747-1060 F	TAL SERV outh Glens Fall th Glens Falls Fax: 518/747-	ICES, INC. Is, NY 12803 , NY 12803 1062	CUSTODY RECORD/ Work Request
Client Malcoln Pir	AN AFRI		Mail	Address _/	15 Cornell Rd	HES
Client Contact/Person #	T. China Street	·		<u>_</u>	other NY 12/10	_ Use Only
Purchase Order		······································	Pho	ne # <u>(5</u> 7	8) 786-7349	Samples Were:     Shipped or     Jacob Delivered
HES Contact	······		`````````````````````````````````			- Hand Delivered
HES Use Only Lab ID	Sample ID / Description	Date Date Collected P=p	AE SAMPLET C≈Compo a.m. G=Gra o.m. MATRIX C	YPE osite # b Conts.	ANALYSIS REQUIRED	2. Ambient or Chilled NOTES:     3. Received Broken/ Leaking (Improperty
	Not Samplin		A 1120	- 58	TEL VOCOTATBE PEBS Lend	Scaled) Y N NOTES
0227Hot MW-11	**	2/26/3/1142	D HO	35	TEL VOES + MTBE, PERS, PO	4. Properly Preserved
I02 MW-14		1318	A Hzo	5	TEL VOLS + MTBLE, PEBS, pb	5. Received Within
10388-5		Z	B H20	5	TEL VOCE + MTBE, PCBs, pb	Y N NOTES:
IO11 55-1		1057	B 5.1	× /	RCRA Metals (SWR46)	]
IO5 55-2		11.03	P Sail	× /	RCRA Mitals (SW846)	COC Tape Was: 1. Present on Outer
IO6 55-3	•	1126	B 5.:1	× /	RCRA Matals (& SW846)	2. Unbroken on Outer
1 707 55-4		1/31	& 5.11 ₽ 5.11	× /	RERA Metals (SW 846)	Package Y N
Matrix     SL - Sludge       S - Soil     O - Oil       SE - Sediment     DW - Drinking       SO - Solid     GW - Ground	SW - Surface Water DS L - Leachate DL Water A - Air X - Water WI - Wipe WW	- Drum Solids Drum Liquids Other / - Waste Water	Special I	nstructions: M_T_	Only	4. Unbroken on Sample NOTES: Y N
Sampled by: (Signature)	Date/Time 2/2/ 31	Receiv	ved by: (Signature)		Date/Time	]
Relinguished by: (Signature)	Date/Time	Receiv	ved by: (Signature)		Date/Time	COC Record Was: 1. Present upon Receipt of
Relinquished by: (Signature)	Date/Time/ 2/27/2/ 08	Receiv	by: (Signature)	ij	Date/Time 2 k 7/6 (	Samples Y N
Dispatched by: (Signature)	Metho	d of Shipment:	· · · · ·		Date/Time	Discrepancies Retween
Received @ Laboratory:	Date/Time 122		ound Time:		Lab Approval:	Sample Labels and COC Record?
	E-Lab Copy YF	LOW - Sampler	Сору	PIN	K - Generator Copy	

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# ATTACHMENT 3

# Air Sampling Results

# AIR TOXICS LTD.

SAMPLE NAME: Basement 250

ID#: 0102521-01A

# EPA METHOD TO-3 GC/PID

File Name: DII. Factor:	d030106b 1.46		Date of Colleg	ction: 2/27/01 sis: 3/1/01
Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0015	0.0047	Not Detected	Not Detected
Toluene	0.0015	0.0056	Not Detected	Not Detected
Ethyl Benzene	0.0015	0.0064	Not Detected	Not Detected
Total Xylenes	0.0015	0.0064	Not Detected	Not Detected

# Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Limits
Fluorobenzene (PID)	97	75-125

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# AIR TOXICS LTD.

SAMPLE NAME: Basement 252

ID#: 0102521-02A

# EPA METHOD TO-3 GC/PID

File Name: d030107b Date of Collection: 2/27/01 Dil. Factor: 5.03 Date of Analysis: 3/1/01

Compound	Rpt. Limit (ppmv)	(uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0050	0.016	Not Detected	Not Detected
Toluene	0.0050	0.019	Not Detected	Not Detected
Ethyl Benzene	0.0050	0.022	Not Detected	Not Detected
Total Xylenes	0.0050	0.022	Not Detected	Not Detected

## Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (PID)	97	75-125

# AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0102521-03A

# EPA METHOD TO-3 GC/PID

Compound	(ppmv)	(uG/L)	(ppmv)	(uG/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	Not Detected	Not Detected
Ethyl Benzene	0.0010	0.0044	Not Detected	Not Detected
Total Xylenes	0.0010	0.0044	Not Detected	Not Detected

# Container Type: NA - Not Applicable

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%Recovery	Limits
97	75-125
	%Recovery 97

AIR TOXICS LTD. AN ENVIRONMENTAL ANALYTICAL LABORATORY

# **CHAIN-OF-CUSTODY RECORD**

Sample Transportation Notice

180 BLUE RAVINE ROAD, SUITE B

Relinquishing signature on this document indicates that sample is being shipped in compliance FOLSOM, CA 95630-4719 with all applicable local, State, Federal, national, and international laws, regulations and (916) 985-1000 FAX: (916) 985-1020 ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

Page / of /

Contact P Company Address Phone (() Collected	Person <u>Matt</u> <u>Bokes</u> <u>Malcolm Pirnia</u> <u>15 Corn.II Rel.</u> <u>518) 786-7349</u> <b>By:</b> Signature <u>Matt</u>	ity Lothern State AX <u>(518)786-86</u>	e <u>Mr</u> Zip <u>12110</u> 115	Project info: P.O. # Project # <u>0.533076</u> Project Name <u>Project Junio 54</u>	Turn Arc	ound Time: al Specif	у
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# **ATTACHMENT 4**

# Asbestos and Lead-Based Paint Survey



# Malcolm Pirnie, Inc.

15 Cornell Road Latham, New York 12110

# Lead Survey Report

**250 Union Street** 

Schenectady, New York

Testwell Laboratories, Inc. Environmental & Construction Services 30 Corporate Circle Suite 131 Albany, New York 12203 Tele: (518) 464-6039 Fax: (518) 464-9522 Email: TestwellElab@aol.com

# Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110

for

# **Schenectady County Planning Department 250 Union Street Schenectady, New York**

# Lead Inspection

Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110

250 Union Street Schenectady, New York

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(Note: Subject Reference headings are for information and ease of indexing and shall not be considered as exclusive divisions.)

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SURVEY METHODS ANALYTICAL DATA LABORATORY QUALITY ASSURANCE

III. FINDINGS

INSPECTION SUMMARY GENERAL CONCLUSIONS AND RECOMMENDATIONS

IV. BUILDING SCHEMATICS/PLAN FLOOR PLANS/FIELD INSPECTIONS DATA

## **SECTION 1: INTRODUCTION**

## EXECUTIVE SUMMARY

Client:	Malcolm	Pirnie,	Inc.
		,	

Client Address: 15 Cornell Road Latham, New York 12110

Premises (Site): 250 Union Street Schenectady, New York

#### ABSTRACT

Malcolm Pirnie, Inc. (Malcolm Pirnie) retained Testwell Laboratories, Inc. in the capacity of an environmental consulting agency; commissioning their staff to undertake lead determination investigations within selected buildings at 250 Union Street Schenectady, New York.

The following report presents results from field investigations, and conclusions based upon testing of surfaces in selected areas of the 250 Union Street property.

# **LIMITATION OF LIABILITIES**

This document contains proprietary information of Testwell Laboratories, Inc., and was prepared expressly for the sole benefit, use and information of Malcolm Pirnie. The liability of Testwell Laboratories, Inc. and our employees in respect to information and opinions contained herein shall not extend to any third party.

No portion of this document may be reproduced, or used except by said licensee without written permission from Testwell Laboratories, Inc.

#### **HOW TO USE THIS REPORT**

This report is designed to give an overview of any possible paint coverings that may present a lead-hazard.

This document provides an initial catalog, along with appropriate response recommendations for the surfaces documented that fall outside the required legal threshold values.

We recommend that all-necessary remedial action and/or abatement work be done in accordance with a site-specific scope of work to ensure complete and controlled operations.

\*The amount and configuration of the suspected material observed may present a potential for exposure which demands that proper engineering controls be adhered to if abatement work is to proceed safely and in compliance with applicable regulations.

\*We also recommend suitable and adequate supervision of all lead removal work by an independent environmental consultant or engineering firm.

#### **SECTION II: METHODOLOGY**

## **SURVEY METHODS**

The site survey and analyses were conducted by an accredited inspector experienced in the recognition of potentially suspect surfacing materials. For lead content measurement, samples of paint shards and chips were collected and submitted for instrumentation analysis via Atomic Absorption Spectroscopy (AAS).

## ANALYTICAL DATA

Representative sections of various paint coverings were tested. Additional samples were collected of paint covering materials such as chippings, shards, and debris. The test/sample sites and conditions were duly noted, including, but not limited to, room type and usage, surface type, substrate, and condition.

No air or swipe samples were requested or collected during this inspection survey.

No field comparisons of visually similar materials were made without additional sampling or testing. In accordance with the specified guidance literature, a single, randomly located test of one surfacing was deemed to be representational of said covering. It is the inspector's opinion that adequate data was procured to support the conclusions and opinions set forth herein.

#### LABORATORY QUALITY ASSURANCE

Testwell Laboratories, Inc. maintains a full in-house analytical facility. Testwell's analytical methodologies incorporate criteria and procedures for chemical testing to ensure that quality analytical results are generated. The quality assurance program entails control of the analyst's working environment, instrumentation, chemicals used, and the methods followed.

The quality control program demonstrates and documents the precision and accuracy of test results through the analysis of field blanks, duplicate samples spiked with analysts and surrogate standards.

These QA/QC procedures are based upon the following protocols:

1) U.S. EPA Contract Laboratory Program

2) Code of Federal Regulation (40 CFR Part 136)

#### 3) U.S. EPA Test Methods for evaluating Solid Waste (SW-846)

In addition, the procedures meet the requirements specified in the New York State Department of Health Environmental Laboratory Program (ELAP).

## SECTION III

#### GENERAL CONCLUSIONS AND RECOMMENDATIONS

250 Union Street Schenectady, New York was inspected for surface coverings that could present a lead paint hazard. Testwell Laboratories, Inc conducted the inspection on February 26, 2001.

Summary of chip sample results:

1) Samples 001 through 008 and 012: the lead concentrations were above 0.5%, which is the EPA Standard.

It is our opinion that there may be a risk potential for exposure to lead arising from upgrading, demolition and/or remodeling the building systems.

Note that this document should be considered an interim report, as it does not fully document the possible hazard identified for these properties. Its limited scope of data does not allow for projection of hazard assessment through areas.

# BUILDING SCHEMATICS/PLAN

# FLOOR PLANS/FIELD INSPECTION DATA SHEETS



# **DATA SAMPLING SHEETS**

# DATA SHEETS

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## TESTWELL LABORATORIES, INC.

30 Corporate Circle Suite 131 Albany, New York 12203

# Client Name: Malcolm Pirnie, Inc.

Client Address: <u>15 Cornell Road, Latham, NY 12110</u> Project Site: 250 Union Street, Schenectady, NY

# CHIP SAMPLE FORM/CHAIN OF CUSTODY

tele: (518) 464-6039 fax: (518) 464-9622

Sampled By: <u>B. Moynihan</u> Turnaround Time: <u>72 hours</u> Project Number: <u>D-60-5</u>

Field Sample #:	Lab ID #:	Sample Location:	Sample Matrix:	Sample Volume:	Analysis Requested:	Analyical Method:	% by Weight Results:	MDL
001	01-105915-01	Front Door	Paint	1inx1in	Lead	7082	1.52	0.01
002	01-105915-02	Front Stairs	Paint	linxlin	Lead	7082	4.24	0.01
003	01-105915-03	Stair Tread	Paint	1inx1in	Lead	7082	21.0	0.01
004	01-105915-04	Window Sill 1 <sup>st</sup> Floor	Paint	1inx1in	Lead	7082	15.7	0.01
005	01-105915-05	Kitchen Wall 1 <sup>st</sup> Floor	Paint	1 inx 1 in	Lead	7082	.971	0.01
006	01-105915-06	Door Frame 1 <sup>st</sup> Floor	Paint	1 inx 1 in	Lead	7082	23.9	0.01
007	01-105915-07	Kitchen Wall 2 <sup>nd</sup> Floor	Paint	1inx1in	Lead	7082	1.60	0.01
008	01-105915-08	Ceiling Above 1x1 Tile 2 <sup>nd</sup> Floor	Paint	1inx1in	Lead	7082	.928	0.01

.5 % by Weight is consider Pb

U = Undetected (FALLING BELOW THE METHOD DETECTION LIMIT).

Method Detected Limit = Listed MDL multiplied by the dilution factor

Digestion according to SW-846 Method 3050 and analysis according to SW-846 Method 7420

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# TESTWELL LABORATORIES, INC.

30 Corporate Circle Suite 131 Albany, New York 12203

Client Name:Maſcolm Pirnie, Inc.Client Address:15 Cornell Road, Latham, NY 12110Project Site:250 Union Street, Schenectady, NY

# CHIP SAMPLE FORM/CHAIN OF CUSTODY

tele: (518) 464-6039 fax: (518) 464-9622

Sampled By: <u>B. Moynihan</u> Turnaround Time: <u>72 hours</u> Project Number: <u>D-60-5</u>

Field Sample #:	Lab ID #:	Sample Location:	Sample Matrix:	Sample Volume:	Analysis Requested:	Analyical Method:	% by Weight Results:	MDL ·
009	01-105915-09	Wall Paint 2 <sup>nd</sup> Floor	Paint	1 inx 1 in	Lead	7082	< 0.05	0.01
010	01-105915-10	Wall 2 <sup>™</sup> Floor	Paint	1inx1in	Lead	7082	.470	0.01
011	01-105915-11	Ceiling 2 <sup>nd</sup> Floor	Paint	1inx1in	Lead	7082	.083	0.01
012	01-105915-12	Outside Window	Paint	1inx1in	Lead	7082	17.8	0.01

#### .5 % by Weight is consider Pb

## U = Undetected (FALLING BELOW THE METHOD DETECTION LIMIT).

#### Method Detected Limit = Listed MDL multiplied by the dilution factor

#### Digestion according to SW-846 Method 3050 and analysis according to SW-846 Method 7420

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# TLI

# Malcolm Pirnie, Inc.

15 Cornell Road Latham, New York 12110

Lead Survey Report

**252 Union Street** 

Schenectady, New York

Testwell Laboratories, Inc. Environmental & Construction Services 30 Corporate Circle Suite 131 Albany, New York 12203 Tele: (518) 464-6039 Fax: (518) 464-9522 Email: TestwellElab@aol.com

# Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110

for

# **Schenectady County Planning Department 252Union Street Schenectady, New York**

Lead Inspection

Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110

252 Union Street Schenectady, New York

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IV. BUILDING SCHEMATICS/PLAN FLOOR PLANS/FIELD INSPECTIONS DATA

## **SECTION 1: INTRODUCTION**

#### EXECUTIVE SUMMARY

Client:	Malcolm Pirnie, Inc.
Client Address:	15 Cornell Road Latham, New York 12110
Premises (Site):	252 Union Street Schenectady, New York

#### ABSTRACT

Malcolm Pirnie, Inc. (Malcolm Pirnie) retained Testwell Laboratories, Inc. in the capacity of an environmental consulting agency; commissioning their staff to undertake lead determination investigations within selected buildings at 252 Union Street Schenectady, New York.

The following report presents results from field investigations, and conclusions based upon testing of surfaces in selected areas of the 252 Union Street property.

#### LIMITATION OF LIABILITIES

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#### HOW TO USE THIS REPORT

This report is designed to give an overview of any possible paint coverings that may present a lead-hazard.

This document provides an initial catalog, along with appropriate response recommendations for the surfaces documented that fall outside the required legal threshold values.

We recommend that all-necessary remedial action and/or abatement work be done in accordance with a site-specific scope of work to ensure complete and controlled operations.

\*The amount and configuration of the suspected material observed may present a potential for exposure which demands that proper engineering controls be adhered to if abatement work is to proceed safely and in compliance with applicable regulations.

\*We also recommend suitable and adequate supervision of all lead removal work by an independent environmental consultant or engineering firm.

#### SECTION II: METHODOLOGY

## SURVEY METHODS

The site survey and analyses were conducted by an accredited inspector experienced in the recognition of potentially suspect surfacing materials. For lead content measurement, samples of paint shards and chips were collected and submitted for instrumentation analysis via Atomic Absorption Spectroscopy (AAS).

#### ANALYTICAL DATA

Representative sections of various paint coverings were tested. Additional samples were collected of paint covering materials such as chippings, shards, and debris. The test/sample sites and conditions were duly noted, including, but not limited to, room type and usage, surface type, substrate, and condition.

No air or swipe samples were requested or collected during this inspection survey.

No field comparisons of visually similar materials were made without additional sampling or testing. In accordance with the specified guidance literature, a single, randomly located test of one surfacing was deemed to be representational of said covering. It is the inspector's opinion that adequate data was procured to support the conclusions and opinions set forth herein.

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Testwell Laboratories, Inc. maintains a full in-house analytical facility. Testwell's analytical methodologies incorporate criteria and procedures for chemical testing to ensure that quality analytical results are generated. The quality assurance program entails control of the analyst's working environment, instrumentation, chemicals used, and the methods followed.

The quality control program demonstrates and documents the precision and accuracy of test results through the analysis of field blanks, duplicate samples spiked with analysts and surrogate standards.

These QA/QC procedures are based upon the following protocols:

1) U.S. EPA Contract Laboratory Program

2) Code of Federal Regulation (40 CFR Part 136)

3) U.S. EPA Test Methods for evaluating Solid Waste (SW-846)

In addition, the procedures meet the requirements specified in the New York State Department of Health Environmental Laboratory Program (ELAP).

#### **SECTION III**

#### GENERAL CONCLUSIONS AND RECOMMENDATIONS

252 Union Street Schenectady, New York was inspected for surface coverings that could present a lead paint hazard. Testwell Laboratories, Inc conducted the inspection on February 26, 2001.

Summary of chip sample results:

1) Samples 002 through 005 and 007 through 009: the lead concentrations were above 0.5%, which is the EPA Standard.

It is our opinion that there may be a risk potential for exposure to lead arising from upgrading, demolition and/or remodeling the building systems.

Note that this document should be considered an interim report, as it does not fully document the possible hazard identified for these properties. Its limited scope of data does not allow for projection of hazard assessment through areas.

In addition, the procedures meet the requirements specified in the New York-State Department of Health Environmental Laboratory Program (ELAP).

#### SECTION III

# GENERAL CONCLUSIONS AND RECOMMENDATIONS

252 Union Street Schenectady, New York was inspected for surface coverings that could present a lead paint hazard. Testwell Laboratories, Inc conducted the inspection on February 26, 2001.

Summary of chip sample results:

1) Samples 001 - 009: the lead concentrations were well above 0.5%, which is the EPA Standard.

It is our opinion that there may be a risk potential for exposure to lead arising from upgrading, demolition and/or remodeling the building systems.

Note that this document should be considered an interim report, as it does not fully document the possible hazard identified for these properties. Its limited scope of data does not allow for projection of hazard assessment through areas.

# **BUILDING SCHEMATICS/PLAN**

# FLOOR PLANS/FIELD INSPECTION DATA SHEETS


### LEAD DETERMINATION REPORT

### **DATA SAMPLING SHEETS**

### DATA SHEETS

#### TESTWELL LABORATORIES, INC.

30 Corporate Circle Suite 131 Albany, New York 12203

#### CHIP SAMPLE FORM/CHAIN OF CUSTODY

tele: (518) 464-6039 fax: (518) 464-9622

Client Name: _	Malcolm Pirnie, Inc,
Client Address:	15 Cornell Road, Latham, NY 12110
Project Site:	252 Union Street, Schenectady, NY

Sampled By: <u>B. Moynihan</u> Turnaround Time: <u>72 hours</u> Project Number: <u>D-60-6</u>

Field Sample #:	Lab ID #:	Sample Location:	Sample Matrix:	Sample Volume:	Analysis Requested:	Analyical Method:	% by Weight Results:	MDL
001	01-105915-01	Window 2 <sup>nd</sup> Floor	Paint	linx1in	Lead	7082	< 0.05	0.01
002	01-105915-02	Window Sill 2 <sup>nd</sup> Floor	Paint	linx1in	Lead	7082	4.95	0.01
003	01-105915-03	Door Jamb	Paint	linx1in	Lead	7082	50.7	0.01
004	01-105915-04	Baseboard	Paint	1inx1in	Lead	7082	2.35	0.01
005	01-105915-05	Door 2 <sup>nd</sup> Floor	Paint	linxlin	Lead	7082	20.7	0.01

#### .5 % by Weight is consider Pb

#### U = Undetected (FALLING BELOW THE METHOD DETECTION LIMIT).

Method Detected Limit = Listed MDL multiplied by the dilution factor

Digestion according to SW-846 Method 3050 and analysis according to SW-846 Method 7420

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#### TESTWELL LABORATORIES, INC.

30 Corporate Circle Suite 131 Albany, New York 12203

Client Name: _	Malcolm Pirnie, Inc.
Client Address:	15 Cornell Road, Latham, NY 12110
Project Site:	252 Union Street, Schenectady, NY

#### CHIP SAMPLE FORM/CHAIN OF CUSTODY

tele: (518) 464-6039 fax: (518) 464-9622

Sampled By: <u>B. Moynihan</u> Turnaround Time: <u>72 hours</u> Project Number: <u>D-60-6</u>

Field Sample #:	Lab ID #:	Sample Location:	Sample Matrix:	Sample Volume:	Analysis Requested:	Analyical Method:	% by Weight Results:	MDL
006	01-105915-06	Wall	Paint	linxlin	Lead	7082	.226	0.01
007	01-105915-07	Outside White Paint	Paint	linxlin	Lead	7082	.865	0.01
008	01-105915-08	Siding Paint	Paint	linxlin	Lead	7082	1.52	0.01
009	01-105915-09	Grey Porch Paint	Paint	linx1in	Lead	7082	3.63	0.01

#### .5 % by Weight is consider Pb

#### U = Undetected (FALLING BELOW THE METHOD DETECTION LIMIT).

Method Detected Limit = Listed MDL multiplied by the dilution factor

Digestion according to SW-846 Method 3050 and analysis according to SW-846 Method 7420

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# TLI

# Environmental & Construction Services

# Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110

# For

# Schenectady County Planning Department 250 Union Street Schenectady, New York

Testwell Laboratories, Inc. Environmental and Construction Services 30 Corporate Circle Suite 131 Albany, New York 12203 p: (518) 464-6039 f: (518) 464-9522 Email TestwellBMcLaren@aol.com

# Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110

# For

# Schenectady County Planning Department 250 Union Street Schenectady, New York

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TESTWELL LABORATORIES, INC. Brian K. McLaren Project Manager Schenectady County Planning Department Asbestos Building Demolition Survey 250 Union Street Schenectady, New York Page TC

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Schenectady County Planning Department Asbestos Building Demolition Survey 250 Union Street Schenectady, New York Page 1

#### **1.0 Executive Summary**

An investigation of the site was performed on 2/26/01 by Brian K. McLaren and Bernie Moynihan of Testwell Laboratories, Inc. (TLI), NYS DOL /EPA Inspector/Management Planner Certificate # 88-10819 and NYS DOL /EPA Inspector Certificate # 96-12226. A review of a drawing prepared by Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110 was conducted prior to and during the investigation.

Bulk samples of suspect asbestos containing materials were collected from **250 Union Street** for laboratory analysis to determine asbestos content, if any. These materials generally include thermal system insulation (TSI), surfacing material and other miscellaneous material. A total of 11 bulk samples were collected during the investigation.

Based on the field investigation and the laboratory analysis of bulk samples collected at the site, removal is required.

#### 2.0 Purpose/Intent

Testwell Laboratories, Inc. (TLI), an Engineering and consulting firm, was retained by Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110 to perform an asbestos building demolition survey at the 250 Union Street Schenectady, New York. The purpose of the survey was to identify any asbestos containing material within the buildings that was selected for demolition. This report is only for this address 250 Union Street Schenectady, New York.

#### 3.0 Inspections

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An investigation of the site was performed on 2/26/01 by Brian K. McLaren and Bernie Moynihan of Testwell Laboratories, Inc. (TLI), NYS DOL /EPA Inspector/Management Planner Certificate # 88-10819 and NYS DOL /EPA Inspector Certificate # 96-12226.

The inspector performed a systematic walk-through inspection of the 250 Union Street Schenectady, New York. Samples of suspected asbestos containing materials were collected and submitted to a laboratory for analysis.

#### 4.0 Bulk Sampling of Suspect Asbestos Containing Materials (ACM)

Bulk sampling of suspect ACM was performed in accordance with protocols contained in the Asbestos Hazard Emergency Response Act of 1986 (40 CFR 763 AHERA). Unless otherwise noted, a minimum of one (1) to three (3) samples were collected from each type of homogeneous material identified.

Samples were placed into leak-tight plastic sample containers, which were labeled to identify material sampled and sample location and stored prior to transport to the laboratory facility. A chain of custody and analysis request was prepared for all samples collected.

Schenectady County Planning Department Asbestos Building Demolition Survey 250 Union Street Schenectady, New York Page 2

Samples were analyzed by Polarized Light Microscopy (PLM) in accordance with the Environmental Protection Agency's Interim Method for the Detection of Asbestos in Bulk Insulation Samples, (EPA-600/M4-82020, December 1982) and the McCrone Research Institute's The Asbestos Particle Atlas as method references.

Non-friable Organically Bound (NOB) samples were analyzed via gravimetric reduction. In general, these materials are flexible-to-rigid asphalt, vinyl or of an organic type matrix. This includes, but is not limited to, vinyl asbestos tile, shingles, tar, rubber patch materials and carpet backing.

The protocol requires that samples are analyzed by a gravimetric reduction method and the samples are subject to a series of ashing and weighing prior to analysis. Once the NOB samples have been gravimetrically reduced they can then be analyzed via Polarized Light Microscopy (PLM).

If a NOB sample contains  $\leq 1\%$  asbestos, the sample may be reported as asbestos containing and no further analysis is required. If PLM analysis indicates an asbestos concentration of  $\geq 1\%$  then the absence of asbestos fibers must be confirmed by Transmission Electron Microscopy (TEM). This method is referred to as the Gravimetric Matrix Reduction Method (ELAP Items 198.1 and 198.4).

TLI is fully accredited by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) for compliance with laboratory guidelines, procedures and analytical proficiency samples in the analysis of asbestos in friable and non-friable materials in accordance with Section 502 of the Public Health Laws of the State of New York. TLI ELAP approval numbers are 10871 and 11142 for the Albany and Ossining laboratories, respectively.

TLI is also fully accredited by the National Institute of Standards and Technology (NIST) for bulk sample analysis under the National Voluntary Laboratory Accreditation Program (NVLAP) for compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. Copies of TLI's laboratory and inspection certificates are shown in Appendix C.

These criteria encompass the requirements of ISO/IEC Guide 25 and relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results.

#### 5.0 Laboratory Test Results - Asbestos

Asbestos fibers were detected in the following materials:

Sample #	Material	Amount	
002	Transite Siding	Exterior	4,500 Sq. Ft.
003	All Roofing Materials	Exterior	2,000 Sq. Ft.
011	White Linoleum	2 <sup>nd</sup> Floor Kitchen	150 Sq. Ft.

A complete analytical report is displayed in Appendix B

Schenectady County Planning Department Asbestos Building Demolition Survey 250 Union Street Schenectady, New York Page 3

#### 6.0 Conclusion/Recommendations

Laboratory analysis confirms that asbestos fibers were detected in some of the materials collected at the site. Removal is required for confirmed ACM.

#### 7.0 Cost Estimate for Asbestos Removal

A cost estimate for the removal of asbestos containing material within the 250 Union Street Schenectady, New York is shown below.

Cost Estimated for Asbestos Removals Only ...... \$ 20,500.00

Testwell Laboratories, Inc.

Brian K. McLaren

Brian K. McLaren Project Manager

# Appendix A - Bulk Location Drawing



# Appendix B - Bulk Sample Reports

Bailt Gampie Reporte

#### Testwell Laboratories, Inc. 30 Corporate Circle, Suite 131 Albany, New York 12203

Project: D-60-5

Client: Malcolm Pirnie, Inc.

Site: 250 Union Street, Schenectady, NY

Phone: Fax:

#### (518) 464-6039 (518) 464-9522

Sampling Date: February 26, 2001

Inspectors: Bernie Moynihan

#### Analysis: I. Miller

Field Number	Log Number	Material Sample	Sample Location	Analysis
001	624B T-608	Siding Vapor Barrier	Outside Building	Negative By PLM/NOB Negative By NOB/TEM
002	625B	Siding	Outside Building	Chrysotile25.0%Cellulose5.0%Binder70.0%
003	626B	Roofing Material	Roof	Chrysotile 1.37%
-	627B	Plaster	1 <sup>st</sup> Floor	Cellulose10.0%Plaster60.0%Binder30.0%N.A.F.D.
005	628B T-609	White Floor Tile	1 <sup>st</sup> Floor Kitchen	Negative By PLM/NOB Negative By NOB/TEM
006	629B T-610	Floor Tile Mastic	1 <sup>st</sup> Floor Kitchen	Negative By PLM/NOB Chrysotile < 1
007	630B	1x1 Ceiling Tile	2 <sup>nd</sup> Floor	Cellulose  99.0%    Binder  1.0%    N.A.F.D.  1.0%
008	631B	Plaster	Stairway	Cellulose10.0%Plaster60.0%Binder30.0%N.A.F.D.

Isabel Miller

Laboratory Director of Approved Signatory

Certifications: (\*) ELAP NYS DOH # 10871 (\*) NVLAP NUMBER 1102

COMMENTS: N.A.F.D. - Means non-asbestos fibers detected.

All reports are the confidential property of our clients and the information contained herein may not be published or reproduced pending our written approval.

#### **Testwell Laboratories, Inc.** 30 Corporate Circle, Suite 131 Albany, New York 12203

Project: D-60-5

Client: Malcolm Pirnie, Inc.

Sampling Date: February 26, 2001

Inspectors: Bernie Moynihan

Site: 250 Union Street, Schenectady, NY Analysis: I. Miller

Field Number	Log Number	Material Sample	Sample Location	Analysis
009	632B T-611	Red Linoleum	2 <sup>nd</sup> Floor Hallway	Negative By PLM/NOB Negative By NOB/TEM
010	633B	Plaster	2 <sup>nd</sup> Floor	Cellulose  10.0%    Plaster  60.0%    Binder  30.0%    N.A.F.D.
011	634B	White Linoleum	2 <sup>nd</sup> Floor Kitchen	Chrysotile 7.71%

Isabel Miller

Laboratory Director of Approved Signatory

Certifications: (\*) ELAP NYS DOH # 10871 (\*) NVLAP NUMBER 1102

COMMENTS: N.A.F.D. - Means non-asbestos fibers detected.

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**Phone:** Fax:

(518) 464-6039 (518) 464-9522

Appendix C - Testwell Laboratories, Inc.



121

STATE OF NEW YORK - DEPARTMENT OF LABOR DIVISION OF SAFETY AND HEALTH License and Certificate Unit BUILDING 12, STATE CAMPUS ALBANY, NY 12240

# ASBESTOS HANDLING LICENSE

RESTRICTED LICENSE

Laboratories, Inc. Testvell Contractor:

47 Hudson Street Address:

Ossining, NY 10562

#### Charles Schnugg Duly Authorized Representative:

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently disp layed at the asbestos project worksite. The licensee verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

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# United States Environmental Protection Agency

This is to certify that

Testwell Laboratories, Inc.

47 Hudson Street Ossining, NY 10562

has fulfilled the requirements of the Toxic Substances Contol Act (TSCA) Section 402(a)(1), and has received certification as a firm, pursuant to 40 CFR Part 745.226 to conduct lead-based paint activities:

Jurisdiction: State of New York excluding Indian Tribes

This certification is valid for three (3) years from the date of issuance and expires May 28, 2003

Certification # NY-01-052003-275

Issued on: May 29, 2000

Regional Administrator

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



Expires 12:01 AM April 1, 200 ISSUED April 1, 2000 REVISED July 18, 2000

# CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 10871

Director: MS. ISABEL CATLIN Lab Name: TESTWELL LABORATORIES INC Address : 30 CORPORATE CIRCLE - STE 131 ALBANY NY 12203

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/SOLID AND HAZARDOUS WASTE

All approved subcategories and/or analytes are listed below:

Niscellaneous : Asbestos in Friable Naterial

## Serial No.: 107478

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificate has a red serial number.

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



Expires 12:01 AM April 1, 200 ISSUED April 1, 2000 REVISED July 18, 2000

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Lab ID No.: 10871

Director: MS. ISABEL CATLIN Lab Name: TESTWELL LABORATORIES INC Address : 30 CORPORATE CIRCLE - STE 131 ALBANY NY 12203

is hereby APPROVED as an Environmental Laboratory for the category

#### ENVIRONMENTAL ANALYSES/AIR AND EMISSIONS

All approved subcategories and/or analytes are listed below:

Miscellaneous Alr : Fibers

# Serial No.: 107477

Wadsworth-Center

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificate has a red serial number.

#### NEW YORK STATE DEPARTMENT OF HEALTH

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



EXPIRES 12:01 AM ADT11 1, 2001 ISSUED April 1, 2000 REVISED August 8, 2000

#### CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11142

Director: MR. DOMINIC PERRUCCIO Lab Name: TESTWELL LABORATORIES INC Address : 47 HUDSON STREET-BUILDING B OSSINING NY 10562

is hereby APPROVED as an Environmental Laboratory for the category

#### ENVIRONMENTAL ANALYSES/AIR AND EMISSIONS

All approved subcategories and/or analytes are listed below:

Niscellaneous Air : <u>Asbe</u>stos Fibers

### Serial No.: 107817

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificate has a red serial number.

#### NEW YORK STATE DEPARTMENT OF HEALTH

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



Expires 12:01 AM April 1, 200 ISSUED April 1, 2000 REVISED August 8, 2000

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Issued in accordance with and pursuant to section 502 Public Health Low of New York State

Lab ID No.: 11142

Director: MR. DOMINIC PERRUCCIO Lab Name: TESTWELL LABORATORIES INC Address : 47 HUDSON STREET-BUILDING B OSSINING NY 10562

is hereby APPROVED as an Environmental Laboratory for the category

#### ENVIRONMENTAL ANALYSES/ POTABLE WATER

All approved subcategories and/or analytes are listed below:

D.W. Miscellaneous : Asbestos

# Serial No.: 107816

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown. Must he conspicuously posted. Valid certificate has a red serial number.

#### NEW YORK STATE DEPARTMENT OF HEALTH

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



Expires 12:01 AM April 1, 200. ISSUED April 1, 2000 REVISED August 8, 2000

#### CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 302 Public Health Law of New York State

Lab ID No.: 11142

Director: MR. DOMINIC PERRUCCIO Lab Name: TESTWELL LABORATORIES INC Accress: 47 HUDSON STREET-BUILDING B OSSINING NY 10562

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/SOLID AND HAZARDOUS WASTE

All approved subcategories and/or analytes are listed below:

Kiscellaneous : Asbestos in Friable Material Asbestos in Non-Friable Materia

# Serial No.: 107818

Wadsworth Center

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Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificate has a rod serial number.

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# The American Industrial Hygiene Association

is proud to acknowledge that

# **Testwell Laboratories, Inc.**

### **Ossining**, NY

has fulfilled the requirements for and has been formally recognized by AIHA and is technically competent to perform the analyses listed in the following

#### **SCOPE OF ACCREDITATION**

**INDUSTRIAL HYGIENE ENVIRONMENTAL LEAD ENVIRONMENTAL MICROBIOLOGY** Originally Accredited: 02/01/92 Originally Accredited: 07/15/99 \_\_\_\_Metals \_Silica X\_Paint Chips \_ Air Bacteria Asbestos PLM X Asbestos PCM X\_Dust Wipes X\_Soll \_Fungi **Diffusive Samples** Organic Solvents

The above named laboratory agrees to perform all analyses listed above in the scope of accreditation according to applicable policy requirements and acknowledges that continued accreditation is dependent on successful participation in the appropriate proficiency testing programs. This laboratory may be contacted to verify the current scope of accreditation, proficiency testing performance and accreditation status. Accreditation by AIHA is not a guarantee of the validity of the data generated by the laboratory.

Laboratory # 6965

Certificate # 486

Christine A. Kea

Christine A. Kearney *L* Chair, Analytical Accreditation Board Accreditation Expires: 07/15/02

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James R. Thornton, CIH, CSP President, AIHA





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ADDRESS CORRESPONDENCE TO: (include certificate number) NYS Department of Labor DOSH - License and Certificate Unit PO Box 687, New York, NY 10014-0687

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STATE OF NEW YORK DEPARTMENT OF LABOR DIVISION OF SAFETY AND HEALTH ASBESTOS HANDLING CERTIFICATE AUTHORIZED CLASSES C - SAMPLING TECHNICIAN (03/01) D - INSPECTOR (03/01) H - PROJECT MONITOR - (03/01) BERNARD MOYNIHAN 321 MARGARET STREET HERKIMER, NY 13350 RICHARD CUCOLO, Director - For the Commissioner of Labor DOSH-442 (01/91)

# TLI

# Environmental & Construction Services

Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110

# For

# Schenectady County Planning Department 252 Union Street Schenectady, New York

Testwell Laboratories, Inc. Environmental and Construction Services 30 Corporate Circle Suite 131 Albany, New York 12203 p: (518) 464-6039 f: (518) 464-9522 Email TestwellBMcLaren@aol.com

# **Malcolm Pirnie, Inc.** 15 Cornell Road Latham, New York 12110

# For

# Schenectady County Planning Department 252 Union Street Schenectady, New York

Generated on:

3/12/01

TESTWELL LABORATORIES, INC. Brian K. McLaren Project Manager Schenectady County Planning Department Asbestos Building Demolition Survey 252 Union Street Schenectady, New York Page TC

#### **Table of Contents**

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4.0	Bulk Sampling of Suspect ACM	1
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6.0	Conclusion/Recommendations	3
7.0	Cost Estimate for Asbestos Removal	3
Appendix A	Asbestos Bulk Sample Locations	
Appendix B	Asbestos Laboratory Analysis Data Sheets	
Appendix C	Certifications	

Schenectady County Planning Department Asbestos Building Demolition Survey 252 Union Street Schenectady, New York Page 1

#### **1.0 Executive Summary**

An investigation of the site was performed on 2/26/01 by Brian K. McLaren and Bernie Moynihan of Testwell Laboratories, Inc. (TLI), NYS DOL /EPA Inspector/Management Planner Certificate # 88-10819 and NYS DOL /EPA Inspector Certificate # 96-12226. A review of a drawing prepared by Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110 was conducted prior to and during the investigation.

Bulk samples of suspect asbestos containing materials were collected from 252 Union Street for laboratory analysis to determine asbestos content, if any. These materials generally include thermal system insulation (TSI), surfacing material and other miscellaneous material. A total of 10 bulk samples were collected during the investigation.

Based on the field investigation and the laboratory analysis of bulk samples collected at the site, removal is required.

#### 2.0 Purpose/Intent

Testwell Laboratories, Inc. (TLI), an Engineering and consulting firm, was retained by Malcolm Pirnie, Inc. 15 Cornell Road Latham, New York 12110 to perform an asbestos building demolition survey at the 252 Union Street Schenectady, New York. The purpose of the survey was to identify any asbestos containing material within the buildings that was selected for demolition. This report is only for this address: 252 Union Street Schenectady, New York.

#### 3.0 Inspections

An investigation of the site was performed on 2/26/01 by Brian K. McLaren and Bernie Moynihan of Testwell Laboratories, Inc. (TLI), NYS DOL /EPA Inspector/Management Planner Certificate # 88-10819 and NYS DOL /EPA Inspector Certificate # # 96-12226.

The inspector performed a systematic walk-through inspection of the 252 & 254 Union Street Schenectady, New York. Samples of suspected asbestos containing materials were collected and submitted to a laboratory for analysis.

#### 4.0 Bulk Sampling of Suspect Asbestos Containing Materials (ACM)

Bulk sampling of suspect ACM was performed in accordance with protocols contained in the Asbestos Hazard Emergency Response Act of 1986 (40 CFR 763 AHERA). Unless otherwise noted, a minimum of one (1) to three (3) samples were collected from each type of homogeneous material identified.

Samples were placed into leak-tight plastic sample containers, which were labeled to identify material sampled and sample location and stored prior to transport to the laboratory facility. A chain of custody and analysis request was prepared for all samples collected.

#### Schenectady County Planning Department

#### Asbestos Building Demolition Survey 252 Union Street Schenectady, New York Page 2

Samples were analyzed by Polarized Light Microscopy (PLM) in accordance with the Environmental Protection Agency's Interim Method for the Detection of Asbestos in Bulk Insulation Samples, (EPA-600/M4-82020, December 1982) and the McCrone Research Institute's The Asbestos Particle Atlas as method references.

Non-friable Organically Bound (NOB) samples were analyzed via gravimetric reduction. In general, these materials are flexible-to-rigid asphalt, vinyl or of an organic type matrix. This includes, but is not limited to, vinyl asbestos tile, shingles, tar, rubber patch materials and carpet backing.

The protocol requires that samples are analyzed by a gravimetric reduction method and the samples are subject to a series of ashing and weighing prior to analysis. Once the NOB samples have been gravimetrically reduced they can then be analyzed via Polarized Light Microscopy (PLM).

If a NOB sample contains  $\leq 1\%$  asbestos, the sample may be reported as asbestos containing and no further analysis is required. If PLM analysis indicates an asbestos concentration of  $\geq 1\%$  then the absence of asbestos fibers must be confirmed by Transmission Electron Microscopy (TEM). This method is referred to as the Gravimetric Matrix Reduction Method (ELAP Items 198.1 and 198.4).

TLI is fully accredited by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) for compliance with laboratory guidelines, procedures and analytical proficiency samples in the analysis of asbestos in friable and non-friable materials in accordance with Section 502 of the Public Health Laws of the State of New York. TLI ELAP approval numbers are 10871 and 11142 for the Albany and Ossining laboratories, respectively.

TLI is also fully accredited by the National Institute of Standards and Technology (NIST) for bulk sample analysis under the National Voluntary Laboratory Accreditation Program (NVLAP) for compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. Copies of TLI's laboratory and inspection certificates are shown in Appendix C.

These criteria encompass the requirements of ISO/IEC Guide 25 and relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results.

#### 5.0 Laboratory Test Results - Asbestos

Asbestos fibers were detected in the following materials:

Sample #	Material		Amount
004	Aircell Pipe Insulation	Crawl Space	75 Ln. Ft.
This amount is estimated, the	e floor over the crawl space wa	as caved in.	

A complete analytical report is displayed in Appendix B

#### Schenectady County Planning Department

#### Asbestos Building Demolition Survey 252 Union Street Schenectady, New York Page 3

#### 6.0 Conclusion/Recommendations

Laboratory analysis confirms that asbestos fibers were detected in some of the materials collected at the site. Removal is required for confirmed ACM.

#### 7.0 Cost Estimate for Asbestos Removal

A cost estimate for the removal of asbestos containing material within the 252 Union Street Schenectady, New York is shown below.

Cost Estimated for Asbestos Removals Only ...... \$ 8,500.00

Testwell Laboratories, Inc.

Brian K. McLaren

Brian K. McLaren Project Manager

# Appendix A - Bulk Location Drawing


Appendix B - Bulk Sample Reports

#### **Testwell Laboratories, Inc.** 30 Corporate Circle, Suite 131 Albany, New York 12203

Project: D-60-6

Malcolm Pirnie, Inc. Client:

252 Union Street, Schenectady, NY Site:

Fax:

(518) 464-6039 (518) 464-9522

Sampling Date: February 26, 2001

Inspectors: Bernie Moynihan

#### Sample Location **Material Sample Analysis Field Number** Log Number 635B Roofing Material Roof Negative By PLM/NOB 001 Negative By NOB/TEM T-612 002 636B Plaster 1<sup>st</sup> Floor Cellulose 10.0% Plaster 60.0% Binder 30.0% N.A.F.D. 2<sup>nd</sup> Floor Gypsum Board Cellulose 20.0% 003 637B Min Wool Trace Gypsum 60.0% Binder 20.0% N.A.F.D. 638B Chrysotile Pipe Insulation Crawl Space 17.3% 004 Cellulose 30.0% Binder 52.7% N.A.F.D. 639B White/Grey Linoleum 1<sup>st</sup> Floor Negative By PLM/NOB 005 T-613 Negative By NOB/TEM 006 640B **Grey Linoleum** 1<sup>st</sup> Floor Negative By PLM/NOB Negative By NOB/TEM T-614 641B Window Glazing **Outside Building** Negative By PLM/NOB 007 T-615 Negative By NOB/TEM

Isabel Miller

Laboratory Director of Approved Signatory

Certifications: (\*) ELAP NYS DOH # 10871 (\*) NVLAP NUMBER 1102

COMMENTS: N.A.F.D. - Means non-asbestos fibers detected.

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# Phone:

Analysis: I. Miller

#### Testwell Laboratories, Inc. 30 Corporate Circle, Suite 131 Albany, New York 12203

Project: D-60-6

Client: Malcolm Pirnie, Inc.

Site: 252 Union Street, Schenectady, NY

Phone:(518) 464-6039Fax:(518) 464-9522

Sampling Date: February 26, 2001

Inspectors: Bernie Moynihan

#### Analysis: I. Miller

Field Number	Log Number	Material Sample	Sample Location	<u>Analysis</u>	
008	642B T-616	Brown Linoleum	Attic	Negative By PLN Negative By NO	1/NOB B/TEM
009	643B	Plaster	Hall	Cellulose Plaster Binder N.A.F.D.	10.0% 60.0% 30.0%
010	644B	Plaster	2 <sup>nd</sup> Floor	Cellulose Plaster Binder N.A.F.D.	10.0% 60.0% 30.0%

Isabel Miller

Laboratory Director of Approved Signatory

Certifications: (\*) ELAP NYS DOH # 10871 (\*) NVLAP NUMBER 1102

COMMENTS: N.A.F.D. - Means non-asbestos fibers detected.

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Appendix C - Testwell Laboratories, Inc.

Contractor: Testwell La Address: 47 Hudson Ossining, 1 Duly Authorized Representativ This license has been issued New York State and of the New Yo suspension or revocation for a (1) a asbestos project, or (2) demonstrated material	ASBESTOS HANDLING LICENS RESTRICTED LICENSE aboratories, Inc. Street NY 10562 We: Charles Schnugg in accordance with applicable provis rk State Codes, Rules and Regulation serious violation of state, federal or loc lack of responsibility in the conduct of	E LICENSE NUMBER: 99-1096 DATE OF ISSUE: 12/05/00 EXPRATION DATE: 12/31/01 EXPRATION DATE: 12/31/01 INFORMATION DATE: 12/31/01 INFORMATI	
material.			
This license is valid only for the disp-layed at the asbestos project wo asbestos project in New York State I perform, by the New York State Depa DO3=+432 (1-98)	ne contractor named above and this lice rksite. The licensee verifies that all p have been issued an Asbestos Certificat artment of Labor. Richard FOR THE COM	ense or a photocopy must be prominently persons employed by the licensee on an te, appropriate for the type of work they	100



# United States Environmental Protection Agency

This is to certify that

Testwell Laboratories, Inc.

47 Hudson Street Ossining, NY 10562

has fulfilled the requirements of the Toxic Substances Contol Act (TSCA) Section 402(a)(1), and has received certification as a firm, pursuant to 40 CFR Part 745.226 to conduct lead-based paint activities:

Jurisdiction: State of New York excluding Indian Tribes

This certification is valid for three (3) years from the date of Issuance and expires May 28, 2003

Certification # NY-01-052003-275

Issued on: May 29, 2000

Regional Administrator

4

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



Expires 12:01 AM April 1, 2001 ISSUED April 1, 2000 REVISED July 18, 2000

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Director: MS. ISABEL CATLIN Lab Name: TESTWELL LABORATORIES INC Address : 30 CORPORATE CIRCLE - STE 131 ALBANY NY 12203

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/SOLID AND HAZARDOUS WASTE

All approved subcategories and/or analytes are listed below:

Miscellaneous : Asbestos in Friable Material

## Serial No.: 107478

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificate has a red serial number.

NEW YORK STATE DIS ALL MALLE SA ALLAND

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



Expires 12:01 AM April 1, 200 ISSUED April 1, 2000 REVISED July 18, 2000

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is hereby APPROVED as an Environmental Laboratory for the category

### ENVIRONMENTAL ANALYSES/AIR AND EMISSIONS

All approved subcategories and/or analytes are listed below:

Miscellaneous Air : Fibers

### Serial No.: 107477

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificate has a red serial number.

#### NEW YORK STATE DEPARTMENT OF HEALTH

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner.



Explies 12:01 AM April 1, 2001 ISSUED April 1, 2000 REVISED August 8, 2000

#### CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11142

Director: MR. DOMINIC PERRUCCIO Lab Name: TESTWELL LABORATORIES INC Address : 47 HUDSON STREET-BUILDING B OSSINING NY 10562

is hereby APPROVED as an Environmental Laboratory for the category

#### ENVIRONMENTAL ANALYSES/AIR AND EMISSIONS

All approved subcategories and/or analytes are listed below:

Miscellaneous Air : Asbestos Fibers

### Serial No.: 107817

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificate has a red serial number.

#### NEW YORK STATE DEPARTMENT OF HEALTH

ANTONIA C. NOVELLO, M.D., M.P.H. Commissioner



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Director: MR. DOMINIC PERRUCCIO Lab Name: TESTWELL LABORATORIES INC Address : 47 HUDSON STREET-BUILDING B OSSINING NY 10562

is hereby APPROVED as an Environmental Laboratory for the category

#### ENVIRONMENTAL ANALYSES/ POTABLE WATER

All approved subcategories and/or analytes are listed below:

D.W. Miscellaneous : Asbestos

### Serial No.: 107816

#### Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown. Must he conspicuously posted. Valid certificate has a red serial number.

#### DOH-3317 (3/97)

#### NEW YORK STATE DEPARTMENT OF HEALTH

ANTONIA C. NOVELLO, M.D., N.P.H. Commissioner



Expires 12:01 AM April 1, 200. ISSUED April 1, 2000 REVISED August 8, 2000

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Director: MR, DOMINIC PERRUCCIO Lab Name: TESTWELL LABORATORIES INC Address: 47 HUDSON STREET-BUILDING B OSSINING NY 10562

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/SOLID AND HAZARDOUS WASTE

All approved subcategories and/or analytes are listed below:

Hiscellaneous : Asbestos în Friable Material Asbestos în Non-Friable Nateria

### Serial No.: 107818

Wadsworth Center

-

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted, Valid certificate has a rod serial number.

# The American Industrial Hygiene Association

is proud to acknowledge that

### **Testwell Laboratories, Inc.**

**Ossining**, NY

has fulfilled the requirements for and has been formally recognized by AIHA and is technically competent to perform the analyses listed in the following

#### SCOPE OF ACCREDITATION

**INDUSTRIAL HYGIENE ENVIRONMENTAL LEAD ENVIRONMENTAL MICROBIOLOGY** Originally Accredited: 02/01/92 Originally Accredited: 07/15/99 \_Metals X\_Paint Chips Silica \_Air Bacteria X Asbestos PCM Asbestos PLM \_X\_Dust Wipes \_X\_Solf Fungi Organic Solvents Diffusive Samples

The above named laboratory agrees to perform all analyses listed above in the scope of accreditation according to applicable policy requirements and acknowledges that continued accreditation is dependent on successful participation in the appropriate proficiency testing programs. This laboratory may be contacted to verify the current scope of accreditation, proficiency testing performance and accreditation status. Accreditation by AIHA is not a guarantee of the validity of the data generated by the laboratory.

Laboratory #6965

Certificate # 486

Christine A. Kes

Christine A. Kearney Chair, Analytical Accreditation Board Accreditation Expires: 07/15/02

. Aharuton

President, AIHA

James R. Thornton, CIH, CSP





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ADDRESS CORRESPONDENCE TO: (include certificate number) NYS Department of Labor DOSH - License and Certificate Unit PO Box 687, New York, NY 10014-0687

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WEIGHT 187 lbs.	HEIGHT 6 ft. 02in.			
1127610				

STATE OF NEW YORK DEPARTMENT OF LABOR DIVISION OF SAFETY AND HEALTH ASBESTOS HANDLING CERTIFICATE AUTHORIZED CLASSES C - SAMPLING TECHNICIAN (03/01) D - INSPECTOR (03/01) H - PROJECT MONITOR (03/01) FBERNARD MOYNIHAN 321 MARGARET STREET HERKIMER. NY 13350 Į. RICHARD CUCOLO, Director - For the Commissioner of Labor DOSH-442 (01/91)

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# ATTACHMENT 5

References

#### REFERENCES

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