

A Summary of the
Closure and Remedial Activities
Performed for
Industrial Environmental Systems, Inc.

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1.0 FACILITY BACKGROUND

The Industrial Environmental Systems, Inc. (IES) facility (EPA I.D. No. NYD000707885) stored and blended industrial waste solvents used as a fuel at the adjacent Northeast Solite Corporation (NES) rotary kilns. The IES facility located in Mt. Marion, New York began operations in 1976 and ceased to operate in 1983. The land and structures owned by NES and IES are contiguous. However, the operation that received, blended, and stored the fuel was owned by IES as a separate corporate entity. A location map is presented in Figure 1 and a site drawing of the IES facility is shown in Figure 2.

The IES site utilized nine (9) storage tanks to blend, isolate, and transfer hazardous waste derived fuel to the NES rotary kilns. Solvents received at the facility were tested and then off-loaded from tank trailers into one of two receiving tanks. The receiving tanks were used to blend the solvent and segregate solid materials to minimize clogging of the piping and pumping system. Periodically, the receiving tanks were cleaned out and solid material was drummed. The drums were temporarily retained on site in accordance with Resource Conservation and Recovery Act (RCRA) then transported off site for disposal at an approved disposal facility.

The New York State Department of Environmental Conservation (NYSDEC) determined that the facility's operation required a permit, and in 1981 IES agreed to sign an Order on Consent. It is beyond the scope of this document to site the numerous correspondence, reports and meetings between IES and NYSDEC regarding the activities at the IES facility associated with the Order on Consent and the events that followed. However, a summary of the events is presented herein.

In accordance with the agreements between IES and the NYSDEC, a waste analysis plan was developed. Shipments of incoming fuels were tested for thermal value and certain chemical constituents. IES only transferred blended solvents meeting the agreed limitations to NES for use as fuel. All material transferred to NES was accomplished utilizing an underground piping system. The use of the material as fuel in the high temperature NES kilns ensured adequate destruction of the waste transferred to the facility.

The waste analysis plan included testing waste solvent shipments for polychlorinated biphenyls (PCB). IES would send a composite sample of ten fuel shipments to an off-site testing laboratory for PCB analysis. In November 1982, IES unknowingly received a shipment of PCB contaminated waste. Appropriate composite samples were obtained and sent for analysis in accordance with the waste analysis plan. IES received a report from the testing laboratory that the composite sample contained PCBs. The facility then submitted a sample of each individual shipment that was contained in the composite sample for analysis to isolate the source of the PCB contamination. However, during this period in November 1982, the solvent-oil fuel contaminated with PCBs was already burned. Once the source was identified, IES reported the findings to NYSDEC. In response, the NYSDEC issued a summary abatement order and commenced enforcement and permit revocation proceedings against IES. A Commissioner's Order dated May 18, 1983, modified by an order dated June 9, 1983, was issued.

In accordance with the Commissioner's orders and before IES could resume operation, IES was required to remove all PCB-contaminated materials from the fuel storage tanks. As an additional requirement, IES submitted and the NYSDEC approved an acceptable protocol to screen incoming fuel shipments for the presence of PCBs. The NYSDEC did not commence review and

approval of the protocol until all PCB-contaminated materials had been fully removed from the site. By late 1983, IES had removed all PCB-contaminated material. Therefore, NES and IES abandoned permitting of the waste solvent fuel program. All nine storage tanks were cleaned and left empty and eventually closed under the RCRA program.

During the installation of groundwater monitoring wells in compliance with the Order on Consent, soil and groundwater contamination was found at the site. Consequently, under the oversight and direction of NYSDEC personnel, additional work scope was developed to investigate and remediate the contamination. Independent, third party documentation and investigation reports submitted to the NYSDEC detailed and interpreted a large volume of chemical analytical data developed from the environmental monitoring program at the IES facility. A reference list of these reports (on file with the NYSDEC) by title and submission date is shown in Table 1. Monitoring results reveal low-level, multi-component contamination.

2.0 GEOLOGIC CONDITIONS OF THE NES AND IES FACILITIES

The IES site is located completely within the NES facility. Therefore, the geological conditions of the IES facility include a description of relevant portions of the NES site. The general area of the fuel storage tanks, associated piping, NES kilns and product handling areas is situated among Devonian age rocks that form a bedrock ridge which trends approximately north 20° east. In the area north of IES/NES, the sequence of bedrock units exposed from oldest to youngest is Esopus Siltstone, Schoharie Limestone and the Onondaga Limestone. Probable thickness of these rock units in the Saugerties area is 150 feet, 100 feet and 120 feet, respectively. Attachment I shows the geological sections traversing the site. Section A-A' runs south to north across the western portion of the NES site. Section B-B' runs east to west across the NES site just north of the IES facility.

In the immediate area of the IES site, only the Schoharie and Esopus formations are exposed. The Onondaga formation was encountered in one well (BR-2 located within the NES property) below 200 feet of glaciolacustrine silts and clays which are present underlying the broad flat valley area in the western portion of the NES site (product storage area). These soils terminate against the west flanks of the Schoharie Limestone ridge at an elevation of approximately 190 feet. However, a very thin veneer of lacustrine soil occurs at slightly higher elevation between and atop the bedrock ridges in the eastern portion of the NES site (beneath and east of the IES facility). Test boring logs and well boring logs are presented as Attachment II.

2.1 Western Area Geology (NES Product Storage Area)

The off-site "western area" is bounded on the east by the N20°E trending ridge on which the kilns are located; the western boundary is the former New York Central railroad tracks; the southern boundary is the property line; and the northern boundary is the site access road. The area is primarily used as a processing and storage area for the lightweight aggregate produced in the kilns.

2.1.1 Unconsolidated Deposits

The uppermost "soil" consists of fill material generally about five to seven feet thick. This fill is comprised of clean medium to fine gravel and shale chips. Some cobbles and boulders were encountered during drilling which were interpreted to be pieces of limestone shot rock.

Glaciolacustrine deposits underlie the fill material over this portion of the site. These soils were deposited in Glacial Lake Albany during the last glacial age and consist primarily of varved silt and clay of medium plasticity with frequent seams of silt and clayey silt. Occasional, ice rafted pieces of fine gravel were noted in the samples collected.

The thickness of the glaciolacustrine unit is variable. The depth of bedrock determined in one well (BR-2) which fully penetrated the glaciolacustrine unit is 216 feet. Another well (DFT-3) located on the western portion of the site just north of the access road, was terminated at a depth of 100 feet and did not encounter bedrock. It is anticipated that bedrock is at least that deep as you approach the western edge of the property boundary, and that the 216-foot depth to bedrock is not anomalous. As you proceed to the east toward the central ridge and the kilns, the glaciolacustrine deposit thins. Other wells (BR-3 and BR-4) located near the bottom of this ridge encountered 4.5 and 3.0 feet, respectively, of glaciolacustrine soils. The surface of the glaciolacustrine unit dips gently to the west.

Glacial till has not been identified underlying the lacustrine deposits in this area, but it is likely that a thin veneer of glacial lodgement does exist.

2.1.2 Bedrock

The western portion of this area is underlain by the Onondaga Formation of the Middle Devonian age. The Onondaga is a medium-light gray, medium to coarse-grained limestone. The Onondaga can be observed in outcrop about 2000 feet north of the kilns. In this area, the observed structure consists of two synclines and an anticline.

2.2 Eastern Area Geology (includes the IES Site)

The eastern area is defined as the portion of the site to the east of the western area discussed in the previous section, which include the IES facility and a portion of the NES site. This area includes the tank farm, the kilns, the primary raw material crusher and conveyor system to the kilns, and is bounded to the south and southeast by the higher topography that separates this area from the quarry.

2.2.1 Unconsolidated Deposits

Surface deposits in this area consist primarily of fill material. This fill ranges from large boulder-size slabs of shot rock from blasting of the central ridge south

and west of the tank farm area, to a silty sand and gravel material. The fill in the western portion of this area from the tank farm extending north-northeast toward the kilns lies directly above the bedrock surface.

To the east in the swale (i.e., under the NES primary crusher) and the lower flanks of the swale, the fill is underlain by glaciolacustrine deposits consisting of clayey silt and silt. These strata have been observed in test pits and excavations in this area and are generally thin, ranging from 0 to 5 feet thick. Topographic analysis of the U.S.G.S. 15 minute Saugerties Quadrangle indicates that the maximum elevation of Glacial Lake Albany is in the order of 195 feet MSL near the general plant area.

Consequently, it would be expected that glaciolacustrine deposits would not be found at an elevation higher than this. Local variations, however, may occur in areas where clay was deposited in shallow water protected environments behind naturally occurring bedrock dams.

Glacial till exists underlying the glaciolacustrine soils in some areas of the site. Glacial till was encountered during the drilling of wells DFT-I and UFT-1. At these locations, the glacial till consists of sand, clayey silt and medium fine gravel in almost equal proportions.

2.2.2 Bedrock

The underlying bedrock consists of sedimentary formations of Devonian Age. The younger formation, the Schoharie Limestone, is observed in outcrops just south of the tank farm area. The Schoharie forms this low ridge which extends underneath the kilns and outcrops again just to the north of the kilns. The excavation conducted to expose and collect the seepage is in this formation.

The Schoharie is gray argillaceous limestone that strikes N20°E and dips to the west at about 35°. Cleavage discontinuities strike approximately parallel to bedding and dip to the east at about 25° to 30°.

The Schoharie Formation is underlain by the Esopus Formation, a 250-300 foot thick gritty siltstone, also of Devonian Age. The Esopus outcrops on the hill east of the tank farm and forms a series of ridges further to the east and northeast. The Esopus is used as a raw material for the lightweight aggregate operation and is exposed in the quarry as well as many nearby outcrops. While the exact location of the Esopus/Schoharie contact is not known, it most likely runs through the swale to the east of the tank farm area, and trends at approximately N20°E.

3.0 GROUND WATER HYDROLOGY OF THE NES AND IES FACILITIES

Monitoring wells were installed in two separate water bearing zones. Shallow monitoring wells were installed in the granular fill overlying the lacustrine deposits. Deeper bedrock wells also were installed. The lacustrine clay aquitard between these zones varies in thickness from about 3 feet encountered at well BR-4 to over 200 feet at well BR-2.

3.1 Western Area Hydrology (NES Product Storage Area)

The ground water in the fill is very limited. The thickness of the water bearing unit is generally less than two feet, and in several areas water levels in the shallow wells are below the fill/lacustrine contact indicating that the fill is essentially dry in that area. It is likely that the groundwater is present only seasonally or following precipitation in portions of the western area.

Recharge to this area is principally from infiltration of precipitation and runoff into the coarse fill. Other sources of recharge include water used in dust control during processing of the lightweight aggregate and some potential infiltration of water through the bedrock ridge of Schoharie that forms the eastern boundary of this zone.

Three rounds of ground water measurements were taken in February 1984 and groundwater elevations in the shallow wells were plotted to show the contours of the water table in Figure 3. As illustrated, ground water movement is principally to the west and northwest, depending on the amount of recharge to this shallow water-bearing zone.

Ground water movement in the vertical direction is not considered significant in this area where an appreciable thickness of clay separates the granular fill from the bedrock. The extreme contrast (on the order 10^5) in permeability between the clay and the granular fill will promote ground water movement laterally rather than vertically. Some vertical ground water flow may occur from the fill into the bedrock in areas near the IES facility where the clay is absent.

3.2 Eastern Area Hydrology (includes the IES Site)

The infiltration of precipitation into the granular fill results in a water bearing zone that exists mostly as a perched condition above a relatively impervious layer of either lacustrine soil or bedrock. In the area that extends from the vertical tanks to the kilns, the granular fill lies directly above the buried bedrock ridge, and water that infiltrated through the fill collected in bedrock depressions or troughs. During the excavation of test pits 1 and 5, water was observed in bedrock troughs. Upon pumping the water from these depressions, the flow from the bedrock seepage face was reduced significantly. This indicates that movement of water does occur from the fill material into the upper fractured and jointed bedrock. The local direction of ground water movement in this area depends on the orientation of the bedrock surface and bedrock discontinuities such as joints, fractures and bedding planes. Seepage from the bedrock face is from vertical fractures and inclined bedding plane that intercept water moving at or near the bedrock/fill interface.

Water also occurs in the granular fill that overlies the lacustrine deposits on the eastern flank of the buried bedrock ridge. Water in the fill in this area also occurs as a result of the infiltration of precipitation, and, based on monitoring of Well DFT-2, appears to be seasonal and generally only exists after significant precipitation events. The direction of water movement in this area is toward the east along the slope of the lacustrine deposits.

Water has also been encountered within granular fill in the swale to the east of the tank farm where DFT-1 is located. Recharge to this area occurs from infiltration of precipitation. In addition, recharge may occur in the area from infiltration of surface water, at least seasonally, from a small spring on the Esopus Siltstone slope southeast of Well DFT-1. In the swale, surface water moves northward along surface drainage features recharging the granular fill. The ground water movement in this area is most likely to the north following the bedrock topography.

4.0 Site Investigation

The Order on Consent required the installation of a single groundwater monitoring well at the IES facility. A copy of the Order on Consent is presented in Attachment III. During the installation of the monitoring wells, a contaminated area was found. Discovery of the contamination lead to an extensive investigation of the site. A summary of the work performed is described below.

4.1 Monitoring Well Installation and Water Quality Analysis

Prior to installing the monitoring well required in the order, Dunn Geoscience Corporation (DGC) drilled numerous test borings holes throughout the site. A determination of the geological and hydrological conditions of the fuel storage area was performed utilizing the borings to evaluate conditions of the site and to assist in selecting the location of the well.

Site geology revealed a bedrock outcrop to the east of the tank storage area. To the north of the area, the bedrock is encountered at a depth of one foot. The groundwater flow is primarily to the west as shown in Figure 3. Also, groundwater elevation measurements taken at two observation wells and the water elevation of a [former] pond adjacent to the south portion of the site indicated that groundwater flows away from the [former] pond area.

A tentative agreement between NYSDEC and IES added the installation of an additional monitoring well at the facility. Later two additional wells were proposed in a subsequent meeting. In August 1983, DGC installed three of the four proposed monitoring wells. It was determined by NYSDEC that the fourth well was too far upgradient to be of value. A replacement for the fourth well would be a bedrock well north of the tank farm.

Since the discovery of the contamination, additional monitoring wells were installed in the vicinity of the IES facility. The purpose of the additional wells was to delineate any possible plume and determine the extent of the contamination. No plume was ever detected and results of groundwater monitoring indicated that only minor contamination

existed outside the immediate area of the tank farm. During the monitoring period, some wells were eliminated from the sampling protocol and other additional wells were installed and monitored. The resulting accumulated data provides an extensive groundwater investigation of the site. Several reports furnished by Dunn Geoscience Corporation, listed in Table 1, provide greater details of the analytical results. The well boring logs are presented as Attachment II.

4.1.1 Inorganic Analytical Results

Monitoring results for inorganic analytical testing indicated that a few parameters such as chloride, sulfate, iron, manganese and selenium had initial elevated levels with respect to ground water standards. However, all have declined, been inconsistent, or are insignificant; therefore, no significant inorganic contamination exists at the site. This was agreed to by NYSDEC's Bureau of Hazardous Site Control in August 1984 and inorganic monitoring was deleted from the protocol.

4.1.2 Volatile Organic Compound Analytical Results

The major source of contamination at the IES site was organic compounds. Commonly detected compounds included ketones, various chlorinated aliphatics and volatile aromatics. A summary of the analytical results is presented in Attachment IV.

Of the wells monitored, DFT-2 was the most contaminated when there was sufficient water in the well for sampling. Therefore, the results of some sampling rounds for well DFT-2 are absent due to dry well conditions.

The single, isolated detection of 5,500 ug/l tetrahydrofuran in well UFT-1 (September 1983) is an anomaly arising from solvent welding of the PVC during well installation. This well was replaced by a new upgradient well (UFT-1A) and tetrahydrofuran was not detected in subsequent tests.

During the monitoring period samples from neighboring drinking water wells were sampled by the County Health Department and analyzed for volatile organic compounds. The results of those analyses are presented in Attachment V. No analytes related to the IES were detected.

4.1.3 Hydrocarbon Scans

Except for a few compounds having set NYSDEC maximum contamination limits (MCLs), most of the organic priority pollutants were not covered by specific groundwater standards. The general definition of contamination used by the New York State Department of Health (NYSDOH) was a MCL of 50 ug/l for any individual compound and/or a MCL of 100 ug/l for the total organic concentration. Results of total hydrocarbon scans from monitoring at the facility are summarized in Table 2. Results of these scans proved inconsistent due to the variable nature of the problem and the variability of different analytical methods

and internal standards attempted. These scans were eventually replaced by more specific methods or dropped where inappropriate.

4.2 Bedrock Seep

During installation of the wells, seepage was observed from a then recently exposed bedrock face north of the tank farm in an area adjacent to and just south of the point where clinker drops from the NES kilns. This area was previously covered and became visible after the area was excavated. The seepage was oily, had a sheen, a strong odor, and flow was small. Samples of the seep were submitted for analysis of volatile organic compounds (EPA Method 624). Chlorinated solvents and other volatile organic compounds were detected in the sample. A summary of the volatile organic compounds identified and quantified in the aqueous seep samples is presented in Attachment VI. The presence of ketones, benzenoid aromatics and select chlorinated aliphatics is consistent with other ground water analyses from the tank farm area.

Under an approval from the NYSDEC, a collection system was installed to collect water from the seep for treatment and disposal. Seepage from the bedrock face was collected in a concrete trough and piped by a gravity drain line to a collection sump. Originally, collected water was transported off-site for disposal. Later, the water was discharged following activated carbon treatment. Following construction of the seep collection system, monitoring at the site continued for several years. Aqueous seep samples were collected periodically and analyzed to ensure proper operation of the system.

During the monitoring period the water quality of the bedrock face seepage improved significantly and levels of the organic contaminants dropped considerably. This favorably affected down gradient groundwater quality, as well as signaled a trend toward a reduction of the source of contamination.

4.3 Test Pits

After the discovery of the seep, several steps were taken to determine whether an active contamination source existed. Three test pits (TP 8-83-1, TP 8-83-2, TP 8-83-3) were excavated during August 1983. A more extensive excavation was then conducted during November 1983 along the IES property to delineate contamination. A total of six new test excavations (TP-1, TP-2, TP-3, TP-4, TP-5, TP-6) were dug in the area surrounding the fuel tanks, fuel lines and bedrock seepage area, as shown in Figure 4. NYSDEC personnel observed all of the excavations. Excavations 1, 3, 4, 5, and 6 were performed to determine subsurface conditions including depth and type of fill, elevation and configuration of bedrock, location of zones of contaminated soil or ground water, and any significant sources of ground water recharge to the bedrock seep. Section A-A' in Figure 5 shows the subsurface conditions in the area. Excavation No. 2 was performed for the purpose of locating buried fuel lines, and is not shown in Figure 4. This excavation was located within Excavation No. 1. Attachment VII contains the test pit excavation logs. The three underground pipelines at the facility were hydrostatically pressure tested to determine if they were leaking. The results of the pressure test indicated that no leaks from the pipelines had occurred.

Contaminated soil uncovered during the excavation was removed and placed on plastic sheeting for testing. The excavated area was backfilled with clean shale, which was routinely quarried and crushed at the NES facility. The contaminated soil from the excavated areas was sampled in the presence of the NYSDEC personnel.

4.3.1 Test Pit Excavation Soil Chemical Analysis

The excavation performed in August 1983 did not indicate any significant site contamination. Soil in the three excavations had a slight odor and there were no visible signs of contamination as noted in the excavation logs (Attachment VII). The excavation sites uncovered in November 1983 revealed visible contamination. Samples of soil were taken from two [excavated/accumulated] piles and analyzed for volatile organic compounds (EPA Method 624, GC/MS), and a hydrocarbon scan. Table 3 summarizes the results of the volatile organic analyses. Except for very slight levels of toluene, ethylbenzene and xylene isomers, the West Seep pile was clean of volatile organic compounds. The Top pile showed contamination with elevated levels of various organic compounds such as benzenoid aromatics and chlorinated aliphatics.

4.3.2 Test Pit Excavation Aqueous Chemical Analysis

Aqueous samples were obtained from puddles at the bottoms of the excavation pits, TP-1, -3, -4, and -5. Analyses for volatile organic compounds were performed on all samples according to EPA Method 624. Contamination was predominantly ketones and several chlorinated aliphatics. There is a good qualitative correlation between these compounds and those found in other nearby aqueous sampling points. The results of the analysis are presented in Table 4.

5.0 Remedial Activities

IES systematically pursued an investigation and evaluation of the site. Test pits were excavated to uncover the source of the contamination. Contaminated soils were removed and replaced with clean fill. Monitoring wells were installed and water quality data collected. These actions and other steps described below were taken to mitigate contamination at the site.

5.1 Prevention Measures

To ensure that no future leaks or spills occurred from the facility all underground pipelines used to transfer hazardous waste fuel were removed and were replaced with new, aboveground lines. IES removed the underground pipes and installed the new aboveground pipes as a preventive measure only, since testing verified that the pipelines did not leak.

In addition, all of the storage tanks were reinstalled on a common concrete foundation meeting the requirements of Subtitle C Regulations for Hazardous Waste Storage and Treatment Tanks.

5.2 Surface Sealing to Prevent Infiltration

In November 1984, the large area excavated in 1983 was completely weather-sealed by a four-inch application of macadam. Later, in 1987 a sub-soil-testing protocol was incorporated into the Closure Plan. Five 3-¼ inch holes were drilled through the macadam cover. Composite samples were taken at 2', 4', 6', 8' and 10' depth at each of the boreholes. Figure 6 shows the area covered and sealed with the macadam.

6.0 Closure Activities

As discussed above, IES stopped receiving hazardous waste in 1983. NYSDEC required IES to completely clean and decontaminate all of the storage tanks as a result of the PCB contamination described in Section 1.0. The facility received no further shipments of hazardous waste. From 1983 to 1986, activities at the facility resulted in the removal of all of the underground pipelines. Areas contaminated were excavated and backfilled with clean material. Furthermore, extensive soil and groundwater testing was performed (see Table 1) demonstrating clean closure of the site.

A Closure Plan was submitted to and approved by the NYSDEC. Upon completion of the closure activities, an independent professional engineer certification was submitted. IES received approval from NYSDEC of the closure certification on July 6, 1988. A copy of the closure plan and other documents related to the facility's closure are presented in Attachment VIII. The approval letter from NYSDEC accepting the closure certification and considering the facility officially closed is presented in Attachment IX.

7.0 Conclusion

IES fully cooperated with the NYSDEC to adequately investigate the site. Numerous monitoring wells were installed and an extensive monitoring program covering approximately five years indicated low level organic contamination and improving conditions at the facility. Also, extensive excavation and other actions taken at the facility provided adequate remediation of the site. Furthermore, no groundwater contamination of organic compounds was detected at any of the neighboring drinking water wells.

There is an apparent correlation between the concentration of volatile organic compounds in the seep and in wells DFT-1 and DFT-2. Well DFT-2 has a history of periodically being a dry well. When this occurs, the contaminant levels in DFT-1, which is down gradient from DFT-2, are lowest. When recharge to DFT-2 yields sufficient water for sampling, then DFT-1 shows an increase in contaminants and there is a corresponding decrease of volatile organic compounds in the seep. Comparison of these well data with the seep data indicates a correlation between the two locations. All of the compounds found in the wells were also found in the seep. Furthermore, during the excavation of test pits 1 and 5, water was observed in bedrock troughs. Upon pumping the water from these depressions, the flow from the bedrock seepage face was reduced significantly. This indicates that some movement of water does occur from the fill material into the upper fractured and jointed bedrock. This complementary relation may be dependent upon bedrock/overburden configuration, surface rainwater infiltration, and seasonal or temporal variations in groundwater conditions.

The information and data presented disclose a correlation between the wells, the bedrock seep and the contaminated material excavated at the site. The bedrock face seepage was chemically characteristic of the monitoring well samples seen on site with ketones, benzenoid aromatics and chlorinated aliphatics constituting the bulk of the contamination problem.

The data presented on Table 2 from Section 4.1.3 above summarize the hydrocarbon analysis performed on the seep and reflect the trend toward a reduction of the source of the contamination. This trend becomes more apparent by plotting the data over time as shown in Chart 1 – 3. The increase in concentrations during November 1984 to May 1985 occurs during the time when the macadam was applied to seal the area from infiltration. Since water infiltrating the area was reduced, flushing/dilution was diminished. Therefore, a brief increase in the concentration would be expected.

The extensive investigation and remediation performed throughout the site proved effective in mitigating the contamination. The analytical results show that the contamination eventually diminished to a low level. Conditions at IES continued to improve as indicated by a decline in the level and quantity of organic compounds detected. In conclusion, the actions taken and the results of the analyses of organic chemicals in the groundwater indicate that the IES facility does not pose a health threat to workers on-site or residential homes in the vicinity of the plant. Furthermore, contamination problem areas were confined within IES/NES boundaries.

8.0 Summary

Contamination in the immediate vicinity of the tank farm most likely arose from local spills since underground piping showed no evidence of leaking. Such spills accumulated in upper fractured bedrock troughs and depressions, and over time were flushed from these areas by precipitation. This would account for the presence and concentrations in certain wells when they were not dry, especially since direct correlations and hydraulic connections were shown during excavations.

The predominant movement of these contaminants was: 1) toward the seep face as evidenced by the westward bedrock slope and the finding of dammed up contaminated water above the bedrock seep face during excavation of test pit 1, and the same general flow of ground water to the west, and 2) limited isolated flow to the east only in the vicinity of wells DFT-1 and DFT-2 given their downhill location along the slope of the east side of the tank farm area. Similar contamination is found nowhere else in areas monitored.

TABLES

Table 1

**Summary of Major Reports for
Industrial Environmental Systems, Inc.**

June 3, 1983	EVALUATION OF THE GEOLOGICAL AND HYDROLOGICAL CONDITIONS IN THE FUEL STORAGE AREA
December 1, 1983	FUEL TANK STORAGE AREA: MONITORING WELL INSTALLATIONS AND GROUNDWATER QUALITY ANALYSIS
May 15, 1984	TANK FARM: MONITORING WELL INSTALLATION & GROUNDWATER QUALITY ANALYSIS
April 1985	TANK FARM: GROUNDWATER QUALITY ANALYSIS
August 1986	TANK FARM AREA: GROUNDWATER QUALITY ASSESSMENT

Table 2

**SUMMARY OF TOTAL HYDROCARBON ANALYSES
INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC**

	Dec-83	Feb-84	Apr-84	Jun-84	Aug-84	Nov-84	Feb-85	Apr-85	May-85	Aug-85	Nov-85	Mar-86
UFT-1	71	78										
UFT-1A			55	<20								
DFT-1	380	39	<30	<20				340	1900	2700	380	
DFT-2	2500		7400	580								
DFT-4									2300			
DFT-5			560	<20								
DFT-6			590	<20	<10	D						
DFT6B							1010			3300		
DFT6C											450	
DFT-7			1600	<20	<10	16	230	2500	2600	2200	150	
DFT-9			90	<20	398	31	900	450	4600	4400	790	
DFT-10			300	23	125	31	780	790	7300	5300	720	
DFT-11			110	<20		D						
DFT-11A								8500	4700	4900	770	
DITCH			<30	<20	<10				3400			
BR-1			1100			72	280	DR	DR	DR	DR	
BR-2			50	<20	<10	120	1200	41700	3100	5800	330	
BR-3			<30	<20	<10	17	680	6800	2800	2400	60	
BR-4			210	170	380	380	1410	4500	2200	4600	560	
SEEP			12600	370			1070	9600	4700	3000	4020	1700

< = not detected at or above the reported value

D = damaged well

DR = dry well

Units in microgram/liter = ug/L = part per billion = ppb

TABLE 3

VOLATILE ORGANICS - EXCAVATION PITS SOIL SAMPLES COLLECTED ON DECEMBER 21, 1983

Industrial Environmental Systems, Inc.

	Pile Location					
	Top Pile	Top Pile	Top Pile	West Seep Pile	West Seep Pile	West Seep Pile
Acrolein	<100	<100	<100	<100	<100	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100
Benzene	480	400	390	<20	<20	<20
Carbon tetrachloride	<20	<20	<20	<20	<20	<20
Chlorobenzene	1000	820	790	<20	<20	<20
1,2-Dichloroethane	450	390	360	<20	<20	<20
1,1,1-Trichloroethane	910	580	500	<20	<20	<20
1,1-Dichloroethane	<20	<20	<20	<20	<20	<20
1,1,2-Trichloroethane	<20	<20	<20	<20	<20	<20
1,1,2,2-Tetrachloroethane	436	520	540	<20	<20	<20
Chloroethane	<20	<20	<20	<20	<20	<20
2-Chloroethylvinyl ether	<100	<100	<100	<100	<100	<100
Chloroform	<20	<20	<20	<20	<20	<20
1,1-Dichloroethene	<20	<20	<20	<20	<20	<20
Trans-1,2-Dichloroethene	<20	<20	<20	<20	<20	<20
1,2-Dichloropropane	<20	<20	<20	<20	<20	<20
1,3-Dichloropropene	<20	<20	<20	<20	<20	<20
Ethylbenzene	14000	11000	12000	<20	39	<20
Methylene chloride	<200	<200	<200	<200	<200	<200
Chloromethane	<20	<20	<20	<20	<20	<20
Bromomethane	<20	<20	<20	<20	<20	<20
Bromoform	<20	<20	<20	<20	<20	<20
Bromodichloromethane	<20	<20	<20	<20	<20	<20
Fluorotrichloromethane	<20	<20	<20	<20	<20	<20
Dichlorodifluoromethane	<20	<20	<20	<20	<20	<20
Chlorodibromomethane	<20	<20	<20	<20	<20	<20
Tetrachloroethene	3900	3000	2800	<20	<20	<20
Toluene	106000	90000	88000	180	300	87
Trichloroethene	1300	1000	950	<20	<20	<20
Vinyl chloride	<20	<20	<20	<20	<20	<20
Xylene isomers	52000	81000	85000	<50	67	<50

units in micrograms/kilogram = ug/kg = part per billion = ppb
< = not detected at or above the reported value

TABLE 4

VOLATILE ORGANICS - EXCAVATION PITS

AQUEOUS SAMPLES COLLECTED DECEMBER 6, 1983

INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC.

Parameters	Test Pit Locations					5
	1	3,East	3,West	4,North	4,South	
Benzene		170	66		23	
Chlorobenzene		23	12		12	
1,2-Dichloroethane	19	290	47	26	51	32
1,1,1-Trichloroethane	19	210	120	32	80	13
1,1-Dichloroethane		47	10		19	16
1,1,2-Trichloroethane	10	15			17	
Chloroform		62				
Trans-1,2-Dichloroethane		32			61	
Ethyl Benzene	94	120		27	79	18
Methylene Chloride		240				
Tetrachloroethene	52	61	44		37	
Toluene	690	3650	2520	300	1020	46
Trichloroethene	14	58	49		18	
Total Xylene Isomers	660	1520	1300	190	520	120
Methyl Ethyl Ketone	140	9120	1080		210	
Methyl Isobutyl Ketone	160	5400	590	73	160	48
Acetone		13700	1620		240	

units in microgram/liter = ug/L = part per billion ppb

CHARTS

Chart 3 Groundwater History

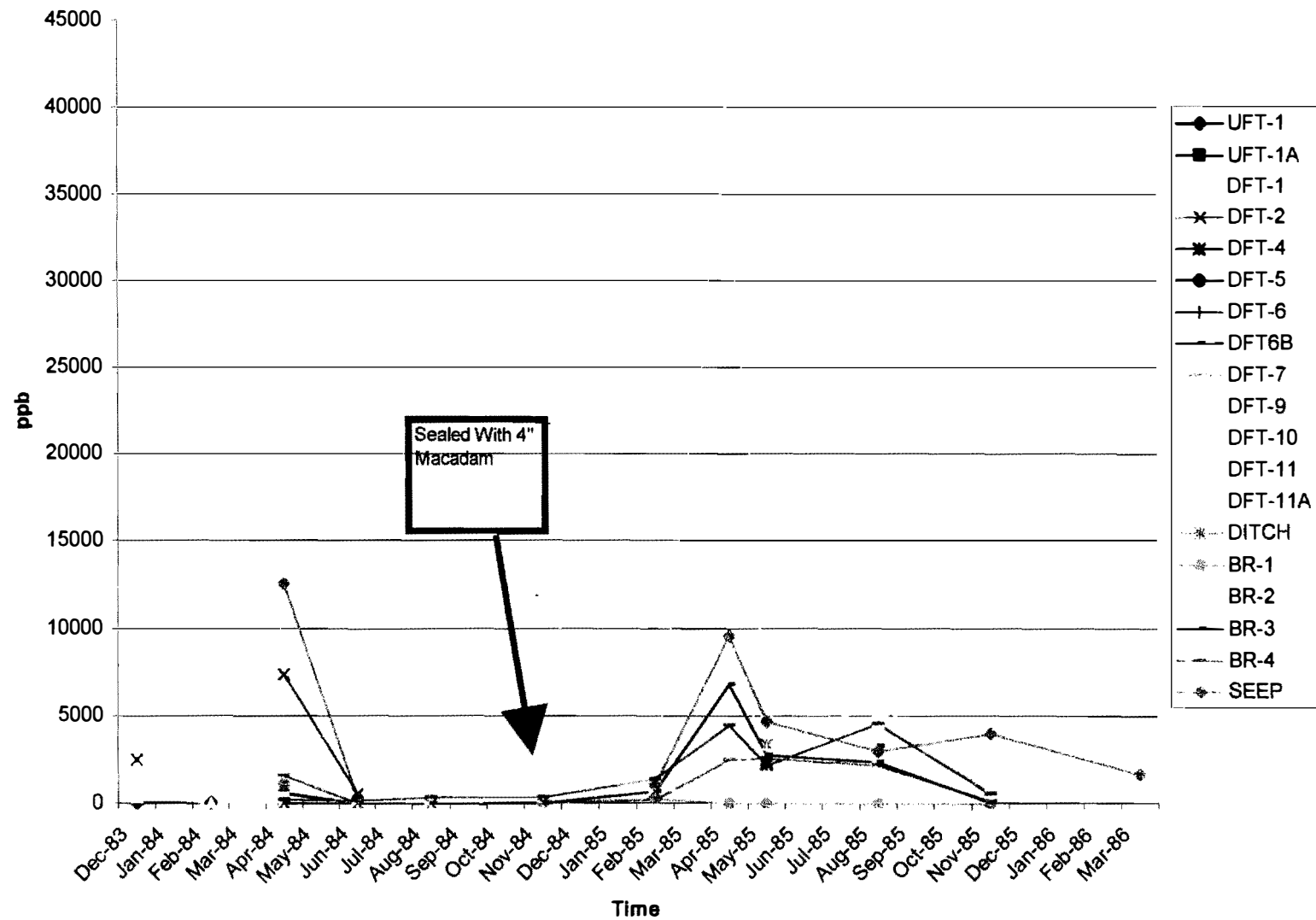
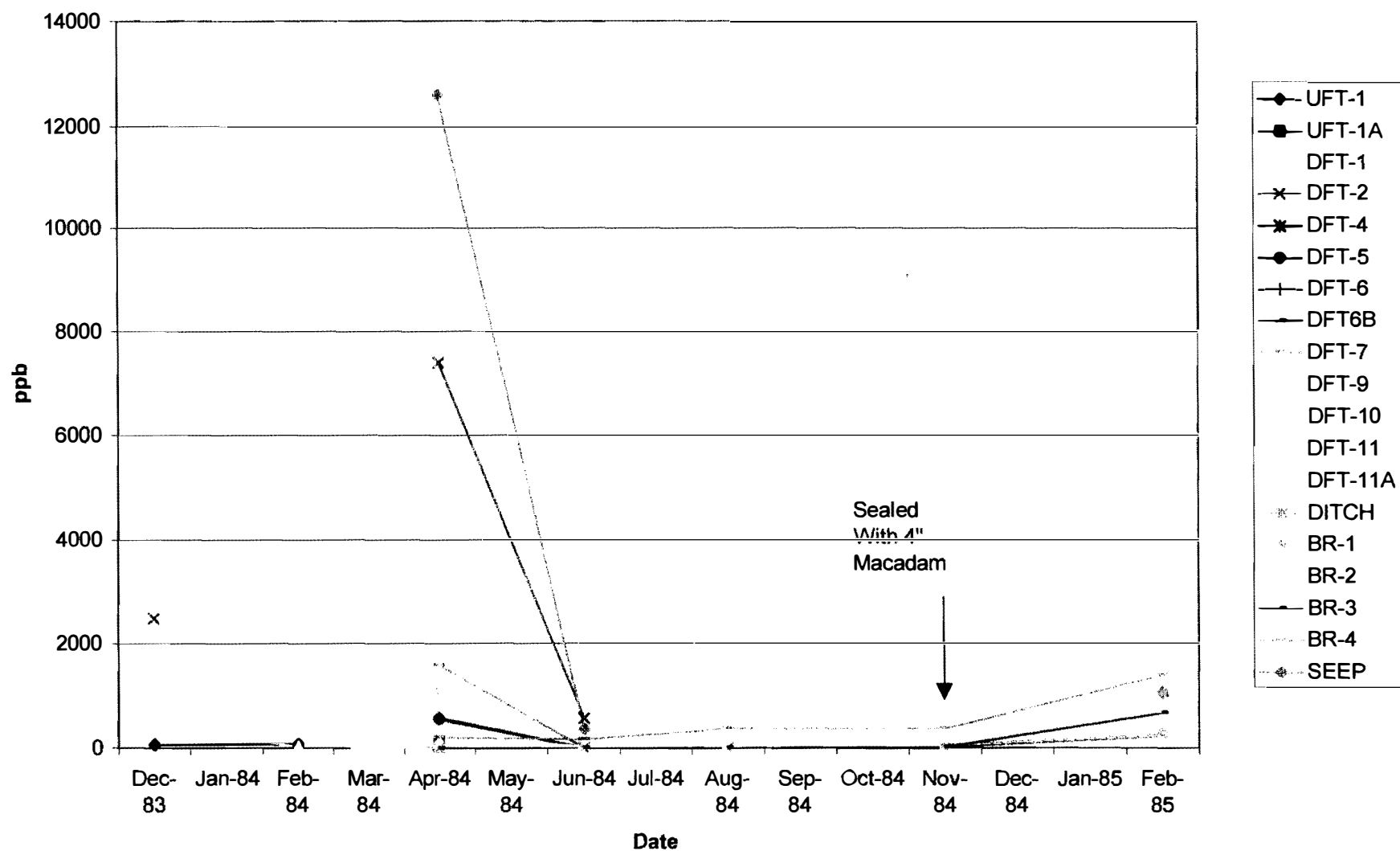
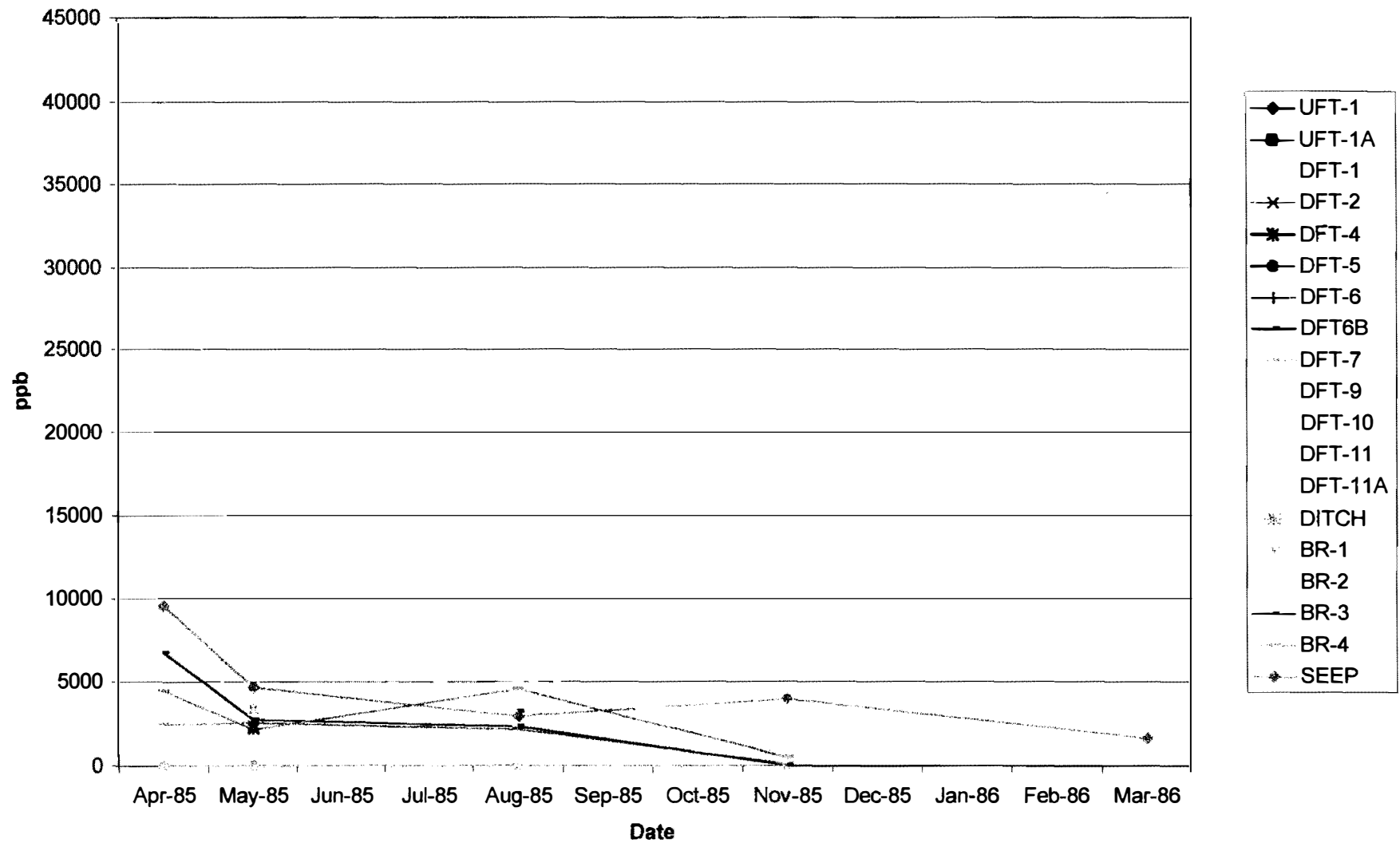
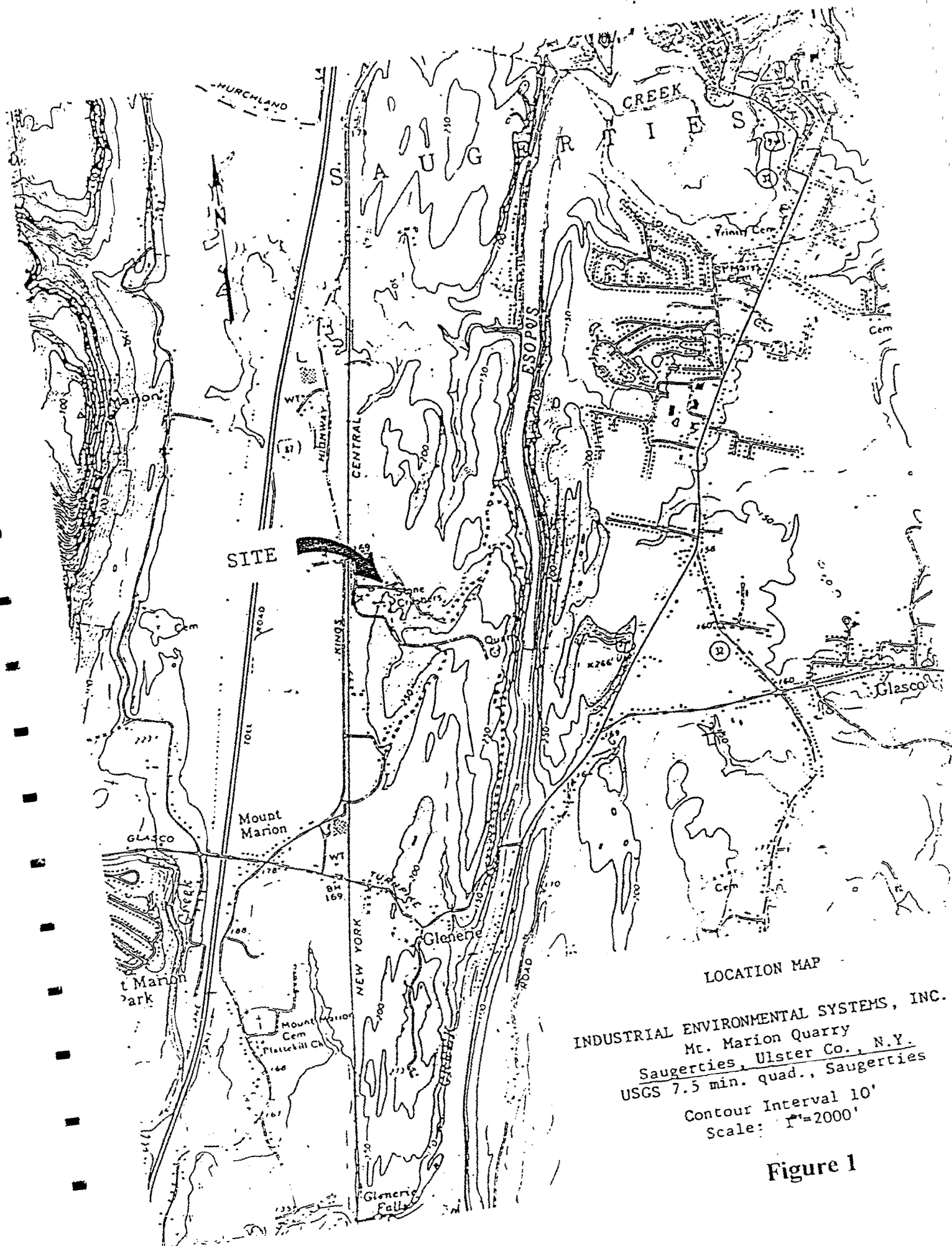


Chart 1 Pre Seal Results





FIGURES



LOCATION MAP

INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC.
Mt. Marion Quarry
Saugerties, Ulster Co., N.Y.
USGS 7.5 min. quad., Saugerties
Contour Interval 10'
Scale: 1"=2000'

Figure 1

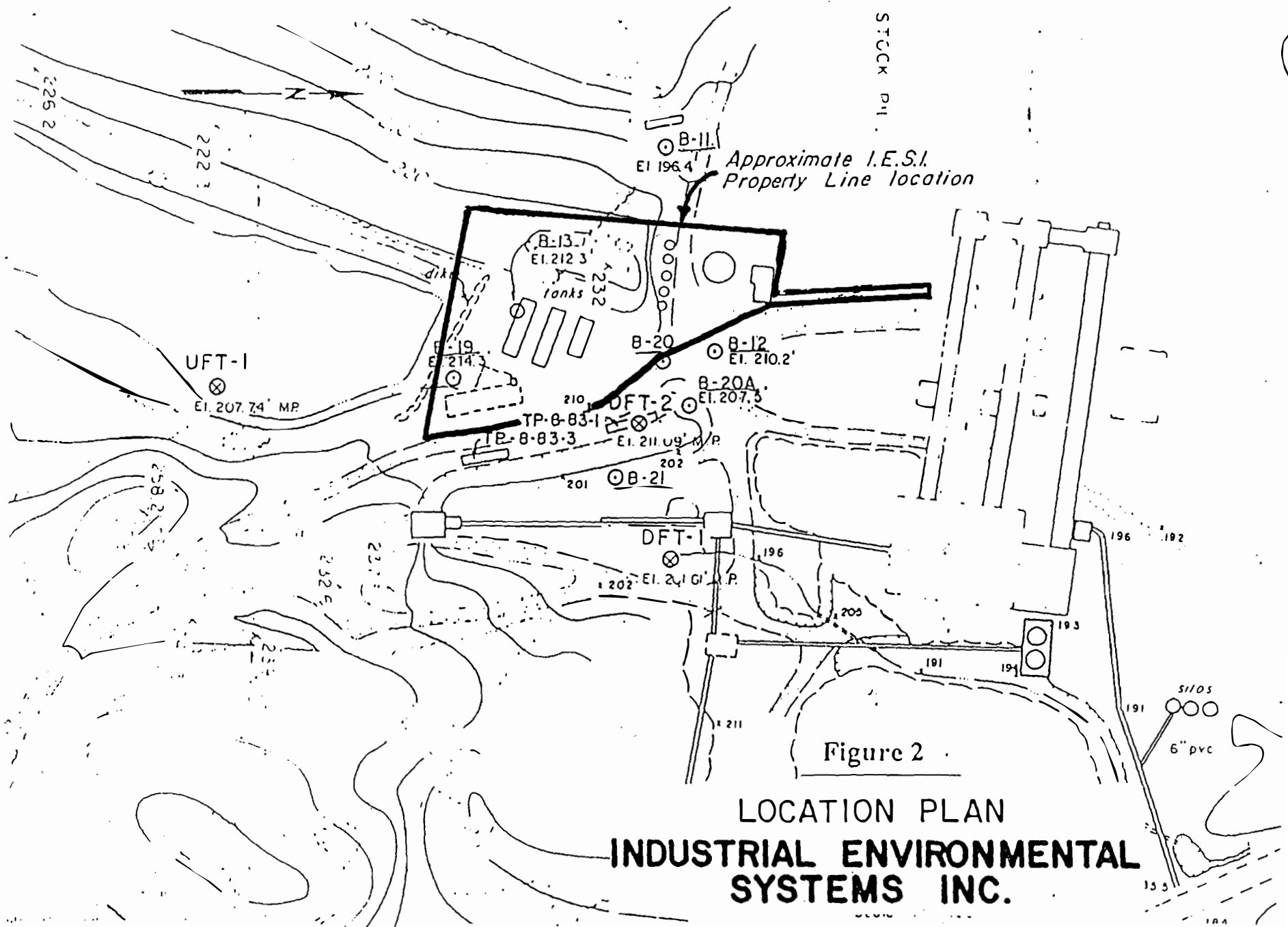
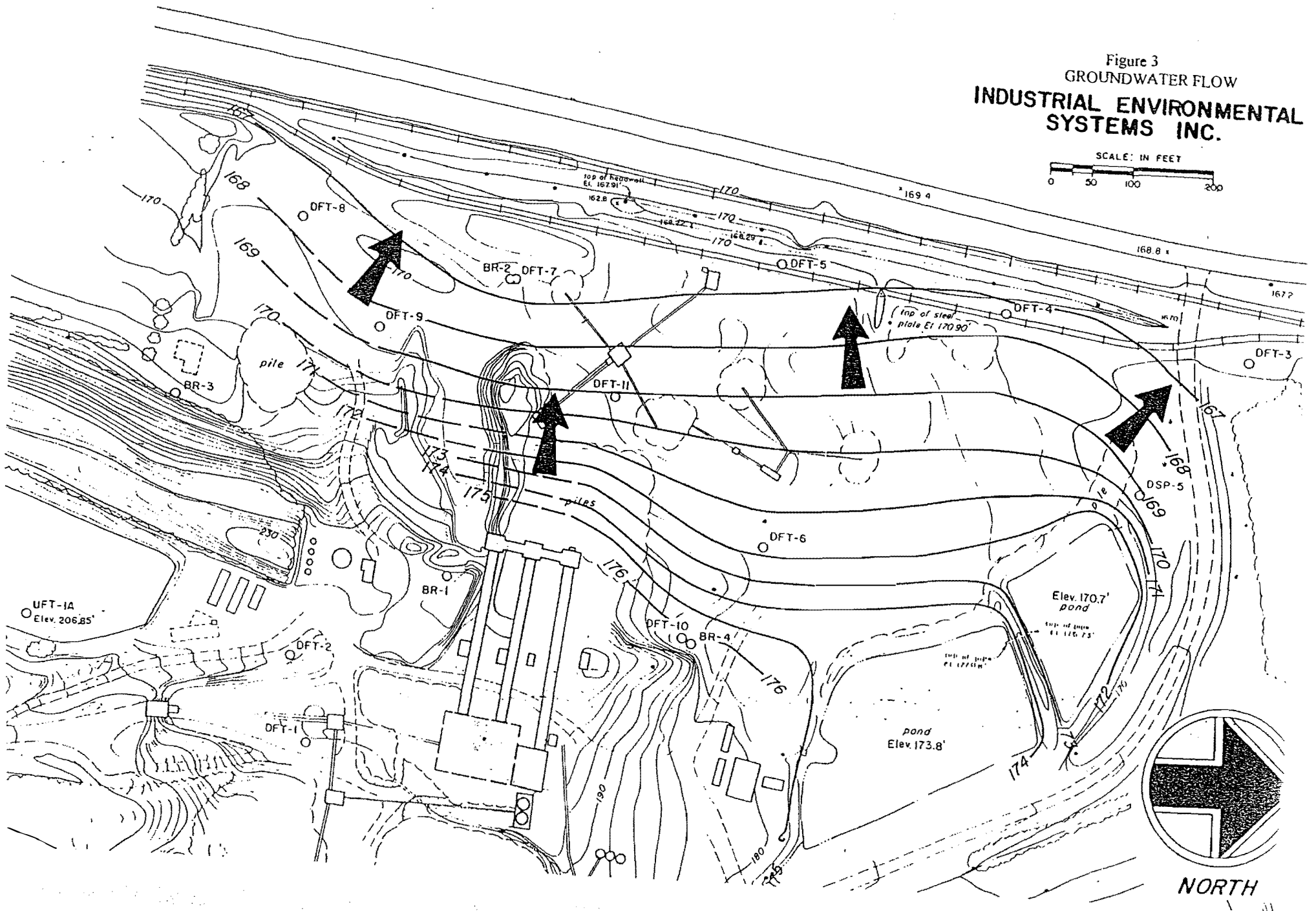
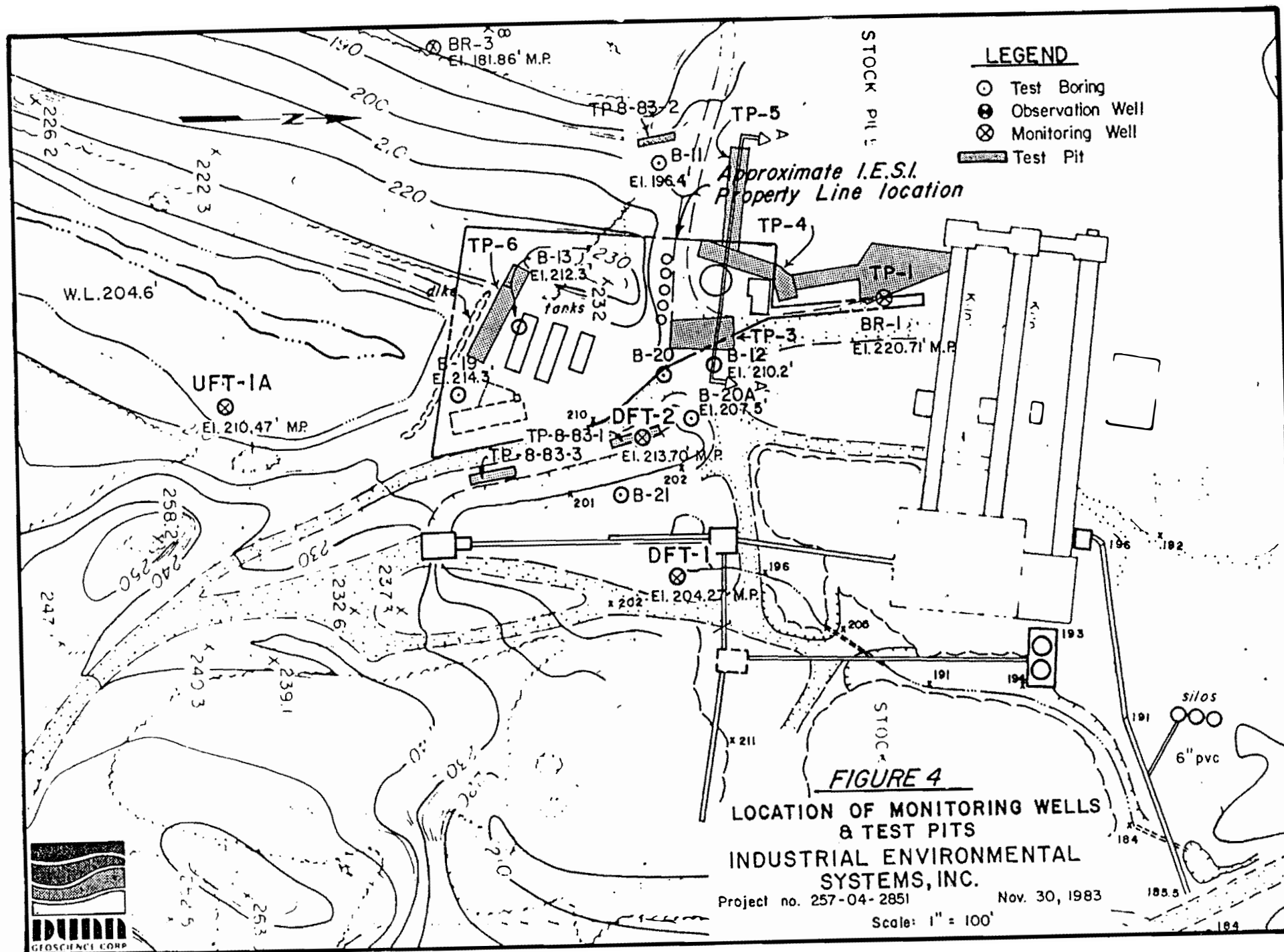
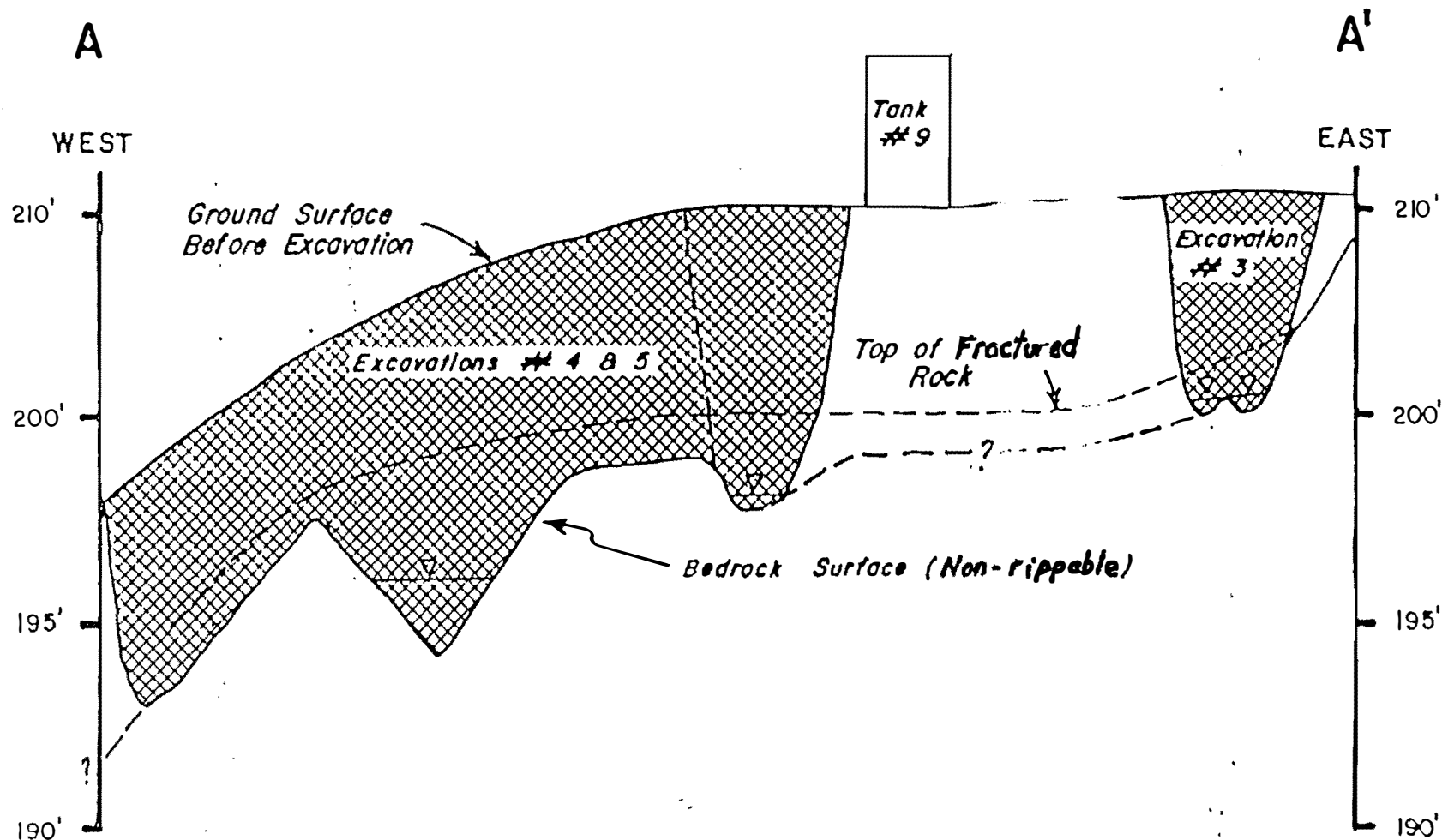


Figure 3
GROUNDWATER FLOW
INDUSTRIAL ENVIRONMENTAL
SYSTEMS INC.

SCALE: IN FEET
0 50 100 200







SCHEMATIC CROSS-SECTION INDUSTRIAL ENVIRONMENTAL SYSTEMS INC.

Town of Saugerties

Ulster County, New York

Not to scale

Figure 5



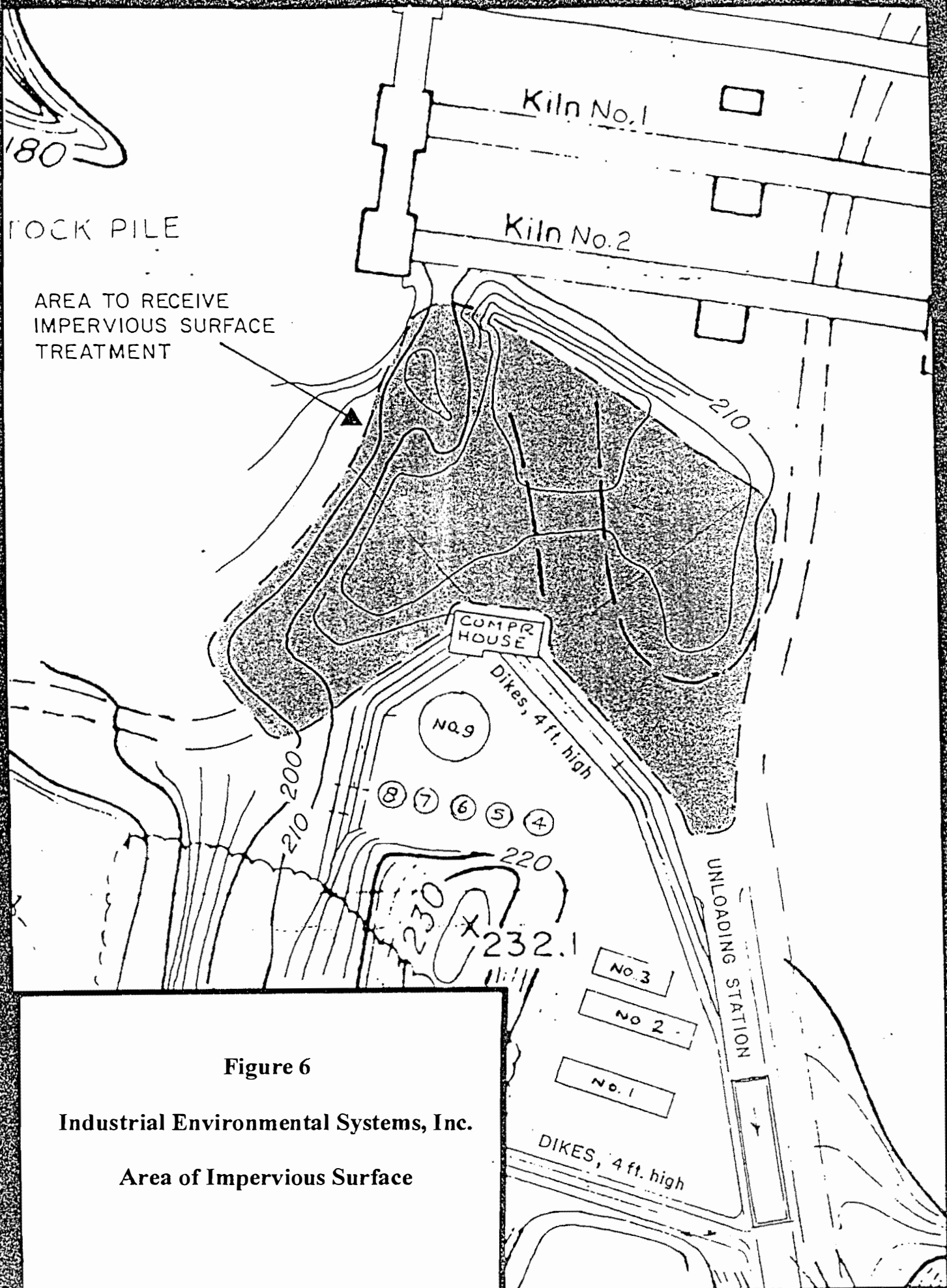


Figure 6

Industrial Environmental Systems, Inc.

Area of Impervious Surface

ATTACHMENTS

to accompany

**A Summary of the
Closure and Remedial Activities
Performed for
Industrial Environmental Systems, Inc.**

Prepared by

**Northeast Solite Corporation
(Mount Marion, NY)
and
ARG Environmental
(Latham, NY)**

June, 1999

ATTACHMENT I

ATTACHMENT II

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK 518-783-802					TEST BORING LOG			BORING NO. B-11	
PROJECT Evaluation of Geologic Conditions									
CLIENT Industrial Environmental Systems, Inc.								SHEET 1 OF 1	
DRILLING CONTRACTOR Warren George, Inc.								JOB NO. 257-1-2183	
PURPOSE Geologic Conditions								ELEVATION 212.3	
GROUNDWATER					CASING	SAMPLE	CORE	DATUM As Surveyed	
DATE	TIME	DEPTH	CASING	TYPE	None	SS	None	DATE STARTED 3/13/81	
				DIAMETER		1-3.8"		DATE FINISHED 3/13/81	
				WEIGHT		130		DRILLER M. Imperato	
				FALL		30"		INSPECTOR G.D. Casper	

DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON, PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS	
5		S-1	P			Gr cmfGa, cmfS, l\$	Rec = 1.6'	
			U				Dry - Moist	
			S				chemical odor	
			H					
		S-2	31			Or mfGa, cmfS, t\$	Rec = 1.4'	
			37				Moist	
			38			<u>Brown-Orange coarse to fine Gravel</u>	Slag	
			18			<u>little coarse to fine Sand, some Silt</u>		
		S-3	10			<u>(GM)</u> (Fill)		
			5			No Rec	Rec = 0	
			14			Misc Fill Slag, roots, Soil	Rec = 0.4'	
	10		S-4	9			Br \$s, mfS, tmG, o, rts, veg	Moist
			8					
			13					
			14			8.0'		
		S-5	11			Br yw mfGa(+), mfS, S Cy \$	Rec = 1.5'	
			14			<u>Brown to yellow medium to fine</u>	pp = 4.0 TSF	
			17			<u>GRAVEL and(+), medium fine Sand,</u>	Moist	
			17			<u>some Clayey Silt (GC) (Fill)</u>	(Fill?)	
		S-6	47			Same	Rec = 0.6'	
			100/1				Moist	
15							Bottom of Hole @ 10.6'	contains rock
								frags/brachio-
							pod fossils	
						Refusal on Limestone	Hole backfilled	
							with fill ma-	
							terial	
	20							

[illegible]

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK 518-783-8102				TEST BORING LOG			BORING NO. B-13	
PROJECT Evaluation of Geologic Conditions								
CLIENT Industrial Environmental Systems, Inc.							SHEET 1 OF 1	
DRILLING CONTRACTOR Warren George, Inc.							JOB NO. 257-1-2183	
PURPOSE Geologic Conditions							ELEVATION 212.3	
GROUNDWATER					CASING	SAMPLE	CORE	DATUM As Surveyed
DATE	TIME	DEPTH	CASING	TYPE	None	SS	None	DATE STARTED 3/16/81
3/16/81	9:30	5.0'	None	DIAMETER		1-3/8" ID		DATE FINISHED 3/16/81
				WEIGHT		140		DRILLER M. Imperato
				FALL		30		INSPECTOR G.D. Casper
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASS- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS
5		S-1	P			Gr cmfGs, cmfS, t ⁽⁺⁾ \$		Rec = 1.0' Dry
			U			<u>Gray coarse to fine GRAVEL</u>		
			S			<u>some, coarse to fine Sand,</u>		
			H			<u>trace⁽⁺⁾ Silt (GP) (Fill)</u>		
		S-2	11			No Rec.		
			9					
			7					
			5					
		S-3	7			Gr cmfGs, cmfS t ⁽⁺⁾ \$		Rec = 0.5' Wet chem odor
			4					
		8						
		9						
	S-4	8			Gr cmfGl, cmfS, t ⁽⁺⁾ \$		Rec = 1.2' Wet-Moist pp = 3.5 TSF	
		15			7.0'			
	S-4a	11			Br mfS, lmfG, l\$&C		Rec = 1.2' pp = 3.5 TSF Moist	
		12			<u>Brown medium to fine SAND, little</u>			
					<u>medium to fine Gravel, little SILT</u>			
	S-5	10			<u>& CLAY (GC) (Fill)</u>			
		16			10.0'			
		21						
		20						
10		S-6	8			Gr mfGt, cmfS, t\$		Rec = 1.2' Wet
			6			<u>Gray medium to fine GRAVEL trace,</u>		
			13			<u>coarse to fine Sand, trace SILT</u>		
			16			<u>(GW) (Fill)</u>		
		S-7	13			Same		
			16			13.6'		
		S-7a	10			Red brown SILT & CLAY some medium to		
			15			<u>fine Sand, trace fine Gravel (ML-CL)</u>		
		S-8	100/.5			<u>(Fill) 14.5'</u>		
15						Bottom of Hole @ 14.5'		Rec = 0.5' pp = 2.5 TSF Moist Refusal on rock Hole backfilled with Fill
20								

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK 518-783-8102					TEST BORING LOG			BORING NO. B-19	
PROJECT Evaluation of Geologic Conditions									
CLIENT Industrial Environmental Systems, Inc.									SHEET 1 OF 1
DRILLING CONTRACTOR Soil and Material Testing, Inc.									JOB NO. 257-1-2183
PURPOSE Geologic Conditions									ELEVATION 214.34'
GROUNDWATER					CASING	SAMPLE	CORE	DATUM As Surveyed	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS	- -	DATE STARTED 5/13/81	
5/13/81	- -	11.0	- -	DIAMETER	6"	1-3/8" ID	- -	DATE FINISHED 5/13/81	
			- -	WEIGHT	- -	140	- -	DRILLER H. Hallenbeck	
			- -	FALL	- -	30	- -	INSPECTOR J.P. Behan	

DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON, PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS	
5		S-1	11			Gr fGs, cfS, t\$	Rec = 1.7' dry	
			12					
			12					
			14					
		S-2	14			Same	Gray brown medium fine(+) GRAVEL some, coarse to Sand, trace clayey Silt (GW) (Fill)	Rec = 0.7' moist
			17					
			12					
			12					
		S-3	5			Gr br fGs(+), cfS, 1Cy\$	Rec = 1.7' moist	
			5					
			5					
			5					
	S-4	4	Br Cy \$ s, cfS, tFG	Rec = 1.6' moist				
		4						
		7						
	S-4A	6	Gr m f(+) G s, cfS, t(+) \$	pc wood in S-4				
10		S-5	14	Same	Rec = 1.3' moist			
			14					
			7					
			7					
		S-6	6	Same	Rec = 0.7' moist			
			7					
			7					
			7					
	S-7	4	Gr O \$	Brown gray SILT & CLAY little fine Sand (ML) (Fill)	Rec = 1.5' moist mottled			
		4						
	S-7A	6	Br gr \$ & Cl, fS		Rec = 1.0' moist mottled			
		7						
15		S-8	17	Br gr S & C s, mFS				
			12					
			7					
			7					
17.2 EOB		S-9	150	Gr mfGl, cfS GrcG		Rec = 0.4' moist weathered rock		
			150/.2'					
20					Bottom of Hole at 17.2'	Rec = 0.1' pc, Gray Shale Refusal		
					1 1/2" well installed screen 11.5-16.5'			
					Silica sand to 2' Grout to Surface			

[illegible]

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK 518-783-8102					TEST BORING LOG			BORING NO. B-20A	
PROJECT Evaluation of Geologic Conditions									
CLIENT Industrial Environmental Systems, Inc.								SHEET 1 OF 1	
DRILLING CONTRACTOR Soil & Material Testing, Inc.								JOB NO. 257-1-2183	
PURPOSE Geologic Conditions								ELEVATION 207.51	
GROUNDWATER					CASING	SAMPLE	CORE	DATUM As Surveyed	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS	-	DATE STARTED 5/13/81	
5/13/81		4.0'	-	DIAMETER	6"	1 3/8"	-	DATE FINISHED 5/13/81	
				WEIGHT	-	140	-	DRILLER H. Hallenbeck	
				FALL	-	30"	-	INSPECTOR J.P. Behan	

DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASS- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS
5		S-1	10			GrmfGs, cfS, t $\frac{1}{2}$	Rec 1.7' dry Slight Chemical Smell
			55				
			90				
			125				
		S-2	15			Brmf(+)Gs, cfS, 1(+)Cy $\frac{1}{4}$	Rec 1.7' Sample moist Chemical Smell
			12				
			14				
			12				
		S-3	12			same <u>Brown medium fine (+)</u>	Rec 1.5'
			11			<u>Gravel some, coarse to</u>	Strong Chemical
			12			<u>fine Sand, little (+)</u>	Smell; wet
			8			<u>clayey Silt (GW-GM)</u>	
	S-4	5			No Rec		
		5					
		6					
		8					
	S-5	125			BrfGa, cfS, 1(+)Cy $\frac{1}{4}$	Rec 0.4'Moist Chemical Smell	
10		S-6	125/.2'			GrcG	1 pc. cG Rec 0.1
15						Bottom of Hole @ 10.2'	1 $\frac{1}{2}$ " well installed fol- lowing completion of drilling screen 6-8.5' Silica sand to 2.0' Grout to surface
20							

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK 518-783-8102					TEST BORING LOG			BORING NO. B-21		
PROJECT Evaluation of Geologic Conditions									SHEET 1 OF 1	
CLIENT Industrial Environmental Systems, Inc.									JOB NO. 257-1-2183	
DRILLING CONTRACTOR Soil & Material Testing, Inc.									ELEVATION -	
PURPOSE Geologic Conditions									DATUM -	
GROUNDWATER					CASING	SAMPLE	CORE			
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS	-	DATE STARTED 5/13/81		
-	-	-	-	DIAMETER	6"	1 3/8"	-	DATE FINISHED 5/13/81		
				WEIGHT	-	140	-	DRILLER H. Hallenbeck		
				FALL	-	30"	-	INSPECTOR J.P. Behan		
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG			IDENTIFICATION		REMARKS
		S-1	20			<u>Brown gray medium fine (+)</u> <u>Gravel some, coarse to fine</u> <u>sand, trace Silt (GW)</u> <u>(Fill)</u>			Rec = 1.5' dry	
			75							
			90							
			125							
5		S-2	50.0"			Bottom of Hole @ 5.0'			Auger and split spoon refusal at 5.0'	
20										

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK 318-783-8102					TEST BORING LOG			BORING NO. UFT-1	
PROJECT Monitoring Well Installation								SHEET 1 OF 1	
CLIENT Northeast Solite Corporation								JOB NO. 257-1-2183	
DRILLING CONTRACTOR Soil & Material Testing								ELEVATION 204.90'	
PURPOSE Monitoring Well Installation								DATUM MSL	
GROUT/NO WATER					CASING	SAMPLE	CORE		
DATE	TIME	DEPTH	CASING	TYPE	HS Auger	SS	--	DATE STARTED 8-17-83	
8-17-83	10:45	4.2'	--	DIAMETER	6" OD	1 3/8" id	--	DATE FINISHED 8-17-83	
8-17-83	11:00	4.0'	--	WEIGHT	--	140#	--	DRILLER J. Hanson	
				FALL	--	30"	--	INSPECTOR G. Casper	

DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS
5		S-1	2	CL		Br Cy\$ s(+), fS; occ. pc mG 0.8' <u>Brown, tan SILT & CLAY little,</u> fine Sand; occasional piece <u>Gravel (CL) GLACIOLACUSTRINE</u> Tn; Same Lt Br or, S&C t, fS; mtld, freq. pkts gr purple clay, occ. pc. mfG Same Brown coarse to fine Sand, some (+) 5.0' Clayey Silt, and (-) medium fine Gravel (GM) 6.5' (GLACIAL TILL) End of Boring at 6.5' Well screen at 6.5'-3.5' Silica Sand at 6.5'-2.0' Bentonite seal at 2.0'-1.5' Cement grout with protective casing at 1.0'-0.0' Steel casing installed 8-19-83	Rec.= 1.2' Moist Rec.= 2.0' Moist Wetter at 3.7' Br gr mtld, sandier below 3.0' Augured to 4' Rec.= 0.8' Clay-Moist Till-Dry-WET at tip of spoon Auger Refusal
			3				
			4				
			5				
		S-2	9	CL			
			11				
			10				
			15				
		S-3	21	SM			
			13				
	S-3A	11					
		70/0.2					
10							
15							
20							

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK 918-783-8102						TEST BORING LOG		BORING NO. DFT-1	
PROJECT Monitoring Well Installation									
CLIENT Northeast Solite Corporation						SHEET 1 OF 1			
DRILLING CONTRACTOR Soil & Material Testing, Inc.						JOB NO. 257-1-2183			
PURPOSE Monitoring Well Installation						ELEVATION 198.64'			
GROUNDWATER						CASING	SAMPLE	CORE	DATUM MSL
DATE	TIME	DEPTH	CASING	TYPE	HS Auger	SS	--	DATE STARTED	8-17-83
				DIAMETER	6" OD		--	DATE FINISHED	8-17-83
				WEIGHT	--	140#	--	DRILLER	J. Hanson
				FALL	--	30"	--	INSPECTOR	G. Casper
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS	
5		S-1	9	SC		Gr br cmf S s, \$yC, s mfG (FILL) <u>Gray brown coarse to fine Sand some (+) Silt & Clay, some (-) medium fine Gravel; occasional piece of wood (SC)</u> (FILL) Same; occ pc wd	S-1 & S-2 Not retained		
			25						
			29						
		S-2	8	SC					
			9						
			7						
		S-3	13	SC					
			15						
			21						
		S-4	11	SC					
	6								
	7								
	7								
10		S-5	6	SC					
			4						
			5						
		S-6	1	SM-GM					
			2						
			3						
15			9						
			10						
			18						
			20						
			12						
20									

[illegible]

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102					TEST BORING LOG			BORING NO. BR-1	
PROJECT Groundwater Contamination Study								SHEET 1 OF 2	
CLIENT Industrial Environmental Systems, Inc.								JOB NO. 257-4-2851	
DRILLING CONTRACTOR Hanson Well Drilling & Pump Co., Inc.								ELEVATION 218.82	
PURPOSE Geologic Conditions & Well Installation								DATUM MSL	
GROUNDWATER					CASING	SAMPLE	CORE	DATE STARTED 1/17/84	
DATE	TIME	DEPTH	CASING	TYPE	Steel	--	NX	DATE FINISHED 2/1/84	
1/23/84	3:30PM	25.32'	30.00'	DIAMETER	4" ID	--	2 1/8"	DRILLER Roy Mason	
2/1/84	12:00PM	25.75'	30.00'	WEIGHT		--	--	INSPECTOR G. Casper/J. Wink	
2/1/84	Complete	5.5'	30.00'	FALL		--	--		

DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS
						Shale Fines and rock rubble Fill Material	Rock sleeve drilled with Ingersoll-Rand-Th 60 (Air-rotary-drill) Down to 30'
5						Same	Very low return in cuttings of fill - probably packing inside on sidewalls.
10							
15						Same	Drilling rate approx. 5 min/ft. @ 900 psi Gray return air
20							

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK						TEST BORING LOG		BORING NO. BR-1	
PROJECT Ground Water Contamination Study								SHEET 2 OF 2	
CLIENT Industrial Environmental Svstems. Inc.								JOB NO. 257-4-2851	
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS	
25						Limestone		Chip samples only	
30		Run #1				Run #1 - 30.0'-35.0' Limestone - Medium gray (N5) moderately hard, slightly weathered small amounts of calcite staining along small fractures. Medium to thinly bedded. Slightly stylolitic and fossiliferous.		No detectable variation in rock. Difficulty in blowing hole clean on 1/18/84 foam hole to clear cuttings Rec. = 86% RQD = 64% D-2 S-2 F-3	
35						35.0' Bottom of hole at 35.0' Monitoring well installed - 1-grouted 4" steel casing (benseal) 0.0'-30.0' 2- 5' bedrock open hole - 30.0'-35.0' Locking (4" diameter) cap installed on steel riser.			

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102					TEST BORING LOG			BORING NO.	
PROJECT Groundwater Contamination Study								BR-2	
CLIENT Industrial Environmental Systems, Inc.								SHEET 1 OF 2	
DRILLING CONTRACTOR Hanson Well Drilling & Pump Co., Inc.								JOB NO. 257-4-2851	
PURPOSE Geologic Conditions & Well Installation								ELEVATION 172.73'	
GROUNDWATER					CASING	SAMPLE	CORE	DATUM MSL	
DATE	TIME	DEPTH	CASING	TYPE	Steel	--	--	DATE STARTED 1/18/84	
1/23/84	9:30P	12'	216'	DIAMETER	6"	--	--	DATE FINISHED 1/23/84	
1/23/84	2:15P	81'	216'	WEIGHT	--	--	--	DRILLER Roy Mason	
				FALL	--	--	--	INSPECTOR G. Casper/J. Wink	
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION			REMARKS
						Fill - Shale fine and rock rubble =10.0'			Drilled open hole-with Ingersoll Rand TH-60 air rotary drill down to 148' using a 6" roller bit.
						Brown SILT and CLAY =20.0'			
						Brown, gray SILT and CLAY			
50									
100									
150									1/19/84
									Drove casing to 140'. Drilled to 200'. Drove casing to 180', roller bit to rock at 216'.
200									

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK						TEST BORING LOG		BORING NO. BR-2	
PROJECT Geologic Conditions & Well Installation								SHEET 2 OF 2	
CLIENT Industrial Enviromental Systems, Inc.								JOB NO. 257-4-2851	
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON, PER 6"	UNITED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS	
							216.0'	Casing down to 217'.	
							Limestone - Medium gray (N5) cherty	Chip samples only	
							237.0'	1/23/84	
250							Bottom of hole at 237.0' Monitoring well installed 1-6" steel casing - 0.0'-217' 2-6" open rock hole - 216'-237' Bolt on cap installed on steel riser	Drilled rock 6" hammer bit 216'-218'. Void from 218'-222' (rate: approx. 12 min/ft down to 227') (rate: approx. 8 min/ft from 227'-229'). Soft seam at 231.1'-232.0' Void at 234.5'-236.8'.	

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102						TEST BORING LOG		BORING NO.	
PROJECT Groundwater Contamination Study								BR-3	
CLIENT Industrial Environmental Systems, Inc.								SHEET 1 OF 2	
DRILLING CONTRACTOR Hanson Well Drilling & Pump Co., Inc.								JOB NO. 257-4-2851	
PURPOSE Geologic Condition & Well Installation								ELEVATION 180.03'	
GROUNDWATER				CASING	SAMPLE	CORE	DATUM MSL		
DATE	TIME	DEPTH	CASING	TYPE	Steel		DATE STARTED 1/23/84		
2/2/84	1:30 P	13.4'	14.5'	DIAMETER	4"		DATE FINISHED 2/3/84		
2/3/84	12:00 P	5.0'	14.5'	WEIGHT			DRILLER Roy Mason		
			FALL				INSPECTOR G. Casper/J. Wink		
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS	
						Brown SILT and CLAY (Glaciolacustrine) (0.0'-4.5')		No Sample (0.0'-4.5')	
5						Limestone		Rock at 4.5' drilled open hole with Ingersoll Rand TH-60 air rotary drill down to 14.5' Chip sample only	
10									
15		Run #1				Run #1 - 14.5'-19.0' Limestone - Medium gray (N5), medium to thinly bedded, moderately hard slightly stained along fractured sur- faces and coarser grained between individual bedding surfaces. Localized clasts and areas of bioturbation.		4" steel casing set with benseal grout from 1.0'- 14.5'. Rec. = 100% RQD = 96% D-2 S-2 F-2-3	
20									

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK					TEST BORING LOG		BORING NO. BR-3	
PROJECT Groundwater Contamination Study					SHEET 2 OF 2			
CLIENT Industrial Enviromental Systems, Inc.					JOB NO. 257-4-2851			
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNITED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS
		Run #2				Run #2 - 19.0'-24.0' Limestone - (Same) Void or Clay seam from 23.0'-23.4', not as fractured.		Rec. = 98% RQD = 94% D-2 S-2 F-2
25		Run #3				Run #3 - 24.0'-29.0' Limestone - (Same) Slightly stylolitic at 24.0', weathered brown fracture at 26.8'		Rec. = 96% RQD = 96% D-2 S-2 F-3
30		Run #4				Run #4 - 29.0'-34.0' Limestone - (Same)		Rec. = 100% RQD = 100% D-2 S-2 F-3
						34.0'		
35						Bottom of hole at 34.0' Monitoring well installed 4" steel casing with 20' rock sleeve. 1-4" steel casing - 0.0'-14.5' 2-Grout seal - 1.0'-14.5' 3-Rock sleeve - 14.5'-34.0'		

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102						TEST BORING LOG			BORING NO.	
PROJECT Groundwater Contamination Study									BR-4	
CLIENT Industrial Environmental Systems, Inc.									SHEET 1 OF 2	
DRILLING CONTRACTOR Hanson Well Drilling & Pump Co., Inc.									JOB NO. 257-4-2851	
PURPOSE Geologic Conditions & Well Installation									ELEVATION 177.95'	
GROUNDWATER						CASING	SAMPLE	CORE	DATUM MSL	
DATE	TIME	DEPTH	CASING	Type	Steel	--	NX	DATE STARTED 2/2/84		
2/3/84	11:30P	2.95	15.0'	DIAMETER	4" ID	--	2" ID	DATE FINISHED 2/2/84		
				WEIGHT	300 lbs	--	--	DRILLER Roy Mason		
			FALL	30"	--	--		INSPECTOR G. Casper/J. Wink		
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPoon. PER 6"	UNITED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION			REMARKS	
						Fill material			(No sample)	
						Brown SILT and CLAY			(No sample)	
						Limestone			Drilled with Ingersoll-Rand TH-60. Chip samples only-soft seam 7'-8'.	
									Set 4" steel casing down to 15.0'. Benseal grout 15.0'-2.0.	
5										
10										
15										
		Run #1				Run #1 - 15.0'-20.0' <u>Limestone</u> - Medium gray (N5) medium to thinly bedded, slightly stained along small fractures and individual bedding planes. Very fine grained with localized clasts of crystalline calcite.			Soft seam at 15.0' Rec.= 100% RQD = 92% D-2 S-2 F-3	
20										

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK							TEST BORING LOG	BORING NO. BR-4
PROJECT Groundwater Contamination Study							SHEET 2 OF 2	
CLIENT Industrial Environmental Systems, Inc.							JOB NO. 257-4-2851	
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASS- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS	
		Run #2				Run #2 - 20.0'-25.0' <u>Limestone</u> - (Same) stylolitic, increase in fracturing bedding planes	Rec. = 100% RQD = 88% D-2 S-2 F-3	
25		Run #3				Run #3 - 25.0'-30.0' <u>Limestone</u> - (Same) Not as fractured	Rec. = 100% RQD = 96% D-2 S-2 F-3	
30		Run #4				Run #4 - 30.0'-35.0' <u>Limestone</u> - (Same)	Rec. = 100% RQD = 96% D-2 S-2 F-3	
35						35.0' Bottom of hole at 35.0' Monitoring well installed		
						4" steel casing - 0.0'-15.0' 20' open 3" rock hole - 15.0'-30.0'		
40						Locking cap installed on steel riser.		

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DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102					TEST BORING LOG			BORING NO.	
PROJECT Groundwater Contamination Study					DFT-3				
CLIENT Industrial Environmental Systems, Inc.					SHEET 1 OF 5				
DRILLING CONTRACTOR Soil & Material Testing, Inc.					JOB NO. 257-4-2851				
PURPOSE Geologic Conditions & Well Installation					ELEVATION 169.76'				
GROUNDWATER					CASING	SAMPLE	CORE	DATUM MSL	
DATE	TIME	DEPTH	CASING	TYPE	Flush	SS	--	DATE STARTED 1/12/84	
				DIAMETER	.4" ID	1 ³ / ₈ " ID	--	DATE FINISHED 1/18/84	
				WEIGHT	300 lbs	140 lbs	--	DRILLER Duane VanBurkom	
				FALL	24"	30"	--	INSPECTOR Jeffrey T. Wink	
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS		
5		S-1	45	GP		Dk Br cmfG s, cmfS	Rec. = 1.6' pp = <.5 tsf Hard ≈.5 of frost		
			110						
			19						
			7						
		S-2	5	SP		Bk cmfS Brown, and gray GRAVEL some, coarse fine Sand, little Silt & Clay (GM) (FILL) 4.0'	Rec. = .1' pp = <.5 tsf Moist		
			4						
			4						
			2						
		S-3	2	ML- CL		Br, gr \$&C; vvd.	Rec. = .6' pp = 2.5 tsf Moist		
			2						
			4						
			7						
	S-4	3	ML- CL		Br, gr \$&C s, fS; mtld Brown, gray SILT & CLAY trace, fine Sand; mottled and varved (ML-CL) (GLACIOLACUSTRINE) Same; 1 fS; vvd.	Rec. = 1.4' pp = 4.25 tsf WET			
		5							
		8							
		12							
	S-5	6	ML- CL			Rec. 1.3' pp = 3.25 tsf WET			
		8							
		10							
		11							
10		S-6	5	SM- SC		Br mfS, a \$&C 10.0'-11.0' - Br mfS 11.0'-12.0' - Br, gr \$&C	Rec. = 1.4' pp = 2.0 tsf WET		
			7						
			7						
			8						
		S-7	4	CL		Br gr C&\$; vvd., occ. \$ lyr.	Rec. = 1.6' pp = <.5 tsf Silt layer @ 12.9'-13.2'		
			6						
			6						
			5						
15		S-8	3	CL		Same	Rec. = 1.6' pp = <.5 tsf WET Silt layer @ 14.6'-15.5'		
			2						
			1						
			1						
		S-9	WHR	CL		Br, gr C&\$ s, mfG	Rec. = 1.1' pp = <.5 tsf WET		
	WHR								
20							Ice rafted gravel		

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK						TEST BORING LOG		BORING NO. DFT-3	
PROJECT Groundwater Contamination Study								SHEET 2 OF 5	
CLIENT Industrial Environmental Systems, Inc.								JOB NO. 257-4-2851	
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON, PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS	
		S-10	WRH WRH WRH	ML- CL		Gr br \$&C; vvd, occ. thin \$ seam, freq. brown varves		Rec. = 1.9' WET pp = <2.5 tsf	
25		S-11	WRH WRH WRH WRH	ML- CL		Same		Rec. = 1.8' WET pp = <.25 tsf	
30		S-12	WRH 1 1	ML- CL		Same		Rec. = 1.8' WET pp = <.25 tsf	
		S-12A	1						
35		S-13	2 2 2 1	ML- CL		Gr br \$&C; vvd, freq. seams and partings \$		Rec. = 2.0' WET pp = <.25 tsf	
40		S-14	WRH 1 2 2	ML- CL		Gr br \$&C; vvd, freq. partings Cy\$		Rec. = 2.0' WET pp = <.25 tsf	

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK				TEST BORING LOG		BORING NO. DFT-3	
PROJECT Groundwater Contamination Study						SHEET 3 OF 5	
CLIENT Industrial Environmental Systems, Inc.						JOB NO. 257-4-2851	
DEPTH 'FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS
		S-15	WRH 1 1 2	ML- CL		Same; occ. thin seam Cy\$	Rec. = 2.0' WET pp = <.25 tsf
50		S-16	2 2 WRH 1	ML- CL		Same	Rec. = 2.0' WET pp = <.25 tsf
55		S-17	1 2 1 1	ML- CL		Same Gray brown SILT & CLAY; varved, frequent Silt seams and partings, frequent brown varves (ML-CL) (GLACIOLACUSTRINE)	Rec. = 2.0' WET pp = <.25 tsf
60		S-18	3 2 1 2	ML- CL		Same	Rec. = 2.0' WET pp = <.25 tsf
65		S-19	4 3 2 2	ML- CL		Same	Rec. = 2.0' WET pp = <.25 tsf

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK				TEST BORING LOG		BORING NO. DFT-3	
PROJECT Groundwater Contamination Study						SHEET 4 OF 5	
CLIENT Industrial Environmental Systems, Inc.						JOB NO. 257-4-2851	
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS
		S-20	6	ML- CL		Same	Rec. = 2.0' WET pp = <.25 tsf occ. stiffer C seams
			4				
			3				
			2				
75		S-21	4	ML- CL		Same	Rec. = 2.0' WET pp = <.25 tsf
			3				
			3				
			2				
80		S-22	4	ML- CL		Same	Rec. = 2.0' WET pp = <.25 tsf
			3				
			3				
			4				
85		S-23	2	ML- CL		Same	Rec. = 1.9' WET pp = <2.5 tsf
			2				
			3				
			3				
90		S-24	2	ML- CL		Same	
			3				
			3				
			4				

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK				TEST BORING LOG		BORING NO. DFT-3	
PROJECT Groundwater Contamination Study				SHEET 5 OF 5			
CLIENT Industrial Environmental Systems, Inc.				JOB NO. 257-4-2851			
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASS- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS
		S-25	3	ML-		Same	Rec. = 2.0' WET pp = <.25 tsf
			2	CL			
			3				
			2				
			P				
			U				
			S				
			H				
			↓				
100						100.0'	
						Bottom of Hole at 100.0'	
						Backfilled with alternating layers of shale fines and bentonite at 100.0'-9.0'	
						Bentonite seal at 9.0'-7.0'	
						Silica Sand at 7.0'-1.5'	
						Well screen - 2" PVC with mirafi wrap at 7.0'-2.0'	
						Bentonite seal at 1.5'-1.0'	
						Cement grout at 1.0'-0.0'	
						Installed protective casing and lock cap	

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DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102						TEST BORING LOG			BORING NO.	
PROJECT						Groundwater Contamination Study			DFT-5	
CLIENT						Industrial Environmental Systems, Inc.			SHEET 1 OF 1	
DRILLING CONTRACTOR						Soil and Material Testing, Inc.			JOB NO. 257-4-2851	
PURPOSE						Monitoring Well Installation			ELEVATION 171.93'	
GROUNDWATER						CASING	SAMPLE	CORE	DATUM MSL	
DATE	TIME	DEPTH	CASING	TYPE	Flush	SS	DATE STARTED 1/19/84			
				DIAMETER	4" ID	1 3/8" ID	DATE FINISHED 1/23/84			
				WEIGHT	300 lbs	140 lbs	DRILLER Duane VanBurkom			
				FALL	24"	30"	INSPECTOR Jeffrey Wink			
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION			REMARKS	
5	P								No sample (0.0'-5.0')	
	P									
	P									
	P									
	P									
		S-1	20			Gray, brown medium fine GRAVEL some Silt & Clay (GM) (FILL) 6.6'		Rec. = .9' WET-stiff		
		10								
		7								
		11								
		S-2	9			Brown SILT & CLAY; varved (ML-CL) (GLACIOLACUSTRINE) 9.0'		Rec. = 1.1' pp = 2.5 tsf WET-stiff		
		12	ML-							
		18	CL							
		22								
10						Bottom of Hole at 9.0'				
						Grouted hole with bentonite Pellets from 7.0'-9.0'				
						Monitoring well installed - 2" PVC threaded				
						1. Screened PVC and filter fabric 2.0'-7.0'				
						2. Sand filter pack 1.5'-7.0'				
						3. Bentonite pellets 1.0'-1.5'				
						4. Cement grout to surface 0.0'-1.0'				
15						Protective casing installed over PVC riser				
20										

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102				TEST BORING LOG				BORING NO.	
PROJECT Groundwater Contamination Study								DFT-6	
CLIENT Industrial Environmental Systems, Inc.								SHEET 1 OF 1	
DRILLING CONTRACTOR Soil & Material Testing, Inc.								JOB NO. 257-4-2851	
PURPOSE Monitoring Well Installation								ELEVATION 175.21'	
GROUNDWATER				CASING	SAMPLE	CORE	DATUM MSL		
DATE	TIME	DEPTH	CASING	TYPE	Flush	SS	DATE STARTED 1/23/84		
1/23/84	3:30PM	4.0'	5.0'	DIAMETER	4" ID	1 3/8" ID	DATE FINISHED 1/23/84		
				WEIGHT	300 lbs	140 lbs	DRILLER Duane VanBurkom		
				FALL	24"	30"	INSPECTOR Gary D. Casper		
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS	
5	P					5.5' Gray, brown medium fine GRAVEL (GP) (FILL) Br SyC; bioturbated Brown Silty CLAY; varved, bioturbated (CL) (GLACIOLACUSTRINE) Same; vvd. 9.0'		No sample (0.0'-5.0')	
	P							Tri-coned and washed (0.0'-5.0')	
	P								
	P								
	P								
		S-1A	21	GP				Rec. = 2.0'	
			11					Moist	
			9					Oily smell top of Silt	
		S-1B	12	CL				Rec. = 2.0'	
			9					Moist	
		S-2	12	CL					
			11						
			22						
10						Bottom of Hole at 9.0'			
						Backfilled to 7.0' with bentonite grout			
						Monitoring well installed - 2" threaded PVC			
						1. Screened PVC well and filter fabric 2.0'-7.0'			
						2. Sand filter pack 1.5'-7.0'			
						3. Bentonite pellets 1.0'-1.5', 7.0'-9.0'			
						4. Cement grout 0.0'-1.0'			
15						Protective casing installed over PVC riser.			

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102				TEST BORING LOG			BORING NO.	
PROJECT Groundwater Contamination Study							DFT-7	
CLIENT Industrial Environmental Systems, Inc.							SHEET 1 OF 1	
DRILLING CONTRACTOR Soil & Material Testing, Inc.							JOB NO. 257-4-2851	
PURPOSE Monitoring Well Installation							ELEVATION 173.30'	
GROUNDWATER				CASING	SAMPLE	CORE	DATUM MSL	
DATE	TIME	DEPTH	CASING	TYPE	Flush	SS	--	DATE STARTED 1/25/84
1/25/84	10:00P	5.8'	8.0'	DIAMETER	4" ID	1 3/8" ID	--	DATE FINISHED 1/25/84
				WEIGHT	300 lbs	140 lbs	--	DRILLER Duane VanBurkom
				FALL	24"	30"	--	INSPECTOR Jeffrey T. Wink
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION		REMARKS
5	P							No sample (0.0'-5.0')
	P							Tri-coned and washed (0.0'-5.0')
	P							
	P							
	P							
		S-1	24	GM		Gray coarse to fine GRAVEL little,		Rec. = 1.0'
			39	GC		Gray coarse to fine Gravel, little		pp = <.5 tsf
			48			Silt & Clay (GM-GC)		WET
			34			(FILL)		
								Tri-coned and washed (7.0'-8.0')
		S-2	5					Rec. = 1.1'
			7	CL		Gray, brown SILT & CLAY little, 8.0'		pp= 3.0 tsf
			16			fine Gravel; varved (ML-CL)		Moist
10			19			(GLACIOLACUSTRINE) 10.0'		
						Bottom of Hole at 10.0'		
						Backfilled hole with sand to 8.0'		
						Monitoring well installed - 2" PVC threaded		
						1. Screened PVC well and filter fabric - 3.0'-8.0'		
						2. Sand filter pack - 2.9'-10.0'		
						3. Bentonite pellets - 2.0'-2.9'		
						4. Cement grout - 0.0'-2.0'		
15						Protective casing installed over a 2.0' PVC riser.		

DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS	
5	P	S-1		GM- GC		Gray fill	No sample (0.0'-2.0') Tri-cone and washed (0.0'-2.0') Rec. = 1.1' pp = <.5 tsf WET	
	P							
	P		14					
	P		14					
	P	8						
	P	9						
	P	S-2A	7	GM-				
			4	GC			5.0'	
	P	S-2B	7	ML-				
			16	CL				
10		S-3	8	ML-		Br, gr S&C; mtld, vvd. Brown, gray SILT & CLAY; mottled and slightly varved (ML-CL) (GLACIOLACUSTRINE)	Rec. = .3' pp = 4.5 tsf Moist	
			17	CL				
15						Same	7.0'	
						Bottom of Hole at 7.0'		
						Monitoring well installed - 2" PVC threaded		
						1. Screened PVC and filter fabric 2.0'-7.0'		
						2. Sand filter pack - 2.0'-7.0'		
						3. Bentonite pellets - 1.0'-2.0'		
						4. Cement bentonite grout to surface 0.0'-1.0'		
						Protective casing installed over 3.0' PVC riser.		

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102				TEST BORING LOG				BORING NO.	
PROJECT Groundwater Contamination Study								DFT-9	
CLIENT Industrial Environmental Systems, Inc.								SHEET 1 OF 1	
DRILLING CONTRACTOR Soil & Material Testing, Inc.								JOB NO. 257-4-2851	
PURPOSE Monitoring Well Installation								ELEVATION 172.11'	
GROUNDWATER				CASING	SAMPLE	CORE	DATUM MSL		
DATE	TIME	DEPTH	CASING	TYPE	Flush	SS	--	DATE STARTED 1/26/84	
1/26/84	10:00P	4.5'	5.0'	DIAMETER	4" ID	1 3/8" ID	--	DATE FINISHED 1/27/84	
1/27/84	11:00P	4.5'	5.0'	WEIGHT	300 lbs	140 lbs	--	DRILLER Duane VanBurkom	
				FALL	24"	30"	--	INSPECTOR Jeffrey T. Wink	

DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS
5	P					Gray fill	No sample (0.0'-2.0')
	P						Tri-cone and washe
	P						NX Core (2.0'-4.0')
	P						Rec. = 2.0'
	P						RQD = 0.0'
5							D -3
							S-3
							F-4
5			65	GC			Rec. = .6'
			70				pp = 4.5 tsf
		S-1	23	CL			WET
			17				
5			8	CL			Rec. = 1.6'
		S-2	13				pp = 4.5 tsf
			18				WET
			27				
10						Br \$&C 1mfG; mtld (6.0'-7.0')	
						Brown, grav SILT & CLAY trace,	
						medium fine Gravel; slightly	
						mottled and varved (ML-CL)	
						(GLACIOLACUSTRINE)	
10						Br, gr \$&C; vvd.	
						Bottom of Hole at 9.0'	
						Monitoring Well Installed - 2" threaded PVC	
						1. Screened PVC well and filter fabric 4.0'-9.0'	
						2. Sand filter pack - 3.9'-9.0'	
15						3. Bentonite pellets - 3.0'-3.9'	
						4. Cement grout - 0.0'-3.0'	
						5' protective casing installed over	
						2.8' PVC riser.	
20							

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102					TEST BORING LOG		BORING NO.	
PROJECT Groundwater Contamination Study							DFT-10	
CLIENT Industrial Environmental Systems, Inc.							SHEET 1 OF 1	
DRILLING CONTRACTOR Soil & Material Testing, Inc.							JOB NO. 257-4-2851	
PURPOSE Monitoring Well Installation							ELEVATION 178.21'	
GROUNDWATER					CASING	SAMPLE	CORE	DATUM MSL
DATE	TIME	DEPTH	CASING	TYPE	Flush	SS		DATE STARTED 1/26/84
				DIAMETER	4" ID	1 3/8" ID		DATE FINISHED 1/26/84
				WEIGHT	300 lbs	140 lbs		DRILLER Duane VanBurkom
				FALL	24"	30"		INSPECTOR Jeffrey T. Wink

DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION	REMARKS	
5	P			ML- CL		Gray fill	No Sample (0.0'-3.0')	
	P					(FILL)	Tri-cone and washed (0.0'-3.0')	
	P							
	P	S-1	11				Br, gr \$&C 1, mfG; mtld	Rec. = 1.1'
	P		9				<u>Brown, gray SILT & CLAY some.</u>	pp = 4.5 tsf
	P		7				<u>medium fine Gravel; slightly</u>	Moist
	P		7				<u>mottled (CL) (GLACIOLACUSTRINE)</u>	
10	P	S-2	8	ML- CL		Br, gr \$&C a, mfG	Rec. = .3'	
	P		10					pp = 2.0 tsf
	P		17					Moist
	P		30					
15						Bottom of Hole at 7.0'		
						Monitoring well installed-2" threaded PVC		
						1. Screened PVC well and filter fabric 2.0'-7.0'		
						2. Sand filter pack 1.6'-7.0'		
						3. Bentonite pellets 1.0'-1.6'		
						4. Cement grout 0.0'-1.0'		
						5' protective casing installed over 3.0' PVC riser.		
20								

DUNN GEOSCIENCE CORPORATION LATHAM, NEW YORK (518) 783-8102					TEST BORING LOG			BORING NO.	
PROJECT Groundwater Contamination Study								DFT-11	
CLIENT Industrial Environmental Systems, Inc.								SHEET 1 OF 1	
DRILLING CONTRACTOR Soil & Material Testing, Inc.								JOB NO. 274-4-2851	
PURPOSE Monitoring Well Installation								ELEVATION 171.84'	
GROUNDWATER					CASING	SAMPLE	CORE	DATUM MSL	
DATE	TIME	DEPTH	CASING	TYPE	Flush	SS		DATE STARTED 1/27/84	
				DIAMETER	4" ID	1 3/8" ID		DATE FINISHED 1/27/84	
				WEIGHT	300 lbs	140 lbs		DRILLER Duane VanBurkom	
				FALL	24"	30"		INSPECTOR Jeffrey T. Wink	
DEPTH FT.	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSI- FICATION	GRAPHIC LOG	IDENTIFICATION			REMARKS
5	P			ML- CL	Run#1	Miscellaneous Fill; shot rock Gravel, Silt & Clay (GM-GP)			No Sample (0.0' - 2.0')
	P					2.0'			Tri-cone and washed
	P					Run #1 - 2.0'-5.0'			(0.0'-2.0')
	P					Limestone - Shot rock			Rec. = 2.0'
	P					(2.0'-4.0')			RQD = 0%
	P					SILT & CLAY			D-2
									S-3
									F-4
10		S-1	5	ML- CL		Br \$&C,s mfG; (Fill) 5.5'			Rec. = .25'
			6			Brown SILT & CLAY little, medium			pp = <.5 tsf
			13			fine Gravel (CL)			WET
			27			(GLACIOLACUSTRINE)			
		S-2	5			Same; Bk mtld			Rec. = 1.3'
			14						pp = >4.5 tsf
			22						WET
			38						
15						Bottom of Hole at 9.0' 9.0'			
						1. Screened PVC pipe and filter fabric - 2.0'-7.0'			
						2. Sand filter pack - 2.0'-7.0'			
						3. Bentonite pellets - 1.0'-2.0'			
						4. Cement grout - 0.0'-1.0'			
						5' protective casing installed over PVC riser.			
20									

ATTACHMENT III

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of Alleged Violation of Part 360
of Title 6 of the Official Compilation of Codes,
Rules and Regulations of the State of New York
("6 NYCRR") by

ORDER ON
CONSENT

INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC.

Respondent.

WHEREAS:

1. Respondent owns and operates a storage facility in the Town of Saugerties, County of Ulster, State of New York (the facility), which facility is used to accept for and dispense to Northeast Solite Corporation fuels used in the production of lightweight aggregate.
2. The fuel stored by Respondent is non-conforming fuel (defined for purposes of this Order as solvents, crankcase oils, lubricating oils and all other organic materials which do not constitute conforming fuels defined for purposes of this Order as coal, distillate fuel oil, residual fuel oil or gas which conform to the limitations specified in 6 NYCRR 225), made up primarily of spent solvents.
3. The component chemicals of the fuels stored by Respondent may pose a threat to the environment if improperly stored or handled.
4. The Department alleges that storage by Respondent of spent solvents constitutes the operation of a hazardous waste storage site requiring a permit pursuant to Section 360.8(a)(17) of 6 NYCRR.
5. The Department alleges that Respondent has neither applied for nor received the permit required by Part 360 of 6 NYCRR.

6. Section 360.8(a)(18) provides, in pertinent part:

"Records shall be maintained at every facility receiving hazardous wastes detailing the physical and chemical nature, origin, quantity, disposal location within the facility, disposal method for said wastes, and such other information as the department may require."

7. Pursuant to Section 71-1503.1 of the ECL, a violation of Part 360 of 6 NYCRR subjects the violator to a penalty of up to two thousand five hundred dollars and an additional penalty of up to one thousand dollars for each day during which such violation continues, and, in addition thereto, the violator may be enjoined from continuing such violation.

8. By Notice of Hearing and Complaint dated May 12, 1981, Department commenced formal administrative proceedings against Respondent for the violation of Part 360 of 6 NYCRR alleged herein. Said proceedings were commenced by Department for the purpose of obtaining an order directing Respondent to undertake remedial measures Department believes are necessary to protect the environment and public health. The execution of this Order has obviated the need for such formal proceedings.

9. Respondent has affirmatively waived its right to notice and hearing on these matters in the manner provided by law, and consents to the issuance and entry of this Order.

10. Respondent, by its consent to the issuance and entry of this Order, does not admit to any violation of law, rule or regulation.

NOW, having considered this matter and being duly advised, it is ORDERED that:

1. Respondent agrees to pay to the Department, on demand, a contempt penalty of one hundred dollars (\$100.00) per day for each day that Respondent exceeds any deadline imposed herein; provided, however, that the total contempt penalty assessed for violations of this Order shall not exceed three thousand dollars. The imposition of such contempt penalty in no way suspends the right of the Department to proceed with the imposition of any other penalty or fine pursuant hereto or to any applicable law, rule, regulation or order. Any determination by the Department or its duly authorized representative

regarding the assessment or amount of a contempt penalty pursuant to this Order shall be subject to judicial review in a proceeding brought pursuant to Article 78 of the New York Civil Practice Law and Rules.

II. Respondent shall comply with each of the requirements set forth in the Schedule of Compliance, hereby incorporated herein and made a part hereof.

III. Any violation alleged by the Department herein to have been committed by Respondent shall constitute a continuing alleged violation. However, the Department shall not institute any action or proceeding for penalties or other relief pursuant to law on account of any of such alleged violation for as long as Respondent adheres to and fully complies with the terms, provisions and conditions of this Order.

IV. For the purpose of insuring compliance herewith, duly authorized representatives of the Department shall be permitted access during reasonable business hours to Respondent's premises or facilities covered by this Order for the purposes of inspection and the making of such tests as may be deemed necessary to determine the status of Respondent's compliance herewith.

V. Respondent shall not be in default of compliance with this Order if Respondent is unable to comply with any provision of this Order because of the action of a national, state, local government body or court, the act of the Department, an act of God, war, strike, riot or catastrophe as to any of which the negligence or willful misconduct on the part of Respondent was not the proximate cause. Further, Respondent shall not be in default of compliance with this Order if Respondent is unable to comply with any provision of this Order because of the action of a third-party who is not an agent of Respondent as to which the negligence or willful misconduct on the part of Respondent was not the proximate cause. For purposes of this Order, commercial laboratories performing analysis for Respondent and/or Department shall not be deemed agents of Respondent. Respondent shall apply in writing to the Department immediately upon obtaining knowledge of such event and request an appropriate modification to this Order.

VI. If, for any reason, Respondent desires that any provision of this Order be changed, Respondent shall make timely written application therefor to the Department setting forth reasonable grounds for the relief sought. No change or modification to this Order shall be made or be effective except as may be specifically set forth in writing by such Department upon

timely written application by Respondent for the relief sought. The Department shall approve or disapprove every application for modification of this Order within thirty days of receipt of said application by the Department. Such modification requests not approved or disapproved within thirty days shall be deemed to be approved. Any approval, disapproval or other determination made by the Department or its duly authorized representative with respect to an application for modification of this Order shall be subject to judicial review in a proceeding brought pursuant to Article 78 of the New York Civil Practice Law and Rules.

VII. All reports and submissions herein required shall be made to the Region 3 Headquarters, New York State Department of Environmental Conservation, 21 South Putt Corners Road, New Paltz, New York, 12561. Attention: Paul D. Keller, Regional Director.

VIII. The provisions of this Order shall be deemed to bind Respondent, its officers, directors, agents, employees, successors and assigns, and all persons, firms and corporations acting under or for it.

IX. Any approvals, disapprovals or other determinations made by the Department or the Commissioner (or their duly authorized representatives) pursuant to this Order shall be subject to judicial review pursuant to Article 78 of the New York Civil Practice Law and Rules.

X. If, for any reason, judicial review pursuant to Article 78 of the New York Civil Practice Law and Rules is not available to Respondent, the approval, disapproval or other determination for which judicial review was unsuccessfully sought shall be subjected to binding arbitration by an arbitrator acceptable to both the Department and Respondent.

Dated: - Albany, New York
Aug. 10, 1981.

ROBERT F. FLACKE, Commissioner
New York State Department of
Environmental Conservation

By: *RP Luef*

TO: INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC.
c/o David E. Evans, Esq.
McGuire, Woods & Battle
1400 Ross Building
Richmond, Virginia 23219

cc: NORTHEAST SOLITE CORPORATION
P. O. Box 437
Kings Highway
Mount Marion, New York 12456

Attention: Mr. John Bragg

cc: SOLITE CORPORATION
P. O. Box 27211
Richmond, Virginia 23216

Attention: Mr. Edgar Martin

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives its rights to notice and hearing herein, and agrees to be bound by the provisions, terms and conditions contained herein.

INDUSTRIAL ENVIRONMENTAL SYSTEMS,
INC.

By: *E. E. Martin*

Title: *VP*

Date: *7/22/81*

STATE OF
COUNTY OF

On this *22nd* day of *July*, 1981, before me personally came *E. E. Martin*, to me know, who being by me duly sworn, did depose and say that he resides in *Richmond, Virginia*, that he is *Vice President* of INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC., the Corporation described in and which executed the foregoing instrument, and that he signed his name as authorized by said Corporation.

Ellen M. Taylor
Notary Public

My Commission Expires March 25, 1985

SCHEDULE OF COMPLIANCE

In order to comply with Article 27 of the ECL and the Rules and Regulations promulgated thereunder, and to assure proper storage and control of non-conforming fuels, Respondent shall perform the following remedial measures:

- I. A spill prevention, control and countermeasure plan shall be immediately developed and implemented in accordance with federal regulations (40 CFR 265, Subparts C and D).
- II. Within ten days of their receipt, Respondent must forward to the Department copies of all federal manifest forms received by the Respondent pursuant to the Rules and Regulations promulgated pursuant to the Federal Resource Conservation and Recovery Act.
- III. By August 15, 1981, Respondent shall propose to the Department, for the Department's approval, a site for the installation of one groundwater monitoring well downgradient of the facility. Within 21 days after receipt of the Department's approval, Respondent shall install the monitoring well downgradient of the facility. Said well shall be installed in accordance with the Department's approval. The downgradient well shall be sampled bi-monthly. All samples will be grab samples and shall be analyzed for concentrations of the following parameters (detection limits are bracketed; ug/l = micrograms per liter, mg/l = milligrams per liter, and pc/l - picocuries per liter):

Aluminum (10 ug/l)
Arsenic (10 ug/l)
Barium (10 ug/l)
Benzene (10 ug/l)
Cadmium (10 ug/l)
Chloride (2 mg/l)
Chromium (Hexavalent) (50 ug/l)
Copper (10 ug/l)
Cyanide (2 ug/l)
Flouride (100 ug/l)
Foaming Agents (25 ug/l)
Iron (10 ug/l)
Lead (10 ug/l)
Manganese (10 ug/l)
Mercury (10 ug/l)
Nickel (10 ug/l)
Nitrate (50 ug/l)
Oil and Grease (1 mg/l)
PCB (0.05 ug/l)

pH (0.1 su)
Phenols (1 ug/l)
Radioactivity (1000 pc/l Gross Beta-
in absence of Strontium 90 and
Alpha emitters; 3 pc/l Radium 226;
10 pc/l Strontium 90)
Selenium (10 ug/l)
Silver (10 ug/l)
Sulfate (2 mg/l)
Sulfide (200 ug/l)
Toluene (10 ug/l)
Xylene (10 ug/l)
Zinc (10 ug/l)

*Total Chlorinated Organics (Gas Chromatography
with Electron Capture Method) (1 ug/l)

**Hydrocarbon Scan (Gas Chromatography with
Mass Spectroscopy Detection Method) (1 ug/l)

*All substances detected at concentrations of 1 microgram or
greater, expressed as Lindane, shall be identified.

**All substances detected at concentrations of 1 microgram or
greater, expressed as Iso-octane, shall be identified.

- IV. As an alternative to III above, Respondent must,
by August 1, 1981, prove to the satisfaction of
the Department that the groundwater has not and
will not be contaminated by Respondent's opera-
tions and, therefore, monitoring wells are un-
necessary.
- V. Respondent shall file a completed application
by no later than August 15, 1981, for a permit
to operate a solid waste management facility
for the storage of hazardous wastes. The ap-
plication should address all aspects of the
applicable provisions of 6 NYCRR Part 360 and
40 CFR 265.
- VI. Respondent shall not store or accept for storage
PCBs, insecticides, pesticides or radioactive
materials.
- VII. Respondent shall develop and submit to the
Department not later than August 15, 1981, a
plan in a form acceptable to the Department which

assures that by September 1, 1981, fuels supplied to Northeast Solite Corporation at all times conform to the criteria specified in paragraph 3(G) of the Order on Consent executed by Northeast Solite Corporation of even date herewith.

ATTACHMENT IV

SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988

PARAMETERS	UFT-1			UFT-1A				
	SEPT 1983	NOV-DEC 1983	JAN-FEB 1984	JUNE 1984	MAY 1985	FEB 1985	AUG 1985	NOV 1985
ACETONE	--	--	--	--	--	--	--	--/--
1,1-DICHLOROETHANE	--	--	--	--	--	--	--	--/--
TRANS-1,2-DICHLOROETHENE	3	3	3	--	--	--	--	--/--
CHLOROFORM	3	3	3	--	--	--	--	--/--
METHYL ETHYL KETONE	--	--	--	--	--	--	--	--/--
1,2-DICHLOROETHANE	13	26	--	3	--	--	--	--/--
1,1,1-TRICHLOROETHANE	--	--	--	--	--	--	--	--/--
TRICHLOROETHENE	4	3	--	--	--	--	--	--/--
1,1,2-TRICHLOROETHANE	82	82	59	3	--	--	--	--/--
METHYL ISOBUTYL KETONE	--	--	--	--	--	--	--	--/--
TETRACHLOROETHENE	4	--	--	--	--	--	--	--/--
1,1,2,2-TETRACHLOROETHANE	5	6	4	--	--	--	--	--/--
TOLUENE	--	--	--	--	--	8	--	--/--
ETHYL BENZENE	--	--	--	--	--	--	--	--/--
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENE	--	--	--	--	--	--	--	--/--
TETRAHYDROFURAN	5500	--	--	--	--	--	--	--/--
ISOPROPYL ETHER	--	--	--	--	--	--	--	--/--
METHYLENE CHLORIDE	--	--	--	--	4.8	3.6	--	--/--
2-CHLOROETHYL VINYL ETHER	--	10	--	--	--	--	--	--/--
BENZENE	--	--	--	--	--	--	--	--/--
CHLOROBENZENE	--	--	--	--	--	--	--	--/--
1,2-DICHLOROPROPENE	--	--	--	--	--	--	--	--/--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--	--/--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--	--/--
1,2-DICHLOROETHENE	--	--	--	--	--	--	--	--/--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	8	--	--/--
TRICHLOROFLUOROETHANE	--	--	--	--	--	--	--	--/--
CHLOROMETHANE	--	--	--	--	--	--	--	--/--
CHLOROETHANE	--	--	--	--	--	--	--	--/--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--	--/--
DICHLOROBENZENES	--	--	--	--	--	--	--	--/--
VINYL CHLORIDE	--	--	--	--	--	--	--	--/--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--	--/--
P,P'-DDE	--	--	--	--	--	--	--	--/--
PCB 1242	--	--	--	--	--	--	--	--/--
PCB 1260	--	--	--	--	--	--	--	--/--

NA = Not Analyzed.
Units in PPB
±/γ = GC/MS, GC

SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988

DFT-1

PARAMETERS	SEPT 1983	NOV-DEC 1983	JAN-FEB 1984	APRIL 1984	JUNE 1984	AUG 1984	NOV 1984	FEB 1985	APRIL 1985
ACETONE	--	--	--	--	--	--	--	--	-/-
1,1-DICHLOROETHANE	1	3	--	8	18	16	8	18.7	4/5
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--	--	-/-
CHLOROFORM	--	--	--	--	--	--	--	--	-/3.1
METHYL ETHYL KETONE	--	35	--	--	--	--	--	--	-/-
1,2-DICHLOROETHANE	4	12	9	15	18	31	11	8	15/11.5
1,1,1-TRICHLOROETHANE	--	--	--	2	4	8	--	--	4/-
TRICHLOROETHENE	--	--	--	--	--	8	8	8	-/-
1,1,2-TRICHLOROETHANE	--	--	--	3	--	8	8	--	3/-
METHYL ISOBUTYL KETONE	--	25	--	--	--	--	--	--	-/-
TETRACHLOROETHENE	--	--	--	--	--	8	8	--	-/-
1,1,2,2-TETRACHLOROETHANE	--	2	--	--	--	--	--	--	-/-
TOLUENE	--	--	--	--	--	14	--	--	-/-
ETHYL BENZENE	--	--	--	--	--	--	--	--	-/-
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENE	--	--	--	--	--	--	--	--	-/-
TETRAHYDROFURAN	--	--	--	--	--	--	--	--	-/-
ISOPROPYL ETHER	--	--	--	--	--	--	--	--	-/-
METHYLENE CHLORIDE	--	--	--	--	--	--	--	4.8	-/-
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--	--	-/-
BENZENE	--	--	--	--	--	--	8	8	-/-
CHLOROBENZENE	--	--	--	--	--	--	8	--	-/-
1,2-DICHLOROPROPENE	--	--	--	--	--	--	--	--	-/-
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--	--	-/-
CARBON TETRACHLORIDE	--	--	--	--	--	--	--	--	-/1.3
1,2-DICHLOROETHENE	--	--	--	--	--	--	--	8	-/1.1
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--	--	-/-
TRICHLOROFLUOROETHANE	--	--	--	--	--	--	--	--	-/-
CHLOROMETHANE	--	--	--	--	--	--	--	--	-/-
CHLOROETHANE	--	--	--	--	--	--	--	--	-/-
1,1-DICHLOROETHENE	--	--	--	--	--	--	--	--	-/-
DICHLOROBENZENES	--	--	--	--	--	--	--	--	-/-
VINYL CHLORIDE	--	--	--	--	--	--	--	8	-/-
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--	--	-/-
P,P'-DDT	0.03	--	0.04	--	--	--	--	--	-/-
PCB 1242	--	--	--	--	--	--	--	--	-/-
PCB 1260	--	--	--	--	--	--	--	--	-/-

NA = Not Analyzed.

B = Originally reported as BMDL, outdated nomenclature (Below Method Detection Limit) signifying a qualitative detection less than the quantitation limit.

Units in PPB

GC/MS, GC

**SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988**

PARAMETERS	MAY 1985	AUG 1985	NOV 1985	JUNE 1988
ACETONE	--/--	--/--	--/--	--/--
1,1-DICHLOROETHANE	8.8 / 5.3	6 / --	5.3 / 5.1	2.2 // 2.1
TRANS-1,2-DICHLOROETHENE	--/--	--/--	--/--	--/--
CHLOROFORM	8 / --	--/--	--/--	--/--
METHYL ETHYL KETONE	--/--	--/--	--/--	--/--
1,2 DICHLOROETHANE	24.1 / 15	24 / 21	18 / 19.7	5.9 // 7.5
1,1,1-TRICHLOROETHANE	8 / 1.3	--/--	--/1	--/--
TRICHLOROETHENE	--/13.5	--/--	--/--	--/--
1,1,2-TRICHLOROETHANE	5.7 / --	--/--	3.2 / --	--/--
METHYL ISOBUTYL KETONE	--/--	--/--	--/--	--/--
TETRACHLOROETHENE	--/--	--/--	--/--	--/--
1,1,2,2-TETRACHLOROETHANE	--/--	--/--	--/--	--/--
TOLUENE	--/--	5 / --	--/--	--/--
ETHYL BENZENE	--/--	--/--	--/--	--/--
M-XYLENE	NA	NA	NA	--/--
O-XYLENE	NA	NA	NA	--/--
P-XYLENE	NA	NA	NA	--/1--
TOTAL XYLENE	--/--	--/--	--/--	--/--
TETRAHYDROFURAN	--/--	--/--	--/--	--/--
ISOPROPYL ETHER	--/--	--/--	--/--	--/--
METHYLENE CHLORIDE	4.8 / --	--/--	--/--	--/--
2-CHLOROETHYL-VINYL ETHER	--/--	--/--	--/--	--/--
BENZENE	8 / --	2 / --	--/--	--/--
CHLORO BENZENE	--/--	--/--	--/--	--/--
1,2 DICHLOROPROPENE	--/--	--/--	--/--	--/--
1,2 DICHLOROPROPANE	--/--	--/--	--/--	--/--
CARBON TETRACHLORIDE	--/--	--/--	--/--	--/--
1,2-DICHLOROETHENE	--/1.7	--/1.3	--/1.4	--/--
TRICHLOROFLUOROMETHANE	--/3.3	--/2	--/--	--/--
TRICHLOROFLUOROETHANE	--/--	--/--	--/--	--/--
CHLOROMETHANE	--/--	--/--	--/--	--/--
CHLOROETHANE	--/--	--/--	--/--	--/--
1,1-DICHLOROETHENE	--/--	--/--	--/--	--/--
DICHLOROBENZENES	--/--	--/--	--/--	--/--
VINYL CHLORIDE	--/--	--/--	--/--	--/--
1,2 DICHLOROBENZENE	--/--	--/	--/	--/--
P,P'-DDE	--/--	--/--	--/--	--/--
PCB 1242	--/--	--/--	--/--	--/--
PCB 1260	--/--	--/--	--/--	--/--

x // y = Original // Duplicate.

NA = Not Analyzed.

B = Originally reported as BMDL, outdated nomenclature (Below Method Detection Limit) signifying a qualitative detection less than the quantitation limit.

Units in PPB

GC/MS, GC

SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988

DFT-2

PARAMETERS	SEPT 1983	NOV-DEC 1983	JAN-FEB 1984	APRIL 1984	JUNE 1984
ACETONE	--	590		1400	--
1,1-DICHLOROETHANE	6	28		27	20
TRANS-1,2-DICHLOROETHENE	9	118		45	23
CHLOROFORM	13	--		150	93
METHYL ETHYL KETONE	--	450		400	--
1,2-DICHLOROETHANE	5	80		110	65
1,1,1-TRICHLOROETHANE	110	710		1100	690
TRICHLOROETHENE	4	36		180	85
1,1,2-TRICHLOROETHANE	--	19		11	7
METHYL ISOBUTYL KETONE	--	470		800	--
TETRACHLOROETHENE	20	170		290	130
1,1,2,2-TETRACHLOROETHANE	--	72		--	19
TOLUENE	--	500	D	1900	120
ETHYL BENZENE	--	--	R	--	--
M-XYLENE	NA	NA	Y	NA	NA
O-XYLENE	NA	NA		NA	NA
P-XYLENE	NA	NA		NA	NA
TOTAL XYLENE	--	580	W	1000	250
TETRAHYDROFURAN	--	--	E	--	--
ISOPROPYL ETHER	--	--	L	--	--
METHYLENE CHLORIDE	--	80	L	190	120
2-CHLOROETHYL VINYL ETHER	--	--		--	--
BENZENE	--	46		94	26
CHLOROBENZENE	--	3		12	3
1,2-DICHLOROPROPENE	--	3		--	--
1,2-DICHLOROPROPANE	--	--		--	2
CARBON TETRACHLORIDE	--	--		--	--
1,2-DICHLOROETHENE	--	--		--	--
TRICHLOROFLUOROMETHANE	--	--		--	--
TRICHLOROFLUOROETHANE	--	--		--	--
CHLOROMETHANE	--	--		--	--
CHLOROETHANE	--	--		--	--
1,1-DICHLOROETHENE	--	--		--	--
DICHLOROBENZENES	--	--		--	--
VINYL CHLORIDE	--	--		--	--
1,2-DICHLOROBENZENE	--	--		--	--
P,P'-DDE	--	--		--	--
PCB 1242	--	--		--	--
PCB 1260	0.22	0.95		1.17	0.15

NA = Not Analyzed.

D = Originally reported as RMCL, outdated nomenclature (Below Method Detection Limit) signifying a qualitative detection less than the quantitation limit.

Units in PPB

SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988

	DFT-4	DFT-6		DFT-6B	DFT-6C		DFT-7		DFT-9	
PARAMETERS	MAY 1985	APRIL 1984	JUNE 1984	AUG 1984	AUG 1985	NOV 1985	JUNE 1988	MAY 1985	AUG 1985	APRIL 1984
ACETONE	--	--	--	--	--	--	--	--	--	--
1-1-DICHLOROETHANE	--	23	8	47	--	26.4	21	--	--	2
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--	--	--	3
METHYL ETHYL KETONE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	--	--	--	--	--	5
1,1,1-TRICHLOROETHANE	--	66	81	8	1.3	2.1	--	--	--	7
TRICHLOROETHENE	4.7	--	--	--	--	--	--	3.2	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	4
METHYL ISOBUTYL KETONE	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	--	--	8	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--	--	--	3
TOLUENE	--	--	--	36	--	--	--	--	--	--
ETHYL BENZENE	--	--	--	--	--	--	--	--	--	--
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENE	--	--	--	--	--	--	--	--	--	--
TETRAHYDROFURAN	--	--	--	--	--	--	--	--	--	--
ISOPROPYL ETHER	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	1.2	--
2-CHLOROETHYL-VINYL ETHER	--	--	--	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	1.8	--	--	--	--	--
1,2-DICHLOROPROPENE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHENE	--	--	--	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--	--	--	--
TRICHLOROFLUOROETHANE	--	--	--	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	1.2	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	2.5	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	38	--	--	--	--	--
DICHLOROBENZENES	--	--	--	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--	--	--	--
P,P'-DDE	--	--	--	--	--	--	--	--	--	--
PCB 1242	--	--	--	--	--	--	--	--	--	--
PCB 1260	--	--	--	--	--	--	--	--	--	--

NA - Not Analyzed.

R - Originally reported as RMDL, outdated nomenclature [Below Method Detection Limit] signifying a qualitative detection less than the quantitation limit.

Units in PPB

SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988

	DFT-9 con't						DFT-10			DFT-11
PARAMETERS	JUNE 1984	AUG 1984	NOV 1984	APRIL 1985	MAY 1985	AUG 1985	AUG 1984	MAY 1985	AUG 1985	AUG 1984
ACETONE	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	2	B	--	1	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--	--	--	--
METHYL ETHYL KETONE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	1.3	1.1	--	--	--	--	--
1,1,1-TRICHLOROETHANE	3	B	--	1.1	--	--	--	--	--	--
TRICHLOROETHENE	--	B	B	--	11.4	--	--	4.9	--	--
1,1,2-TRICHLOROETHANE	--	B	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	--	--	--	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	2	--	--	--	--	--	66	--	--	B
TOLUENE	--	B	--	--	--	--	B	--	--	--
ETHYL BENZENE	--	--	--	--	--	--	--	--	--	--
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENE	--	--	--	--	--	--	--	--	--	--
TETRAHYDROFURAN	--	--	--	--	--	--	--	--	--	--
ISOPROPYLETHER	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	--	--	--	--	--	--	--	--	--	--
2-CHLOROETHYL-VINYL ETHER	--	--	--	--	--	--	--	--	--	--
BENZENE	--	--	--	--	1.1	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROPROPENE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHENE	--	--	--	--	1.4	1.3	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--	--	--	--
TRICHLOROFLUOROETHANE	--	--	--	--	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--	--	--	--
DICHLOROBENZENES	--	--	--	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLORODIFLUOROMETHANE	--	--	--	--	--	--	--	--	--	--
P,P'-DDE	--	--	--	--	--	--	--	--	--	--
PCB 1242	--	--	--	--	--	--	--	--	--	--
PCB 1260	--	--	--	--	--	--	--	--	--	--

NA - Not Analyzed.

B - Originally reported as BMDL, outdated nomenclature (Below Method Detection Limit) signifying a qualitative detection less than the quantitation limit
Units in PPB

SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988

	DFT-11A	DITCH		
PARAMETERS	MAY 1985	JUNE 1984	AUG 1984	NOV 1984
ACETONE
1-1-DICHLOROETHANE
TRANS-1,2-DICHLOROETHENE
CHLOROFORM
METHYL ETHYL KETONE
1,2-DICHLOROETHANE
1,1,1-TRICHLOROETHANE	..	2
TRICHLOROETHENE	1.8
1,1,2-TRICHLOROETHANE
METHYL ISOBUTYL KETONE
TETRACHLOROETHENE	22	..
1,1,2,2-TETRACHLOROETHANE
TOLUENE
ETHYL BENZENE
M-XYLENE	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA
TOTAL XYLENE
TETRAHYDROFURAN
ISOPROPYL ETHER
METHYLENE CHLORIDE	B
2 CHLOROETHYL-VINYL ETHER
BENZENE
CHLOROBENZENE
1,2-DICHLOROPROPENE
1,2-DICHLOROPROPANE
CARBON TETRACHLORIDE
1,2-DICHLOROETHENE	1.2
TRICHLOROFLUOROMETHANE
TRICHLOROFLUOROETHANE
CHLOROMETHANE
CHLOROETHANE
1,1-DICHLOROETHENE
DICHLOROBENZENES
VINYL CHLORIDE
1,2-DICHLOROBENZENE
P,P'-DDE
PCB 1242
PCB 1260

NA = Not Analyzed.

B = Originally reported as BMDL, outdated nomenclature (Below Method Detection Limit) signifying a qualitative detection less than the quantization limit.

Units in PPB

SUMMARY OF HISTORICAL GROUNDWATER MONITORING DATA
FORMER INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. FACILITY
MOUNT MARION, NEW YORK
SEPTEMBER 1983 TO JUNE 1988

	BR-1	BR-2	BR-3						BR-4	
PARAMETERS	NOV 1984	NOV 1984	AUG 1984	NOV 1984	APRIL 1985	MAY 1985	AUG 1985	NOV 1985	APRIL 1986	AUG 1986
ACETONE	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	--	--	--	--	2.1	3.9	--	7.4	--	--
TRANS-1,2-DICHLOROETHENE	--	--	--	--	--	--	--	--	--	--
CHLOROFORM	--	--	--	--	--	--	--	--	2	--
METHYL ETHYL KETONE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	--	--	--	--	2.1	--	5.7	--	--	--
1,1,1-TRICHLOROETHANE	--	--	--	--	1.1	--	1.7	1.7	--	--
TRICHLOROETHENE	--	--	--	--	--	3.8	--	--	--	--
1,1,2-TRICHLOROETHANE	--	--	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	--	B	11	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	--	--	--	--	--	--	--	--	--	--
TOLUENE	--	B	B	--	--	--	--	--	--	--
ETHYL BENZENE	--	--	--	--	--	--	--	--	--	--
M-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENE	--	--	--	--	--	--	--	--	--	--
TETRAHYDROFURAN	--	--	--	--	--	--	--	--	--	--
ISOPROPYL ETHER	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE	B	--	--	--	--	--	--	--	--	B
2-CHLOROETHYL VINYL ETHER	--	--	--	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROPROPENE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE	--	--	--	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	--	--	--	--	1.1	--	--	--	--	--
1,2-DICHLOROETHENE	--	--	--	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	--	--	--	--	--	--	--	--	--	--
TRICHLOROFLUOROETHANE	--	--	--	B	--	--	--	--	--	--
CHLOROMETHANE	--	--	--	--	--	--	--	--	--	--
CHLOROETHANE	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	--	--	--	--	--	--	--	--	--	--
DICHLOROBENZENES	--	--	--	--	--	--	--	--	--	--
VINYL CHLORIDE	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	--	--	--	--	--	--	--	--	--	--
P,P'-DDE	--	--	--	--	--	--	--	--	--	--
PCB 1242	--	--	--	--	--	--	--	--	--	--
PCB 1260	--	--	--	--	--	--	--	--	--	--

NA = Not Analyzed.

B = Originally reported as RMDL, outdated nomenclature (Below Method Detection Limit) signifying a qualitative detection less than the quantitation limit.

Units in PPB

ATTACHMENT V

ANALYTICAL REPORT

Company:

NORTHEAST SOLITE

KINGS HIGHWAY

MT. MARION

NY 12456

Report Summary

Report Date: 05-APR-91

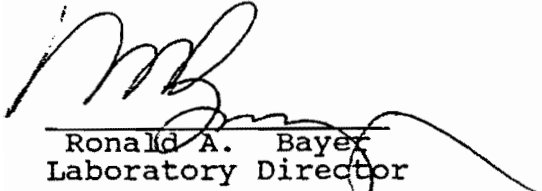
Project: STANDARD

Lab Number: 97355

Sample Number(s): 97355-001

to

97355-001


Ronald A. Bayer
Laboratory Director

Volatile Organics Analysis Data Sheet

Client Name: NORTHEAST SOLITE

Sample Number: 97355-001

Project Name: STANDARD

Date Collected: 20-MAR-91

Matrix: 2 GW/WW

Date Received: 20-MAR-91

Method: VOA-502.1

Analyzed Date: 29-MAR-91

Sample Location: AT WELL

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 97355-001

Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: NORTHEAST SOLITE

Sample Number: 97355-001

Project Name: STANDARD

Date Collected: 20-MAR-91

Matrix: 2 GW/WW

Date Received: 20-MAR-91

Method: VOA-503.1

Analyzed Date: 28-MAR-91

Sample Location: AT WELL

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: NORTHEAST SOLITE

Sample Number: 97355-001

Project Name: STANDARD

Date Collected: 20-MAR-91

Matrix: 2 GW/WW

Date Received: 20-MAR-91

Method: VOA-503.1

Analyzed Date: 28-MAR-91

Sample Location: AT WELL

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: NORTHEAST SOLITE

Sample Number: 97355-001

Project Name: STANDARD

Date Collected: 20-MAR-91

Matrix: 2 GW/WW

Date Received: 20-MAR-91

Method: VOA-502.1

Analyzed Date: 29-MAR-91

Sample Location: AT WELL

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 97355-001

Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

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P. 04

Volatile Organics Analysis Data Sheet

Client Name: NORTHEAST SOLITE

Sample Number: 97355-001

Project Name: STANDARD

Date Collected: 20-MAR-91

Matrix: 2 GW/WW

Date Received: 20-MAR-91

Method: VOA-503.1

Analyzed Date: 28-MAR-91

Sample Location: AT WELL

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

ANALYTICAL REPORT

Company:

NORTHEAST SOLITE

KINGS HIGHWAY

MT.MARION

NY 12456

Report Summary

Report Date: 26-APR-91

Project: STANDARD

Lab Number: 97355

Sample Number(s): 97355-001

to

97355-001



Ronald A. Bayer
Laboratory Director

Volatile Organics Analysis Data Sheet

Client Name: NORTHEAST SOLITE

Sample Number: 97355-001

Project Name: STANDARD

Date Collected: 20-MAR-91

Matrix: 2 GW/WW

Date Received: 20-MAR-91

Method: VOA-502.1

Analyzed Date: 29-MAR-91

Sample Location: AT WELL

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-8	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 97355-001

Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

ANALYTICAL REPORT

Company:

N.E. SOLITE

PO BOX 437

MT.MARION

NY 12456

Report Summary

Report Date: 29-MAY-91

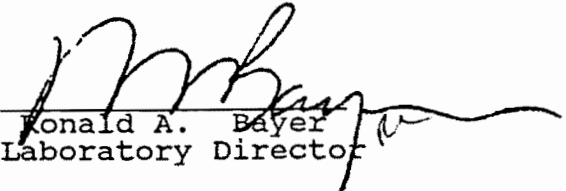
Project: STANDARD

Lab Number: 98775

Sample Number(s): 98775-001

to

98775-003


Ronald A. Bayer
Laboratory Director

Volatile Organics Analysis Data Sheet

Client Name: N.E. SOLITE

Sample Number: 98775-001

Project Name: STANDARD

Date Collected: 01-MAY-91

Matrix: 2 GW/WW

Date Received: 01-MAY-91

Method: VOA-502.1

Analyzed Date: 10-MAY-91

Sample Location: WELL 1, WELL 2, WELL 3

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 98775-001

Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: N.E. SOLITE

Sample Number: 98775-001

Project Name: STANDARD

Date Collected: 01-MAY-91

Matrix: 2 GW/WW

Date Received: 01-MAY-91

Method: VOA-503.1

Analyzed Date: 10-MAY-91

Sample Location: WELL 1, WELL 2, WELL 3

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

ANALYTICAL REPORT

Company: Northeast Solite Corp.

PO Box 437

Mt. Marion NY 12546

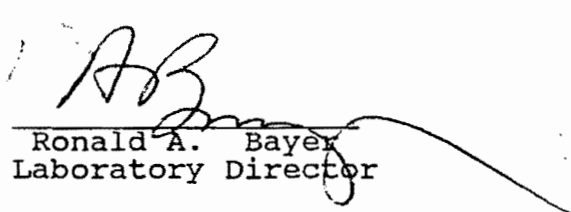
Report Summary

Report Date: 19-JUL-91

Project: STANDARD

Lab Number: 101084

Sample Number(s): 101084-01
to
101084-02


Ronald A. Bayer
Laboratory Director

Volatile Organics Analysis Data Sheet

Client Name: Northeast Solite Corp.

Sample Number: 101084-01

Project Name: STANDARD

Date Collected: 09-JUL-91

Matrix: 1 DrinkH2O

Date Received: 09-JUL-91

Method: VOA-502.1

Analyzed Date: 19-JUL-91

Sample Location: BEFORE FILTER

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 101084-01

Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: Northeast Solite Corp.

Sample Number: 101084-01

Project Name: STANDARD

Date Collected: 09-JUL-91

Matrix: 1 DrinkH2O

Date Received: 09-JUL-91

Method: VOA-503.1

Analyzed Date: 19-JUL-91

Sample Location: BEFORE FILTER

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: Northeast Solite Corp.

Sample Number: 101084-02

Project Name: STANDARD

Date Collected: 09-JUL-91

Matrix: 1 DrinkH2O

Date Received: 09-JUL-91

Method: VOA-502.1

Analyzed Date: 19-JUL-91

Sample Location: AFTER FILTER

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 101084-02

Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: Northeast Solite Corp.

Sample Number: 101084-02

Project Name: STANDARD

Date Collected: 09-JUL-91

-Matrix: 1 DrinkH2O

Date Received: 09-JUL-91

Method: VOA-503.1

Analyzed Date: 19-JUL-91

Sample Location: AFTER FILTER

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

ANALYTICAL REPORT

Company: Northeast Solite Corp.

PO Box 437

Mt. Marion NY 12546


Report Summary

Report Date: 19-JUL-91

Project: STANDARD

Lab Number: 101084

Sample Number(s): 101084-01
to
101084-02



Ronald A. Bayer
Laboratory Director

Volatile Organics Analysis Data Sheet

Client Name: Northeast Solite Corp.

Sample Number: 101084-01

Project Name: STANDARD

Date Collected: 09-JUL-91

Matrix: 1 DrinkH2O

Date Received: 09-JUL-91

Method: VOA-502.1

Analyzed Date: 19-JUL-91

Sample Location: BEFORE FILTER

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 101084-01

Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: Northeast Solite Corp.

Sample Number: 101084-01

Project Name: STANDARD

Date Collected: 09-JUL-91

Matrix: 1 DrinkH2O

Date Received: 09-JUL-91

Method: VOA-503.1

Analyzed Date: 19-JUL-91

Sample Location: BEFORE FILTER

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

Volatile Organics Analysis Data Sheet

Client Name: Northeast Solite Corp.

Sample Number: 101084-02

Project Name: STANDARD

Date Collected: 09-JUL-91

Matrix: 1 DrinkH2O

Date Received: 09-JUL-91

Method: VOA-502.1

Analyzed Date: 19-JUL-91

Sample Location: AFTER FILTER

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U

Continued ...

Samplenum: 101084-02


Method: VOA-502.1 continued

CAS NO.	Compound	ug/l	ug/l	Qualifier
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

ANALYTICAL REPORT

W.E. SOLITE
PO BOX 437
MT. MARION NY 12456

Report Date: 29-OCT-91
Project: STANDARD
Lab Number: 104491
Sample Number(s): 104491-01
to
104491-02



Ronald A. Bayer
Laboratory Director

Volatile Organics Analysis Data Sheet
Form I VOA

Client Name: N.E. SOLITE

Project Name: STANDARD

ETL Sample Number: 104491-01

Client I.D.: WELL BEFORE LIGHT

Date Collected: 15-OCT-91

Matrix: 1 DrinkH2O

Date Received: 15-OCT-91

Percent Solid: NA

Date Analyzed: 22-OCT-91

Method: VOA-502.1

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

Volatile Organics Analysis Data Sheet
Form 1 VOA

Client Name:	N.E. SOLITE	Project Name:	STANDARD
ETL Sample Number:	104491-01		
Client I.D.:	WELL BEFORE LIGHT		
Date Collected:	15-OCT-91	Matrix:	1 DrinkH2O
Date Received:	15-OCT-91	Percent Solid:	NA
Date Analyzed:	22-OCT-91	Method:	VOA-503.1
Comments:			

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

Volatile Organics Analysis Data Sheet
Form 1 VOA

Client Name: N.E. SOLITE

Project Name: STANDARD

ETL Sample Number: 104491-02

Client I.D.: AFTER UV LIGHT

Date Collected: 15-OCT-91

Matrix: 1_DrinkH2O

Date Received: 15-OCT-91

Percent Solid: NA

Date Analyzed: 22-OCT-91

Method: VOA-502.1

Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	.5		U
74-83-9	Bromomethane	.5		U
75-71-8	Dichlorodifluoromethane	.5		U
75-01-4	Vinyl Chloride	.5		U
75-00-3	Chloroethane	.5		U
75-09-2	Methylene Chloride	.5		U
75-69-4	Trichlorofluoromethane	.5		U
75-35-4	1,1-Dichloroethene	.5		U
74-97-5	Bromochloromethane	.5		U
75-34-3	1,1-Dichloroethane	.5		U
156-59-4	Trans-1,2-Dichloroethene	.5		U
156-59-4	cis-1,2-Dichloroethene	.5		U
67-66-3	Chloroform	.5		U
107-06-2	1,2-Dichloroethane	.5		U
590-20-7	2,2-Dichloropropane	.5		U
74-95-3	Dibromomethane	.5		U
71-55-6	1,1,1-Trichloroethane	.5		U
56-23-5	Carbon Tetrachloride	.5		U
75-27-4	Bromodichloromethane	.5		U
78-87-5	1,2-Dichloropropane	.5		U
563-58-6	1,1-Dichloropropene	.5		U
79-01-6	Trichloroethene	.5		U
142-28-9	1,3-Dichloropropane	.5		U
124-48-1	Dibromochloromethane	.5		U
79-00-5	1,1,2-Trichloroethane	.5		U
106-93-4	1,2-Dibromoethane	.5		U
75-25-2	Bromoform	.5		U
630-20-6	1,1,1,2-Tetrachloroethane	.5		U
96-18-4	1,2,3-Trichloropropane	.5		U
79-34-5	1,1,2,2-Tetrachloroethane	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
108-86-1	Bromobenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
10061-01-5	cis-1,3-Dichloropropene	.5		U
10061-02-6	trans-1,3-Dichloropropene	.5		U

Volatile Organics Analysis Data Sheet
Form I VOA

Client Name: N.E. SOLITE	Project Name: STANDARD
ETL Sample Number: 104491-02	
Client I.D.: AFTER UV LIGHT	
Date Collected: 15-OCT-91	Matrix: 1 Drink#20
Date Received: 15-OCT-91	Percent Solid: NA
Date Analyzed: 22-OCT-91	Method: VOA-503.1
Comments:	

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
71-43-2	Benzene	.5		U
79-01-6	Trichloroethene	.5		U
108-88-3	Toluene	.5		U
127-18-4	Tetrachloroethene	.5		U
108-90-7	Chlorobenzene	.5		U
100-41-4	Ethylbenzene	.5		U
106-42-3	p-Xylene	.5		U
108-38-3	m-Xylene	.5		U
95-47-6	o-Xylene	.5		U
98-82-8	Isopropylbenzene	.5		U
100-42-5	Styrene	.5		U
103-65-1	n-Propylbenzene	.5		U
98-06-6	tert-Butylbenzene	.5		U
95-49-8	2-Chlorotoluene	.5		U
106-43-4	4-Chlorotoluene	.5		U
108-86-1	Bromobenzene	.5		U
135-98-8	sec-Butylbenzene	.5		U
108-67-8	1,3,5-Trimethylbenzene	.5		U
99-87-6	4-Isopropyltoluene	.5		U
95-63-6	1,2,4-Trimethylbenzene	.5		U
106-46-7	1,4-Dichlorobenzene	.5		U
541-73-1	1,3-Dichlorobenzene	.5		U
104-51-8	n-Butylbenzene	.5		U
95-50-1	1,2-Dichlorobenzene	.5		U
87-68-3	Hexachlorobutadiene	.5		U
91-20-3	Naphthalene	.5		U
120-82-1	1,2,4-Trichlorobenzene	.5		U
87-61-6	1,2,3-Trichlorobenzene	.5		U

PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080178 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
PROGRAM: 110: STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE: 5524
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: N.E. SOLITE SITE #356005 BATH TAP
DESCRIPTION: P O BOX 437 MT. MARION NY 12456 ATTN: DOUG
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W-KET: VOLATILE ORGANICS & KETONES IN WATER
SAMPLE TYPE: 120: PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/04/20 11:20 DATE PRINTED: 92/05/20

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE REPORTED: 92/04/29 REPORT MAILED OUT

-----PARAMETER-----	-----RESULT-----
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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SUBMITTED BY: MAPSTONE

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080178 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LOCATION: N.E. SOLITE SITE #356005 BATH TAP
TIME OF SAMPLING: 92/04/20 11:20 DATE PRINTED: 92/05/20

-----PARAMETER-----	-----RESULT-----
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
M/P-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
ISOPROPYLBENZENE (Cumene)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (p-Cymene)	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF VOLATILE ALIQUOT	1

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 92/05/20 FINAL REPORT

-----PARAMETER-----	-----RESULT-----
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

ANALYSIS: ICP-1 ICP GROUPING 1

-----PARAMETER-----	-----RESULT-----
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L

**** CONTINUED ON NEXT PAGE ****

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080178 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LOCATION: N.E. SOLITE SITE #356005 BATH TAP
TIME OF SAMPLING: 92/04/20 11:20 DATE PRINTED: 92/05/20

-----PARAMETER-----	-----RESULT-----
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	48. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	108. MCG/L
IRON	16. MCG/L
MANGANESE	< 5. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	820. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	19. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	55.4 MG/L
POTASSIUM	2.7 MG/L
MAGNESIUM	10.5 MG/L
SODIUM	6.8 MG/L

***** END OF REPORT *****

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NEW YORK STATE DEPARTMENT OF HEALTH
HADSWORTH CENTER FOR LABORATORIES AND RESEARCH

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RESULTS OF EXAMINATION

FINAL REPORT

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SAMPLE ID: 928080179 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
PROGRAM: 110: STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE: 5524
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: SAGAZI KIT TAP SITE #356005
DESCRIPTION: CHERI SAGAZI 5094 OLD KINGS HWY SAUGERTIES
REPORTING LAB: 80: LABORATORY OF ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W-KET: VOLATILE ORGANICS & KETONES IN WATER
SAMPLE TYPE: 120: PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/04/20 11:45 DATE PRINTED: 92/05/20

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE REPORTED: 92/04/29 REPORT MAILED OUT

-----PARAMETER-----	-----RESULT-----
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080179 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LOCATION: SAGAZI KIT TAP SITE #356005
TIME OF SAMPLING: 92/04/20 11:45 DATE PRINTED: 92/05/20

PARAMETER	RESULT
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
M/P-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
ISOPROPYLBENZENE (Cumene)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (p-Cymene)	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
HEXACHLOROBTADIENE (C-46)	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF VOLATILE ALIQUOT	1

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 92/05/20 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L

**** CONTINUED ON NEXT PAGE ****

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080179 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LOCATION: SAGAZI KIT TAP SITE #356005
TIME OF SAMPLING: 92/04/20 11:45 DATE PRINTED: 92/05/20

PARAMETER	RESULT
LEAD	< 10. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	184. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	< 5. MCG/L
IRON	< 10. MCG/L
MANGANESE	5. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	2450. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	211. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	69.5 MG/L
POTASSIUM	1.5 MG/L
MAGNESIUM	14.5 MG/L
SODIUM	18.4 MG/L

**** END OF REPORT ****

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

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PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080177 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
PROGRAM: 110: STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE: 5524
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: FIN PAN TANK TAP SITE #356005
DESCRIPTION: OLD KINS HWY AND TISSEL RD MT. MARION
REPORTING LAB: - - - TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W-KET: VOLATILE ORGANICS & KETONES IN WATER
SAMPLE TYPE: 120: PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/04/20 13:55 DATE PRINTED: 92/05/20

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE REPORTED: 92/04/29 REPORT MAILED OUT

-----PARAMETER-----	-----RESULT-----
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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PAGE 2

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080177 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LOCATION: FIN PAN TANK TAP SITE #356005
TIME OF SAMPLING: 92/04/20 13:55 DATE PRINTED: 92/05/20

PARAMETER	RESULT
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
M/P-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
ISOPROPYLBENZENE (Cumene)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (p-Cymene)	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF VOLATILE ALIQUOT	1

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 92/05/20 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

ANALYSIS: ICP-1 ICP GROUPING 1

PARAMETER	RESULT
MERCURY	< 0.2 MCG/L
ARSENIC	< 10. MCG/L
SELENIUM	< 5. MCG/L

**** CONTINUED ON NEXT PAGE ****

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080177 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00

POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER

LOCATION: FIN PAN TANK TAP SITE #356005

TIME OF SAMPLING: 92/04/20 13:55

DATE PRINTED: 92/05/20

PARAMETER	RESULT
LEAD	43. MCG/L
BERYLLIUM	< 1. MCG/L
SILVER	< 10. MCG/L
BARIUM	259. MCG/L
CADMIUM	< 5. MCG/L
COBALT	< 5. MCG/L
CHROMIUM	< 5. MCG/L
COPPER	102. MCG/L
IRON	186. MCG/L
MANGANESE	44. MCG/L
NICKEL	< 5. MCG/L
STRONTIUM	500. MCG/L
TITANIUM	< 5. MCG/L
VANADIUM	< 5. MCG/L
ZINC	35. MCG/L
MOLYBDENUM	< 20. MCG/L
ANTIMONY	< 80. MCG/L
TIN	< 50. MCG/L
THALLIUM	< 80. MCG/L
ALUMINUM	< 100. MCG/L
CALCIUM	27.3 MG/L
POTASSIUM	1.0 MG/L
MAGNESIUM	5.8 MG/L
SODIUM	16.7 MG/L

**** END OF REPORT ****

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080180 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
PROGRAM: 110: STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE: 5524
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: FARM DELI KIT TAP SITE #356005
DESCRIPTION: ANDY AND JACKIE LABARGE 5100 OLD KINGS HWY SAUGERTIES
REPORTING LAB: 80: LABORATORY OF ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W-KET: VOLATILE ORGANICS & KETONES IN WATER
SAMPLE TYPE: 120: PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/04/20 13:30 DATE PRINTED: 92/05/21

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/05/21 FINAL REPORT (REV)

-----PARAMETER-----	-----RESULT-----
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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PAGE 2

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080180 SAMPLE RECEIVED: 92/04/21/ CHARGE: 19.00
POLITICAL SUBDIVISION: SAUGERTIES V. COUNTY: ULSTER
LOCATION: FARM DELI KIT TAP SITE #356005
TIME OF SAMPLING: 92/04/20 13:30 DATE PRINTED: 92/05/21

-----PARAMETER-----	-----RESULT-----
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
M/P-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
ISOPROPYLBENZENE (Cumene)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (p-Cymene)	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF VOLATILE ALIQUOT	1

REVISION DATE 92/05/20, ABOVE RESULT VALUE CHANGED, WAS:

6

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE REPORTED: 92/05/20 REPORT MAILED OUT

-----PARAMETER-----	-----RESULT-----
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

*** CONTINUED ON NEXT PAGE ***

PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928080181 SAMPLE RECEIVED: 92/04/21/ CHARGE: 14.00
PROGRAM: 110: STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE: 5500
POLITICAL SUBDIVISION: ULSTER COUNTY: ULSTER
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: TRIP BLANK-7 ULSTER CO. WATER SAMPLES
DESCRIPTION: WITH SAMPLE #928080174 TO 928080180 DATE PREPARED: 4/6/92
REPORTING LAB: 80: LABORATORY OF ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W-KET: VOLATILE ORGANICS & KETONES IN WATER
SAMPLE TYPE: 297: FIELD BLANK / TRIP BLANK
TIME OF SAMPLING: 92/04/20 DATE PRINTED: 92/05/20

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE REPORTED: 92/04/29 REPORT MAILED OUT

-----PARAMETER-----	-----RESULT-----
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(1), RO(1), LPHE(1), FED(), INFO-P(), INFO-L()

DIRECTOR OF ENVIRONMENTAL SANITATION
ULSTER COUNTY HEALTH DEPT.
300 FLATBUSH AVE.
KINGSTON, N.Y. 12401

SUBMITTED BY: MAPSTONE

PAGE 2

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 928030181 SAMPLE RECEIVED: 92/04/21/ CHARGE: 14.00
POLITICAL SUBDIVISION: ULSTER COUNTY: ULSTER
LOCATION: TRIP BLANK-7 ULSTER CO. WATER SAMPLES
TIME OF SAMPLING: 92/04/20 DATE PRINTED: 92/05/20

-----PARAMETER-----	-----RESULT-----
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
M/P-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
ISOPROPYLBENZENE (Cumene)	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
4-ISOPROPYLTOLUENE (p-Cymene)	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
PH OF VOLATILE ALIQUOT	1

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 92/05/20 FINAL REPORT

-----PARAMETER-----	-----RESULT-----
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

ANALYTICAL REPORT

Northeast Solids Corp.
PO Box 437
Mt. Marion NY 12546

Post-It® brand fax transmittal memo 7671

of pages » Z

To <i>Eure, Jewett</i>	From <i>Lindner</i>
Co.	Co.
Dept.	Phone #
Fax #	Fax #

Report Date:	11-MAY-92
Project:	STANDARD
Lab Number:	110948
Sample Number(s):	110948-01

RMB
Ronald A. Bayer
Laboratory Director

Volatile Organics Analysis Data Sheet
Form 1 VOA

Client Name: Northeast Solite Corp. Project Name: STANDARD
 ETL Sample Number: 110948-01
 Client I.D.: SEEP AFTER FILTER
 Date Collected: 04-MAY-92 Matrix: 2 GW/WF
 Date Received: 06-MAY-92 Percent Solid: NA
 Date Analyzed: 07-MAY-92 Method: VOA-624
 Comments:

CAS NO.	Compound	Detection Limit ug/l	Conc. ug/l	Data Qualifier
74-87-3	Chloromethane	10		U
74-83-9	Bromomethane	10		U
75-01-4	Vinyl Chloride	10		U
75-00-3	Chloroethane	10		U
75-09-2	Methylene Chloride	5		U
75-69-4	Trichlorofluoromethane	5		U
75-35-4	1,1-Dichloroethane	5		U
75-64-3	1,1-Dichloroethane	5		U
156-60-5	trans-1,2-Dichloroethene	5		U
67-66-3	Chloroform	5		U
107-06-2	1,2-Dichloroethane	5		U
71-55-6	1,1,1-Trichloroethane	5		U
56-23-5	Carbon tetrachloride	5		U
75-27-4	Bromodichloromethane	5		U
78-87-5	1,2-Dichloropropene	5		U
10061-01-5	cis-1,3-Dichloropropene	5		U
79-01-8	Trichloroethene	5		U
71-43-2	Benzene	5		U
124-48-1	Dibromochloromethane	5		U
10061-02-6	trans-1,3-Dichloropropene	5		U
79-00-5	1,1,2-Trichloroethane	5		U
110-75-8	2-Chloroethylvinyl ether	5		U
75-25-2	Bromoform	5		U
79-34-5	1,1,2,2-Tetrachloroethane	5		U
127-18-4	Tetrachloroethene	5		U
108-88-3	Toluene	5		U
108-90-7	Chlorobenzene	5		U
100-41-4	Ethylbenzene	5		U
541-73-1	1,3-Dichlorobenzene	5		U
95-50-1	1,2-Dichlorobenzene	5		U
106-46-7	1,4-Dichlorobenzene	5		U

ATTACHMENT VI

**SUMMARY OF HISTORICAL SEEP
MONITORING DATA - IESI**

PARAMETERS	Sep-83	Sep-83	Nov-83	Jan-84	Apr-84	Jun-84	Jul-84	Aug-84	Aug-84
ACETONE	120	130		490	1900				
1,1-DICHLOROETHANE	9	2		7	7	3			
TRANS-1,2-DICHLOROETHENE		3		8	3				
CHLOROFORM	10	2	10	10	27	3	2		
METHY ETHYL KETONE	40	30	90	300	1200				
1,2-DICHLOROETHANE	20	6		19	77	10	6	B	8
1,1,1-TRICHLOROETHANE	10	1		9	18	4	2.1		1.1
TRICHLOROETHENE	6			5	6		1.4	B	1
1,1,2-TRICHLOROETHANE	2				3				
METHYL ISOBUTYL KETONE	58	25	88	240	1200				
TETRACHLOROETHENE	4			5	4	3	4	B	1.4
1,1,2,2-TETRACHLOROETHANE	4	2		3	6				
TOLUENE	4	2	13	92					NA
ETHYLBENZENE	9	3		16					NA
m-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENE	65	19	77	160					
TETRAHYDROFURAN	97	46							
ISOPROPYL ETHER	11	3							
METHYLENE CHLORIDE					70				
2-CHLOROETHYL VINYL ETHER									
BENZENE				5					NA
CHLOROBENZENE									
1,2-DICHLOROPROPENE									
1,2-DICHLOROPROPANE					5				
CARBON TETRACHLORIDE									
1,2-DICHLOROETHENE									
TRICHLOROFLUOROMETHANE									
TRICHLOROFLUROETHANE									
CHLOROMETHANE									
CHLOROETHANE									
1,1-DICHLOROETHENE							1.3		1.6
DICHLOROBENZENES									
VINYL CHLORIDE									
1,2-DICHLOROBENZENE									NA

NA = not analyzed

Units in ug/L = ppb

**SUMMARY OF HISTORICAL SEEP
MONITORING DATA - IESI**

PARAMETERS	Aug-84	Aug-84	Sep-84	Oct-84	Oct-84	Nov-84	Nov-84	Dec-84	Dec-84
ACETONE	NA			NA	NA		NA	NA	NA
1,1-DICHLOROETHANE								NA	
TRANS-1,2-DICHLOROETHENE								NA	
CHLOROFORM								NA	
METHY ETHYL KETONE	NA			NA	NA				
1,2-DICHLOROETHANE	3.1	2	2			B		NA	
1,1,1-TRICHLOROETHANE								NA	
TRICHLOROETHENE						B		NA	
1,1,2-TRICHLOROETHANE								NA	
METHYL ISOBUTYL KETONE	NA	1	1	NA	NA				
TETRACHLOROETHENE	1	1				B		NA	
1,1,2,2-TETRACHLOROETHANE			1						
TOLUENE	1.2	1.2					1.6	2.6	2
ETHYLBENZENE	1.9	1.5	2.7		1.3		1.9	2.1	2
m-XYLENE	NA	1.5	2.6			NA			
o-XYLENE	NA	2.4	3.6		3.1	NA			
p-XYLENE	NA	1	1.9		1.3	NA	1	0.2	1.2
TOTAL XYLENE									
TETRAHYDROFURAN									
ISOPROPYL ETHER									
METHYLENE CHLORIDE								NA	
2-CHLOROETHYL VINYL ETHER								NA	
BENZENE							1.4	1.7	1.8
CHLOROBENZENE									
1,2-DICHLOROPROPENE									
1,2-DICHLOROPROPANE									
CARBON TETRACHLORIDE								NA	
1,2-DICHLOROETHENE									
TRICHLOROFLUOROMETHANE								NA	
TRICHLOROFLUOROETHANE									
CHLOROMETHANE								NA	
CHLOROETHANE								NA	
1,1-DICHLOROETHENE	1							NA	
DICHLOROBENZENES									
VINYL CHLORIDE								NA	
1,2-DICHLOROBENZENE	3								

NA = not analyzed

Units in ug/L = ppb

**SUMMARY OF HISTORICAL SEEP
MONITORING DATA - IESI**

PARAMETERS	Jan-85	Jan-85	Jan-85	Feb-85	Feb-85	Feb-85	Mar-85	Mar-85	Mar-85
ACETONE	NA	N/A	N/A	N/A	N/A	N/A			
1,1-DICHLOROETHANE	NA			1.1	N/A	1.1			
TRANS-1,2-DICHLOROETHENE	NA	N/A	N/A	1.6	N/A	N/A			
CHLOROFORM	NA	N/A	N/A		N/A	N/A			
METHY ETHYL KETONE				N/A					
1,2-DICHLOROETHANE	NA	N/A	N/A		N/A	N/A		1	
1,1,1-TRICHLOROETHANE	NA	N/A	N/A	3.8	N/A	N/A			
TRICHLOROETHENE	NA	N/A	N/A	2.5	N/A	N/A	1.2	1.2	
1,1,2-TRICHLOROETHANE		N/A	N/A		N/A	N/A			
METHYL ISOBUTYL KETONE		N/A	N/A	N/A	N/A	N/A			
TETRACHLOROETHENE	NA	N/A	N/A	4.1	N/A	1.7		2.8	
1,1,2,2-TETRACHLOROETHANE		N/A	1.3		N/A	N/A			
TOLUENE	9.5	5.4	4.9	6	1.9	4.6	11	11	3
ETHYLBENZENE	12.3	9.2	8.8	7.2	2.2	4.2	8.4	8.4	1.9
m-XYLENE	5.3	3.6	3	N/A	N/A	3.6	N/A	7.8	N/A
o-XYLENE	16.3	11	11	N/A	2.1	8.6	N/A	11	N/A
p-XYLENE	9.8	7	7	N/A	1.5	5.7	N/A	9	N/A
TOTAL XYLENE				N/A			27.8		4.4
TETRAHYDROFURAN									
ISOPROPYL ETHER									
METHYLENE CHLORIDE	NA	N/A	N/A	5.8	N/A	N/A			
2-CHLOROETHYL VINYL ETHER	NA	N/A	N/A		N/A	N/A		1	
BENZENE	6.8	3.8	2.9	4.4	1.4	3.3			
CHLOROBENZENE					N/A	N/A			
1,2-DICHLOROPROPENE									
1,2-DICHLOROPROPANE									
CARBON TETRACHLORIDE	NA	N/A	N/A		N/A	N/A			
1,2-DICHLOROETHENE									
TRICHLOROFLUOROMETHANE	NA	N/A	N/A		N/A	N/A			
TRICHLOROFLUOROETHANE									
CHLOROMETHANE	NA	N/A	N/A		N/A	N/A			
CHLOROETHANE	NA	N/A	N/A		N/A	N/A			
1,1-DICHLOROETHENE	NA	N/A	N/A	2.8	N/A	N/A			
DICHLOROBENZENES									
VINYL CHLORIDE	NA	N/A	N/A		N/A	N/A			
1,2-DICHLOROBENZENE			N/A		N/A	N/A			

NA = not analyzed

Units in ug/L = ppb

**SUMMARY OF HISTORICAL SEEP
MONITORING DATA - IESI**

PARAMETERS	Apr-85	Apr-85	Apr-85	May-85	May-85	May-85	Jun-85	Jun-85	Jun-85
ACETONE				N/A			110		
1,1-DICHLOROETHANE									
TRANS-1,2-DICHLOROETHENE									
CHLOROFORM				1.8					
METHY ETHYL KETONE									
1,2-DICHLOROETHANE									
1,1,1-TRICHLOROETHANE									
TRICHLOROETHENE				2.3					
1,1,2-TRICHLOROETHANE									
METHYL ISOBUTYL KETONE	26			N/A					
TETRACHLOROETHENE			1.7	4.1	1.2	2.1		2.3	1.5
1,1,2,2-TETRACHLOROETHANE									
TOLUENE		18	2.3	6		1.6		1.2	
ETHYLBENZENE	5	7	3.7	7.2	1.5	4.1	2	4.1	2.5
m-XYLENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
o-XYLENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p-XYLENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL XYLENE	19	21.1	16.1		5.1	8.9	5	7.5	2
TETRAHYDROFURAN									
ISOPROPYL ETHER									
METHYLENE CHLORIDE				2.8					
2-CHLOROETHYL VINYL ETHER									
BENZENE			3.2	4.4	2	4.5		2.4	1.9
CHLOROBENZENE				6					
1,2-DICHLOROPROPENE									
1,2-DICHLOROPROPANE									
CARBON TETRACHLORIDE									
1,2-DICHLOROETHENE									
TRICHLOROFLUOROMETHANE				10					
TRICHLOROFLUOROETHANE									
CHLOROMETHANE									
CHLOROETHANE									
1,1-DICHLOROETHENE									
DICHLOROBENZENES			2.8			1.3		1.3	
VINYL CHLORIDE									
1,2-DICHLOROBENZENE									

NA = not analyzed

Units in ug/L = ppb

[illegible]

**SUMMARY OF HISTORICAL SEEP
MONITORING DATA - IESI**

PARAMETERS	Oct-85	Oct-85	Oct-85	Nov-85	Dec-85
ACETONE					1
1,1-DICHLOROETHANE					
TRANS-1,2-DICHLOROETHENE					
CHLOROFORM					
METHY ETHYL KETONE					
1,2-DICHLOROETHANE					
1,1,1-TRICHLOROETHANE					
TRICHLOROETHENE					
1,1,2-TRICHLOROETHANE					
METHYL ISOBUTYL KETONE					
TETRACHLOROETHENE		1.7			1.2
1,1,2,2-TETRACHLOROETHANE					1.2
TOLUENE	1.2	1			
ETHYLBENZENE					
m-XYLENE	N/A	N/A	N/A	N/A	N/A
o-XYLENE	N/A	N/A	N/A	N/A	N/A
p-XYLENE	N/A	N/A	N/A	N/A	N/A
TOTAL XYLENE					
TETRAHYDROFURAN					
ISOPROPYL ETHER					
METHYLENE CHLORIDE					
2-CHLOROETHYL VINYL ETHER					
BENZENE					
CHLOROBENZENE					
1,2-DICHLOROPROPENE					
1,2-DICHLOROPROPANE					
CARBON TETRACHLORIDE					
1,2-DICHLOROETHENE					
TRICHLOROFLUOROMETHANE					
TRICHLOROFLUOROETHANE					
CHLOROMETHANE					
CHLOROETHANE					
1,1-DICHLOROETHENE					
DICHLOROBENZENES		1.1			
VINYL CHLORIDE					
1,2-DICHLOROBENZENE					
NA = not analyzed					
Units in ug/L = ppb					

ATTACHMENT VII

TEST PIT LOG

DUNN GEOSCIENCE CORPORATION

5 Northway Lane, North

Latham, New York 12110 (518) 783-8102

DATE STARTED 8-16-83 TIME JOB NO. 257-1-2183
DATE FINISHED 8-16-83 TIME TEST PIT NO. 8-83-1
CLIENT Northeast Solite Corp. SITE Mt. Marion, NY
SURFACE ELEVATION EXCAVATOR
DATUM EQUIPMENT Backhoe
WATER ELEVATION None INSPECTOR W.J. Hall

DEPTH	DENS.	MOIST.	DESCRIPTION OF SOIL	REMARKS
0				
			Gray coarse to fine SAND, trace Silt, and coarse to fine (+) Gravel. (FILL)	
5				
10				
15				
20				

TEST PIT LOG

DUNN GEOSCIENCE CORPORATION

5 Northway Lane, North

Latham, New York 12110 (518) 783-8102

DATE STARTED 8-16-83 TIME JOB NO. 257-1-2183

DATE FINISHED 8-16-83 TIME TEST PIT NO. 8-83-2

CLIENT Northeast Solite Corp. SITE Mt. Marion, NY

SURFACE ELEVATION EXCAVATOR

DATUM EQUIPMENT Backhoe

WATER ELEVATION None INSPECTOR W.J. Hall

DEPTH	DENS.	MOIST.	DESCRIPTION OF SOIL	REMARKS
0			Gray coarse to fine SAND, trace Silt, and coarse to fine Gravel. (FILL) 2.0'	Odor and dary gray-black staining in soil. 0'-2'.
			Brown Boulders with about 5-15% brown clayey Silt (FILL) 6.0'	
			Collapsing Hole Forces Termination	
5				
10				
15				
20				

Note: Test Trench was 20' long.

TEST PIT LOG

DUNN GEOSCIENCE CORPORATION

5 Northway Lane, North

Latham, New York 12110 (518) 783-8102

DATE STARTED 8-16-83 TIME JOB NO. 257-1-2183
DATE FINISHED 8-16-83 TIME TEST PIT NO. 8-83-3
CLIENT Northeast Solite Corp. SITE Mt. Marion, NY
SURFACE ELEVATION EXCAVATOR
DATUM EQUIPMENT Backhoe
WATER ELEVATION None INSPECTOR W.J. Hall

DEPTH	DENS.	MOIST.	DESCRIPTION OF SOIL	REMARKS
0			Gray coarse to fine SAND, trace Silt and coarse to fine gravel (FILL)	Occasional slight odor
5				
10				
15				
20				

Excavation No. 1

Date Started	11-29-83	Length	130'
Date Finished	12-09-83	Width	40'
		Maximum Depth	15'

Excavation extended from southern edge of kiln foundation south-southeast to an area just north of the small block building where it intersected Excavation No. 4. Work on this excavation was performed on several days during the course of this project. Excavation No. 2, which is not shown, fell within Excavation No. 1.

Observations

- Visibly contaminated water was present above the bedrock seep standing at a depth of one to two feet. The water was dammed up behind a bedrock ridge at the edge of the face;
- Lowering the water level in this excavation by pumping caused a reduction in the flow from the seep to approximately one-half to two-thirds of its original rate;
- Pumping at Excavation No. 5 caused a drop in the water level in Excavation No. 1 with a corresponding reduction in seep flow;
- Digging was hampered, especially in the northern end of the excavation, by deep, loose fill. A large and unstable excavation resulted;
- The bedrock surface rises slowly toward south-southeast. A couple of shallow ridges, perhaps due to bedding, were exposed;
- Dry, hard bedrock was exposed at the bottom of the excavation from approximately 60 to 150 feet south of the kiln. Water was encountered again as the rock surface dropped off further south;
- Ground water was trickling along some of the rock surfaces, but most of water entering the section of the trench above the seep appeared to be coming from the south. Water was entering from fractures in bedrock and contained surface film and frequent oil blebs;

- The soil and rock fill in a two- to three-foot zone above the bedrock surface in the area surrounding the intersection of Excavations No. 1 and 4 was saturated with a heavy, dark brown oil;
- The south end of excavation encountered six feet or less of fill overlying highly fractured but in-place bedrock. The fractured rock was rippable.

Excavation No. 2

Date Started	11-29-83	Length	10'
Date Finished	11-29-83	Width	10'
		Maximum Depth	6'

Shallow excavation dug to locate fuel lines. Bedrock was not exposed, and no contaminated water or soil was encountered. Excavation No. 1 encompassed this excavation.

Excavation No. 3

Date Started	11-29-83	Length	50'
Date Finished	11-30-83	Width	30'
		Maximum Depth	12'

Excavation extended from the pump pad east of the small vertical tanks to a line approximately even with the northern edge of tank No. 9. Excavation was hampered by the presence of many buried fuel, electrical and air lines which were left exposed as the excavation progressed.

Observations

- Strong odors were produced as the excavation progressed through the unsaturated fill;
- A layer of purple colored fill approximately eight inches thick was present just below the surface;
- Approximately two to three feet of cinders and shale fines were present overlying shot rock;
- Contamination was noted within the finer portions of the fill, particularly near the buried pipes. Surfaces of the fractured rock were often coated with dark residual contamination;
- The solid bedrock surface dropped off from approximately two and one-half feet at the southern end of the excavation to about eleven feet at the center and northern end. A knob of solid, unfractured bedrock was exposed in the eastern wall of the pit. The surface of the knob dipped at approximately 30-35° to the east and may represent a bedding plane in the Schoharie formation. This knob appeared to be confining ground water to its west;
- A low ridge trending north-south divided the bottom of the pit into two halves. The east half was slightly deeper;

- Slight ground water seepage was observed trickling down the exposed bedrock knob. This water was visibly uncontaminated. Water collected slowly in the bottom of the pit. A heavy, oily sheen was present on top of the water. Water appeared to be entering the west half of the pit from the west and eastern half from the north. Water collecting in the west half was visibly more contaminated.

Excavation No. 4

Date Started	12-05-83	Length	80'
Date Finished	12-06-83	Width	15'
		Maximum Depth	14'

Excavation started at a point southwest of tank No. 9 and progressed in a northerly direction along the top of the slope to a point north of the small block building where it intersected with Excavation No. 1.

Observations

- Black "tar-like" material was uncovered in a pocket at a depth of about three feet opposite tank No. 9. This material did not have a detectable odor and was most likely No. 6 oil or similar material;
- Fill in the southern portion of the excavation consisted of rock, wood, plaster sheeting, cables, brick and metal;
- The northern portion of the excavation uncovered up to four feet of loose fill overlying highly fractured but in-place rock to a depth of approximately 14 feet where solid rock was encountered;
- A bedrock ridge paralleled the excavation along its western wall. The height of the ridge was one to two feet above the excavation bottom;
- Ground water was encountered at a depth of approximately twelve feet and appeared to be contaminated, having a multicolor surface film. Water entered the trench directly from bedrock as upwellings in bedrock fractures and from the east. The water was confined by the bedrock ridge along the west wall and flowed slowly in a northerly direction along the axis of the excavation;

- Heavy thick oil was encountered in a two- to three-foot layer above bedrock near the northwest corner of the block building and most of the water entering the excavation in this area was from the west.

Excavation No. 5

Date Started	12-06-83	Length	80'
Date Finished	12-06-83	Width	15'
		Maximum Depth	13'

Excavation started west of tank No. 9, at the west side of Excavation No. 4, and continued down the slope for a total length of approximately 80 feet, to determine if contamination was present west of the immediate fuel storage area.

Observations

- The bedrock ridge along the west side of Excavation No. 4 rises to a height of approximately two feet and then falls off further to the west into another north-south trending bedrock trough, at about 55 feet from Tank No. 9. The rock surface rises again further west before falling off down the slope;
- The western one-third of the excavation encountered brown soil and rock above the bedrock surface, and no water;
- Ground water encountered in the bedrock trough appeared to be contaminated and had a heavy black oil surface film. When pumped, the excavation yielded large quantities of water which entered from the north. Flow was mostly through highly fractured rock above the solid bedrock surface. Approximately two feet of water collected in the pit;
- When Excavation No. 5 was pumped, the water in Excavation No. 1 dried up and flow at the bedrock seep slowed accordingly, to approximately 65 percent of original rate;
- The water in Excavation No. 5 did not return to its original level after pumping was stopped, and the thickness of the surface film increased.

Excavation No. 6

Date Started	12-09-83	Length	80'
Date Finished	12-09-83	Width	15'
		Maximum Depth	12'

Excavation No. 6 was located north of the fuel tank area and extended east from the ridge of Schoharie bedrock. The purpose of this excavation was to intercept and identify any possible source of ground water recharge to the fuel tank area.

Observations

- A maximum thickness of approximately eight feet of fill was encountered over bedrock in the westernmost end of the trench, and over clay soil in the central and eastern portion of the excavation;
- Water seepage occurred along the fill/soil interface in a thin layer of decaying vegetation. Seepage was predominantly from the south;
- Water quality was good and seepage rate was low and decreased as the excavation continued to the east.

ATTACHMENT VIII



P.O. BOX 437 • MT. MARION • NEW YORK 12456 • PHONE (914) 246-9571

July 29, 1987

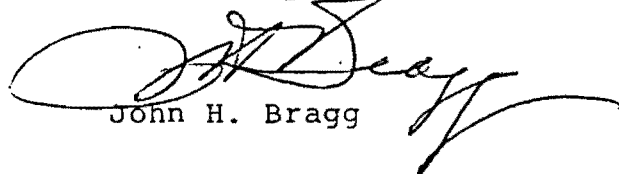
Mr. James Reidy, P. E.
Region 3 Hazardous Waste Engineer
N. Y. State Dept. of Environmental Conservation
202 Mamaroneck Ave.
White Plains, NY 10601

Re: Industrial Environmental Systems, Incorporated
Northeast Solite Corporation

Dear Mr. Reidy:

Pursuant to recent correspondence between your office and ours, the Closure Plan for the subject facilities has been revised and augmented under date of July 29, 1987. The Plan is enclosed herewith.

Very truly yours,



John H. Bragg

cc: A. Klauss T. West
G. Peck D. Evans
S. Potter G. Eure
G. Heitzman G. Kosko
E. Martin

Industrial Environmental Systems, Incorporated

and

Northeast Solite Corporation

FACILITY CLOSURE PLAN

July 29, 1987

CLOSURE PLAN

[6 NYCRR 373-1.5(a)(2)(xiii)] [40 CFR 270.14(b)(13)]

1.0 CLOSURE PERFORMANCE STANDARD [6 NYCRR 373-2.7(b)(1),(2)] [40 CFR 264.111(a),(b)]

Industrial Environmental Systems, Incorporated ("IESI") and Northeast Solite Corporation ("NSC") will maintain a copy of this Closure Plan and all revisions, as approved, in the facility office until certification of closure completeness has been submitted to, and accepted by, the Commissioner of the New York State Department of Environmental Conservation ("DEC").

This Closure Plan was designed to ensure that the IESI and NSC facilities will not require further maintenance and controls after closure, to minimize or eliminate threats to human health and the environment and to avoid escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground, to surface waters or to the atmosphere. If there is evidence of any spills or leaks, in the course of closure activities, samples will be taken and analyzed in order to determine the extent of contamination, if any, in soil, surface water or ground water. To the extent necessary to minimize any threat to human health and the environment, any contaminated soil will be excavated, removed and disposed of at an approved TSD facility, and any contaminated surface water or groundwater will be remediated.

2.0 PARTIAL AND FINAL CLOSURE ACTIVITIES [6 NYCRR 373-2.7(c)(1)(i)] [40 CFR 254.112(a)(1)]

Partial closure of the IESI facility took place with the total removal of all liquids and bottom sludges from all of the facility's fuel tanks, with these wastes being shipped in bulk, together with all drummed wastes, to approved TSD facilities. The manifest numbers and shipping destinations are listed in a letter from John Bragg (IESI) to James Reidy (DEC), dated May 29, 1987. This letter is included as Appendix A. As this work proceeded, DEC Region 3 received frequent progress reports and was kept fully informed of

procedures and developments. A partial list of the correspondence in this regard is contained in Appendix A. The project was completed on November 17, 1983. All tanks were left in broom-clean condition, and have been empty since that date.

In December, 1983, extensive excavation was conducted in the area between the IESI and NSC facilities, a space measuring approximately 150 feet by 200 feet. All visibly contaminated soil was removed, as were all underground LBM pipelines which had carried hazardous waste fuel, and the area was back-filled with clean 3/8-inch by 0-inch shale, which is routinely quarried and crushed on NSC's site. The pipelines removed were replaced with new, above-ground lines in July, 1984. During the same month, No. 9 fuel tank was completely steamed out and fitted with a new bottom, which rests on a concrete foundation above ground level, while Nos. 4, 5, 6, 7 and 8 tanks were re-installed on a common concrete foundation which was equipped with a leak detection system.

In November, 1984, the excavated/refilled area mentioned above was completely weather-sealed by a four-inch application of macadam. Final closure activities will include obtaining four sub-soil samples from below the previously excavated areas beneath the present macadam cover. The samples will be analyzed for possible concentrations of volatile organics. The protocol for this sampling can be found in a letter (attached Appendix B) from John Bragg to James Reidy, dated July 10, 1987.

Beginning in January, 1984, several monitoring wells were installed in the vicinity of the IESI facility. These have exhibited minimal contamination, and will continue to be monitored over such future period as may be mutually agreeable. Several reports furnished by Dunn Geoscience Corporation, consultant to IESI/NSC, summarize monitoring well analysis results over a lengthy period of time. A reference list of these reports by title and submission date is shown on page 2 of Appendix A. Complete copies have been maintained in the DEC files.

It is not anticipated that any of the tanks will be re-located within the IESI/NSC premises or sent to another location off-site, but in the event this should occur, procedures outlined in Section 4.2 for final closure will be followed. Prior to final implementation of this Closure Plan, any modifications to the existing facility equipment, structures, instruments or

procedures related to the management of either facility will result in IESI and/or NSC revising the Plan accordingly. It is understood that such changes will be subject to approval by DEC before they are initiated.

3.0 MAXIMUM WASTE INVENTORY [6 NYCRR 373-2.7(c)(ii)] [40 CFR 264.112(a)(2)]

The maximum hazardous waste drum storage capacity is twenty 55-gallon drums (1,100 gallons), while the total capacity of the eight hazardous waste fuel storage tanks is 207,000 gallons, thus the total capacity of the IESI facility is 208,100 gallons. As stated in Section 2.0, partial closure has been effectuated with the total removal from the site of the tanks' contents and the drummed waste inventory. Prior to final closure of the IESI/NSC facilities, the maximum inventory of wastes on these facility sites will be only the liquids in the transfer lines and in the feed lines to the aggregate kilns, a maximum of 450 gallons. This amount would be increased by whatever volume of cleaning and rinsing liquids is required.

4.0 INVENTORY REMOVAL AND DISPOSAL OR DECONTAMINATION OF EQUIPMENT [6 NYCRR 373-2.7(c)(iii),(iv); (e)] [40 CFR 264.114]

All hazardous waste stored at IESI was held in above-ground, closed top, steel storage tanks and in 55-gallon drums, positioned inside a secondary containment area surrounded by a 4-foot dike. Closure activity was initiated with the removal of all the hazardous waste that was stored in tanks and drums.

Appendix C describes the fire, safety and spill control procedures that will be implemented during final closure operations.

All pumps, valves and pipelines will be drained into liquid-tight drums and/or pumped into tanker trucks. The drainings will be transported to Oldover Corporation at Arvon, Virginia or to a nearby approved incineration facility for final disposal.

Following waste removal, all piping (with the exception of new, unused piping) to and from the eight LBM fuel storage tanks on the IESI premises will be disconnected, dismantled and decontaminated. The work will be performed by a properly qualified outside contractor with the capabilities and authorization to transport all removed wastes, including combustibles, condensates and rinsing liquids, to approved disposal facilities.

4.1 CLOSURE OF CONTAINERS [6 NYCRR 373-2.9(i)] [40 CFR 264.178]

Any containers of flushing water or oil, condensate, hazardous waste drainings or contaminated work clothes that result from the closure process will be staged in the container storage area, prior to removal for disposal at an approved facility. Flushing liquids that are possibly hazardous in nature will be handled as described in Appendix A [(D)(1,2)].

4.2 CLOSURE OF TANKS [6 NYCRR 373-2.10(e)] [40 CFR 264.197]

Closure of the tank storage area involves decontamination of the tanks, the removal of all waste from, and decontamination of, the blending and recirculation process equipment, all contaminated piping, valves and pumps, and secondary containment equipment and structures.

The tanks will be decontaminated and closed through the following steps:

1. Manhole covers will be removed and the tanks will be checked for any remaining sludge particles or dirt.
2. The tanks will be closed and steam cleaned, if necessary. In this event, sufficient steam shall be added to a tank to raise its shell temperature to 170 deg. F. (76 deg. C.), as specified in API Publication 2015, "Cleaning Petroleum Storage Tanks". This temperature should be sufficient to remove any solvent residue.
3. The tanks will be purged and water flushed and the condensate and rinse water will be pumped into tanker trucks for transport to E. I. duPont, Deepwater, New Jersey, or an

equivalent facility. Tanks will be inspected visually to insure that all residues have been removed, and a "sniffer" type gas detector will be used to determine if any combustible vapors remain. Steam cleaning will be repeated as long as significant residues are present.

4. Tanks, pumps, piping, valves and structures will be subjected to wet wipe tests, and they will be considered clean and decontaminated if the results of such tests demonstrate that any remaining hazardous constituents are less than 1,000 micrograms per square meter. A recommended standard field operating procedure for wet wipe sampling is described in Appendix D attached to this Plan.
5. During the tank cleaning, inspection and decontamination process, the fire, safety and spill control procedures found in Appendix C will be followed. The loading and transport procedures used during tank closure will be the same as used during normal operation. All transport operations will be accomplished in accordance with DOT, EPA, State and local regulations.

Process equipment, piping, pumps and valves will be decontaminated through the following procedures:

1. The pipes, pumps and process equipment will be steam cleaned, using sufficient steam to raise the temperature of the equipment to 170 deg. F.
2. The equipment and piping will be purged and flushed with water. The condensate and rinse water will be pumped into tanker trucks and transported to E. I. duPont, Deepwater, New Jersey, or an equivalent facility.
3. The process units and pipes will be checked for remaining residues using a flammable gas detector to identify any remaining vapors. Steam cleaning will be repeated if necessary.
4. Successful decontamination will be verified by wipe tests, as mentioned above.

The secondary containment structures, including the concrete bases, curbs and sumps for the tank and drum storage areas will be steam cleaned and flushed with water, and the resulting condensate and rinse water will be collected and transported to an approved off-site TSD facility.

The truck unloading area will be blocked to ensure no escape of cleaning media or debris. Barriers will be erected around the area of the pad, if necessary, to collect decontamination solutions. The pad will be steam cleaned and the resulting condensate will be collected, analyzed for contamination, and sent to an approved off-site TSD facility.

4.3 CLOSURE OF ROTARY KILNS [6 NYCRR 373-2.15(h)] [40 CFR 264.351]

NSC's three lightweight aggregate production units are cylindrical, horizontally mounted rotary kilns constructed of steel shells with refractory lining. The incineration system involves the piping for feeding waste from the IESI storage facility to the kilns, the kilns themselves, a wet scrubber on air emissions from the kilns, and emission stacks. Due to the very high destruction efficiency of the kiln, hazardous waste and constituents will contact only the fuel feed piping during the incineration operation. These closure procedures are directed toward dismantling and removal of all contaminated feed lines, fittings and valves on NSC premises, testing the surrounding area to document that no inadvertent contamination has occurred and implementing any remediation of area contamination that might be necessary. The feed lines and associated components that are removed will be transferred for use at another approved Solite facility. Closure of hazardous waste incineration operations will not result in discontinuation of lightweight aggregate production at NSC. Therefore, dismantling or demolition of equipment other than the feed lines is not included in these closure procedures.

Closure of hazardous waste incineration operations at NSC will include the following procedures:

1. Beginning at the connection to the new unused IESI feed supply lines at the south end of NSC's premises, all of the contaminated feed lines extending northward through the NSC incineration facility will be disconnected and dismantled.

Pipelines and components will be drained to drip-dry condition. All drainings will be caught in suitable containers, and the contents of these will be transferred to 55-gallon drums.

2. The contaminated piping, valves and fittings will be capped or blanked as appropriate and the equipment will be loaded on a truck for transport to an approved Solite facility.
3. Personnel performing this work will be furnished with appropriate safety equipment, as described Appendix C. All contaminated safety clothing used during closure, together with all pipeline drainings, drainage containers and like equipment will be collected in 55-gallon drums and transported off-site to an approved TSD facility.

4.4 CERTIFICATION OF CLOSURE [6 NYCRR 373-3.7(f)]

When closure is completed, IESI/NSC will submit their certification to DEC, together with a certification by an independent registered New York State professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

5.0 SCHEDULE FOR CLOSURE [6 NYCRR 373-2.7(d),(f)] [40 CFR 264.112(a)(4), 264.113, 264.115]

Following receipt of approval of this Closure Plan, final closure activities will be initiated in accordance with Part 373-2.7 of the Regulations. Completion of closure will be within 180 days following the approval date. The DEC Commissioner will be notified by IESI and NSC 180 days before the commencement of final closure. Tables I and II attached show the closure activity schedules contemplated for IESI and NSC, respectively. Final closure will be supervised and certified by a professional engineer, registered in the State of New York, and by IESI/NSC. The anticipated working schedule for the professional engineer is included in Appendix A, page 4, (G)(2).

6.0 EXTENSIONS OF CLOSURE TIME [6 NYCRR 373-2.7(d)] [40 CFR 264.113(a),(b)]

Neither IESI nor NSC anticipates that any extension of closure time will be required.

TABLE I

CLOSURE SCHEDULE FOR CONTAINERS AND TANKS (IESI)

Activity	Days																	
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1. Washing of tank storage and piping system	++++	++++	+++															
2. Removal/disposal of washings, sludge and absorbents			++++	++++	+													
3. Testing for any remaining contamination				++	++++	++++	++++	++++	++									
4. Soil sampling and analysis as may be required												+++	++++	++				
5. Completion of closure, certification and submittal to NYSDEC Commissioner and USEPA Region II Administrator															++++	++++	++++	++++

TABLE II

CLOSURE SCHEDULE FOR ROTARY KILNS (NSC)

Activity	Days												
	7	14	21	28	35	42	49	56	63	70	77	84	90
1. Dismantle, drain and cap feed lines and fittings	+++++	+++++	+++++	+++++									
2. Removal/disposal of liquids from feed lines and fittings		+++++	+++++	+++++	+++++								
3. Transfer feed lines and fittings off-site					+++++	+++++							
4. Off-site disposal of contaminated clothing and safety equipment							+++++	+++++	+++++				
5. Completion of closure, certification and submittal to NYSDEC Commissioner and USEPA Region II Administrator										+++++	+++++	+++++	+++++



P.O. BOX 437 • MT. MARION • NEW YORK 12456 • PHONE (914) 246-9571

May 29, 1987

Mr. James Reidy, P. E.
Regional Hazardous Waste Engineer, Region 3
N. Y. State Dept. of Environmental Conservation
202 Mamaroneck Ave.
White Plains, N. Y. 10601

Ref: Proposed Facility Closure Plan dated January 6, 1987: Industrial
Environmental Systems, Inc. (IESI) and Northeast Solite Corp. (NSC)

Your letter of April 6, 1987

Dear Mr. Reidy:

The purpose of this letter is to address perceived deficiencies in the subject proposed Closure Plan, as noted in your above referenced letter. The following comments conform to the paragraph numbering found in that letter.

A) Closure Performance Standard

We note that the Certificate of Closure completeness will not require approval by the USEPA Region II Administrator.

B) Partial and Final Closure Activities

1) The period during which waste was removed from the IESI storage tanks, the destinations to which that waste was shipped and a complete listing of numbered shipment manifests on file with your Department is set forth in Table I on page 6 of this letter.

2) There is extensive correspondence between DEC officials and IESI representatives documenting the fact that your Department was kept advised of activities and developments during the partial closure involving the removal of all material from the IESI storage tanks. The DEC people involved were: Region 3 Attorney Laura Zeisel, Deputy Commissioner Peter Lanahan, Region 3 Technician Robert Martin, Region 3 Director Paul Keller, Region 3 Engineer Albert Klauss, Commissioner Henry Williams, Cesar Manfredi, Compliance Counsel Laurens Vernon, General Counsel Nicholas Robinson and Administrative Law Judge William Dickerson. Other writers and addressees were: IESI attorneys Thomas West and David Evans, IESI Manager John Bragg, State Assemblyman Maurice Hinchey and Town of Saugerties Attorney Daniel Lamb, Jr.

Mr. Reidy
Page 2
May 29, 1987

A partial list of the pertinent correspondence, which you will find in the Department files, follows:

Letter of Date:	To:	From:	Copies to:
11/30/82	Zeisel	West	Lanahan, Evans, Lamb
12/10/82	Martin	Bragg	Zeisel, West, Evans, Lamb
2/24/83	Keller	Bragg	Zeisel, West, Evans
3/7/83	Klauss	Bragg	-
3/23/83	Klauss	Bragg	-
4/8/83	Klauss	Bragg	Evans, West
4/22/83	Klauss	Bragg	Evans, West
5/9/83	Klauss	Bragg	Evans, West
5/24/83	Williams	West	Zeisel, Dickerson, Vernon, Evans
6/7/83	Klauss	Bragg	-
6/7/83	Williams	West	Zeisel, Hinchey, Dickerson, Vernon, Evans
6/10/83	Klauss	Bragg	-
6/13/83	Klauss	Bragg	-
8/18/83	Williams	West	Zeisel, Evans
8/23/83	Manfredi	Bragg	Klauss
9/2/83	Williams	West	Zeisel, Evans
10/21/83	Williams	West	Zeisel, Keller, Robinson, Evans
11/18/83	Klauss	Bragg	Keller
12/20/83	West	Zeisel	Williams, Vernon, Evans

3) The results obtained from the monitoring wells installed beginning in January, 1984, and the frequency of sampling these wells, are extensively chronicled in three bound reports submitted by our consultant, Dunn Geoscience Corporation. Several copies of each, as listed below, reside in the Department's files. Copies of the various letters of transmittal are enclosed.

IESI Facility Monitoring Well Reports Prepared by
Dunn Geoscience Corporation

- a. Tank Farm - Monitoring Well Installation & Ground-Water Quality Analysis - May 15, 1984 (Transmitted by letters dated May 24, 1984, from John Bragg to Albert Klauss and Edward Miles)
- b. Tank Farm - Groundwater Quality Analysis - April, 1985, including a separate Appendix volume (Transmitted by letters dated April 19, 1985, from John Bragg to Albert Klauss and William Wertz)
- c. Tank Farm Area - Groundwater Quality Assessment - August, 1986, including a separate Appendix volume (Transmitted by letter dated September 3, 1986, from George Eure to Albert Klauss)

4) It is understood that any modifications to the Closure Plan and/or equipment utilized must be approved by DEC prior to the initiation of these changes.

5) It is our recollection that, early in 1984 during the site excavation described in Section 2.0 of the Proposed Closure Plan, the excavated soil was examined and sampled by a representative of the New York State Health Department laboratory, and that this person was accompanied by either Edward Miles or William Wertz, from the Albany DEC office. We know of no analysis results from these samples.

(6) The backfill placed in the excavated area was clean 3/8" x 0" crushed shale from the NSC quarry deposit.

C) Inventory Removal and Disposal of Decontamination of Equipment

1) In order to prevent and/or contain spills during decontamination and dismantling, an adequate supply of drums and half-drums will be provided to catch drainings. Any considerable quantity of used cleaning liquids will either be conducted to drums and continuously pumped to a receiving tanker or pumped directly to a tanker. The ground surface in all active working areas will be covered with polyethylene plastic to insure that any minor escape of liquid will not contact the ground soil. Where necessary, temporary barrier berms will be constructed of impermeable clay, in order to guard against the spread of any possible spill. An adequate supply of absorbent materials designed for spill-control use will be maintained at the work site.

2) At the present time we are negotiating the closure work with several qualified contractors. The contract has not yet been awarded.

D) Closure of Containers

1) Flushing liquids will be retained in approved drums until they can be analyzed for possible hazardous constituents. It is anticipated that any detected contamination of flushing liquids will be low-level in value.

2) Flush water exhibiting hazardous characteristics will be disposed of at the E. I. duPont facility in Deepwater, New Jersey. Non-hazardous flush water will be wasted through the NSC process water system. Combustible flushing liquids will be transported to Oldover Corporation, Arvon, Virginia, an approved incinerator of liquid hazardous waste for use as process fuel.

E) Closure of Tanks

1) The safety and spill control procedures outlined in the IESI/NSC hazardous waste management facility permit application will be added to the Closure Plan.

2) Refer to (C)(1) above.

3) Refer to (D)(2) above.

F) Closure of Rotary Kilns

- 1) The feed lines to the rotary kilns will not be dismantled for shipping to another location. They will instead be drained and decontaminated as described in Section 4.2(4) of the Proposed Closure Plan dated January 6, 1987.
- 2) Refer to (C)(1) above.
- 3) The disposition of the contaminated material is described in (D)(2) above.

G) Schedule for Closure

- 1) Following receipt of approval of the revised Closure Plan, final closure activities will be initiated in accordance with Part 373-2.7 of the Regulations.
- 2) Set forth below is a tentative schedule for the involvement of an independent professional engineer in the closure activities. The objective will be to have the engineer present on the site in a series of one-day visits, at points in time that are significant to efficient accomplishment of the work and to satisfaction of the requirements incorporated in the closure plan. IESI/NSC will keep the engineer informed of all sample analysis results as they are received.

The engineer will thoroughly review the closure plan prior to his first visit to the facility.

Tentative Schedule - Supervising Professional Engineer

<u>Day</u>	<u>Engineer's Function</u>
1	Inspect the work location(s). Verify that safety gear and spill control equipment are available and adequate. Observe tank flushing and pipeline dismantling/draining procedures. Approve temporary drum storage of drained flushing liquids.
4	Observe and approve methods and procedures in sampling spent flushing liquids.
14	With regard to any waste to be shipped and disposed off-site, check the initial truck-loading procedures and manifest record-keeping. Observe continuing flushing/draining operations.
35	Advise and observe in connection with sampling for any possible remaining contamination of equipment and any final sampling that may be deemed necessary. Monitor procedures for disposal of all contaminated clothing and safety equipment.
135	At the appropriate time during the period presently estimated to extend from day 135 to day 180, and following the validation of all

Mr. Reidy
Page 5
May 29, 1987

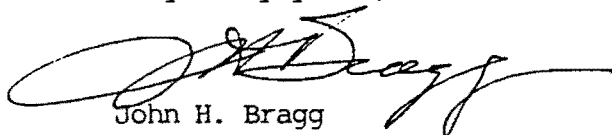
sample analysis results, the engineer will conduct his final inspection of the facility site and certify the closure project to be complete and ready for submittal to the Commissioner, NYSDEC.

H) Closure Cost Funding

1) As described on page I-2 of the IESI/NSC hazardous waste management facility application, the financial assurance mechanism for the final closing cost is a Closure Trust Fund which has been established at Sovran Bank NA, Richmond, Virginia.

We will submit a re-draft of the Proposed Closure Plan at such time as the Department approves the changes and additions contained in this letter.

Very truly yours,



John H. Bragg

Enc: (5)

cc: J. O'Mara

(less enc.)

A. Klauss
G. Peck
S. Potter
G. Heitzman
E. E. Martin
T. S. West
D. E. Evans
G. E. Eure
G. Kosko

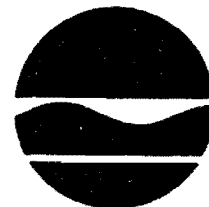
Mr. Reidy
Page 6
May 29, 1987

TABLE I

Industrial Environmental Systems, Inc.
Waste Removal from Tanks
Began 12/14/82, Completed 11/17/83
List of Shipments and Manifest Numbers

<u>Shipment Date</u>	<u>N. Y. Manifest Number</u>	<u>Destination</u>
12/14/82	159455 7	Oldover Corp., Arvonion, VA
12/16/82	159458 4	same
12/16/82	159453 9	same
12/17/82	159460 2	same
3/2/83	159463 8	Chemical Waste Management, Inc., Emelle, AL
3/3/83	301208 4	same
4/5/83	159468 3	SCA Chemical Services, Inc., Model City, NY
4/5/83	159469 2	same
4/5/83	159470 1	same
8/15/83	159474 6	Oldover Corp., Arvonion, VA
8/27/83	277999 2	same
9/21/83	277998 3	SCA Chemical Services, Inc., Chicago, IL
10/21/83	277992 9	same
10/21/83	277993 8	same
10/25/83	277990 2	same
10/31/83	277991 1	same
11/10/83	277987 5	same
11/11/83	277984 8	same
11/11/83	277986 6	same
11/11/83	277985 7	same
11/14/83	277996 5	same
11/14/83	277983 9	same
11/15/83	277979 4	same
11/16/83	277981 2	same
11/17/83	277978 5 (final shipment)	same

New York State Department of Environmental Conservation
202 Mamaroneck Avenue, White Plains, New York 10601



Henry G. Williams
Commissioner

April 6, 1987

Mr. John H. Bragg
Northeast Solite Corporation
P.O. Box 437
Mt. Marion, New York 12456

Re: Proposed Facility Closure Plan
Industrial Environmental Systems, Incorporated
and Northeast Solite Corporation

Dear Mr. Bragg:

Upon review of the above mentioned Closure Plan, as contained in your letter of January 8, 1987, it has been found that the submitted Closure Plan has several deficiencies. Among these deficiencies are:

A) Closure Performance Standard

The Certificate of Closure completeness does not have to be approved by the USEPA Region II Administrator.

B) Partial and Final Closure Activities

1) To where was the waste removed from the site on November 17, 1983 shipped? Also, a copy of all manifests must be included.

2) Was the partial closure completed under DEC's supervision and, if not, was the DEC notified before the closure began? An explanation for any non-notification of DEC must be submitted with the revised Closure Plan.

3) What has been the sampling frequency and results on the monitoring wells installed beginning in January, 1984?

4) Any modifications to this Closure Plan and/or equipment utilized must be approved by DEC before initiation of these changes.

Mr. Bragg
Page 2
April 6, 1987

5) a) Were any soil samples taken during the excavation and, if so, please submit results.

b) At least four soil samples below the excavated site must be taken to assure that there is no residual contamination.

6) What was the source and analysis of the clean fill used after excavation was completed

C) Inventory Removal and Disposal of Decontamination of Equipment

1) What precautions will be implemented to prevent spills during decontamination and dismantling?

2) Who is the "properly qualified outside contractor" that will perform the work?

D) Closure of Containers

1) Will the flushing water or oil, etc. be handled as hazardous or non-hazardous and how will this determination be made?

2) What is the final destination of the above-mentioned wastes?

E) Closure of Tanks

1) The safety and spill control procedures outlined in the facility's hazardous waste management facility permit application and, as mentioned in the Closure Plan, must be added to the Closure Plan for completeness.

2) A more detailed description of the barriers erected around the unloading pad, to insure no release of cleaning fluid, must be supplied.

3) What "approved off site TSD Facility" will the condensate and rinse water be shipped to?

Mr. Bragg
Page 3
April 6, 1987

F) Closure of Rotary Kilns

- 1) Unless the feed lines and associated equipment that are removed are decontaminated, they must be shipped as hazardous waste.
- 2) What precautions, to prevent spills, will be implemented during the draining of pipelines and components into 55 gallon drums?
- 3) Where will the contaminated material be shipped to?

G) Schedule for Closure

- 1) Within 30 days after receipt of approval of this revised Closure Plan, final closure activities will be initiated and not 180 days as stated in submitted Closure Plan.
- 2) A proposed schedule for the independent professional engineer to supervise the actual closing must be supplied. Although some flexibility in this schedule may be allowed during closure activity, this schedule must be specific and conclusively demonstrate that adequate supervision of the closure activity will be achieved.

H) Closure Cost Funding

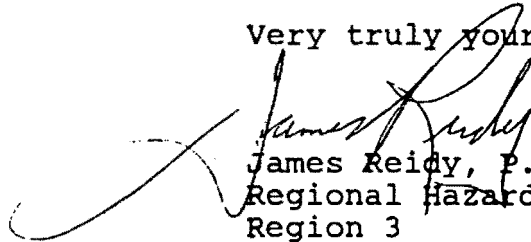
- 1) How will the cost be funded and what is the total cost for all closure activity?

Mr. Bragg
Page 4
April 6, 1987

Please address the above deficiencies and submit the revisions to this office by May 15, 1987.

If you have any questions on the above comments, you may contact Mr. John O'Mara of my staff at (914) 761-6660.

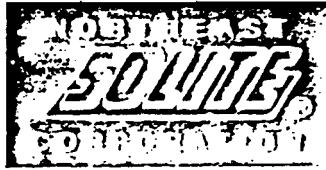
Very truly yours,



James Reidy, P.E.
Regional Hazardous Waste Engineer
Region 3

JR:JO:bz

cc: A. Klauss
G. Heitzman, Albany
G. Peck
S. Potter



P.O. BOX 437 • M.L. MARION • NEW YORK 12456 • PHONE (914) 246-9571

July 10, 1987

Mr. James Reidy, P. E.
Region 3 Hazardous Waste Engineer
N. Y. State Dept. of Environmental Conservation
202 Mamaroneck Ave.
White Plains, N. Y. 10601

Ref: Industrial Environmental Systems, Inc. (IESI) and
Northeast Solite Corp. (NSC): Proposed Facility Closure Plan
dated January 6, 1987

Your letters of April 6 and June 24, 1987

Dear Mr. Reidy:

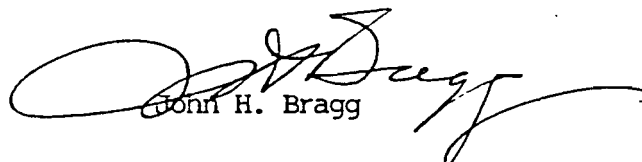
The purpose of this letter is to propose a sub-soil testing protocol to be incorporated in our Closure Plan. As I understand your letter of June 24, 1987, agreement on this testing will put the Plan into approvable form.

As previously stated in our proposal, excavations to remove possibly contaminated soil were conducted in December, 1983. The excavated area ("the area") was later (November, 1984) topped with 4 inches of macadam. The area is delineated in red on our attached Sketch 1-87. We propose to drill four holes, 3-1/4 inches in diameter, approximately equally spaced and traversing the area in an east-west direction. Hole locations are designated as A, B, C and D on the sketch.

To facilitate obtaining samples well below the excavated site, all holes will penetrate to a depth of ten feet. Each hole will be blown clean when a depth of eight feet is reached. The cuttings from the final two feet beyond the eight-foot depth will constitute the sub-soil sample, which will be analyzed for volatile organics.

If further information is required, please advise.

Very truly yours,


John H. Bragg

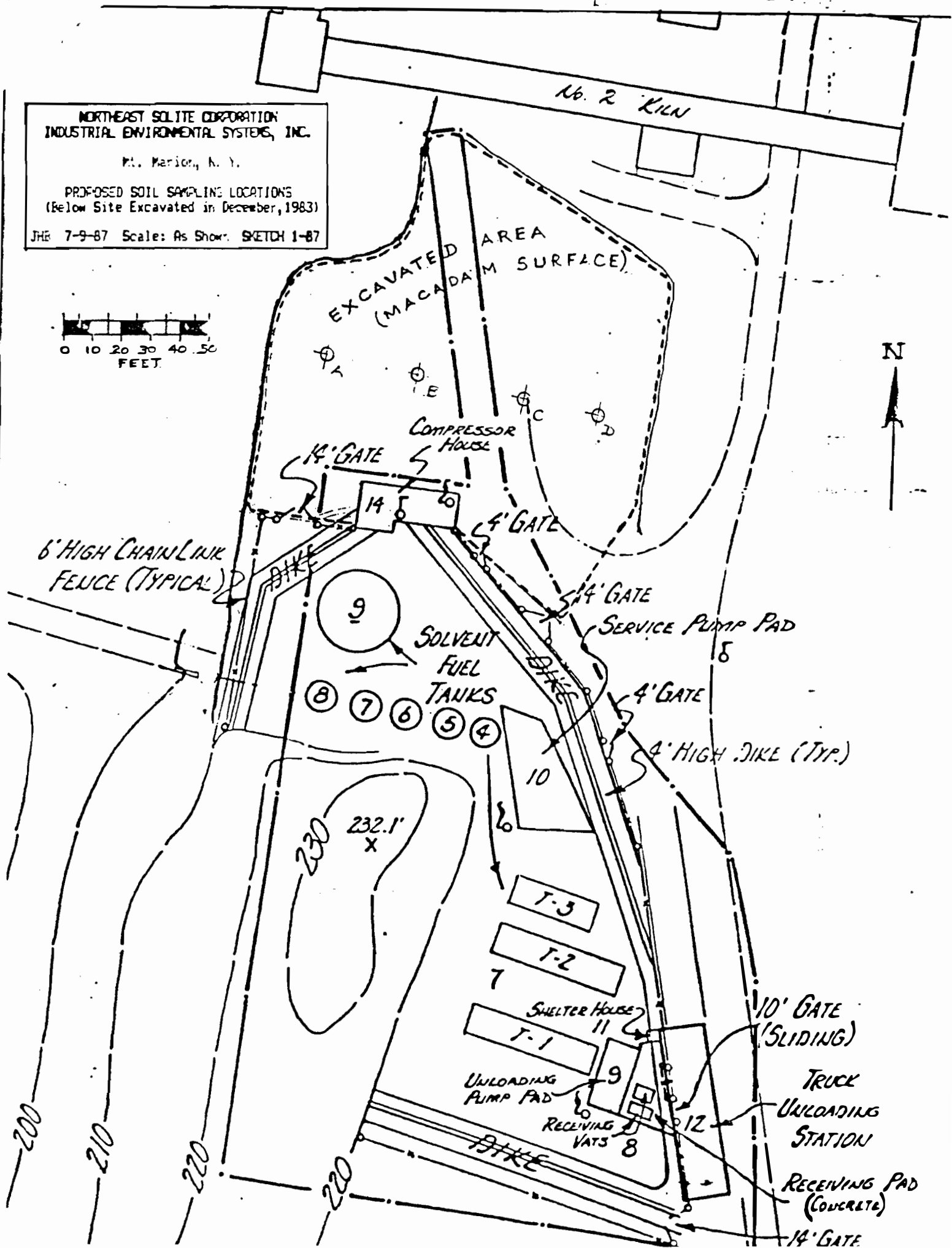
cc: A. Klauss T. West
G. Heitzman D. Evans
G. Peck G. Eure
S. Potter G. Kosko
E. Martin

NORTHEAST SOLITE CORPORATION
INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC.

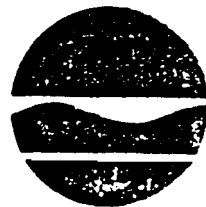
Mt. Marion, N. Y.

PROPOSED SOIL SAMPLING LOCATIONS
(Below Site Excavated in December, 1983)

JHE 7-9-87 Scale: As Shown. SKETCH 1-87



New York State Department of Environmental Conservation
202 Mamaroneck Avenue, Room 304
White Plains, NY 10601-5381



THOMAS C. JORLING
Commissioner

July 21, 1987

Mr. John Bragg
Northeast Solite Corporation
P. O. Box 437
Mt. Marion, NY 12456

Dear Mr. Bragg:

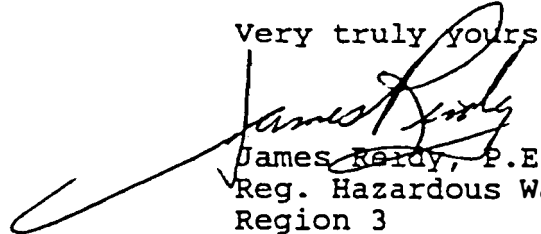
The addition of the sub soil testing protocol as contained in your July 10, 1987 letter will put the closure plan into an approvable form with the following additions:

1. A composite sample should be taken at 2', 4', 6', 8' and 10' depths at each of the bore holes;
2. A background sample should be taken to measure if there are elevated levels at the sampling site.

You should also be aware that after the drilling through the macadam, the drill should be cleaned and the hole blown clear to avoid any cross contamination of any sample taken below the macadam.

Upon the receipt of the amended closure plan, we can then proceed to the public notice of the closure. If you have any questions, you may contact Mr. John O'Mara of my staff at (914) 761-6660.

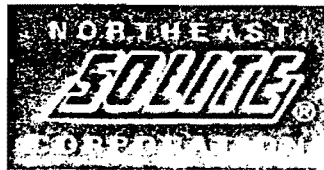
Very truly yours,


James R. Ruddy, P.E.
Reg. Hazardous Waste Engr
Region 3

JR/acp

cc A. Klauss
G. Heitzman
G. Peck
S. Potter

EXM
TSW
JEE
GAT
GSK



P.O. BOX 437 • MT. MARION • NEW YORK 12456 • PHONE (914) 246-9571

July 22, 1987

Mr. James Reidy, P. E.
Region 3 Hazardous Waste Engineer
N. Y. State Dept. of Environmental Conservation
202 Mamaroneck Ave., Room 304
White Plains, NY 10601

Re: Northeast Solite Corp. and Industrial Environmental
Systems, Inc.: Sub Soil-Testing Protocol Amendment to
Proposed Facility Closure Plan dated January 6, 1987

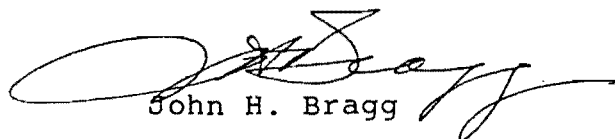
Dear Mr. Reidy:

In answer to your letter of July 21st, we confirm that four sub-soil samples for analysis will be taken from four drilled holes on our premises. These holes, located in a macadam-surfaced area, have been designated as A, B, C and D in a sketch submitted with our letter of July 10th. A fifth sampling hole ("E") will be drilled in a location removed from the heavily-trafficked area, for the purpose of obtaining a background sub-soil sample. A single composite sample, representing portions taken from depths of 2, 4, 6, 8 and 10 feet, will be obtained from each drill-hole.

At each hole location, an area of subgrade approximately one foot square will be exposed prior to commencement of drilling, in order to avoid contamination from the macadam material.

We are in the process of amending the subject Closure Plan to reflect the corrections and additions discussed in your most recent letter as well as yours of April 6th and June 24th, and in my letters of May 29th and July 10th. The amended Plan should be in your hands on or about July 27, 1987.

Very truly yours,



John H. Bragg

cc: A. Klauss T. West
G. Peck D. Evans
G. Heitzman G. Eure
S. Potter G. Kosko
E. Martin



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July 31, 1987

Mr. John O'Mara
N. Y. State Dept. of Environmental Conservation
202 Mamaroneck Ave., Room 304
White Plains, NY 10601

Re: Northeast Solite Corp. and Industrial Environmental
Systems, Inc. - Closure Plan dated July 29, 1987

Dear Mr. O'Mara:

As you pointed out in our conversation this morning, the letter included with Appendix B of the subject plan is inappropriate, and drill hole "E" is omitted from the accompanying sketch. Please substitute Appendix B (Rev. 7/31/87), which we enclose in quadruplicate. The revision incorporates our letter to Mr. Reidy dated July 22, 1987, and a corrected Sketch 1-87.

Very truly yours,

John H. Bragg

cc: A. Klauss T. West
G. Peck D. Evans
G. Heitzman G. Eure
S. Potter G. Kosko
E. Martin

Industrial Environmental Systems, Incorporated ("IESI") and
Northeast Solite Corporation ("NSC")

FIRE, SAFETY AND SPILL CONTROL PROCEDURES GOVERNING CLOSURE
OF HAZARDOUS WASTE MANAGEMENT FACILITY

1. Waste Inventory. The facility's inventory of hazardous waste at the commencement of final closure activities will be minimal. As described in Section 2.0 of the Closure Plan, the contents of all eight hazardous waste storage tanks were removed and disposed of in 1983, with no drummed material remaining in storage. Therefore, the total amount of waste subject to possible spill incidents during final closure is a maximum of 450 gallons, representing liquids which may remain in the pipe lines. Any cleaning/flushing liquids would be added to this amount.
2. Personal Safety Protection. Where necessary, working personnel will be equipped with acid/solvent resistant coveralls (olefin material coated with heavy polyethylene film), head protection, neoprene coated gloves, and boots that are resistant to solvents and acids. Wrists and ankles of coveralls will be sealed with electrical tape to protect against upward and inward splash. Full face respirators with organic vapor filter cartridges, sealing directly to the mask, will be used.
3. Control and Prevention of Fire. During closure operations, no smoking will be permitted anywhere within the facility. A fire or an explosion could result from ignition of vapors within a tank, exposed waste material, or waste spills. The use of on-site water to extinguish a fire will be avoided. Water may be used to cool nearby tanks, drums or other waste-containing equipment to prevent the spread of a fire and possible explosions. Fires will be contained, controlled and/or extinguished with 20-pound dry-chemical portable fire extinguishers. This is a fire-limiting measure only; the local Fire Department will be called for any emergency involving fire or explosion, and, once present on the site, will direct all responses to the emergency.

Secondary effects which could result from a fire/explosion emergency will be limited to the greatest possible extent. If a fire threatens adjacent materials or equipment that could ignite or explode, these will be removed. In the event that the NSC rotary kiln burning operation presents any hazard during a fire/explosion incident, the process will be shut down until the emergency has passed.

4. . . . Spill Control. Initial response to any spill incident will consist of shutting down or isolating the spill source and controlling the spread of spilled materials. If a fire is, or could be, involved, the Fire Department will be notified and the control procedures described in paragraph 3 above will be implemented.

Because of the relatively small waste inventory, any possible hazardous waste spills will be limited in quantity. Mobile equipment will be readily available for use in placing any temporary barrier berms that might be needed. These will be constructed of fine crushed shale and/or impermeable clay. Both of these materials are readily available on the site. Fine crushed lightweight aggregate is provided for clean-up absorption purposes.

Precautions and procedures for spill control follow:

- a. If the spill is at all large, temporary dikes will be placed to limit and control its spread.
- b. In order to reduce any explosion/fire potential, all electrical power in the immediate spill area will be shut down. Any mobile equipment not required for the immediate emergency will be shut off.
- c. If the amount of spillage liquid warrants, it will be transferred by portable pump to a tanker truck, if available, for transport off the premises. Alternatively, the liquids will be transferred to drum containers or to an on-site storage tank, as applicable.
- d. Material spilled on tanks, piping or other associated equipment will be thoroughly cleaned off.

- e. Small spills could result from pump leaks or pipeline drainings. These will be removed by absorption in fine lightweight aggregate and suitable padding. Any contaminated soils attendant on a spill will be excavated. These soils and any spent absorption materials will be placed in sealed drums for removal to a suitable disposal facility.
- f. Pump foundation pads, tanker truck loading/unloading slabs and other containment structures located within a spill area will be washed down with water, detergent and stiff brooms. Washing liquids will be pumped into a tanker truck for off-site disposal.
- g. Minor spills will be immediately taken up with suitable absorbent materials as they occur.
- h. If a spill ensues while loading or unloading a tanker truck, all valves on the truck and on the associated piping and hoses will be secured until the spill is contained, neutralized and cleaned up.
- i. Control of possible spills occurring during the emptying, filling, loading or unloading of containers will be implemented as described above. Any leaking containers that might be encountered will be placed in compatible 85-gallon emergency drums and packed with absorbent material.



DUNN
GEOSCIENCE CORP.

5 NORTHWAY LANE NORTH •
LATHAM, NEW YORK 12110
(518) 783-8102

Dunn Geoscience Corporation
Standard Field Operating Procedure
Wet Wipe Sampling - SWS - 1F1

WET WIPE SAMPLING - SWS - 1F1

Protocol For Wet Wipe Sampling

Wet wipe sampling is utilized to verify the completeness of decontamination of various surfaces as well as to delineate areas of suspected contamination. The former technique incorporates random testing of surfaces while the latter approach would warrant a more detailed grid strategy. Both situations will utilize similar sampling protocols.

Sampling Protocol

- Step 1. Prior to initiation of sampling place sterilized 3" x 3" gauze pads in a 500 ml wide mouth sample bottle equipped with a teflon-lined lid. Add a sufficient amount of solvent (for PCB's and dioxin use pesticide grade hexane) to thoroughly saturate all the gauze pads contained in the wide-mouth bottle. The sampling technician should wear new, unused, latex gloves while handling the gauze pads. A clean pair of tweezers should be placed in the wide mouth bottle prior to application of the teflon lined lid.
- Step 2. Outline a 2500 cm² area (approximately 19.8" x 19.8") with masking tape or other appropriate devices. If the surface will not allow for one contiguous 2500 cm² area, then sub-areas can be measured provided the sum total equals 2500 cm².
- Step 3. Use tweezers to remove one saturated gauze pad from the wide mouth container. It is important that a new pair of latex gloves is used for the collection of each wipe sample. After removing one gauze pad, place the tweezers back in the wide mouth container and cap tightly.

Step 4. Place the gauze pad in the gloved hand of the sampler and wipe the subject surface area by applying constant pressure in a horizontal left to right fashion. Each stroke of the gauze pad should overlap the previous stroke to ensure complete coverage of the surface. Once the entire area has been wiped, the gauze pad should be reversed and the area rewiped vertically left to right.*

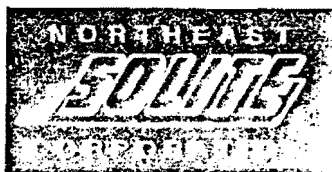
Step 5. Upon completion of the wiping procedure place the used gauze pad in a pre-numbered 250 ml sample container and cap tightly.

Quality Assurance/Quality Control

In addition to proper sampling protocols and techniques there are certain measures that can be utilized to determine the representativeness of analytical data derived from wet wipe sampling procedures. These methods employ gloved field blanks, trip blanks, rewipe samples and duplicate samples to ensure quality analytical results. A brief description of each of these methods is provided:

1. Gloved field blank - A solvent saturated sterilized gauge pad is used to gently wipe a new pair of latex gloves which has been obtained from the same allotment of gloves as used during the sampling. This gauze pad is then placed in a pre-numbered sample bottle and submitted for analysis. Analytical results will indicate whether contamination from the latex gloves or the gauze pad is a concern.

2. Trip blank - A trip blank consists of an empty sample container which accompanies the remaining sample bottles from the laboratory to the field and back to the laboratory. Analytical results will indicate whether sample bottle contamination is a concern.
 3. Rewipe Sample - These samples are collected by rewiping an area from which a wipe sample has already been obtained. Analytical results indicate the effectiveness of contaminant removal by the solvent saturated gauze pad.
 4. Duplicate Wipe - Two wipe samples are collected from areas directly adjacent to one another. Analytical results indicate the consistency of contamination and reproducibility of analyses.
- * In a situation where heavy oil and grease is encountered, multiple gauze pads can be used; however, no more than three gauze pads should be employed for the collection of any one sample.



P.O. BOX 437 • MT. MARION • NEW YORK 12456 • PHONE (914) 246-9571

August 3, 1987

Mr. John O'Mara
N. Y. State Dept. of Environmental Conservation
202 Mamaroneck Ave., Room 304
White Plains, NY 10601

Re: Northeast Solite Corp. and Industrial Environmental
Systems, Inc. - Facility Closure Plan dated July 29, 1987

Dear Mr. O'Mara:

We enclose four copies of a correction page 2, to be inserted in the Closure Plan in place of the original page bearing the same number. This is necessary in order to make the text consistent with the earlier revision made to Appendix B.

We regret any inconvenience this may have caused.

Very truly yours,



John H. Bragg

cc: E. Martin
T. West
D. Evans
G. Eure
G. Kosko

procedures and developments. A partial list of the correspondence in this regard is contained in Appendix A. The project was completed on November 17, 1983. All tanks were left in broom-clean condition, and have been empty since that date.

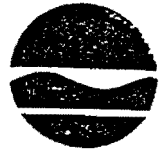
In December, 1983, extensive excavation was conducted in the area between the IESI and NSC facilities, a space measuring approximately 150 feet by 200 feet. All visibly contaminated soil was removed, as were all underground LBM pipelines which had carried hazardous waste fuel, and the area was back-filled with clean 3/8-inch by 0-inch shale, which is routinely quarried and crushed on NSC's site. The pipelines removed were replaced with new, above-ground lines in July, 1984. During the same month, No. 9 fuel tank was completely steamed out and fitted with a new bottom, which rests on a concrete foundation above ground level, while Nos. 4, 5, 6, 7 and 8 tanks were re-installed on a common concrete foundation which was equipped with a leak detection system.

In November, 1984, the excavated/refilled area mentioned above was completely weather-sealed by a four-inch application of macadam. Final closure activities will include obtaining four sub-soil samples from below the previously excavated areas beneath the present macadam cover. The samples will be analyzed for possible concentrations of volatile organics. The protocol for this sampling can be found in a letter [attached Appendix B (Rev. 7/31/87)] from John Bragg to James Reidy, dated July 22, 1987.

Beginning in January, 1984, several monitoring wells were installed in the vicinity of the IESI facility. These have exhibited minimal contamination, and will continue to be monitored over such future period as may be mutually agreeable. Several reports furnished by Dunn Geoscience Corporation, consultant to IESI/NSC, summarize monitoring well analysis results over a lengthy period of time. A reference list of these reports by title and submission date is shown on page 2 of Appendix A. Complete copies have been maintained in the DEC files.

It is not anticipated that any of the tanks will be re-located within the IESI/NSC premises or sent to another location off-site, but in the event this should occur, procedures outlined in Section 4.2 for final closure will be followed. Prior to final implementation of this Closure Plan, any modifications to the existing facility equipment, structures, instruments or

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling
Commissioner

October 22, 1987

Mr. John H. Bragg
Northeast Solite Corporation
P.O. Box 437
Mt. Marion, NY 12456

Dear Mr. Bragg:

Re: Closure of NSC, EPA ID No. NYD050424324,
and IES, EPA ID No. NYD000707885

This letter is to inform you that upon review of our records, the applicable regulatory requirements, in conjunction with closure of the above-referenced facility, have been met, and, hereby, approval of the closure plan and Public Notice is granted.

Please note that this approval in no ways precludes your responsibility to submit closure certification to this office as noted in the closure plan. It is deemed that closure of the referenced facility is not complete until such certification is received by this office.

If you have any questions regarding this notice, please contact Mr. Mark Kauffman at (518) 457-3274.

Sincerely,

James Sibbald Moran, P.E.
Supervisor
Facility Closure Section
Bureau of Hazardous Waste Operations
Division of Hazardous Substances Regulation

cc: A. Klauss, Region 3, New Paltz
J. Reidy, Region 3, White Plains
J. Middelkoop
M. Kauffman

Praetorius and Conrad, P. C.

Professional Engineering and Land Surveying
74 Main Street • Saugerties, New York 12477
Phone: (914) 246-3571

Richard J. Praetorius, P.E.

Thomas W. Conrad, L.S.

19 April 1988

Industrial Environmental Systems, Inc.
Northeast Solite Corp.
P.O. Box 437, Kings Highway
Saugerties, New York 12477

ATTENTION: GEORGE EURE

SUBJECT: INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. (IESI) AND
NORTHEAST SOLITE CORP. (NSC), PROPOSED FACILITY
CLOSURE PLAN DATED 29 JULY 1987

Dear Mr. Eure:

As part of the conditions outlined in the Closure Plan for the IESI/NSC facility, we were hired by you to review the approved Closure Plan and to inspect the sampling procedures, dismantling operations and other closure activities.

After reviewing the plan, we inspected the site on a spot-check basis, and have attached our observations. It should be noted that one aspect of the plan was changed, in that instead of steam cleaning the pipes and fittings, they were dismantled by Cecos International, loaded into two 20 cubic yard containers, and shipped to the Cecos International facility in Buffalo, N.Y. (See Hazardous Waste Manifest NYA-3307228 and NYA-5908383). P
O.K.

Twenty one barrels of rust scale and three barrels of wash water were also removed from the site. In reviewing the Hazardous Waste Manifests for all the material removed from the site the records appear in order.

We have received the sampling results from the wipe tests and soil borings taken during our inspections, and the results appear to be valid representations of the conditions present at the time of sampling.

Industrial Environmental Systems, Inc.

Page 2

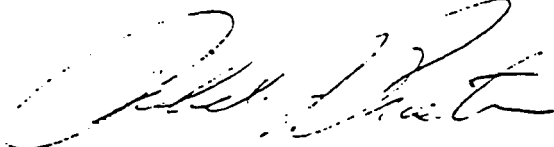
19 April 1988

After discussing the test results with Ronald Bayer of Envirotech Laboratories, Inc., the method stipulated for testing the soil samples for trichloroethylene did not yield meaningful results. If the N.Y.S.D.E.C. has any questions about this, we recommend that they be referred directly to Ronald Bayer for further explanation.

The closure project is complete and ready for submittal to the Commissioner of the NYSDEC.

Respectfully submitted,

PRAETORIUS AND CONRAD, P.C.

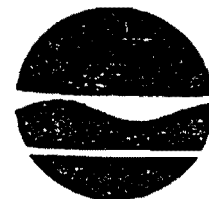


Richard J. Praetorius, P.E.
President



RJP/js9
Enc.

New York State Department of Environmental Conservation
202 Mamaroneck Avenue, White Plains, New York 10601



Thomas C. Jorling
Commissioner

May 12, 1988

Mr. George E. Eure
Northeast Solite Corporation
P.O. Box 437
Mt. Marion, New York 12456

Re: Closure Certification of
Industrial Environmental Systems Inc. (IES)
EPA No. NYD 000707885
Northeast Solite Corp. (NES)
EPA NYD 050424324

Dear Mr. Eure:

In answer to your letter of April 25, 1988, please be advised that this Department has reviewed the above mentioned certification, and found it deficient for the following reasons:

- 1) The schedule that the professional engineer (PE) was on site to insure that the approved Closure Plan (CP) was adhered to, must be supplied. Specifically, what days, how much time on these days and what was observed must be submitted. A field notebook would suffice.
- 2) The PE certification should specify that closure of hazardous waste facility conforms to the NYSDEC approved CP except as noted in your letter of April 25, 1988. The supervising role of the PE is explained in Section G of May 29, 1987 letter of IES-NES to this Department. The PE should determine if tanks, drums and structures are clean and decontaminated. Did the PE check the initial truck loading procedures?
- 3) Specify what is the final destination of the tanks.
- 4) Specify if pumps were also wipe tested or instead if they were dismantled together with pipes and fittings.
- 5) The wipe test results of tank samples show hazardous constituents less than 1,000 micrograms/square meter. However, where there is trichloroethene present in the laboratory results of volatile organics, the facility is

Mr. Eure
Page 2
May 12, 1988

required to submit evidence (e.g. letter of Envirotech Lab or new sampling, etc.) that the amounts of such chemical in the sample concentration is too small so that sample could not give a representative value.

- 6) Both owner and PE certifications do not mention closure of feed lines to rotary kilns as per approved Closure Plan.

Should you have any questions regarding this matter, please call Mr. Wilfredo Palomino of my staff at (914) 761-6660.

Very truly yours,



James Reidy, P.E.
Regional Hazardous Waste Engineer

JR:WP:bz

cc: A. Klauss, NYSDEC, New Paltz

M. Kauffman, NYSDEC, Albany.

George Kosko
For your info.
Ed



P.O. BOX 457 • MIL MARION • NEW YORK 12556 • PHONE (914) 246-9871

June 8, 1988

Mr. Jim Reidy, P.E.
Regional Hazardous Waste Engineer
NYS Dept. of Environmental Conservation
202 Mamaroneck Avenue
White Plains, NY 10601

Re: Closure Certification of Industrial Environmental
Systems, Inc., EPA No. NYD 000707885
Northeast Solite Corp., EPA No. NYD 050424324

Dear Mr. Reidy:

The purpose of this letter is to address the perceived deficiencies listed in your letter of May 12, 1988.

1. The Schedule of Professional Engineer.
Enclosed are daily reports from the P.E. showing dates, times and observations.
2. P.E. Certification of Closure.
A letter stating the facility has been closed is attached.
3. The Final Destination of the Tanks.
Tanks #1, 2, 3, 4, 5, 6 and 7 will be dismantled and scrapped.
Tanks #8 and 9 will remain as fuel oil storage for kiln fuel.
4. The Pumps.
The pumps were dismantled and disposed of with the contaminated pipes and valves listed on manifest #NYA 330722 8 and NYA 590838 3.
5. Laboratory Results of Volatile Organics.
Enclosed is a letter from Envirotech Laboratories, Inc. explaining the results.
6. NES Feed Lines.
The feed lines for Northeast Solite were dismantled and disposed of with the piping, valves and pumps listed on manifest NYA 330722 8 and NYA 590838 3.

Please notify me if you have further questions.

Sincerely,

George E. Eure
Plant Manager

Gee/ay

Praetorius and Conrad, P. C.

Professional Engineering and Land Surveying
74 Main Street • Saugerties, New York 12477
Phone: (914) 246-3671

Richard J. Praetorius, P.E.

Thomas W. Conrad, L.S.

8 April 1988 .

Industrial Environmental Systems, Inc.
Northeast Solite Corporation
Mt. Marion, New York 12456

SUBJECT: Facility Closure Plan, Removal of Transfer and Feed
Lines, Steam Cleaning of Containment Slabs, Field
Inspection


DATE: 7 April 1988

PRESENT: George Eure, Northeast Solite Corporation
George Collins, Praetorius and Conrad, P.C.
E. Donnelly, Cecos International, Inc.
J. Falbo, Cecos International, Inc.

INSPECTION: Arrived on site at 2:15 p.m. Noticed all hazardous
waste fuel transfer and feed pipe lines had been
removed. Pipe lines had been stored in two con-
tainers for removal from site. According to G.
Eure, pipe lines will be disposed of in approved
hazardous waste landfill.

Noticed containment slabs. Containment slabs were
steam cleaned by Cecos International. Rinse water
had been collected and stored in 55-gallon drums.
Samples of rinse water have been submitted to
testing lab.

Left site at 3:00 p.m.


George R. Collins, Project Engineer

Praetorius and Conrad, P. C.

Professional Engineering and Land Surveying

74 Main Street • Saugerties, New York 12477

Phone: (914) 246-3671

Richard J. Praetorius, P.E.

Thomas W. Conrad, L.S.

8 March 1988

Industrial Environmental Systems, Inc.
Northeast Solite Corporation
Mt. Marion, New York 12456

SUBJECT: Facility Closure Plan, Sub-Soil Testing, Field
Inspection

DATE: 7 March 1988

PRESENT: George R. Collins, Praetorius & Conrad, P. C.
George Eure, Northeast Solite, Inc.
Whiting Pixley, Envirotech Labs, Inc.
Charlie, Drill Operator, Northeast Solite, Inc.

INSPECTION: Arrived 1:30 p.m. A roughly 1 sq. ft. area of
macadam had been removed (4" thick) in 5 locations,
at approximately the same points as shown on the
Sketch 1-87 in a letter from John Bragg, Northeast
Solite to James Reidy, N.Y.S.D.E.C.

Test Hole E was sampled first. Hole was drilled to
a depth of roughly 2'. The hole and tailings were
then blown clean. A box with a 2" slot cut from the
bottom was then placed over the hole in order to
catch any tailings that would blow out of the hole
for use in the sampling. The drill was taken down
to a depth of 10'.

The procedure was then begun for Test Hole D,
however, no tailings were being blown out of hole,
possibly due to fracture in the sub-soil. The drill
was moved to Test Hole C, and it was found the same
happened as at Hole D.

Test Hole B. Small amounts of soil were coming up,
enough for a sample to be taken. Small drops of oil
and paint particles were noticed in the soil sample,
coming from the drill rig.

Test Hole A was then sampled. Paint and oil were
noticed in sample again. A small amount of paint was
scraped from the rigging for sampling. Also, a
sample of the lubricating oil for the drill would be
taken to determine their make-up.

A new hole was cut out of the macadam for Test Holes
C and D, both about 4' west of their original

location. The sampling procedure was done for both holes.

Left site at 3:00 p.m.

A handwritten signature in dark ink, appearing to read 'GRC', is positioned above the printed name.

George R. Collins, Project Engineer

Praetorius and Conrad, P. C.

Professional Engineering and Land Surveying

74 Main Street • Saugerties, New York 12477

Phone: (914) 246-3671

Richard J. Praetorius, P.E.

Thomas W. Conrad, L.S.

1 February 1988

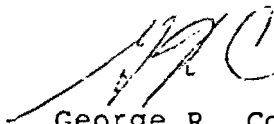
Industrial Environmental Systems, Inc.
Northeast Solite Corp.
Mt. Marion, New York 12456

SUBJECT: Facility Closure Plan, Wet Wipe Sampling, Field
Inspection.

DATE: 28 January 1988

PRESENT: George R. Collins, Praetorius and Conrad, P.C.
Rich Bayer, Envirotech Labs, Inc.
Jim Palumbo, Northeast Solite Corp.

INSPECTION: Arrived on site 1:40. Sampling being taken off
floor of tank 9 upon arrival. Wet wipe samples
taken in the following order: Tank 9, 6, 5, 4, 3,
2, 1, 7. Tank 8 was not open and was said to have
No. 2 fuel oil inside. A sample vial of the liquid
from Tank 8 was taken. A rewipe sample was taken in
Tank 5. A duplicate sample was taken in Tank 3.
Sample area: 20" x 20" square. All samples taken
from tank walls, except Tank 9. Left site at 3:00
p.m.



George R. Collins, Project Engineer

Praetorius and Conrad, P. C.

Professional Engineering and Land Surveying

74 Main Street • Saugerties, New York 12477

Phone: (914) 246-3671

Richard J. Praetorius, P.E.

Thomas W. Conrad, L.S.

2 June 1988

Industrial Environmental Systems, Inc.
Northeast Solite Corporation
P. O. Box 437, Kings Highway
Saugerties, New York 12477

ATTENTION: GEORGE EURE

SUBJECT: INDUSTRIAL ENVIRONMENTAL SYSTEMS, INC. (IESI) AND
NORTHEAST SOLITE CORP. (NSC), PROPOSED FACILITY
CLOSURE PLAN DATED 29 JULY 1987


Dear Mr. Eure:

The facility has been closed in accordance with the approved closure plan referenced above with modification as described in my letter of 19 April 1988.

If you require any additional information, please feel free to contact me.

Very truly yours,

PRAETORIUS AND CONRAD, P. C.

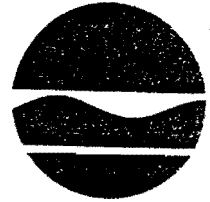


Richard J. Praetorius, P. E.
President

RJP/gsl

ATTACHMENT IX

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling
Commissioner

July 6, 1988

Mr. George E. Eure
Northeast Solite Corporation
P.O. Box 437
Mt. Marion, NY 12456

Dear Mr. Eure:

RE: Closure of NSC, EPA Identification Number: NYD050424324 and
IES, EPA Identification Number: NYD000707885

This letter is to confirm the receipt of owner/operator and independent professional engineer's certification dated April 25, 1988 of RCRA closure for this facility as well as the required additional information dated June 8, 1988. We now consider this facility officially closed. Your authority to operate as a Treatment, Storage, and Disposal Facility (TSDF) is terminated.

Please be advised that the United States Environmental Protection Agency has determined that the corrective action provisions of the Hazardous and Solid Waste Amendments (HSWA) Section 3008(h) apply to all TSDF's which have acquired interim status.

The New York State Department of Environmental Conservation has established a program to evaluate the corrective action measures necessary at closed and closing facilities within the State. Once the corrective action provisions of HSWA have been met by the facility or determined not to be necessary at the facility, the facility can have their interim status terminated.

If you have any questions regarding your closure or status within this program, please contact Ms. Michelle M. Taylor, of my staff, at (518) 457-3274.

Sincerely,

James H. Sibbald Moran

James Sibbald Moran, P.E.
Chief, Facility Closure Section
Bureau of Hazardous Waste Operations
Division of Hazardous Substances Regulation

cc: H. Mulholland, USEPA
A. Klaus, Region 3 (New Paltz)
J. Reidy, Region 3 (White Plains)
J. Desai