

**SITE INVESTIGATION  
FORMER SCHMIGEL SITE  
OAK MATERIALS GROUP INC.  
Hoosick Falls, New York**

**prepared for:**

**Whiteman, Osterman & Hanna**

**March 1987**

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## 1.0 INTRODUCTION

The following report presents the results of an investigation conducted at a site on the former Schmigel property as requested by counsel for Oak Materials Group Inc., Hoosick Falls, N.Y. The investigation, as completed by Conestoga-Rovers & Associates (CRA), followed the guidelines of the approved work plan presented in the report entitled "Proposed Site Investigation Former Schmigel Site Oak Materials Group Inc. Hoosick Falls, New York prepared for: Whiteman, Osterman & Hanna, November 1985" (See Appendix A). This plan included revisions which addressed comments of the New York State Department of Environmental Conservation (NYSDEC) on the original proposed work plan dated May 25, 1984. This investigation was completed pursuant to an Order on Consent formalized between the NYSDEC and Oak Materials Group Inc. (File No. 4-0213).

This report presents the following aspects of the site investigation that was conducted from April 1986 to March 1987.

- i) summary of environmental conditions,
- ii) data collected during field investigation,
- iii) an assessment of areal and vertical extent of wastes
- iv) a determination of migration potential of on-site contaminants,



- v) an identification of wells which may be impacted by  
contaminants which may migrate off site,
- vi) an assessment of the results of the field  
investigation, and
- vii) a discussion of current and/or potential environmental  
impacts, both on site and off site due to the former  
disposal area.

## 2.0 BACKGROUND INFORMATION

### 2.1 SITE IDENTIFICATION

The subject of the investigation discussed herein and referred to as the 'former disposal area' or the 'site' is located on property to the north of Route 67 approximately 2.5 miles northeast of Hoosick Falls, New York. The former disposal area is located on the east side of the entrance road which services a small residential area (one house and several mobile home sites). The former disposal area is approximately 200 feet from Route 67 in a low spot between the entrance road and a steep slope to the east and covers approximately 1000 square yards. Figure 1 illustrates the location of the site.

A reconnaissance of the area surrounding the former disposal area being investigated indicated that portions of the hillside have been built up with fill in order to create level areas on which to place mobile homes. The fill apparently contains a considerable amount of building rubble along with other refuse in addition to soils. Other areas of dumped refuse are apparent locally including a junkyard north of the Brenenstuhl house.

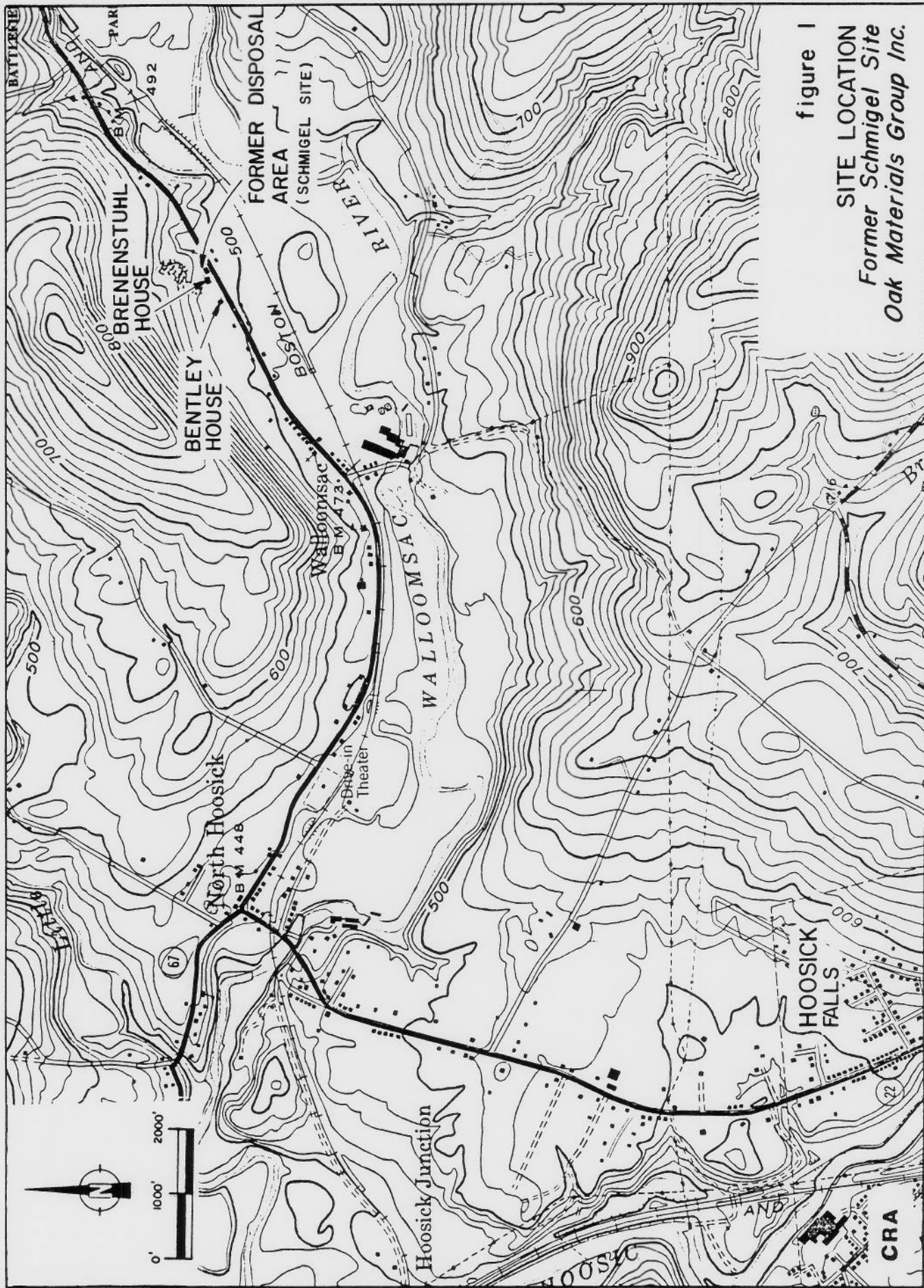
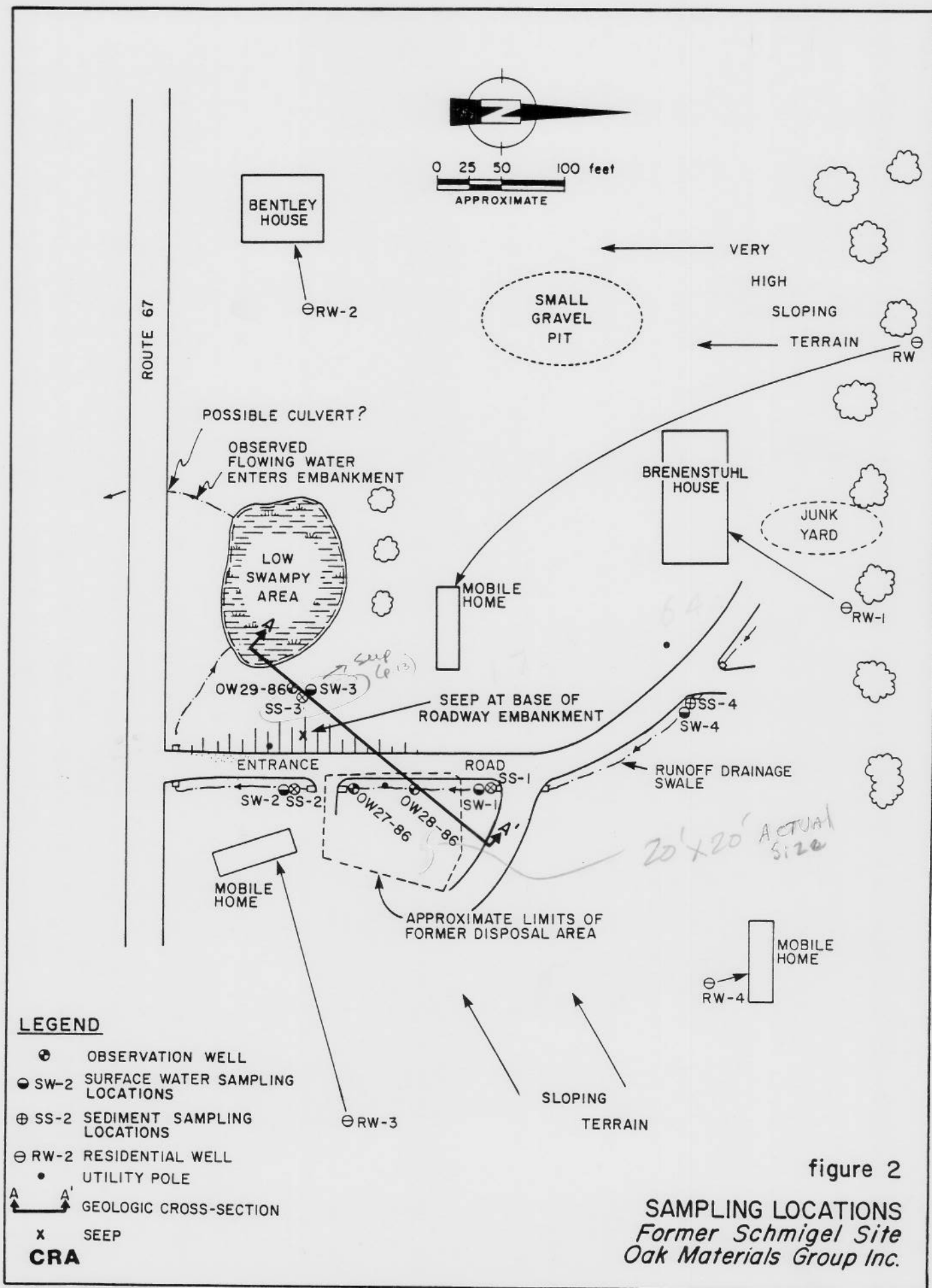


figure 1  
SITE LOCATION  
Former Schmigel Site  
Oak Materials Group Inc.

## 2.2 HISTORIC INFORMATION

The NYSDEC has indicated that it believes the former disposal area may have been the location of the disposal of 100 to 200 55-gallon drums of scrap material that is suspected to include epoxy resins, dicyamide, methyl cellosolve and acetone. The material was allegedly transported to the site (circa 1974) by Alex Schmigel (former owner). Schmigel reportedly dumped the drummed wastes in a low lying area and the drums were either crushed and used as fill or they were salvaged for possible re-use. The disposal area is immediately east of the entrance to the residential area and an adjacent gravel pit, located along Route 67. A general plan of the area is presented in Figure 2.



### 3.0 INSTALLATION OF MONITORING WELLS

During the period April 30 to May 1, 1986 three shallow overburden groundwater monitoring wells were installed at the former Schmigel site. Observation wells OW27-86 and OW28-86 were placed along the western limits of the former disposal area east of the entrance roadway approximately 55 feet apart. OW29-86 was placed downgradient of the former disposal area, west of the entrance road at the base of the embankment forming the entrance road (see Figure 2).

The monitoring wells were installed to facilitate collection of groundwater samples. This was to provide information concerning the quality of groundwater downgradient of the disposal area. Prior to drilling of each borehole, the augers and drill rods were cleaned by scraping off adhering soils and spraying with a steam cleaner.

Drilling to facilitate the installation of the wells was accomplished using a dozer-mounted drilling rig equipped with hollow stem augers. Continuous split spoon samples of the overburden materials penetrated were collected



to the full depth of each borehole. The soil samples were logged according to geologic stratigraphy and stored in jars as a geologic record. Two soil samples were collected from each borehole for chemical analysis (see Section 5.1). Excess soil cuttings brought to the surface during the drilling operations were spread around the drill site.

The monitoring wells were installed through the hollow stem augers. Upon completion of drilling, the augers were raised slightly, a small quantity of quartzite sand was dropped down the inside of the augers and a two-inch diameter schedule 80 PVC riser pipe and attached two-inch diameter PVC well screen were placed into position. As the augers were slowly raised, the remainder of the sandpack as well as a 1-foot bentonite seal and cement/bentonite grout were placed. See Figure 3 for typical well details.

The screened interval of each well was installed in the uppermost wetted zone within the overburden. Stratigraphic and Instrumentation Logs of each well are presented in Appendix B.

During the monitoring well installation program and during subsequent groundwater and sediment sampling programs all activities were conducted according to

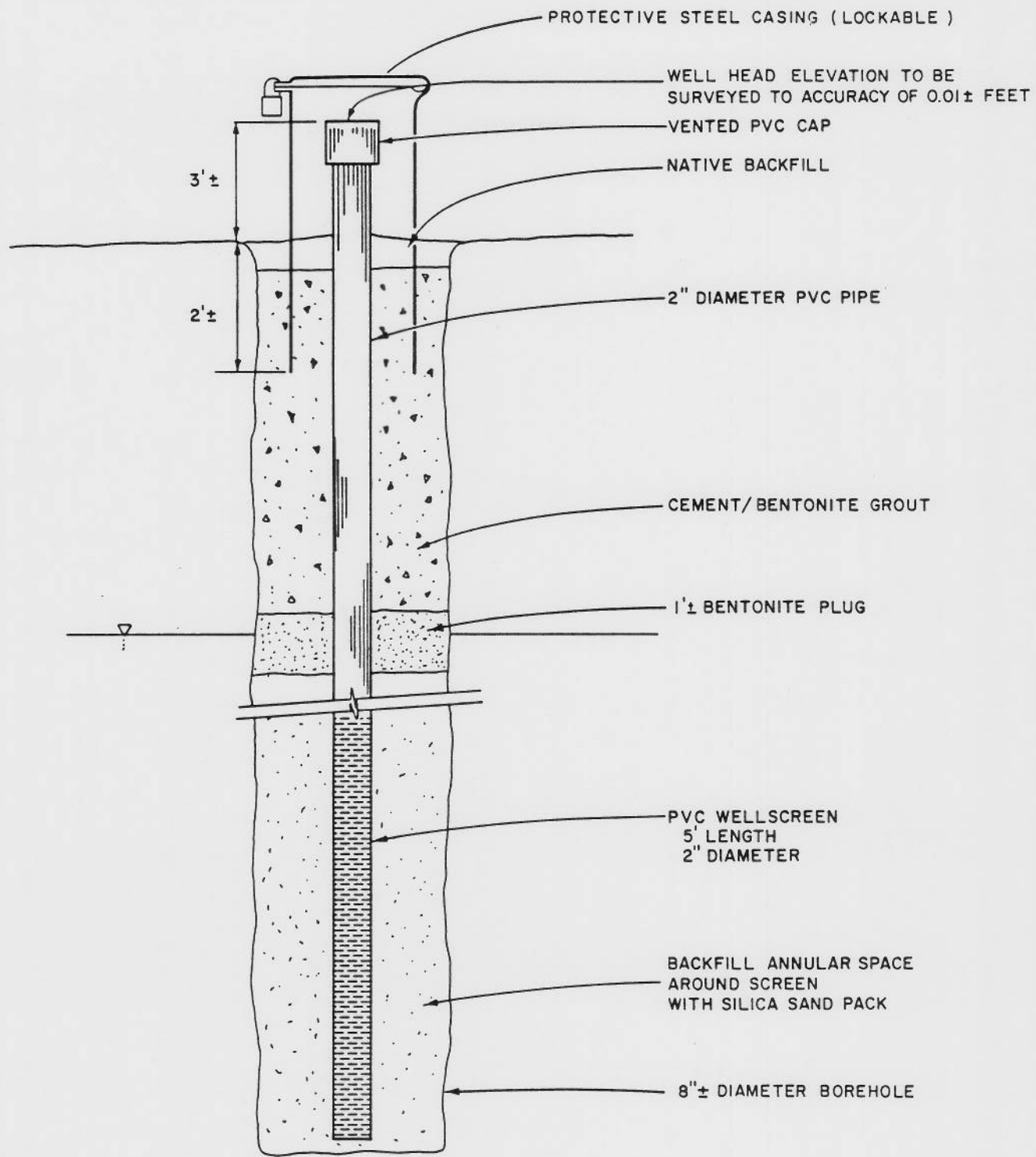


figure 3  
TYPICAL WELL INSTALLATION DETAIL  
*Former Schmigel Site*  
*Oak Materials Group Inc.*

CRA



the health and safety program designed for the site investigation. The Health and Safety Program is presented in Section 7.0 of the proposal which is presented in Appendix A.

#### 4.0 ASSESSMENT OF HYDROGEOLOGY

##### 4.1 REGIONAL CHARACTERISTICS

The investigation site is located in a mountainous region near the New York/Vermont State line, within Rensselaer County. The area is located on the side of a relatively steep slope approximately 1,500 feet from the Walloomsac River. The elevation of the former disposal area is on the order of 600 feet AMSL - National Geodetic Vertical datum of 1929. (It is to be noted that the datum used in surveying the wells is assumed - 100 (feet) equals the top of casing at OW28-86).

The overburden soils on the slope in the vicinity of the former disposal area are very shallow having many outcrops of rock and some springs. Some of the rock outcrops are stained and rusty brown in color due to the oxidation of the rock constituents. The principal formation which makes up the upper bedrock of the area is the Wallomsac Formation which includes slate, phyllite, schist and meta gray wacke.

Runoff from the steep slope above the investigation area is collected by small swales (streams) on the hillside, one of which crosses the former disposal area. Runoff, due to springs and precipitation descends the slope

via these swales and a culvert beneath the entrance road to a low swampy area. A small stream exits the southwest corner of the low swampy area and flows south into the embankment to Route #67 (a culvert was not apparent at the location where the stream flowed into the embankment).

#### 4.2 OVERBURDEN SOILS

The soil stratigraphy at each of the monitoring wells was determined through examination of split spoon samples. The fill layer at OW27-86 and OW28-86 is from four to eight feet deep and consists of gravelly, silty sand and wood fragments. The native soils immediately beneath the fill consist of coarse to medium sand and some gravel. A layer of silty clay, approximately two feet in thickness was encountered below the sand and gravel at OW27-86 and this was underlain by coarse sandy gravel. The clay layer was not encountered at OW28-86.

The overburden soils at OW29-86 consisted of silty clay and clayey silt. Figure 4 presents a geologic cross-section of the area including the former disposal site.

A metal detection device was used in an effort to determine the areal extent of the former disposal

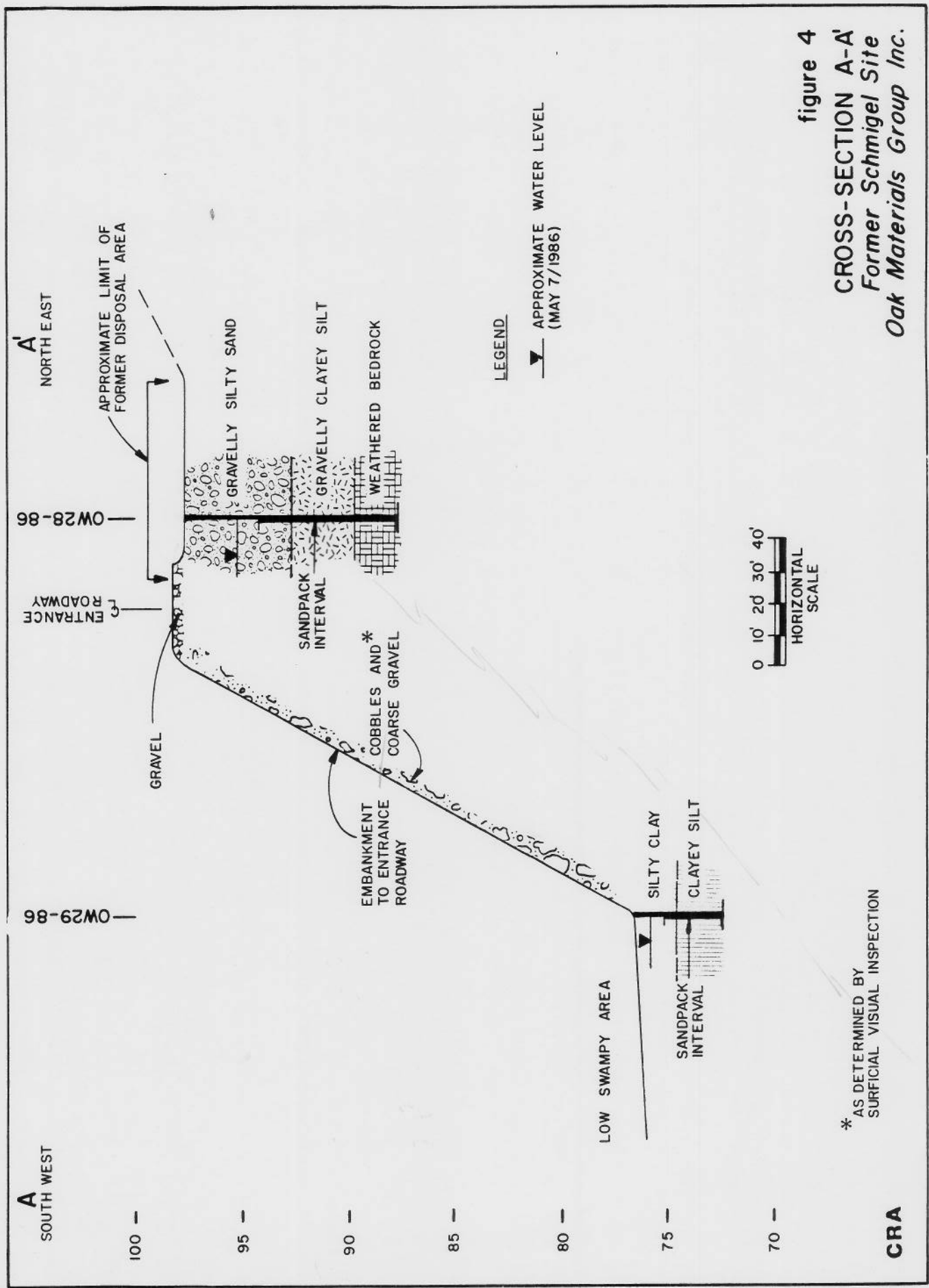


figure 4  
 CROSS-SECTION A-A'  
 Former Schmigel Site  
 Oak Materials Group Inc.

**CRA**

area. Measurements were somewhat distorted by the high mineral content of the rock outcrops and shallow bedrock. Visual inspections of the disposal areas in April and August 1986 and March 1987 were used to further refine the estimated limits of waste disposal. It is estimated that the former disposal area covers approximately 1,000 square yards including a portion of the entrance roadway as illustrated by Figure 2. The borehole information is insufficient to adequately estimate the depth of buried waste over the whole area. A test pit excavation program would be necessary to accurately define the horizontal and vertical extent of the buried waste.

#### 4.3 GROUNDWATER CONDITIONS

The groundwater in the area of the former disposal area originates mainly from springs on the side of the slope above the site. The spring water originates from the bedrock and descends the slope through the shallow overburden layer. Some of the spring water runs downslope along the surface a portion of which infiltrates back into the overburden soils.

The groundwater surface elevation at monitoring wells OW27-86 and OW28-86 is approximately 89 and 94 (feet), respectively, some 15 feet above the water surface

TABLE 1

MONITORING WELL WATER LEVEL ELEVATIONS

Monitoring Well	OW27-86	OW28-86	OW29-86
Top of Casing Elevation (feet)	98.40	100.00	78.38
Date:			
May 2, 1986	89.6	95.1	75.7
May 6, 1986	89.4	95.0	--
May 7, 1986	89.2	94.9	75.8
August 8, 1986	88.4	92.3	75.2
August 25, 1986	88.8	93.2	75.5

at OW29-86 which is approximately 75 feet (see Table 1). These elevations are based upon an assumed elevation of 100 feet for the top of casing of OW28-86. The actual elevation in the area is on the order of 600 feet AMSL - National Geodetic Vertical Datum of 1929. The groundwater gradient through the former disposal area is therefore very steep although actual rates of water movement may be restricted due to the presence of clayey soil beneath the site. Based upon the monitoring well information and the steep slope of the ground surface in the area, it is assumed that the general overburden and shallow bedrock groundwater gradient is southerly toward the Walloomsac River.

## 5.0 SAMPLE COLLECTION FOR CHEMICAL ANALYSIS

### 5.1 SOIL SAMPLES

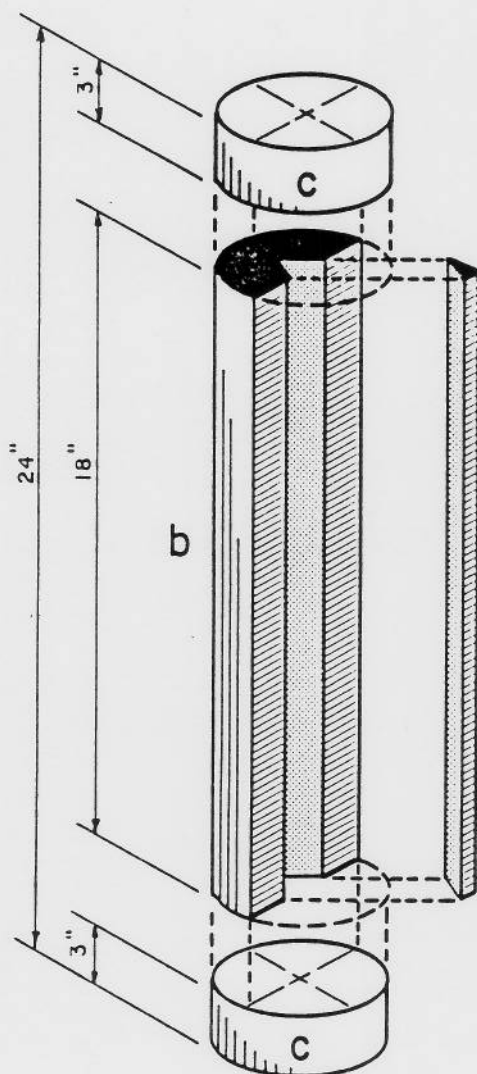
During the well installation program conducted on April 30 to May 1, 1986 two soil samples for chemical analysis were collected at each installation. The soil samples were collected using split spoons. The soil samples were selected as illustrated by Figure 5. Prior to the collection of samples for chemical analysis, the sampling equipment was washed as described by the following procedure:

- i) soapy water wash and/or swab with paper towelling,
- ii) methanol rinse,
- iii) hexane rinse,
- iv) methanol rinse,
- v) three rinses with distilled water, and
- vi) air dry.

### 5.2 SEDIMENT SAMPLES

During the round 2 sampling program, a series of sediment samples was collected from areas where surface water was present. Surface water samples were also collected at each sediment sample location. Three sediment samples





TYPICAL SOIL CORE

d

PORTION OF SAMPLE FOR CHEMICAL ANALYSIS

- CONTACT WITH UNSTERILIZED MATERIALS IS NOT ACCEPTABLE
- CONTAINER : PRECLEANSED 250 ml. GLASS
- STORAGE - REFRIGERATED ( 4°C )
- SHIPPING - ON ICE BY COURIER TO DESIGNATED LAB

b

PORTION OF SAMPLE TO BE RETAINED FOR GEOLOGIC RECORDS

a

- CONTACT WITH UNSTERILIZED MATERIALS IS NOT A PROBLEM
- CONTAINER : - CLEAN GLASS JAR  
- CLEAR GLASS IS SUITABLE
- GASKET - ANY SUITABLE GASKET
- STORAGE - IN STANDARD SHIPPING CARTON  
- NO REFRIGERATION REQUIRED

c

PORTION OF SAMPLE TO BE DISCARDED

CRA

figure 5  
SAMPLE SELECTION DETAILS  
*Former Schmigel Site*  
*Oak Materials Group Inc.*

were taken in a small stream running down the hill over the former disposal area to a low swampy area west of the site. Samples SS-1 and SS-4 were taken upstream of the former disposal area while SS-2 was collected from downstream of the disposal area. Sample SS-3 was collected at the location of a seep flowing from the base of the entrance roadway embankment. Figure 2 illustrates the location of each sediment sampling point.

Each of the three stream sediment samples was collected by compositing sediment obtained from the centerline and both edges of the stream. The seep sediment sample was collected as a composite of three sample locations in the area of the seep.

The sediment sample collection equipment was cleaned prior to collection of each sample according to the following procedure:

- i) soapy water wash and/or swab with paper towelling,
- ii) methanol rinse,
- iii) hexane rinse,
- iv) methanol rinse,
- v) three rinses with distilled water, and
- vi) air dry.

### 5.3 SURFACE WATER SAMPLES

As previously mentioned, surface water samples were collected at each sediment sample location. These samples are referred to as SW-1, SW-2, SW-3 and SW-4. Each surface water sample consisted of water flowing in the stream or seep, depending upon the location. The samples were collected by inserting the sample container directly into the water and allowing it to fill. Figure 2 illustrates the location of each surface water sampling point.

### 5.4 GROUNDWATER SAMPLES

During both Round 1 and Round 2 sample collection programs conducted in May, 1986 and August, 1986, respectively, the three shallow overburden groundwater monitoring wells were sampled. The wells were sampled using a stainless steel bailer. Each well was purged of five well volumes or until dry on three occasions using a centrifugal pump. The bailer was cleaned prior to taking each sample according to the following procedure:

- i) soapy water rinse and/or swab with paper towelling,
- ii) methanol rinse,

- iii) hexane rinse,
- iv) methanol rinse,
- v) three rinses with distilled water, and
- vi) air dry.

## 6.0 ANALYTICAL RESULTS

### 6.1 SOILS

The six soil samples collected during the installation of the monitoring wells at the former Schmigel Site were analysed for acetone and methyl cellosolve. Methyl cellosolve is a brand name for ethylene glycol monomethyl ether. Methyl Cellosolve was not detected in any of the six soil samples at detection limit of 10 ppm. Acetone was present in soils from OW28-86 (adjacent to the former disposal area) and OW29-86 (west of the entrance road) at concentrations up to 1.7 ppm. Table 2 summarizes the analytical data pertaining to the soil samples. Appendix C presents the laboratory report.

### 6.2 SEDIMENT

During the Round 2 sample collection program, four sediment samples were collected from various locations along a small stream which crosses the investigation site. These soil samples were analyzed for priority pollutant metals, total phenols and the hazardous substance list volatiles.

TABLE 2

## ANALYTICAL DATA - ROUND 1, MAY 1986

	Detection Level	OW27-86				OW28-86				OW29-86				Units
		8'-10'	12'-14'	6'-8'	8'-10'	0'-2'	2'-4'							
<u>SOIL</u>														
Acetone	1.0	BDL	BDL	BDL	1.2	BDL	1.7							ppm
Methyl cellulolve	10.0	BDL	BDL	BDL	BDL	BDL	BDL							ppm
<u>WATER</u>														
Base/Neutrals														
di-n-butylphthalate	5.0	7		BDL		BDL								ppb
Purgeables														
Vinyl chloride	1.0	10		BDL		BDL				20				ppb
Chloroethane	1.0	BDL		BDL		BDL				3				ppb
Methylene chloride	1.0	4		BDL		BDL				2				ppb
1,1-dichloroethane	1.0	BDL		BDL		BDL				11				ppb
t-1,2-dichloroethylene	1.0	BDL		BDL		BDL				6				ppb
1,2-dichloroethane	1.0	5		BDL		BDL				BDL				ppb
Benzene	1.0	2		BDL		BDL				BDL				ppb
1,1,2-trichloroethane	1.0	5		BDL		BDL				BDL				ppb
Toluene	1.0	120		BDL		BDL				BDL				ppb
Ethylbenzene	1.0	110		BDL		BDL				2				ppb
Xylenes	3.0	400		BDL		BDL				BDL				ppb
Pesticides/PCBs		ND		ND		ND				ND				ppb

TABLE 2

ANALYTICAL DATA - ROUND 1, MAY 1986

	Detection Limit	OW27-86	OW28-86	OW29-86	Units
<u>Acids</u>					
Total phenols	0.5	6	BDL	BDL	ppb
<u>Metals</u>					
Arsenic	1.0	10	110	2	ppb
Chromium	5.0	10	BDL	5	ppb
Lead	10.0	50	BDL	40	ppb
Mercury	0.1	2	6	3	ppb
Thallium	10.0	200	BDL	300	ppb
Zinc	5.0	50	40	400	ppb
Cadmium	1.0	BDL	1	BDL	ppb
- Acetone	0.1	7.2	1.1	BDL	ppm
- Methyl cellosolve	10.0	BDL	BDL	BDL	ppm

Notes: Parameters analyzed for consisted of the Priority Pollutants plus xylenes.

The sediment sample taken furthest upstream (approximately 200 feet) of the former disposal site (SS-4) indicated the presence of many of the metals including arsenic (9.6 ppm), mercury (0.08 ppm), lead (4.5 ppm), copper (12 ppm) and thallium (241 ppm) as well as others (See Table 3). Phenols were present in the SS-4 sample at 1.0 ppm while none of the hazardous substance list volatiles were detected. Sample SS-1 from immediately upgradient of the disposal area exhibited similar soil quality.

The sediment sample (SS-2) collected downgradient of the former disposal area exhibited similar metals content results with the exception of a much higher zinc content (466 ppm as opposed to 39 ppm and 38 ppm from samples SS-1 and SS-4, respectively). The phenols concentration of SS-2 was similar (0.4 ppm) and no hazardous substance list volatiles were detected.

SS-3 collected at the seep located at the base of the roadway embankment downgradient of the disposal area indicated similar quality (to SS-1 and SS-2) with respect to metals concentrations, but had a somewhat higher zinc concentration (66 ppm). The phenols concentration of SS-3 was very low (0.004 ppm) and no hazardous substance volatiles were detected. Table 3 summarizes the analytical data pertaining to the sediment samples. Appendix D presents the laboratory report.



TABLE 3

ANALYTICAL DATA - SEDIMENT SAMPLES

Parameter	Detection Limit	SS-4	SS-1	SS-2	SS-3	Normal* Background
<u>Phenols (ppm)</u>		1.0	1.6	0.4	0.004	
<u>Metals (ppm)</u>						
Antimony (Sb)		2.18	2.38	3.27	2.54	0.1 - 10
Arsenic (As)		9.6	29.60	16.6	11.4	40
Beryllium (Be)	0.5	BDL	BDL	BDL	BDL	.76 - 1.3
Cadmium (Cd)		0.14	0.1	1.0	0.33	1
Chromium (Cr)		0.10	9.5	6.7	6.08	2 - 250
Copper (Cu)		12.0	17.5	16	9.5	2 - 100
Lead (Pb)		4.5	7.3	4.0	7.32	2 - 200
Mercury (Hg)		0.08	0.15	0.31	0.09	0.45 - .160
Nickel (Ni)		15.0	9.5	4.5	6.0	3 - 1000
Selenium (Se)	0.02	BDL	BDL	0.02	BDL	0.1 - 10
Silver (Ag)		0.3	0.4	0.3	0.36	50
Thallium (Tl)		241	241	200	195	1
Zinc (Zn)		38	39	466	66	10 - 300
Volatiles		BDL	BDL	BDL	BDL	

Notes: Parameters analyzed for consisted of the site specific parameters

- total phenols
- metals fraction of the Priority Pollutants
- Hazardous Substances List - volatiles fraction

\* References: Handbook on the Toxicology of Metals, Editors: Friberg, Nordberg and Vouk, Elsevier, Amsterdam  
 Geochemistry, Brown, Arthur H., Prentice Hall Inc., Englewood Cliffs, New Jersey.

### 6.3 SURFACE WATER

Surface water samples were taken at each of the four sediment sample collection locations. The samples were collected during a rainfall and as a result appreciable flow was available for sampling. Surface water sample SW-4 collected from sample point SW-4, located approximately 200 feet upgradient of the former disposal area contained low concentrations of arsenic (10 ppb), lead (30 ppb) and zinc (30 ppb), total phenols (4 ppb) and no detectable concentrations of hazardous substance list volatiles. Surface water sample SW-1 collected from immediately upgradient of the disposal area also contained low concentrations of arsenic (40 ppb), lead (60 ppb), and zinc (90 ppb); somewhat higher than SW-4, as well as traces of cadmium (1 ppb), chromium (8 ppb), mercury (1 ppb) and total phenols (3 ppb).

The downgradient samples, SW-2, from the surface water ditch below the disposal area, and SW-3, from the seep at the base of the entrance roadway embankment, indicated low concentrations of arsenic, lead and zinc, up to 50 ppb, 90 ppb and 310 ppb, respectively, somewhat higher than both SW-1 and SW-4, and low concentrations of cadmium, copper and mercury up to 8 ppb, 220 ppb and 0.7 ppb, respectively. The total phenols concentrations of samples SW-2 and SW-3, 5 ppb and 2 ppb, respectively, were similar to that found in the upgradient surface water samples.

None of the hazardous substance list volatiles were detected in the four surface water samples. Table 4 presents the analytical results, also presented in Appendix D.

#### 6.4 GROUNDWATER

Groundwater samples collected at the former Schmigel property include two rounds from the shallow overburden groundwater monitoring wells and one round of selected private drinking water wells in the nearby area. Three residential wells upgradient of the former disposal area (RW-1, RW-3 and RW-4) and one downgradient (RW-2), all within 1000 feet of the former disposal area, were selected. The initial round of samples from the monitoring wells (collected in May, 1986) were analyzed for the priority pollutants with the exception of cyanide and dioxin, with the results to be used for the purpose of selecting a group of site specific parameters.

The results of analysis of the initial set of monitoring well samples indicated the presence of arsenic (110 ppb)\*, mercury (6 ppb), cadmium (1 ppb), zinc (400 ppb),

\* highest concentration of the three groundwater samples from OW27-86, OW28-86 and OW29-86.

(See Table 2 for Round 1 Results)

TABLE 4

ANALYTICAL DATA-WATER SAMPLE RESULTS

RESIDENTIAL WELLS										SURFACE WATER				MONITORING WELLS				Water Quality* Standards (ppb)
Detection Limit	Upgradient		Downgradient		Upgradient		Downgradient		OW27-86		Downgradient OW28-86		OW29-86					
	RW-1	RW-3	RW-4	RW-2	SW-4	SW-1	SW-2	SW-3	OW27-86	Downgradient OW28-86	OW29-86	OW29-86						
Phenols (ppb)	2	BDL	BDL	3	4	3	5	2	22	(6)	BDL	(BDL)	9	(BDL)				
Metals (ppb)																		
Antimony	25	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	40	(BDL)				
Arsenic	10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	450	(2)				
Beryllium	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	BDL	(BDL)				
Cadmium	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	7	(BDL)				
Chromium	50	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	80	(5)				
Copper	10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	340	(BDL)				
Lead	0.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	300	(40)				
Mercury	50	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	2	(3)				
Nickel	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	120	(BDL)				
Selenium	10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	BDL	(BDL)				
Silver	500	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	230	(BDL)				
Thallium	10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	1,760	(300)				
Zinc		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	470	(400)				
Volatiles (ppb)																		
Acetone	10.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(7,200)	BDL	(1,100)	BDL	(<100)				
Total Xylenes	3.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(400)	BDL	(BDL)	BDL	(BDL)				
Vinyl Chloride	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(10)	BDL	(BDL)	1.1	(20)				
Chloroethane	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(BDL)	--	(3)				

continued.....

TABLE 4

## ANALYTICAL DATA-WATER SAMPLES

Detection Limit	RESIDENTIAL WELLS				SURFACE WATER			MONITORING WELLS			Water Quality* Standards (ppb)		
	Upgradient		Downgradient	RW-2	Upgradient SW-4	Downgradient SW-2	Downgradient SW-3	Downgradient		OW29-86			
	RW-1	RW-3	OW27-86					OW28-86					
Methylene Chloride	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(4)	BDL	(BDL)	(2.0)	0.19
1,1-dichloroethane	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(2.0)	18.8	740
trans-1,2-dichloroethylene	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(BDL)	BDL	(2.0)	BDL	1,000
1,2-dichloroethane	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(5.0)	BDL	(BDL)	BDL	0.94
2-butanone	10.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	10	BDL	(BDL)	BDL	N/A
1,1,2-trichloroethane	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(5.0)	BDL	(BDL)	BDL	19,000
Benzene	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(2.0)	BDL	(BDL)	BDL	0.67
Toluene	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(1.20)	BDL	(BDL)	BDL	15,000
Ethyl Benzene	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(110)	BDL	(BDL)	BDL	2,400
												(2)	

Notes: Units are ug/L (ppb)

BDL - Below Detection Limit

N/A - No Criteria Available

Sampling Date - August 8, 1986

Analytical data in brackets are from Round 1 samples collected in May, 1986 (see Table 2)

\* Reference: Table 5-2 EPA Ambient Standards and Criteria for Superfund Remedial Sites. Guidance on Feasibility Studies under CERCLA. EPA/540/G-85/003 June, 1985.

chromium (10 ppb), lead (50 ppb) and thallium (300 ppb). Acetone was present in OW27-86 (7,200 ppb) and OW28-86 (1,100 ppb) but not in OW29-86. Phenols were present in OW27-86 (6.0 ppb) but not in OW28-86 and OW29-86. Methyl cellosolve was not detected in any of the three samples and pesticides, PCBs and acids (except phenols) were also not detected. Of the base/neutral priority pollutants, only di-n-butylphthalate was detected and only in the OW27-86 sample (7 ppb).

Several parameters of the purgeables fraction of the priority pollutants were detected at low levels, including benzene (2.0 ppb), toluene (120 ppb), xylenes (400 ppb) and ethylene benzene (110 ppb) found in OW27-86.

Based upon the analytical results of the Round 1 samples a set of site specific parameters were selected which consisted of the priority pollutant metals, the hazardous substance list volatiles and total phenols.

The second round of samples was collected from the overburden groundwater monitoring wells in August, 1986. The analytical results are contained in Table 4.

Four residential wells including the nearest downgradient well in the immediate locality of the former disposal area were sampled. Samples from RW-1, RW-3 and RW-4, located upgradient and within 1,000 feet of the former disposal area, contained trace concentrations of arsenic, copper, lead and zinc, up to 20 ppb, 140 ppb, 7 ppb and 40 ppb, respectively. The sample from RW-2 located downgradient of the disposal area and also within 1,000 feet, exhibited low concentrations of only arsenic (9 ppb) and lead (1 ppb). The concentrations of total phenols in RW-1, RW-2, RW-3 and RW-4 were BDL, 0.020 ppm, BDL and 0.003 ppm, respectively. No hazardous substance list volatiles were detected in any of the residential well samples. The concentrations of priority pollutant metals are well within drinking water standards in samples from all four residential wells tested. Table 4 presents the analytical results, also presented in Appendix D.



## 7.0 CONCLUSIONS AND PROPOSED REMEDIAL MEASURES

An investigation concerning the potential impact to human health and to the environment of the former disposal area located on the former Schmigel property has been conducted. The following conclusions have been made:

- Wastes dumped here... overkill*
- i) Wastes deposited in the former disposal area have impacted groundwater immediately adjacent to the area to a minimal degree, but the quality of drinking water from the downgradient private well (RW-2) has not been affected. The contaminants found in groundwater samples from the monitoring wells include priority pollutant metals and some hazardous substance list volatiles. This conclusion is based upon a comparison of analytical results of groundwater samples from the former disposal area groundwater monitoring wells (OW27-86, OW28-86 and OW29-86) and the upgradient groundwater wells (residential wells RW-1, RW-3 and RW-4). Also, trace concentrations of hazardous substance list volatiles found in the monitoring well groundwater samples were not detected in the surface water and sediment samples. The chemical concentrations noted in the downgradient monitoring wells do not significantly exceed drinking water quality standards.



The material allegedly disposed of at the former disposal area included epoxy resins, acetone and ethanol. Traces of acetone were found in some of the groundwater and soil samples collected from the area adjacent to the former disposal area. It is alleged that waste lubricating oil from a local garage was also deposited at the former disposal area. The garage wastes may have included solvents (i.e. acetone) commonly used to clean oily mechanical parts.

- ii) The exact horizontal and vertical extent of the wastes comprising the former disposal area cannot presently be defined. The approximate surficial limits have been estimated through visual inspection and to some degree by a magnetic survey. (The usefulness of the magnetic survey was partially restricted by the high mineral content of shallow rocks and bedrock in the area.) The excavation of test pits would be required if further definition of the volume occupied by the wastes is required. It may be found that a significant amount of the material at the former disposal area consists of rubble, debris and other fill material such as that existing at other locations on the former Schmigel property.
- magnetometer or M.D.*

- iii) Surface runoff and surficial soils in the drainage swale which runs along the east side of the entrance roadway contain concentrations of priority pollutant metals which appear to be slightly elevated but only the thallium concentration is above normal background concentrations. The concentrations of metals in the surface water and sediment samples from upgradient and downgradient of the former disposal area are similar indicating that the bulk of these metals concentrations is from a source upgradient of the former disposal area.
- iv) It was noted that areas of deposited material other than the former disposal area exist on the former Schmigel property. A junk yard is located to the north of the Brenenstuhl house, and various other material, especially building rubble has been incorporated into the fill used to reshape the slope to facilitate the development of mobile home lots. The other areas of waste may be the source of the metals concentrations (slightly above background) found in the drainage swale. This potential source of slightly elevated metals concentrations in surface water and soils from the drainage swale may be exposed or close to the surface and therefore the potential for human contact may exist and impact of surface water may continue.

v) Water from the seep and the soils adjacent to the seep, located at the bottom of the entrance road embankment contains concentrations of metals in excess of natural background levels.

vi) The flow from the seep and from the drainage swale collects in the low swampy areas west of the entrance roadway. Accumulated water will exit the low swampy area in three ways:

- 1) evaporation,
- 2) groundwater recharge, or
- 3) via an intermittent stream which flows toward the Walloomsac River.

The recharge and stream flow may carry low concentrations of metals.

vii) In consideration of the minimal impact of the former disposal site and due to the assimilative property of the flow of the Walloomsac River, the distance to the river (approximately 1,500 feet) and the filtering effect of the overburden soils it is expected that the concentrations of chemicals in groundwater reaching the Walloomsac River would be of little consequence.

viii) The investigation undertaken to date indicates that there has been no significant impact upon the local environment or public health.

The following closure activities will be conducted, subject to the permission of the property owners, and are based upon the preceding conclusions:

- i) Due to the fact that there is no apparent significant impact on the local environment or public health, it is proposed that the waste material present in the 'former disposal area' be capped in place. The former disposal area will be covered with a minimum one foot layer of soils to prevent direct exposure to human and animal life and prevent precipitation contact with the wastes. In addition, the existing surface drainage paths will be re-routed to prevent surface water contact with the waste and further reduce potential chemical transport. The culvert located immediately north of the former disposal area, beneath the driveway off the main entrance roadway will be closed and the drainage path will be re-routed away from the former disposal area. Run-off descending the slope to the east and northeast will also be diverted away from the former disposal area through the use of drainage swales. Where necessary, clean fill will be used for swale construction.
- clay?

Following closure of the former disposal area, samples from one upgradient well (RW-4) and three downgradient wells (OW27-86, OW28-86 and OW29-86) will be analyzed for H.S.L. volatiles, P.P. metals, and phenols (the site specific parameters) according to the following schedule and an evaluation of the monitoring program will be made at the end of five years: RW-2

- semi-annually - years 1 and 2 following closure
- annually - years 3, 4 and 5 following closure

ii) Despite the minimal impact to the groundwater by the former disposal area, it is proposed that nearby potential receptor(s) of groundwater which has passed beneath the site be further evaluated. Boring logs and construction details for the Bentley well (RW-2) and other wells downgradient of the site will be obtained if available, along with water levels of the wells and local surface water bodies. A confirmation sample will be collected from the Bentley well and other wells more distant from the former disposal area will be sampled as appropriate, based on the preceeding information. The water samples will be analyzed for the site specific parameters.

All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES

A handwritten signature in cursive script, reading "David E. Black". The signature is written in dark ink and is positioned above the printed name.

David E. Black, P. Eng.

APPENDIX A

PROPOSED SITE INVESTIGATION

FORMER SCHMIGEL SITE

OAK MATERIALS GROUP INC.

HOOSICK FALLS, NEW YORK

Prepared for:

Whiteman, Osterman & Hanna

November 1985

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## 1.0 INTRODUCTION

A proposed plan of work to investigate an inactive waste site (former Schmigel Site) near Hoosick Falls was presented in the report entitled "Proposed Site Investigation - Oak Materials Group Inc. - May 25, 1984". The NYSDEC has reviewed and commented on the proposed plan. A copy of these comments dated July 2, 1984, is presented in Appendix 'A'.

This revised plan of work, which addresses the comments of NYSDEC, is submitted as the proposed written scope of work (the "Proposal") pursuant to an Order on Consent between NYSDEC and Oak Materials Group Inc. (File No. 4-0213).

## 2.0 INACTIVE WASTE AREA - SCHMIGEL SITE

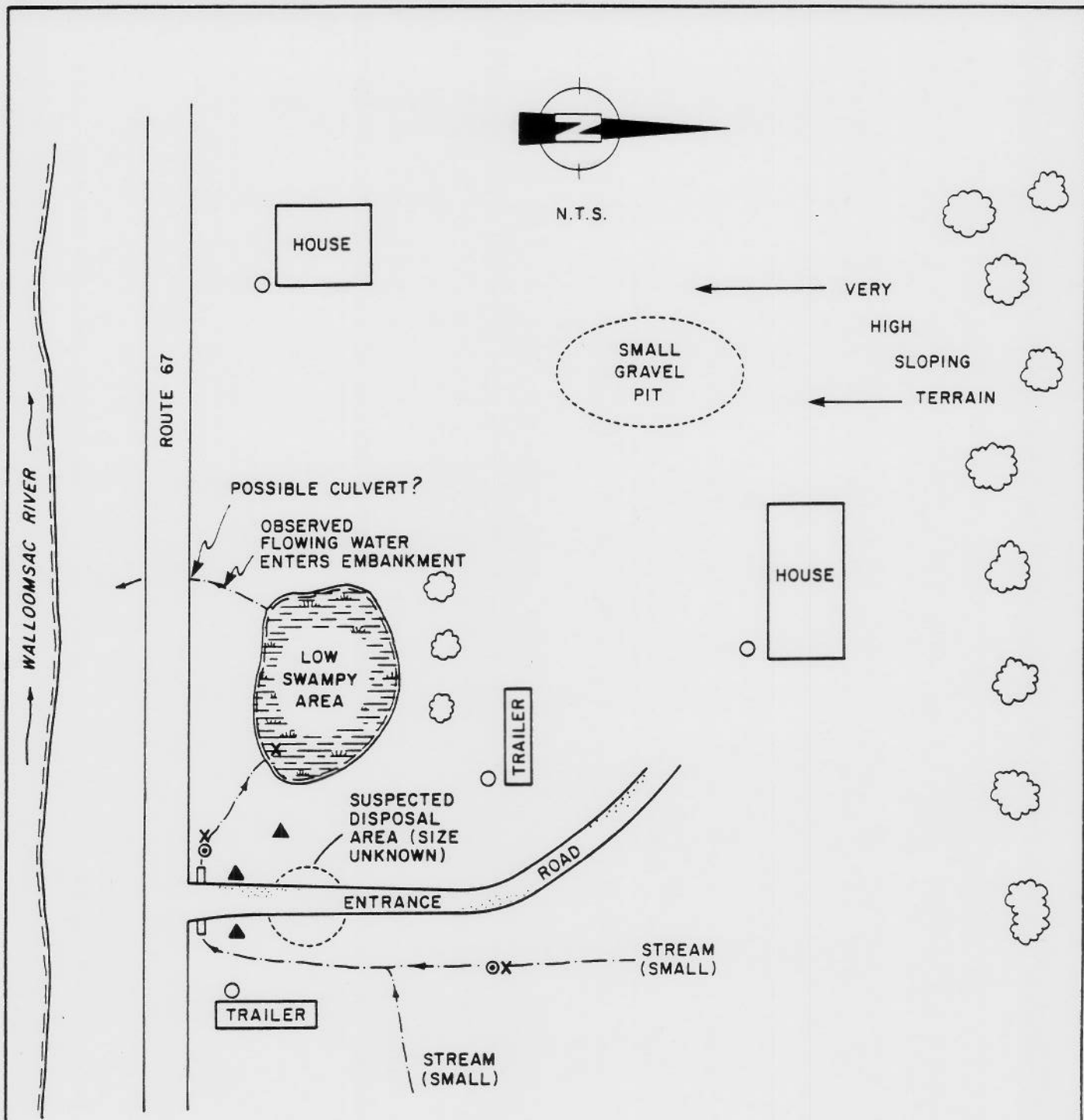
### 2.1 HISTORIC INFORMATION

The Schmigel Site may contain the disposal of 100 to 200 55-gallon drums of scrap material. The material is suspected to include ~~epoxy resins, dicyamides, methyl cellosolve and acetone~~. The material was transported to the site (circa 1974) by Alex Schmigel (former owner) who opened the drums and crushed the barrels to fill a low lying area. The disposal area currently provides access across the low area to a few residences. A general plan of the area is presented in Figure 1.

The size of this site can not be easily determined by visual inspection. It is suspected that waste material from other sources may also be present at the site.

### 2.2 INVESTIGATION PLAN

The proposed plan, contingent upon receiving authorization to enter the property for such purpose and weather conditions permitting, for the Schmigel Site will include the following:



#### LEGEND

- ▲ OBSERVATION WELL
- ⊙ STREAM SAMPLING LOCATION
- PROBABLE PRIVATE WELLS
- X SEDIMENT SAMPLING LOCATIONS

figure 1

**INACTIVE WASTE AREA**  
*Former Schmigel Property*  
*Oak Materials Group Inc.*

**CRA**

- 1) Install three shallow overburden groundwater monitoring wells downgradient of the site to the top of the uppermost impermeable strata encountered (Maximum Depth = 30')
- 2) Submit two appropriate soil samples from each borehole for analysis of acetone and methyl cellosolve.
- 3) Purge the installed wells of five well volumes of water or until dry.
- 4) Collect groundwater samples from the installed wells and analyze for the priority pollutants plus acetone and methyl cellosolve.
- 5) Based on the results of the groundwater analysis, develop a set of site specific parameters.
- 6) Collect upstream and downstream surface water samples from the adjacent stream and analyze for the site specific parameters.
- 7) Collect sediment samples from the two surface water sampling locations plus one sample from the upstream end of the swampy area. Each stream sediment sample will be collected by compositing sediment collected from the centerline and both edges of the stream. The swamp

sediment sample shall be collected as a composite of three sample locations at the upstream edge of the swamp area. The sediment sample will be analyzed for the site specific parameters.

- 8) Collect groundwater samples from the local residential wells (including the trailer well at the intersection of Route 67 and the entrance road) and resample the installed monitoring wells (for confirmation) for the site specific parameters.
- 9) Estimate the areal extent of the ~~former disposal area~~ using a metal detecting device.

The proposed sampling locations are presented in Figure 1.

### 3.0 WELL INSTALLATIONS

Based on local information collected during the initial site visit, it is suspected that the water table at the site is relatively close to the ground surface. (i.e. < 10' below grade). All groundwater monitoring wells will be installed using a drill rig equipped with hollow stem augers. Continuous split spoon samples will be collected to depth. The geologic stratigraphy will be continuously logged to depth using standard New York State DOT soil specifications and classification techniques.

Each well will be constructed of 2" diameter PVC pipe coupled to a 5 foot length of PVC slotted well screen as shown in Figure 2. Periodic water table measurements will be taken in conjunction with the installation of wells and collection of samples for chemical analysis.

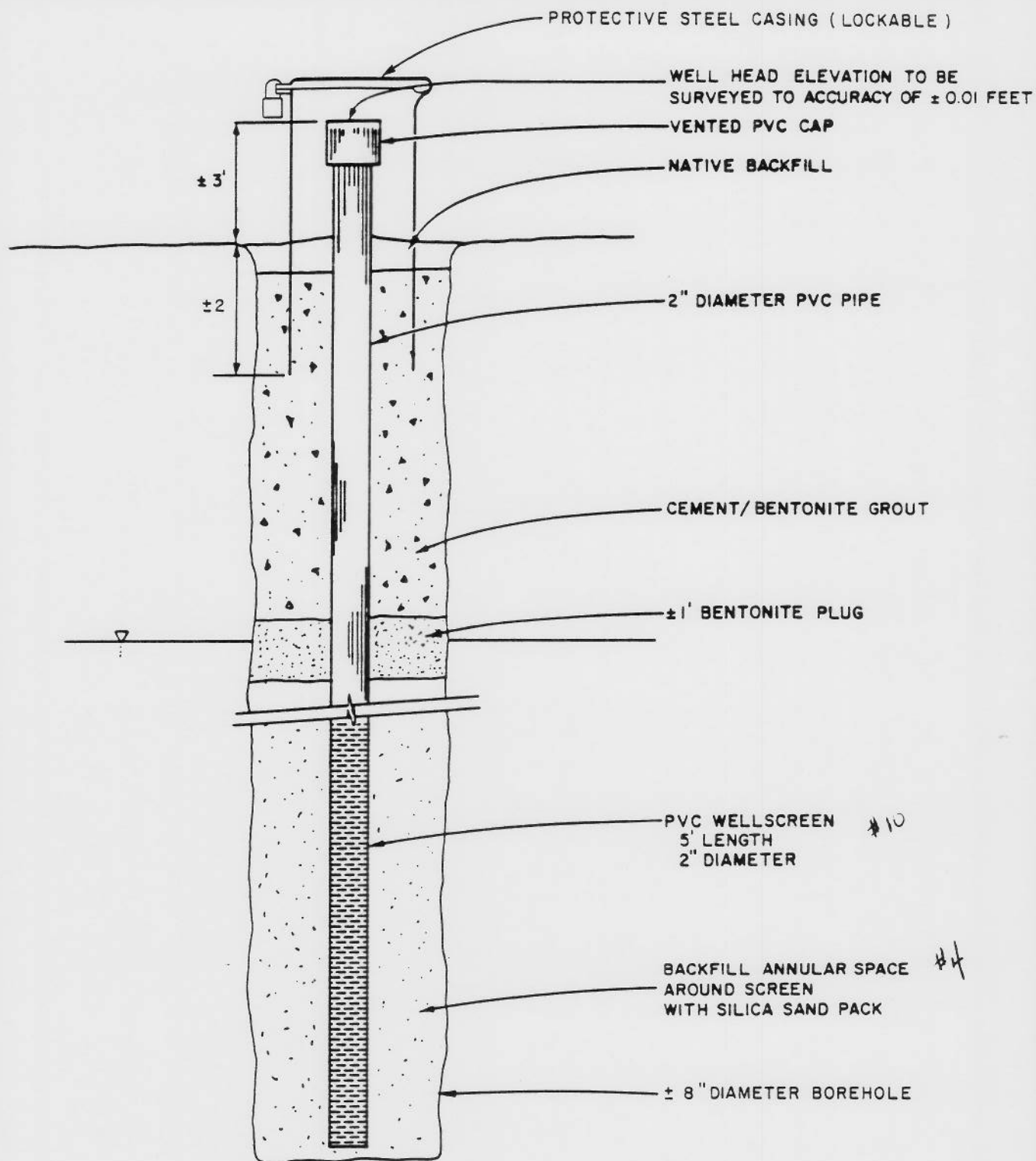


figure 2  
TYPICAL GROUNDWATER  
MONITORING WELL DETAIL  
*Oak Materials Group Inc.*



#### **4.0 WASTE MATERIAL HANDLING**

All soil cuttings brought to the surface during the drilling program will be evenly spread at the drill site.

All cleaning water, fluids and collected wastewater are to be contained and properly disposed.

## 5.0 EQUIPMENT CLEANING

After each well installation or borehole, all drilling equipment, tools and casings will be cleaned in the following manner:

- remove all soil with a wire brush
- steam clean

All split spoon samplers and soil sample extraction tools will be cleaned as follows prior to collection of each soil sample for chemical analysis:

- water wash to remove all foreign material
- rinse with methanol
- rinse with hexane
- rinse with methanol
- rinse with distilled deionized water

All equipment will be cleaned at a designated area (polyethylene covered) and all personnel must wear protective clothing including tyvek coveralls, rubber boots and rubber gloves.

## 6.0 ANALYTICAL PROTOCOL

The following analytical protocols will be implemented for chemical analysis:

- Acetone - by GC (No standard method - lab to provide procedure used)
- Methyl Cellosolve - by GC (No standard method - lab to provide procedure used)
- Priority Pollutants - EPA-600/D-80-021, "Guidelines Establishing Test Procedures for the Analysis of Pollutants; Proposed Regulations", Federal Register 44 (233), December 3, 1979.

Of every ten samples submitted for chemical analysis, one duplicate sample will be submitted for quality assurance confirmation.

## 7.0 HEALTH AND SAFETY PLAN

### 7.1 PURPOSE

This Health and Safety Plan has been designed to ensure:

- 1) that personnel working on-site are not over-exposed to the compounds present at the site;
- 2) that the health and safety of the general public and the environment is not compromised by airborne off-site migration of contaminated materials due to this project;
- 3) compliance with applicable governmental and non-governmental (American Conference of Governmental Industrial Hygienists) regulations and guidelines.

All site operations will be conducted in accordance with the provisions of the Health and Safety Plan. Cost and/or scheduling considerations will not be considered as justification for modifying this plan.

## 7.2 RESPONSIBILITIES AND ADMINISTRATION

A Site Representative will be assigned to this project and shall be responsible for all decisions regarding operations and work stoppage due to health and safety considerations.

The Site Representative's responsibilities include:

- supervision and enforcement of safety equipment usage,
- supervision and inspection of equipment cleaning,
- supervision of decontamination area,
- conducts air monitoring program,
- personnel training in safety equipment usage and emergency procedures,
- maintains Exclusion Zone (EZ) and Contaminant Reduction Zone (CRZ) work areas,
- implementation of safety and health program,
- has authority to suspend work activity due to unsafe working conditions,
- informs workers of the nature of chemical exposure risk as required by Right-to-Know Law,
- responsible to recommend medical examination when worker appears to require it, and
- coordination of emergency procedures.

### 7.3 WORKER TRAINING AND EDUCATION

Prior to commencing site activities, a health and safety training program will be presented. Attendance is mandatory for all personnel who will be or are expected to be involved with the program. Visitors and other personnel not fully trained in the health and safety aspects of this program will not be permitted within the Exclusion Zone.

All personnel employed on this project will receive a copy of the health and safety program and will sign a form stating that they have read and understood the contents of the plan and will comply in every respect with the program.

This training program will ensure that each attendee understands the basic principles of personnel protection and safety, be able to perform their assigned job tasks in a safe and environmentally responsible manner, and be prepared to respond in an appropriate manner to any emergency which may arise. Personnel not successfully completing this training program will not be permitted to enter or work in potentially contaminated areas of the site.

#### 7.4 AIR MONITORING

Various direct reading instruments, including an explosimeter and an organic vapor photoionizer, will be used to assess background and work zone concentrations of organic hydrocarbons. Measurements will be taken immediately adjacent to the well/borehole. Any significant departures from general background will be reported to the Site Supervisor, who will decide if operations are to be shut down or continued. Organic vapor concentrations of 5 ppm above background or combustible gas concentrations greater than 10% LEL (Lower Explosive Limit) are considered significant and reportable.

In the event that any significant departure from general background level is measured, the following contingency plan will be implemented:

- organic vapor >5 ppm but <25 ppm
  - don air purifying respirators
  - increase air monitoring at EZ perimeter
- organic vapor >25 ppm
  - cease work
  - continue air monitoring at EZ perimeter
  - evaluate means to reduce organic vapor emission and/or continue in SCBA equipment
- LEL >10%
  - cease work and rectify as appropriate

All air sampling instruments will be calibrated daily and/or according to manufacturer specifications or established EPA protocols.

#### 7.5 SITE OPERATIONS AND ORGANIZATION

The scope of work for this project involves installing monitoring wells and boreholes and collecting surface and subsurface soil samples. All active augering or sampling personnel will require the use of the following types of PPE:

- 1) Disposable, splash resistant Tyvek coveralls,
- 2) Rubber gloves,
- 3) Hardhats (liners optional),
- 4) Safety shoes with steel toes and shanks,
- 5) Rubber boots,
- 6) Safety glasses with side shields, and
- 7) Half-mask air purifying respirators equipped with organic vapor, cartridges. (Available in the event they are needed)

PPE will be maintained in a clean sanitary condition and ready for use. Disposable coveralls shall be discarded when torn and as an employee leaves the contaminated work zone. Respirators shall be cleaned after



each day's use and cartridges discarded. A sufficient quantity of potable water shall be supplied for washing of personnel, cleaning PPE, and drinking.

Designated work areas will be set up during all on-site soil handling operations. The purpose of these procedures is to limit access to contaminated areas, and prevent the migration of hazardous materials into adjacent non-contaminated areas. These areas are as follows:

- 1) The Exclusion Zone (EZ) is the area immediately surrounding the drilling operation. Stakes and flagging will be used to define its boundaries. Sufficient area will be provided for efficient movement of personnel and equipment, as well as contaminant control. Boundaries are modifiable depending on operational requirements. The Site Representative will be responsible for maintaining the boundaries of this area. Personnel entering this area are required to wear the full PPE as defined above.
- 2) The Contaminant Reduction Zone (CRZ) lies upwind of the EZ and provides for the decontamination of equipment and samples. In addition, personnel entering or leaving the EZ will use this area for donning, washing or disposing of PPE. Labeled drums will be provided for disposal purposes. Supplemental safety equipment, such as fire

extinguishers, portable eyewash and extra quantities of PPE may be stored in this area. The order in which safety equipment is to be donned is as follows:

- Tyvek
- gloves
- boots

The reverse order applies when removing safety equipment.

- 3) The remaining portions of the site, the Clean Zone, are considered to be free of major contamination. Support and administrative activities will be located in this area.

Additional PPE usage guidelines are as follows:

- 1) Prescription eyewear used on-site shall be safety glasses equipped with side shields. Contact lenses shall not be used.
- 2) On-site personnel unable to pass the respirator fit testing shall not be allowed to enter or work in the EZ.
- 3) Steel toed leather footwear shall be covered with neoprene overboots prior to entering the EZ and immediately upon entering the CRZ.

- 4) Safety footwear and hard hats are to be worn by site personnel at all times.

EZ personnel also carry certain responsibilities for their own safety and health, and are required to observe the following safe work practices:

- 1) Familiarize themselves with this Health and Safety Program.
- 2) Use the "buddy system" when working in a contaminated operation.
- 3) Use the safety equipment in accordance with training received, labeling instructions and common sense.
- 4) Maintain safety equipment in good condition and proper working order.
- 5) Refrain from activities that would create additional hazards (i.e. smoking, eating, etc. in restricted areas, leaning against dirty, contaminated surfaces).
- 6) Soiled disposable outerwear shall be removed prior to washing hands and face, eating, using lavatory facilities, or leaving the site.

## 7.6 EMERGENCY AND FIRST AID EQUIPMENT AND SUPPLIES

The safety equipment listed below will be supplied for use by EZ personnel and will be located in close proximity to the work zone:

- 1) Twenty pound ABC type dry chemical fire extinguishers.  
(One per drill rig)
- 2) Self contained breathing apparatus (SCBA). (One per CRA  
drill rig)
- 3) OSHA approved first aid kit sized for a minimum of five  
people.
- 4) Potable water.

## 8.0 SUMMARY

The described investigatory program will be complete upon receipt of final results of all analyses performed pursuant to the program. Within 60 days of completion of the described investigatory program, a report containing the following will be submitted to NYSDEC:

- a) A summary of all environmental conditions at the Site and potentially affected off-site areas, including: soil conditions, hydrogeological characteristics, groundwater and surface water quality, site water balance, site drainage and any adversely affected wildlife.
- b) A presentation of all data collected during the Field Investigation and/or used in preparing the Report, including, but not limited to: soil boring logs, well data, and the results of chemical analyses performed on samples obtained during the Field Investigation.
- c) An assessment of the types and quantities of any hazardous and industrial wastes present as well as the areal and vertical extent of such wastes with a waste location map and cross-section of the waste disposal area.

- d) A determination of the nature and extent of actual and potential release and migration of hazardous and industrial wastes from the Site through surface water, groundwater, soil and sediment to areas at the Site and off-site. Mathematical modeling of the Site will not be performed due to the size and nature of the Site.
- e) An identification of all households, persons, municipalities and industries in the vicinity of the Site who utilize public or private wells as a source of drinking, household, or irrigation water, which may be impacted by the release and migration of any hazardous and industrial wastes through groundwater, based upon a search of available public records and other reasonable attempts to ascertain the location of the public and private wells which may be impacted by any release and migration of hazardous and industrial wastes through groundwater.
- f) An assessment of the results of the Field Investigation and a determination of the current or potential impacts of any threat to the environment which exists, or may exist in the future, at the Site and off-site, as a result of the hazardous and industrial wastes disposed of at the Site.

APPENDIX B

STRATIGRAPHIC AND  
INSTRUMENTATION LOGS

- g) References to all scientific or technical literature used in the preparation of the Report; and
- h) Names, titles and disciplines of all professionals engaged in the preparation of the Report.

All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES LIMITED

Frank A. Rovers, P. Eng.



STRATIGRAPHIC AND INSTRUMENTATION LOG  
(OVERBURDEN)

PROJECT NAME: FORMER SCHMIGEL SITE  
PROJECT NO.: 1393  
CLIENT: OAK MATERIALS GROUP INC.  
LOCATION: WALLOOMSAC, NEW YORK

HOLE DESIGNATION: OW27-86  
DATE COMPLETED: 4/30/86  
DRILLING METHOD: HOLLOW STEM AUGER  
CRA SUPERVISOR: C. PADGINTON

DEPTH ft/m BG	STRATIGRAPHY DESCRIPTION & REMARKS	ELEVATION ft/m AMSL	MONITOR INSTALLATION	SAMPLE		
				NUM BER	STA TE	VAL UE
0		98.40	locking cap			
		95.82	protective casing			
1.0	SP-Clayey-gravelly-sand, brownish gray, rust and black, wet, carbonization, gravel subrounded fill, non-plastic, medium dense		2"Ø PVC pipe cement/bentonite grout bentonite pellets	1ss		12
2.0						
3.0	Gravel Sand - - - - -	92.82	bentonite pellets and cave-in bentonite pellets	2ss		14
4.0	SP-Sand as above with slight increase in clay content	91.82				
5.0	to Recovery - Auger to 6 ft.		sand pack	3ss		4
6.0	SP-Wood, twigs, pieces of board, etc.	89.82				
7.0			screen	4ss		5
8.0	CL-Silty-clay, brown, native, saturated	98.07 87.82				
9.0	SM-Silty-fine sand, brown, native, saturated, low plasticity			5ss		6
10.0		85.82				
11.0	CL-Silty-clay, green and black, inclusions of bedrock (slate), saturated, plastic, native, stiff					
12.0		83.82	Screen Details Screen set to 9.8 ft (El. 86.0) Length - 5 ft. Dia. - 0.167 ft. #10 Slot Schedule 40 PVC	6ss		15
13.0	GP-Coarse, sandy, gravels, gray and brown, saturated, native, medium dense	81.82		7ss		28
14.0						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

WATER FOUND

STATIC WATER LEVEL

# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FORMER SCHMIGEL SITE  
 PROJECT NO.: 1393  
 CLIENT: OAK MATERIALS GROUP INC.  
 LOCATION: WALLOOMSAC, NEW YORK

HOLE DESIGNATION: OW28-86  
 DATE COMPLETED: 4/30/86  
 DRILLING METHOD: HOLLOW STEM AUGER  
 CRA SUPERVISOR: C. PADGINTON

DEPTH ft/m BG	STRATIGRAPHY DESCRIPTION & REMARKS	ELEVATION ft/m AMSL	MONITOR INSTALLATION	SAMPLE		
				NUM BER	STA TE	'N' VAL UE
0		100.00	locking cap			
		97.30	protective casing			
1.0	SP-SM-Gravelly, silty-sand, brown and gray, wet, non-plastic, native, medium dense, organic inclusions		2"Ø PVC pipe	1ss		16
2.0			cement/bentonite grout			
3.0			bentonite pellets	2ss		10
4.0		93.30	sand pack			
5.0	No Recovery - Auger to 6 ft.			3ss		
6.0	SP-SM-Gravelly-clayey, silt, greenish-gray, carbonization, saturated native	91.30	screen	4ss		50+
7.0						
8.0	SP-Medium sand w/bedrock fragments-weathered, brownish gray, saturated, native	89.30		5ss		50+
9.0						
10.0	Auger Refusal-Top of Rock	87.30				
12.0			Screen Details Screen set to 9.4ft. (El. 87.9) Length - 5 ft. Dia. - 0.167 #10 Slot Schedule 30 PVC			
14.0						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

GRAIN SIZE ANALYSIS

WATER FOUND

STATIC WATER LEVEL

STRATIGRAPHIC AND INSTRUMENTATION LOG  
(OVERBURDEN)

PROJECT NAME: FORMER SCHMIGEL SITE  
PROJECT NO.: 1393  
CLIENT: OAK MATERIALS GROUP INC.  
LOCATION: WALLOOMSAC, NEW YORK

HOLE DESIGNATION: OW29-86  
DATE COMPLETED: 5/01/86  
DRILLING METHOD: HOLLOW STEM AUGER  
CRA SUPERVISOR: C. PADGINTON

DEPTH ft/m BG	STRATIGRAPHY DESCRIPTION & REMARKS	ELEVATION ft/m AMSL	MONITOR INSTALLATION	SAMPLE		
				N U M B E R	S T A T E	'N' V A L U E
0		78.38 76.37	locking cap protective casing			
1.0	OL-organic silty-clay, brown w/ light brown and black mottling, plastic, saturated, native		2"Ø PVC pipe bentonite seal	1ss		2
2.0	MH-cl-clayey-silt, brown and black, wet-moist, w/depth, plastic, firm, native	74.37	sand pack	2ss		8
3.0			screen			
4.0	Bottom of Hole	72.37				
5.0			Screen Details Screen set to 3.7ft. (El. 72.67) Length - 1.5 ft. Dia. - 0.167 ft. #10 slot Schedule 80 PVC			
6.0						
7.0						
8.0						
9.0						
10.0						
12.0						
14.0						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE  
GRAIN SIZE ANALYSIS      WATER FOUND      STATIC WATER LEVEL

APPENDIX C

LABORATORY REPORT

ROUND 1 - MAY 1986





Attention: FULL DIXON Date Received: 5/9/86 Sample Taken By: Client

**Client:** Whiteman, Osterman & Hanna

**Attention:** Phil Dixon

No. Samples analyzed 6

Date Received: 5/9/86 Sample Taken By: Client

Matrix: Soil

**Date Sampled:** 4/30-5/9/86 **Location:** Hoosick Falls **Composite or Grab:** Comp

[illegible]

(<sup>1</sup>)Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable &lt; = less than

ND = Not Detectable &gt; = greater than

Approved by: Jeremy D. Fidler

Date: 6/25/86

Specializing in Hazardous Waste and Petroleum Product Analyses



P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

BASE/NEUTRAL PRIORITY POLLUTANTSCLIENT Whiteman, Osterman & HannaDATE SAMPLED May 8, 198699 Washington AvenueDATE RECEIVED May 9, 1986Albany, NY 12210CLIENT ID OW27-86ATTENTION Mr. Bill WhitemanA.E.S. ID 860509D01

ppb

ppb

1,3-Dichlorobenzene	<5.0	Diethylphthalate	<5.0
1,4-Dichlorobenzene	<5.0	N-nitrosodiphenylamine	<5.0
1,2-Dichlorobenzene	<5.0	Hexachlorobenzene	<5.0
Hexachloroethane	<5.0	4-Bromophenyl phenyl ether	<5.0
Bis (2-chloroethyl) ether	<5.0	Phenanthrene	<5.0
Bis (2-chloroisopropyl) ether	<5.0	Anthracene	<5.0
N-Nitrosodi-n-propylamine	<5.0	Di-n-butyl phthalate	7
Nitrobenzene	<5.0	Fluoranthene	<5.0
Hexachlorobutadiene	<5.0	Pyrene	<5.0
1,2,4-Trichlorobenzene	<5.0	Benzidine	<40.0
Isophorone	<5.0	Butyl benzyl phthalate	<5.0
Naphthalene	<5.0	Bis (2-ethylhexyl) phthalate	<5.0
Bis (2-chloroethoxy) methane	<5.0	Chrysene	<5.0
Hexachlorocyclopentadiene	<5.0	Benzo(a)anthracene	<5.0
2-Chloronaphthalene	<5.0	3,3-Dichlorobenzidine	<10.0
Acenaphthylene	<5.0	Di-n-octylphthalate	<5.0
Acenaphthene	<5.0	Benzo(b)fluoranthene	<5.0





Base/Neutral Priority Pollutants  
Page -2-

	ppb		ppb
Dimethyl phthalate	<5.0	Benzo(k)fluoranthene	<5.0
2,6-Dinitrotoluene	<5.0	Benzo(a)pyrene	<5.0
Fluorene	<5.0	Indeno(1,2,3-cd)pyrene	<5.0
4-Chlorophenyl phenyl ether	<5.0	Dibenzo(a,h)anthracene	<5.0
2,4-Dinitrotoluene	<5.0	Benzo(g,h,i)perylene	<5.0
1,2-Diphenylhydrazine	<5.0	N-nitrosodimethyl Amine	<5.0

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: *Paul Petersen*  
Date: 6/13/86





P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

PESTICIDE/PCB PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 8, 1986  
99 Washington Avenue DATE RECEIVED May 9, 1986  
Albany, NY 12210 CLIENT ID OW27-86  
ATTENTION Mr. Bill Whiteman A.E.S. ID 860509D01

	ppb		ppb
a-BHC	<0.1	Endosulfan II	<0.1
g-BHC	<0.1	4,4-DDT	<0.1
b-BHC	<0.1	Endosulfan Sulfate	<0.1
Heptachlor	<0.1	Endrin Aldehyde	<0.1
d-BHC	<0.1	Chlordane	<2.0
Alrin	<0.1	Toxaphene	<2.0
Heptachlor Epoxide	<0.1	PCB-1221	<0.5
Endosulfan I	<0.1	PCB-1232	<0.5
4,4'-DDE	<0.1	PCB-1016/1242	<0.5
Dieldrin	<0.1	PCB-1248	<0.5
Endrin	<0.1	PCB-1254	<0.5
4,4'-DDD	<0.1	PCB-1260	<0.5

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Page 3 of 5Reviewed by: *Paul B. [Signature]*  
Date: 6/13/86

Specializing in Hazardous Waste and Petroleum Product Analyses



P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

PURGEABLE PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 8, 1986  
99 Washington Avenue DATE RECEIVED May 9, 1986  
Albany, NY 12110 CLIENT ID OW27-86  
ATTENTION Mr. Bill Whiteman A.E.S. ID 860509D01

Chloromethane	ppb <1.0	1,2-Dichloropropane	ppb <1.0
Bromomethane	<1.0	t-1,3-Dichloropropene	<1.0
		Trichloroethene	<1.0
Vinyl Chloride	10	Benzene	2
Chloroethane	<1.0	Dibromochloromethane	<1.0
Methylene Chloride	4	1,1,2-Trichloroethane	5
		C-1.3-Dichloropropene	<1.0
1,1-Dichloroethene	<1.0	2-Chloroethylvinyl ether	<10.0
1,1-Dichloroethane	<1.0	Bromoform	<1.0
t-1,2-Dichloroethene	<1.0	1,1,2,2-Tetrachloroethane	<1.0
Chloroform	<1.0	Tetrachloroethene	<1.0
1,2-Dichloroethane	5	Toluene	120
1,1,1-Trichloroethane	<1.0	Chlorobenzene	<1.0
Carbon Tetrachloride	<1.0	Ethylbenzene	110
Bromodichloromethane	<1.0		
		Xylenes *	400

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments: \*Calculated with RF=1000

Reviewed by: Paul Butcher  
Date: 6/13/86



P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

ACID PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 8, 1986  
99 Washington Avenue DATE RECEIVED May 9, 1986  
Albany, NY 12210 CLIENT ID OW27-86  
ATTENTION Mr. Bill Whiteman A.E.S. ID 860509D01

	ppb		ppb
2-Chlorophenol	<5.0	2,4,6-Trichlorophenol	<5.0
2-Nitrophenol	<5.0	4-Chloro-3-Methylphenol	<5.0
Phenol	6	2,4-Dinitrophenol	<25.0
2,4-Dimethylphenol	<5.0	2-Methyl-4,6-Dinitrophenol	<25.0
2,4-Dichlorophenol	<5.0	Pentachlorophenol	<25.0
		4-Nitrophenol	<25.0

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: *Paul V. Litch*

Date: 4/13/86



P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

BASE/NEUTRAL PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 6, 1986  
99 Washington Avenue DATE RECEIVED May 7, 1986  
Albany, NY 12210 CLIENT ID OW28-86  
ATTENTION Mr. William Whiteman A.E.S. ID 860507E04

	ppb		ppb
1,3-Dichlorobenzene	<5.0	Diethylphthalate	<5.0
1,4-Dichlorobenzene	<5.0	N-nitrosodiphenylamine	<5.0
1,2-Dichlorobenzene	<5.0	Hexachlorobenzene	<5.0
Hexachloroethane	<5.0	4-Bromophenyl phenyl ether	<5.0
Bis (2-chloroethyl) ether	<5.0	Phenanthrene	<5.0
Bis (2-chloroisopropyl) ether	<5.0	Anthracene	<5.0
N-Nitrosodi-n-propylamine	<5.0	Di-n-butyl phthalate	<5.0
Nitrobenzene	<5.0	Fluoranthene	<5.0
Hexachlorobutadiene	<5.0	Pyrene	<5.0
1,2,4-Trichlorobenzene	<5.0	Benzidine	<40.0
Isophorone	<5.0	Butyl benzyl phthalate	<5.0
Naphthalene	<5.0	Bis (2-ethylhexyl) phthalate	<5.0
Bis (2-chloroethoxy) methane	<5.0	Chrysene	<5.0
Hexachlorocyclopentadiene	<5.0	Benzo(a)anthracene	<5.0
2-Chloronaphthalene	<5.0	3,3-Dichlorobenzidine	<10.0
Acenaphthylene	<5.0	Di-n-octylphthalate	<5.0
Acenaphthene	<5.0	Benzo(b)fluoranthene	<5.0



Base/Neutral Priority Pollutants  
Page -2-

	ppb		ppb
Dimethyl phthalate	<5.0	Benzo(k)fluoranthene	<5.0
2,6-Dinitrotoluene	<5.0	Benzo(a)pyrene	<5.0
Fluorene	<5.0	Indeno(1,2,3-cd)pyrene	<5.0
4-Chlorophenyl phenyl ether	<5.0	Dibenzo(a,h)anthracene	<5.0
2,4-Dinitrotoluene	<5.0	Benzo(g,h,i)perylene	<5.0
1,2-Diphenylhydrazine	<5.0	N-nitrosodimethyl Amine	<5.0

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: *Paul Pappas*  
Date: 6/27/86



P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

PURGEABLE PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 6, 1986  
99 Washington Avenue DATE RECEIVED May 7, 1986  
Albany, NY 12210 CLIENT ID OW28-86  
ATTENTION Mr. William Whiteman A.E.S. ID 860507E04

Chloromethane	ppb <1.0	1,2-Dichloropropane	ppb <1.0
Bromomethane	<1.0	t-1,3-Dichloropropene	<1.0
Dichlorodifluoromethane		Trichloroethene	<1.0
Vinyl Chloride	<1.0	Benzene	<1.0
Chloroethane	<1.0	Dibromochloromethane	<1.0
Methylene Chloride	<1.0	1,1,2-Trichloroethane	<1.0
Trichlorofluoromethane		C-1.3-Dichloropropene	<1.0
1,1-Dichloroethene	<1.0	2-Chloroethylvinyl ether	<10.0
1,1-Dichloroethane	2	Bromoform	<1.0
t-1,2-Dichloroethene	2	1,1,2,2-Tetrachloroethane	<1.0
Chloroform	<1.0	Tetrachloroethene	<1.0
1,2-Dichloroethane	<1.0	Toluene	<1.0
1,1,1-Trichloroethane	<1.0	Chlorobenzene	<1.0
Carbon Tetrachloride	<1.0	Ethylbenzene	<1.0
Bromodichloromethane	<1.0	M-Xylene	
		Xylenes	

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: Paul PatashnikDate: 6/29/86Page 3 of 5

Specializing in Hazardous Waste and Petroleum Product Analyses



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Rensselaer, NY 12144

(518) 434-4546

PESTICIDE/PCB PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 6, 1986  
99 Washington Avenue DATE RECEIVED May 7, 1986  
Albany, NY 12210 CLIENT ID OW28-86  
ATTENTION Mr. William Whiteman A.E.S. ID 860507E04

	ppb		ppb
a-BHC	<0.1	Endosulfan II	<0.1
g-BHC	<0.1	4,4-DDT	<0.1
b-BHC	<0.1	Endosulfan Sulfate	<0.1
Heptachlor	<0.1	Endrin Aldehyde	<0.1
d-BHC	<0.1	Chlordane	<2.0
Alrin	<0.1	Toxaphene	<2.0
Heptachlor Epoxide	<0.1	PCB-1221	<0.5
Endosulfan I	<0.1	PCB-1232	<0.5
4,4'-DDE	<0.1	PCB-1016/1242	<0.5
Dieldrin	<0.1	PCB-1248	<0.5
Endrin	<0.1	PCB-1254	<0.5
4,4'-DDD	<0.1	PCB-1260	<0.5

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: *Paul Bateman*Date: 6/29/86Page 4 of 5

Specializing in Hazardous Waste and Petroleum Product Analyses



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ACID PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 6, 1986  
99 Washington Avenue DATE RECEIVED May 7, 1986  
Albany, NY 12210 CLIENT ID OW28-86  
ATTENTION Mr. William Whiteman A.E.S. ID 860507E04

	ppb		ppb
2-Chlorophenol	<0.5	2,4,6-Trichlorophenol	<0.5
2-Nitrophenol	<0.5	4-Chloro-3-Methylphenol	<0.5
Phenol	<0.5	2,4-Dinitrophenol	<25.0
2,4-Dimethylphenol	<0.5	2-Methyl-4,6-Dinitrophenol	<25.0
2,4-Dichlorophenol	<0.5	Pentachlorophenol	<25.0
		4-Nitrophenol	<25.0

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: *Paul B. [Signature]*

Date: 6/24/86

Page 5 of 5

Specializing in Hazardous Waste and Petroleum Product Analyses





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298 Riverside Avenue

Rensselaer, NY 12144

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BASE/NEUTRAL PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 8, 1986  
99 Washington Avenue DATE RECEIVED May 9, 1986  
Albany, NY 12210 CLIENT ID OW29-86  
ATTENTION Mr. Bill Whiteman A.E.S. ID 860509D03

	ppb		ppb
1,3-Dichlorobenzene	<5.0	Diethylphthalate	<5.0
1,4-Dichlorobenzene	<5.0	N-nitrosodiphenylamine	<5.0
1,2-Dichlorobenzene	<5.0	Hexachlorobenzene	<5.0
Hexachloroethane	<5.0	4-Bromophenyl phenyl ether	<5.0
Bis (2-chloroethyl) ether	<5.0	Phenanthrene	<5.0
Bis (2-chloroisopropyl) ether	<5.0	Anthracene	<5.0
N-Nitrosodi-n-propylamine	<5.0	Di-n-butyl phthalate	<5.0
Nitrobenzene	<5.0	Fluoranthene	<5.0
Hexachlorobutadiene	<5.0	Pyrene	<5.0
1,2,4-Trichlorobenzene	<5.0	Benzidine	<40.0
Isophorone	<10.0	Butyl benzyl phthalate	<5.0
Naphthalene	<5.0	Bis (2-ethylhexyl) phthalate	<5.0
Bis (2-chloroethoxy) methane	<5.0	Chrysene	<5.0
Hexachlorocyclopentadiene	<5.0	Benzo(a)anthracene	<5.0
2-Chloronaphthalene	<5.0	3,3-Dichlorobenzidine	<10.0
Acenaphthylene	<5.0	Di-n-octylphthalate	<5.0
Acenaphthene	<5.0	Benzo(b)fluoranthene	<5.0



Base/Neutral Priority Pollutants  
Page -2-

	ppb		ppb
Dimethyl phthalate	<5.0	Benzo(k)fluoranthene	<5.0
2,6-Dinitrotoluene	<5.0	Benzo(a)pyrene	<5.0
Fluorene	<5.0	Indeno(1,2,3-cd)pyrene	<5.0
4-Chlorophenyl phenyl ether	<5.0	Dibenzo(a,h)anthracene	<5.0
2,4-Dinitrotoluene	<5.0	Benzo(g,h,i)perylene	<5.0
1,2-Diphenylhydrazine	<5.0	N-nitrosodimethyl Amine	<5.0

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: Paul R. [Signature]  
Date: 6/13/86



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298 Riverside Avenue

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(518) 434-4546

PESTICIDE/PCB PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 8, 1986  
99 Washington Avenue DATE RECEIVED May 9, 1986  
Albany, NY 12210 CLIENT ID OW29-86  
ATTENTION Mr. Bill Whiteman A.E.S. ID 860509D03

	ppb		ppb
a-BHC	<0.1	Endosulfan II	<0.1
g-BHC	<0.1	4,4-DDT	<0.1
b-BHC	<0.1	Endosulfan Sulfate	<0.1
Heptachlor	<0.1	Endrin Aldehyde	<0.1
d-BHC	<0.1	Chlordane	<2.0
Alrin	<0.1	Toxaphene	<2.0
Heptachlor Epoxide	<0.1	PCB-1221	<0.5
Endosulfan I	<0.1	PCB-1232	<0.5
4,4'-DDE	<0.1	PCB-1016/1242	<0.5
Dieldrin	<0.1	PCB-1248	<0.5
Endrin	<0.1	PCB-1254	<0.5
4,4'-DDD	<0.1	PCB-1260	<0.5

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: Paul BatesDate: 6/3/86Page 3 of 5

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P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

PURGEABLE PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 8, 1986  
99 Washington Avenue DATE RECEIVED May 9, 1986  
Albany, NY 12110 CLIENT ID OW29-86  
ATTENTION Mr. Bill Whiteman A.E.S. ID 860509D03

	ppb		ppb
Chloromethane	<1.0	1,2-Dichloropropane	<1.0
Bromomethane	<1.0	t-1,3-Dichloropropane	<1.0
Dichlorodifluoromethane		Trichloroethene	<1.0
Vinyl Chloride	20	Benzene	<1.0
Chloroethane	3	Dibromochloromethane	<1.0
Methylene Chloride	2	1,1,2-Trichloroethane	<1.0
Trichlorofluoromethane		C-1.3-Dichloropropene	<1.0
1,1-Dichloroethene	<1.0	2-Chloroethylvinyl ether	<10.0
1,1-Dichloroethane	11	Bromoform	<1.0
t-1,2-Dichloroethene	6	1,1,2,2-Tetrachloroethane	<1.0
Chloroform	<1.0	Tetrachloroethene	<1.0
1,2-Dichloroethane	<1.0	Toluene	<1.0
1,1,1-Trichloroethane	<1.0	Chlorobenzene	<1.0
Carbon Tetrachloride	<1.0	Ethylbenzene	2
Bromodichloromethane	<1.0	M-Xylene	
		Xylenes *	<3.0

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments: \*Calculated with RF=1000

Reviewed by: Paul E. [Signature]Date: 6/13/86



P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

ACID PRIORITY POLLUTANTS

CLIENT Whiteman, Osterman & Hanna DATE SAMPLED May 8, 1986  
99 Washington Avenue DATE RECEIVED May 9, 1986  
Albany, NY 12210 CLIENT ID OW29-86  
ATTENTION Mr. Bill Whiteman A.E.S. ID 860509D03

	ppb		ppb
2-Chlorophenol	<5.0	2,4,6-Trichlorophenol	<5.0
2-Nitrophenol	<5.0	4-Chloro-3-Methylphenol	<5.0
Phenol	<5.0	2,4-Dinitrophenol	<25.0
2,4-Dimethylphenol	<5.0	2-Methyl-4,6-Dinitrophenol	<25.0
2,4-Dichlorophenol	<5.0	Pentachlorophenol	<25.0
		4-Nitrophenol	<25.0

Methodology: Federal Register - 40 CFR, Part 136, December 3, 1979

Comments:

Reviewed by: *Paul Patis*

Date: 6/13/86



P.O. Box 265  
298 Riverside Avenue  
Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Whiteman, Osterman & Hanna

99 Washington Avenue

Albany, NY 12210

Attention: Bill Whiteman

Date Received: 5/9/86 Sample Taken By: CP

Date Sampled: 5/8/86 Location: Hoosick Falls

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID		OW27-86	OW28-86	OW29-86	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER						
Methyl Cellosolve		<10.0					FS-B-26
Acetone		7.2	1.1	<0.1			FS-B-26
Antimony		<0.01		<0.01			MET-L-35
Arsenic		0.01		0.002			MET-L-37
Beryllium		<0.01		<0.01			MET-L-31
Cadmium		<0.001		<0.001			MET-L-27
Chromium		0.01		<0.005			MET-L-32
Copper		<0.05		<0.05			MET-L-28
Lead		0.05		0.04			MET-L-31
Mercury		0.002		0.003			MET-L-40
Nickel		<0.05		<0.05			MET-L-30
Selenium		<0.002		<0.002			MET-L-38
Silver		<0.01		<0.01			MET-L-29

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than  
ND = Not Detectable > = greater than

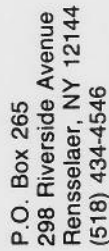
Revised per David Black

Approved by: David Black

Date: 11/1/86

Specializing in Hazardous Waste and Petroleum Product Analyses





**Attention:** Bill Whiteman

**Attention:** Bill Whiteman  
**Date Received:** 5/9/87 **Sample Taken By:** Client

Date Sampled: 5/8/86 Location: Hoosick Falls

Composite or Grab: Grab  
OR CHEMICAL ANALYSIS

[illegible]

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable &lt; = less than

ND = Not Detectable > = greater than

Approved by:

Specializing in Hazardous Waste and Petroleum Product Analyses



P.O. Box 265  
298 Riverside Avenue  
Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Whiteman, Osterman & Hanna

99 Washington Avenue

Albany, NY 12210

Attention: Kevin Young

Date Received: 5/7/86 Sample Taken By: Client

Date Sampled: 4/29-5/6/86 Location: Oak Project

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID AES NUMBER	OW28-86							UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
Arsenic		0.11								MET-L-37
Selenium		<0.002								MET-L-38
Mercury		0.006								MET-L-40
Lead		<0.01								MET-L-26
Cadmium		0.001								MET-L-16
Chromium		<0.005								MET-L-32
Silver		<0.01								MET-L-20
Beryllium		<0.01								MET-L-22
Antimony		<0.01								MET-L-35
Copper		<0.05								MET-L-16
Nickel		<0.05								MET-L 20
Zinc		0.04								MET-L-17
Thallium		<0.10								MET-M-4

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Revised per David Black

Approved by: David Black

Date: 11/14/86

Specializing in Hazardous Waste and Petroleum Product Analyses







P.O. Box 265

298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

### CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME

SAMPLERS: (Signature)

Carabona-Rivers & Associates Inc. Rijk

*[Signature]*

SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
x OW17-86	River Rd. Plant, Hoosick Falls	4-27-86		A P	Soil		pH & Metals
OW26-86	" " " " "	5-6-86	12:00	A P	Water		Metals
OW28-86	Schmigel Site, N. Hoosick	5-6-86	2:00	A P	"		Metals
OW29-86	River Rd. Plant, Hoosick Falls	5-6-86	12:00	A P	"		Metals
OW25-86	" " " " "	5-6-86	12:00	A P	"		Metals
x BW20-86	" " " " "	4-27-86		A P			pH & Metals
				A P			
				A P			
				A P			
				A P			
				A P			
				A P			
				A P			
				A P			
				A P			
				A P			

Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature)		Date/Time
Relinquished by: (Signature)		Received by: (Signature)		Date/Time
Relinquished by: (Signature)		Received by: (Signature)		Date/Time
Relinquished by: (Signature)		Received by Mobile Laboratory for field analysis: (Signature)		Date/Time
Dispatched by: (Signature)	Date/Time	Received for Laboratory by: <i>[Signature]</i>		Date/Time 4/1/86 5:00pm
Method of Shipment:				

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PINK - Generator Copy



# COPY

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298 Riverside Avenue

Rensselaer, NY 12144

(518) 434-4546

## CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME			SAMPLERS: (Signature)				
Conestoga - Rivers & Associates Inc - Cat			<i>(Signature)</i>				
SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE MATRIX	COMP GRAB	NUMBER OF CONT'S	ANALYSIS REQUIRED
OW22-86	Schnigel site, N. Hoosick	5-6-86	10:00	A	X	1	Acids
" "	" "	5-6-86	3:00	A	X	1	BN Rd. PCB
" "	" "	5-6-86	10:00	A	X	1	Volatiles
x OW23-86	River Rd Plant, Hoosick Falls	7-27-86		A	P	1	PH + Metals
x CW16-86	" " " " "	7-27-86		A	P	1	PH + Metals
x CW17-86	" " " " "	7-27-86		A	P	1	PH + Metals
OW18-86	" " " " "	7-27-86		A	P	1	PH + Metals
OW24-86	" " " " "	5-6-86	12:00	A	X	1	PH
CW25-86	" " " " "	5-6-86	12:00	A	X	1	PH
OW26-86	" " " " "	5-6-86	12:00	A	X	1	PH
x BH22-86	" " " " "	7-27-86		A	P	1	PH + Metals
x BH21-86	" " " " "	7-27-86		A	P	1	PH + Metals
Relinquished by: (Signature)		Received by: (Signature)				Date/Time	
<i>(Signature)</i>							
Relinquished by: (Signature)		Received by: (Signature)				Date/Time	
Relinquished by: (Signature)		Received by: (Signature)				Date/Time	
Relinquished by: (Signature)		Received by Mobile Laboratory for field analysis: (Signature)				Date/Time	
Dispatched by: (Signature)		Date/Time	Received for Laboratory by:			Date/Time	
			<i>(Signature)</i>			5/11/86	
Method of Shipment:							

Specializing in Hazardous Waste and Petroleum Product Analyses

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PINK - Generator Copy

# CHAIN OF CUSTODY RECORD

PROJECT NO.  
1393

PROJECT NAME  
Oak Materials

**CRA** Consulting Engineers  
CONESTOGA-ROVERS & ASSOCIATES LIMITED

SAMPLER'S SIGNATURE							
SAMPLE NO.	SEQ. NO.	DATE	TIME	SAMPLE LOCATION	SAMPLE TYPE	NUMBER OF CONTAINERS	REMARKS
QW27-86		5-7-86	11:00 AM	Schmigel Site, N. Hoosick	Groundwater	1	Acids
QW29-86		5-7-86	12:30 PM	Schmigel Site, N. Hoosick	"	1	"
QW27-86		5-7-86	11:00 AM	"	"	1	BW Rest / PCB
QW29-86		5-7-86	12:30 PM	"	"	1	"
QW27-86		5-7-86	10:30 PM	"	"	1	Volatiles
QW27-86		5-7-86	11:00 AM	"	"	1	Acetone & Methyl Cellulose
QW29-86		5-7-86	11:00 AM	"	"	1	Metals
QW27-86		5-7-86	1:00 PM	"	"	1	"
QW29-86		5-7-86	4:00 PM	"	"	1	Acetone & Methyl Cellulose
QW27-86		5-7-86	4:00 PM	"	"	1	Volatiles
QW29-86		5-7-86	4:00 PM	"	"	1	Acetone & Methyl Cellulose
Pwell #1		5-7-86	4:00 PM	Curtis Lumber, Hoosick Falls	Water	1	pH
Pwell #1 Rep.		5-7-86	4:00 PM	"	Water	1	pH
				TOTAL NO. OF CONTAINERS			
				1			

RELINQUISHED BY (Sign)		DATE/TIME	RECEIVED BY (Sign)	DATE/TIME	RECEIVED BY (Sign)
1 <i>[Signature]</i>		5-8-86	2 <i>[Signature]</i>		3
RELINQUISHED BY (Sign)		DATE/TIME	RECEIVED BY (Sign)	DATE/TIME	RECEIVED BY (Sign)
3			REL'D BY MOBILE LAB (Sign) 4		5
METHOD OF SHIPMENT		SHIPPED BY (Sign)		RECEIVED FOR LABORATORY (Sign)	
				DATE/TIME	



<b>CHAIN OF CUSTODY RECORD</b>		PROJECT NO. 1393	PROJECT NAME Oak Materials	<b>CRA</b> Consulting Engineers CONESTOGA-ROVERS & ASSOCIATES LIMITED
--------------------------------	--	---------------------	-------------------------------	--

SAMPLER'S SIGNATURE							
<i>[Signature]</i>							
SAMPLE NO.	SEQ. NO.	DATE	TIME	SAMPLE LOCATION	SAMPLE TYPE	NUMBER OF CONTAINERS	REMARKS
P Well #1		5-7-86	4:00 PM	Curtis Lumber, Hickory Falls	Water	1	Metals
P Well #199		5-7-86	4:00 PM	" "	"	1	Metals
QW27-86	13-14	<del>5-24-86</del>	30-86	Schmied Site, N. HOOBICK	Soil	1	Acetone Methyl cel
QW27-86	8-10	4-30-86	-	" "	"	1	"
QW28-86	8-10	5-1-86	-	" "	Soil	1	"
QW28-86		5-1-86	-	" "	"	1	"
QW27-86	0-2	5-2-86	-	" "	"	1	"
QW29-86	2-4	5-2-86	-	" "	"	1	"
TOTAL NO. OF CONTAINERS							

RELINQUISHED BY (Sign) <i>[Signature]</i>	DATE/TIME 5-8-86	RECEIVED BY (Sign) <i>[Signature]</i>	DATE/TIME	RELINQUISHED BY (Sign) 2	DATE/TIME	RECEIVED BY (Sign) 3
RELINQUISHED BY (Sign) 3	DATE/TIME	REC'D BY MOBILE LAB (Sign) 4	DATE/TIME	REL'D BY MOBILE LAB (Sign) 4	DATE/TIME	RECEIVED BY (Sign) 5
METHOD OF SHIPMENT			SHIPPED BY (Sign)		RECEIVED FOR LABORATORY (Sign)	
					DATE/TIME	

APPENDIX D

LABORATORY REPORT

ROUND 2 - AUGUST 1986



P.O. Box 265  
298 Riverside Avenue  
Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

7703 Niagara Falls Blvd.

Niagara Falls, NY 14304

Attention: Mr. Dave Black

Date Received: 8/11/86

Sample Taken By: Client

Oak Technology  
Hoosick Falls

Date Sampled: 8/8/86

Location: Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID	SW 2	SW 2	SW 1	SS 1	SS 1	SW 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER	860811B01	860811B02	860811B03	860811B04	860811B05	860811B05		
Arsenic		0.05	16.60	0.04	29.60	0.02	0.02	*	MET-0-5
Selenium		<0.002	0.02	<0.002	<0.02	<0.002	<0.002		MET-0-2
Mercury		0.0007	0.31	0.001	0.15	0.0006	0.0006		MET-0-1
Lead		0.09	4.0	0.06	7.30	0.03	0.03		MET-N-44
Cadmium		0.008	1.0	0.001	0.1	0.002	0.002		MET-0-4
Chromium		<0.005	6.7	0.008	9.5	<0.005	<0.005		MET-N-43
Silver		<0.01	0.30	<0.01	0.40	<0.01	<0.01		MET-0-21
Beryllium		<0.01	<0.5	<0.01	<0.5	<0.01	<0.01		MET-N-41
Antimony		<0.025	3.27	<0.025	2.38	<0.025	<0.025		MET-0-
Copper		<0.05	16	<0.05	17.5	0.22	0.22		MET-N-40
Nickel		<0.05	4.5	<0.05	9.5	<0.05	<0.05		MET-N-41
Zinc		0.31	466	0.09	39	0.09	0.09		MET-N-40
Tallium		<0.50	200	<0.50	241	<0.50	<0.50		ICP-B047

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

\*Units are mg/l in water samples  
and ug/g for soil samples

NA = Not Applicable < = less than  
ND = Not Detectable > = greater than

Approved by:

Date:

Specializing in Hazardous Waste and Petroleum Product Analyses



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298 Riverside Avenue  
Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Conestoga-Rogers & Associates

Page 2 of 12

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID		SS 4	RW 1	RW 2	RW 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER	SW 4						
Arsenic		0.01	860811B06	860811B07	860811B08	860811B10	*	MET-O-5
Selenium		<0.002		<0.002	<0.002	<0.002	*	MET-O-2
Mercury		<0.0004		<0.0004	<0.0004	<0.0004	*	MET-O-1
Lead		0.03		0.001	0.002	0.007	*	MET-N-44
Cadmium		<0.001		<0.001	<0.001	<0.001	*	MET-O-4
Chromium		<0.005		<0.005	<0.001	<0.001	*	MET-N-43
Silver		<0.01		<0.01	<0.01	<0.01	*	MET-O-21
Beryllium		<0.01		<0.01	<0.01	<0.01	*	MET-N-41
Antimony		<0.025		<0.025	<0.025	<0.025	*	MET-O-
Copper		<0.05		<0.05	<0.05	<0.05	*	MET-N-40
Nickel		<0.05		<0.05	<0.05	<0.05	*	MET-N-41
Zinc		0.03		<0.01	<0.01	0.04	*	MET-N-40
Thallium		<0.50		<0.50	<0.50	<0.50	*	ICP-B-49

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than  
ND = Not Detectable > = greater than

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

Specializing in Hazardous Waste and Petroleum Product Analyses





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Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

Page 3 of 12

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID		OW 27	OW 28	OW 29	SS 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER	RW 4						
Arsenic		0.009	860811B11 0.01	860811B13 0.03	860811B14 0.45	860811B15 11.40	*	MET-0-5
Selenium		<0.002	<0.002	<0.002	<0.002	<0.02	*	MET-0-2
Mercury		<0.0004	0.004	0.002	0.002	0.09	*	MET-0-1
Lead		0.003	0.13	0.02	0.30	7.32	*	MET-N-44
Cadmium		<0.001	0.005	<0.001	0.007	0.33	*	MET-0-4
Chromium		<0.005	<0.005	0.006	0.08	6.08	*	MET-N-43
Silver		<0.01	0.12	<0.01	0.23	0.36	*	MET-0-21
Beryllium		<0.01	<0.01	<0.01	<0.01	<0.5	*	MET-N-41
Antimony		<0.025	<0.025	<0.025	0.04	2.54	*	MET-0-
Copper		0.14	3.31	<0.05	0.34	9.5	*	MET-N-40
Nickel		<0.05	0.05	<0.05	0.12	6.0	*	MET-N-41
Zinc		0.01	0.98	0.12	0.47	66	*	MET-N-40
Tallium		<0.50	1.19	<0.50	1.76	195	*	ICP-B-47

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

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Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

Specializing in Hazardous Waste and Petroleum Product Analyses



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298 Riverside Avenue  
Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Conestoga Rovers & Associates

Page 4 of 12

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID	SW 2	SS 2	SW 1	SS 1	SW 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER							
Phenols		0.005	0.4	0.003	1.6	0.002		TA-A-38
Chloromethane		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Bromomethane		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Vinyl Chloride		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Methylene Chloride		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Acetone		<10.0	<100.0	<10.0	<100.0	<10.0	ppb	TF-C-24
Carbon Disulfide		<10.0	<100.0	<10.0	<100.0	<10.0	ppb	TF-C-24
1,1 Dichloro-ethane		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
1,1 Dichloro-ethene		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
T-1,2 Dichloro-ethene		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
Chloroform		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
1,2 Dichloro-ethane		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
2 Butanone		<10.0	<100.0	<10.0	<100.0	<10.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

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(518) 434-4546

## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

Page 5 of 12

Attention: Dave Black

Date Received: 8/11/86

Sample Taken By: Client

No. Samples analyzed 15

Matrix: Soil/Water

Date Sampled: 8/8/86

Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID	SW 2	SS 2	SW 1	SS 1	SW 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER	860811B01	860811B02	860811B03	860811B04	860811B05		
1,1,1 Trichloro-ethane		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
Carbon Tetrachloride		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
Vinyl Acetate		<10.0	<100.0	<10.0	<100.0	<10.0	ppb	TF-C-24
Bromodichloromethane		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
1,1,2,2 Tetra-chloroethane		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
1,2 Dichloro-propene		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
Trichloro-ethene		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
1,1,3 Dichloro-propene		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
Dibromochloromethane		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
1,1,2 Trichloro-ethane		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
Benzene		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
cis 1,3 Dichloro-propene		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24
2-Chloroethyl-vinylether		<1.0	<10.0	<1.0	<10.0	<1.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

Specializing in Hazardous Waste and Petroleum Product Analyses



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(518) 434-4546

## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

Page 6 of 12

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID		SS 2	SS 1	SS 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER	SW 2					
Bromoform		<5.0	<50.0	<50.0	<5.0	ppb	TF-C-24
2-Hexanone		<10.0	<100.0	<100.0	<10.0	ppb	TF-C-24
4-Methyl 2-Penta- none		<10.0	<100.0	<100.0	<10.0	ppb	TF-C-24
Tetrachloro- ethene		<1.0	<10.0	<10.0	<1.0	ppb	TF-C-24
Toluene		<1.0	<10.0	<10.0	<1.0	ppb	TF-C-24
Chlorobenzene		<1.0	<10.0	<10.0	<1.0	ppb	TF-C-24
Ethyl Benzene		<1.0	<10.0	<10.0	<1.0	ppb	TF-C-24
Styrene		<1.0	<10.0	<10.0	<1.0	ppb	TF-C-24
Total Xylenes		<1.0	<10.0	<10.0	<1.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

Specializing in Hazardous Waste and Petroleum Product Analyses





P.O. Box 265  
298 Riverside Avenue  
Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

Page 7 of 12

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID	SW 4	SS 4	RW 1	RW 2	RW 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER	860811B06	860811B07	860811B08	860811B09	860811B10		
Phenols		0.004	1.0	<0.002	0.02	<0.002		TA-A-38
Chloromethane		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Bromomethane		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Vinyl Chloride		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Methylene Chloride		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Acetone		<10.0	<100.0	<10.0	<10.0	<10.0	ppb	TF-C-24
Carbon Disulfide		<10.0	<100.0	<10.0	<10.0	<10.0	ppb	TF-C-24
1,1 Dichloro-ethane		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
1,1 Dichloro-ethene		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
1,2 Dichloro-ethene		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Chloroform		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
1,2 Dichloro-ethane		<1.0	<1.0	<1.0	<1.0	<1.0	ppb	TF-C-24
2-Butanone		<10.0	<100.0	<10.0	<10.0	<10.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Approved by: [Signature]

Date: 8/11/86

Specializing in Hazardous Waste and Petroleum Product Analyses



P.O. Box 265  
298 Riverside Avenue  
Rensselaer, NY 12144  
(518) 434-4546

## LABORATORY REPORT

Client: Conestogs-Rovers & Associates

Page 8 of 12

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID	SW 4	SS 4	RW 1	RW 2	RW 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER	860811B06	850811B07	860811B08	860811B09	860811B10		
1,1,1 Trichloro-ethane		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Carbon Tetrachloride		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Vinyl Acetate		<10.0	<100.0	<10.0	<10.0	<10.0	ppb	TF-C-24
Bromodichloro-methane		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
1,1,2,2 Tetra-chloroethane		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
1,2 Dichloro-propene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Trichloro-ethene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
t-1,3 Dichloro-propene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Dibromochloroethane		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
1,1,2 Trichloro-ethane		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Benzene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
cis 1,3 Dichloro-propene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
2-Chloroethyl-vinylether		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Approved by:

Date:

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(518) 434-4546

## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

Page 9 of 2

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID AES NUMBER	SW 4	SS 4	RW 1	RW 2	RW 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
Bromoform		<5.0	<50.0	<5.0	<5.0	<5.0	ppb	TF-C-24
2-Hexanone		<10.0	<100.0	<10.0	<10.0	<10.0	ppb	TF-C-24
4-Methyl-2 Penta- none		<10.0	<100.0	<10.0	<10.0	<10.0	ppb	TF-C-24
Tetrachloro- ethene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Toluene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Chlorobenzene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Ethyl Benzene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Styrene		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24
Total Xylenes		<1.0	<10.0	<1.0	<1.0	<1.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

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ND = Not Detectable > = greater than

Approved by: TS/ghf

Date: 9/10/86

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## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

Page 10 of 12

Attention: Dave Black

Date Received: 8/11/86 Sample Taken By: Client

Date Sampled: 8/8/86 Location: Hoosick Falls

No. Samples analyzed 15

Matrix: Soil/Water

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID AES NUMBER	RW 4	OW 27	OW 28	OW 29	SS 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
Phenols		0.003	0.022	<0.002	0.009	0.004		TA-A-38
Chloromethane		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Bromomethane		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Vinyl Chloride		<1.0	<1.0	<1.0	1.1	<10.0	ppb	TF-C-24
Methylene Chloride		<1.0	<1.0	<1.0	2.0	<10.0	ppb	TF-C-24
Acetone		<10.0	<10.0	<10.0	<10.0	<100.0	ppb	TF-C-24
Carbon Disulfide		<10.0	<10.0	<10.0	<10.0	<100.0	ppb	TF-C-24
1,1 Dichloro-ethane		<1.0	<1.0	<1.0	18.8	<10.0	ppb	TF-C-24
1,1 Dichloro-ethene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
t-1,2 Dichloro-ethene		<1.0	<1.0	3.3	<1.0	<10.0	ppb	TF-C-24
Chloroform		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
1,2 Dichloro-ethane		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
2-Butanone		<10.0	10	<10.0	<10.0	<100.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than  
ND = Not Detectable > = greater than

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

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Client: Conestoga-Rovers & Associates

Page 11 of 12

## LABORATORY REPORT

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID	RW 4	OW 27	OW 28	OW 29	SS 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
	AES NUMBER							
1,1,1 Trichloro-ethane	860811B11	<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Carbon Tetrachloride		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Vinyl Acetate		<10.0	<10.0	<10.0	<10.0	<100.0	ppb	TF-C-24
Bromodichloro-methane		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
1,1,2,2 Tetra-chloroethane		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
1,2 Dichloro-propene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Trichloro-ethene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
1,1,3 Dichloro-propene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Dibromochloro-methane		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
1,1,2 Trichloro-ethane		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Benzene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
cis 1,3 Dichloro-propene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
2-Chloroethyl-vinylether		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Approved by:                     

Date:                     

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## LABORATORY REPORT

Client: Conestoga-Rovers & Associates

Page 12 of 12

Attention: Dave Black

No. Samples analyzed 15

Date Received: 8/11/86 Sample Taken By: Client

Matrix: Soil/Water

Date Sampled: 8/8/86 Location: Hoosick Falls

Composite or Grab: Grab

Methods are in accordance with STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, and METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, (EPA), unless otherwise noted or attached.

PARAMETER(S)	Your sample ID AES NUMBER	RW 4	OW 27	OW 28	OW 29	SS 3	UNITS <sup>(1)</sup>	LABORATORY NOTE BOOK REFERENCE
Bromoform	860811BL1	<5.0	<5.0	<5.0	<5.0	<50.0	ppb	TF-C-24
2-Hexanone		<10.0	<10.0	<10.0	<10.0	<100.0	ppb	TF-C-24
4-Methyl 2-Penta- none		<10.0	<10.0	<10.0	<10.0	<100.0	ppb	TF-C-24
Tetrachloro- ethene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Toluene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Chlorobenzene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Ethyl Benzene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Styrene		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24
Total Xylenes		<1.0	<1.0	<1.0	<1.0	<10.0	ppb	TF-C-24

<sup>(1)</sup>Units are expressed in mg/l unless otherwise stated.

NA = Not Applicable < = less than

ND = Not Detectable > = greater than

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

Specializing in Hazardous Waste and Petroleum Product Analyses



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Rensselaer, NY 12144

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### CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME				SAMPLERS: (Signature)				
Chestoga-Revers				<i>[Signature]</i>				
SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME	SAMPLE TYPE	COMP	GRAB	NUMBER OF CONT'S	ANALYSIS REQUIRED
			A = a.m. P = p.m.					
SW2	Surface water, Schuylkill Site	8-8-86	A	Water			3	pharls, metals, volatile
SS2	Surface Soil	8-8-86	P	Soil			1	" "
SW1	Surface water	" "	A	Water			3	" "
SS1	Surface soil	" "	P	Soil			1	" "
SW3	Surface water	" "	A	Water			3	" "
SS3	" soil	" "	P	Soil			1	" "
SW4	" water	" "	A	Water			3	" "
SS4	" soil	" "	P	Soil			1	" "
RW1	(Borehole) Borehole Well	" "	A	"			3	" "
RW2	Borehole Well	" "	P	"			3	" "
RW3	Armed Well	" "	A	"			3	" "
RW4	Rawlins Well	" "	P	"			3	" "
Relinquished by: (Signature)			Received by: (Signature)				Date/Time	
<i>[Signature]</i>			<i>[Signature]</i>				8/9/86 10:00	
Relinquished by: (Signature)			Received by: (Signature)				Date/Time	
Relinquished by: (Signature)			Received by: (Signature)				Date/Time	
Relinquished by: (Signature)			Received by Mobile Laboratory for field analysis: (Signature)				Date/Time	
Dispatched by: (Signature)		Date/Time	Received for Laboratory by:		Date/Time			
Method of Shipment:								

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### CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME <b>Conestoga - Rovers</b>	SAMPLERS: (Signature) <i>Chas H. [Signature]</i>
--	---

SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
OW 27	OW-27-86 Schriber 1/5-86	8-8-86	A	Water		3	phenols, metals, volatiles
OW 28	OW-28-86	"	A	"		3	" "
OW 29	OW-29-86	"	A	"		3	" "
			P				
			A				
			P				
			A				
			P				
			A				
			P				
			A				
			P				
			A				
			P				
			A				
			P				
			A				
			P				

Relinquished by: (Signature) <i>Chas H. [Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date/Time 8/9/86 10:20
Relinquished by: (Signature)		Received by: (Signature)		Date/Time
Relinquished by: (Signature)		Received by: (Signature)		Date/Time
Relinquished by: (Signature)		Received by Mobile Laboratory for field analysis: (Signature)		Date/Time
Dispatched by: (Signature)	Date/Time	Received for Laboratory by:		Date/Time
Method of Shipment:				

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## CHAIN OF CUSTODY RECORD

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