915054

FINAL REPORT

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK

PHASE II INVESTIGATIONS

VOLUME II

Alltift Realty
City of Buffalo

Site No. 915054
Erie County

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233-0001
Henry G. Williams, *Commissioner*

Division of Solid and Hazardous Waste
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By:
ENGINEERING-SCIENCE
In Association With
DAMES & MOORE

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ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE II INVESTIGATIONS

VOLUME II

ALLTIFT REALTY
NYS SITE I.D. 915054
CITY OF BUFFALO
ERIE COUNTY
NEW YORK STATE

Prepared For

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ALLTIFT REALTY
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FIELD PROCEDURES

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PHASE II FIELD PROCEDURES

The following procedures have been used by Engineering Science/ Dames & Moore field teams during the Phase II field investigations.

These procedures have been developed from the standard practices of the companies and, in some instances, reflect specific procedural requests from the NYSDEC.

GEOPHYSICAL SURVEY PROCEDURES

Electrical Resistivity Survey

The electrical resistivity survey provides a method for shallow subsurface investigations by means of electrical measurements taken at the surface of the earth. Two electrode arrangements were used for the electrical resistivity survey, the standard Wenner and the "Modified" Wenner electrode arrays.

The standard Wenner electrode configuration (Bison, 1975), is one in which four electrodes are spaced at equal intervals along a line. This method is known as electrical resistivity profiling, where electrode spacing is approximately equal to depth below ground surface and used to investigate a particular subsurface zone.

The "Modified" Wenner electrode configuration (Carrington and Watson, 1981) for depth sounding was used to determine the variation in electrical subsurface conditions with depth. The sounding procedure consists of moving the two potential electrodes at one foot increments, along a line, away from the geoelectrical center while the two current

electrodes remain stationary. Successive readings are taken and the apparent resistivity values are plotted against electrode spacing. The potential electrode spacings closely approximate depth below ground surface with this electrode configuration.

Both vertical electrical soundings and horizontal electrical profiles were conducted at selected depths and locations in the immediate vicinity of the site.

Magnetometer Survey

The magnetometer survey was conducted utilizing a Geometrics Model 816/826A magnetometer. The magnetometer obtains readings of the magnetic field intensity, in gammas, of the earth at a single ground surface location. The successful application of the magnetometer is determined by the magnetic intensity of the target and the established background intensity.

Background magnetic values are established by setting up a magnetometer base station in a clean area and recording the values at the beginning and end of each survey. The magnetometer survey is conducted on a large-scale grid pattern using 40-by-40 foot grids as station locations. A tightly spaced grid 10-by-10 foot or 20-by-20 foot may be employed in areas where magnetic anomalies are identified.

SURFACE WATER, SEDIMENT, AND LEACHATE SAMPLING

Surface water, sediment, and leachate sampling bottles were provided by the laboratory. At leachate collection points only liquid samples were taken. At all other points both water and sediment samples were taken, except where otherwise noted. When no preservatives were present in the bottle, the bottle was directly submerged into the surface water and allowed to fill; when preservatives were used, the sample was initially collected in a wide mouth glass jar and decanted into a sampling jar with the appropriate preservative. Care was taken not to overfill the sampling jars, so as to avoid loss of the sample preserva-

tive. The wide-mouth glass jar was washed with hexane followed by methanol and rinsed with distilled water between each sample. Samples were wrapped, packaged on ice and shipped according to the same quality assurance procedures as described in the section on Monitoring Well Sampling.

DRILLING, WELL INSTALLATION AND WELL DEVELOPMENT DRILLING

After an evaluation of geophysical survey results, and existing site conditions, the drilling program was reevaluated, if necessary, and implemented. Drilling was performed by R & R International with CME drill rigs mounted on truck and all-terrain vehicles. A 6-1/4 inch I.D. hollow-stemmed auger was used for all borings except where drilling conditions warranted use of roller bit and 6-inch casing (rotary wash method). All down-hole tools were steam-cleaned between borings to prevent cross-contamination during drilling. An attempt was made to keep tools, rods, etc. as clean as possible during drilling by frequently cleaning the equipment and using plastic tarps to cover the ground.

Soil samples were taken with an open-drive split-spoon sampler. At least one boring, typically the upgradient boring, was sampled continuously. In all other boreholes, the sampling method was standard sampling at 5-foot intervals. Glass sample jars were provided by the drilling subcontractor.

All cuttings and drilling fluids were monitored with an HNu meter to assess potential for air contamination. If volatile organics had been detected in excess of 5 ppm, material would have been containerized.

Well Installation

Well installation took place immediately after drilling. For all wells, except in cases of an extremely thin aquifer, a 10-foot long 2-inch Johnson PVC wound continuous slot (0.010 inch) screen and 2-inch I.D. PVC riser pipe was used. At the base of each well, a 2-foot long

2-inch I.D. pipe was placed to help prevent clogging of the pipe due to infiltration of sediment. All other pipe sections were 10-feet long and flush-jointed; all joints were additionally secured with teflon tape. All screens and pipe sections were cleaned by steaming prior to installation.

Upon completing the PVC emplacement, a No. 1 Q-rok sand filter was tremmied into the annulus to a height of 2 to 4 feet above the tip of the screened interval. An approximately 2-foot thick primary bentonite seal was placed on top of the sand pack. When installing the shallow wells, grout was placed on top of the bentonite seal to the ground surface and a 6-inch O.D. steel protective casing with a locking cap was installed. After placing the primary bentonite seal in the deep wells, the auger was gradually withdrawn while grout was placed in the hole.

At the upgradient, CW-1 location, no deep well was installed because bedrock was encountered at approximately 10 feet, and only one soil aquifer exists at that location. A total of three wells were installed at the CW-2 location. CW-2A, the first deep well, was abandoned after its completion because it was determined that a 5-foot length of steel casing had been left in the hole by the drillers within the screened interval. A second deep well, CW-2C, was drilled to replace CW-2A. A deep well, CW-3A, was drilled to bedrock at the CW-3 location. While waiting for new rock coring equipment to be delivered, the shallow well, CW-3B was drilled and installed. By request of NYSDEC, CW-3A was abandoned because the hole had been left open for several days. Because the CW-3 location required drilling through obvious waste and landfill material, it was requested that replacement wells be drilled off the site to the north. CW-3B was retained in order to sample the water in the fill material. Two new wells, CW-6A and CW-6B, were installed to replace CW-3A and CW-3B, respectively. During the drilling of the deep well, CW-5B, at the CW-5 location, a broken piece of steel drill rod was lost in the hole below the confining layer. As a result of this, the hole was grouted and sealed from 45 feet to 17 feet, and the shallow well was installed in this boring. The deep well, CW-5A, was then installed at this location.

Well Development

Each well was developed by pumping with either an airlift system, a positive displacement pump, or a bailer in order to evacuate the well and allow normal inflow of groundwater through the sand pack. Evacuation continued until discharge water was free of fines, typically 4 to 6 hours. If HNu meter readings in excess of 5 ppm had been measured, the discharge water would have been containerized.

Monitoring Well Sampling

The sampling of monitoring wells consists of three parts: well evacuation, well sampling, and analytical field tests. Each of these procedures is described below.

Well Evacuation

Prior to sampling a monitoring well, the static water level was recorded and at least two well volumes of water were removed to assure that the water in the well was truly representative of the groundwater. Evacuation was accomplished by using either a teflon bailer, stainless steel bailer, centrifugal pump, or an airlift system. The method used was dictated by each well, (i.e., volume of water to evacuate and depth to static water level). If HNu meter readings in excess of 5 ppm had been measured, the discharge water would have been containerized.

Sampling Procedure

Following recovery from final evacuation, groundwater samples were collected according to the procedures summarized on Table A.1. For deep wells, the samples were collected using a positive displacement device with a check valve at its lower end. The advantage of a positive displacement pump is that it limits degassing and volatilization of contamination when a sample is removed from a deep well. For shallow wells, samples were collected using either a stainless steel or a teflon bailer with a ball check valve at its lower end. Incorporation of a

check valve onto the bailers assures that a sample is representative of the depth to which the bailer is lowered. All samples were removed from a depth just above the well screen to further assure a representative groundwater sample. After sampling, the sampling apparatus was cleaned with hexane, methanol, and then rinsed with distilled, deionized water.

In addition to water samples collected from the monitoring wells, three types of "blanks" were collected and submitted to the chemical laboratory for analyses:

a. Trip Blank A - One Trip Blank A was prepared by the chemical laboratory. It consisted of distilled, deionized water in a sample bottle which remained capped during the shipment of sample bottles and sampling effort.

   One Trip Blank A accompanied each set of sample bottles to be used in each geographical location. It was a check on the chemical laboratory's analysis.

b. Trip Blank B - One-for-each-geographical location Trip Blank B samples were prepared ahead of time by the laboratory. Each sample consisted of distilled deionized water in a sample bottle, labeled and capped. At each location, a new Trip Blank B sample was used. For each, the procedure was to open the blank when the wells were uncapped, keep Trip Blank B opened until sampling effort was finished at the well, and cap Trip Blank B when groundwater sample bottles were capped. Trip Blank B was a check on the contribution of atmospheric contamination to the water samples.

c. Equipment/Wash Blank - Taken between selected wells. Procedures were as follows:

   - Sampling equipment (pump or bailer) washed with hexane followed by methanol, collecting solvent rinse. Rinsed with distilled water.

- o Sample taken of "clean" distilled deionized water.
- o Sample refrigerated.

The analytical results from the groundwater sampling effort are presented in Section IV and Appendix D.

Analytical Field Tests

Prior to filling the sample bottles, two 250-ml beakers of groundwater were filled. The sample in one beaker was immediately analyzed for temperature (°C), specific conductance (umhos/cm), and pH. The sample in the other beaker was analyzed for dissolved oxygen (ppm). Specific conductance, pH, and dissolved oxygen were measured by electronic probe. Temperature was measured by probe and double-checked with a thermometer. All equipment was cleaned and calibrated between each sample. During the sampling and field testing, sampling records were kept. Results of these analytical field tests are compiled in Appendix D.

AIR QUALITY MONITORING

Air quality monitoring for organic vapors with an HNu photoionization meter was implemented during site investigations before, during, and after sampling, and at the time of drilling. The meter was calibrated in the laboratory before use with a benzene standard. The first reading that was taken was an upwind position. The wand on the meter was held at head height for 30 seconds and the reading was recorded. Readings with the wand at head height were continually taken during site reconnaissance. Organic vapors emanating from surface water and leachate seeps were determined by holding the wand 6" to 12" above the water for 30 seconds. During the drilling procedure, the split-spoon soil samples were held at approximately 1" from the wand to test for organic constituents emanating from the soil samples. The air in the drilled well was also analyzed by dangling the wand at a depth of approximately 1 foot.

GAMMA AND ELECTRIC LOGGING

Each well (or the deeper well of a cluster) at each installation was logged using a Mt. Sopris 1000-C portable logging instrument to record the natural gamma activity of the formations. All logs were run from the bottom of the hole to the surface. The instrument depth meter was initialized with the Probe Electrode at ground surface at each well. The logging probe was cleaned with distilled water between wells. At most wells the surface electrode was connected to the protective surface casing. At a few wells the surface electrode was pushed into adjacent soil. Copies of the resulting logs are shown as figures in Appendix B.

The interpretations of these logs are based on relative changes of all three logs, not necessarily the actual values of displacement. The logs were utilized in conjunction with the drilling logs in formulating a basic understanding of the subsurface strata and in preparing geological cross-sections.

IN-SITU PERMEABILITY TESTS

An in-situ variable head permeability test (slug test) was performed in each well. This test provides estimate of permeability calculated from the rate at which water level inside a well will equilibrate with the hydraulic head in the surrounding aquifer. The test procedure is as follows: the initial change in water level is accomplished inserting or withdrawing a solid "slug" of known volume into or out of the well. The slug test data is analyzed by the Hvorslev (1951) method for data reduction. For the well geometries used at this site, the method calculates horizontal hydraulic conductivity (K_h). K_h has units of a velocity and is an estimate of the capability of a saturated soil to transmit groundwater in a horizontal direction. To use the Hvorslev method, a semi-log plot of recovery data (of normalized to the initial change in water level) versus time (arithmetic scale) is prepared. K_h is calculated according to the following equation:

$$K = \frac{r^2 \ln (L/R)}{2 L T_o}$$

Where: K = horizontal hydraulic conductivity

r = radius of the well casing

L = length of the well screen

R = radius of the well intake (well casing plus sand pack)

T_o = basic time lag (=value of t at recovery of 0.37)

In most cases, two tests were done on each well; one where the water level was initially lowered in the well (depeletion mode) and the other where the water level was initially raised in the well. The results of both analyses for each well are summarized in the text.

TABLE A.1
SAMPLING PROCEDURE FOR MONITORING WELLS

1. Well and trip blank "B" were opened; initial static water level recorded with an electric sounder.

2. Sampling device lowered into well.

   - o Positive displacement device lowered by the attached stainless steel guide cable.

   - o Bailer was lowered by a stainless steel cable.

3. Sample taken.

   - o From positive displacement discharge tube.

     - The discharge tube was inserted to the bottom of the sample bottle and withdrawn ahead of the sample so that aeration and turbulence were minimized.

   - o From bailer.

     - Sample was poured slowly from the open end of the bailer and the sample bottle tilted so that aeration and turbulence were minimized.

4. Samples were capped, labeled and placed in ice filled coolers provided by the chemical laboratory.

5. Well and trip blank were capped and locked.

6. Chain-of-Custody forms were completed in triplicate.

   - o The original and a copy were put into a zip-lock bag and placed into the cooler.

   - o A copy was kept for files.

7. Cooler was sealed with strapping tape. Custody labels assured integrity and provide security against tampering.

8. Sampling device washed.

   - o Sampling device was washed with hexane, followed by methanol and finally distilled water.

   - o Solvents and distilled water rinse were collected into a large funnel which emptied into a 5-gallon container.

APPENDIX B

BORING LOGS, WELL SCHEMATICS, GRAIN SIZE ANALYSIS, GAMMA LOGS, AND PERMEABILITY TEST DATA

Boring Logs

DAMES & MOORE BORING LOGS

One boring log for each drilling location has been submitted. The log is representative of the subsurface conditions found in the deep well at that drilling location. The dates shown on the logs represent the total amount of time needed to complete all drilling activities at that drilling location. Further details regarding the drilling operations are given in Appendix A.

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-1
SURFACE ELEV: 585.47'

DRILLING METHOD: Hollow stem auger

SAMPLING METHOD: Split spoon

DATE STARTED: 7/16/85

DATE FINISHED: 7/16/85

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			0		Black organic silty topsoil
1	4	SS	1		Tan fine sand with some black organic silt Hnu=0
			2		
			3		
			4		grading moist grading some clay and gravel
			5	SM	
2	11	SS	6		
			7		
			8		grading with cobbles
			9		
3	60/2.5"	SS	10	GM	Brown gravel with brown wet sand and some clay (Till) Hnu=1ppm
			11		
			12		Black stained limestone (Onondaga Limestone)
			13		
			14		
			15		Boring terminated at a depth of 15.0 feet on 7/16/85.

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-2A
SURFACE ELEV: 586.04'

DRILLING METHOD: Hollow stem augers

SAMPLING METHOD: Split spoon

DATE STARTED: 7/8/85
DATE FINISHED: 7/17/85

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
1	14	SS	0		Brown with zones of black fill made up of fine sand and gravel
			1		Hnu=0.3ppm
2	12	SS	2		Hnu=4ppm
			3	Fill	
3	5	SS	4		Hnu=1ppm
			5		
4	2	SS	6		
			7		Gray moist silt with a little fine sand
5	7	SS	8		
			9	ML	
6	12	SS	10		grading yellowish gray
			11		
7	16	SS	12	GM	Gray/black wet gravel with a little silt yellowish brown moist wilt
			13		
8	27	SS	14		grading with reddish tint
			15		
	23	SS	16	ML	
			17		grading with some clay
9	13	SS	18		
			19		grading trace clay
			20		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-2A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
10	5	SS	20		grading little clay Hnu=5ppm
			21	SM	Gray moist fine sand and silt Hnu=4ppm
11	8	SS	22	CL	Gray moist clay with some silt, trace fine sand Hnu=11.5ppm
			23	SP	Gray/black moist fine sand Hnu=12ppm
12	6	SS	24		Gray moist clay with little silt Hnu=8.5ppm
			25		
13	8	SS	26		grading trace silt Hnu=6.5ppm
			27		
14	13	SS	28		Hnu=5ppm
			29		
15	0	SS	30		grading some silt Hnu=5.5ppm
			31		
16	6	SS	32		Hnu=3.5ppm
			33		
17	4	SS	34	CL	grading reddish
			35		down-hole Hnu=35ppm
18	4	SS	36		Hnu=5ppm Hnu=4ppm
			37		
19	4	SS	38		
			39		grading gray/red Hnu=4.5ppm
			40		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-2A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
20	4	SS	40		
			41		
			42		grading very moist
			43	SM	Gray moist fine sand, little gravel, silt and clay (Till)
			44	CL	Gray moist clayey silt fine sand and gravel (Till)
			45		
			46		Gray moist fine sand and gravel, little to some clay (Till)
			47	SM	
			48		grading trace of gravel
			49		
			50		
			51		
			52		Gray very moist fine sand with little gravel (Till)
			53	SP	
			54		
			55		
Run 1			56		Gray Onondaga Limestone, some fossil hash visible, black staining and strong kerosene odor noted at 56.6 feet.
			57		
			58		
			59		
			60		
			61		Boring terminated at a depth of 61.1 feet on 7/17/85

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-3
SURFACE ELEV: 593.93'

DRILLING METHOD: Hollow stem augers

SAMPLING METHOD: Split spoon

DATE STARTED: 7/9/85

DATE FINISHED: 7/13/85

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
1	17	SS	0		Organic silt, some gravel misc. fill (Fill) Hnu=0ppm
			1		
			2		
			3		
			4		
2	4	SS	5		
			6		
			7		
			8		
			9		
3	16	SS	10	Fill	grading with wood and tarry substance
			11		
			12		
			13		grading looser
			14		
4	5	SS	15		grading with black tarry substance (strong petroleum chemical odor) Hnu=4ppm
			16		
			17		
			18		
			19		
5	10	SS	20	CL	

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-3

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			20		Gray, moist clay with some silt, trace fine sand
			21		
			22		Hnu=0.2ppm
			23		
			24		
6	6	SS	25		
			26		
			27		
			28		
			29		
7	4	SS	30		Hnu=0.1ppm
			31		
			32		
			33		
			34		
8	Rod wt.	SS	35		
			36		Hnu=0ppm
			37		
			38		
			39		
9	Rod wt.	SS	40		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-3

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			40		
			41		grading with fine sand lenses Anu=0.2ppm
			42		
			43		
			44		
10	4	SS	45		
			46		
			47		grading wet Anu=1ppm
			48		
			49		
11	Rod wt.	SS	50	CL	grading with little to some red clay Anu=0ppm
			51		
			52		petroleum odor in cuttings between 50.0 - 60.0'
			53		
			54		
			55		
			56		
			57		
			58		
			59		
			60		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-3

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
12	Rod wt.	SS	60		
			61	CL	red moist clay, some gray clay Hnu=0.4ppm
			62		
			63		
			64	GM	Gray, moist clay, some fine sand, trace gravel, pieces of broken gray shale (Till)
			65	ML	
			66		
			67		
			68		Hole abandoned and grouted at a depth of 68.0 feet on 7/13/85

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-4A
SURFACE ELEV: 581.51'

DRILLING METHOD: Hollow stem auger

SAMPLING METHOD: Split spoon

DATE STARTED: 7/17/85
DATE FINISHED: 7/18/85

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
1	10	SS	0		0-3" grass/weeds, topsoil 3"=1.5' black wet gravel/slag and sand Hnu=0ppm cobbles encounterd at 2' (railroad stones) railroad fill to 5'
			1		
			2	Fill	
			3		
			4		
2	11	SS	5		Gray, moist fine sand, some clay Hnu=0ppm
			6	SC	
			7		
			8		Gray, moist silt with trace of tan and gray fine sand Hnu=0.2ppm
			9		
3	18	SS	10		
			11	ML	
			12		
			13		
			14		Gray, wet fine sand
4	10	SS	15		
			16	SP	
			17		
			18		
			19		Gray, moist clay, trace of sand and silt
5	3	SS	20	CL	

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-4A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			20		
			21		
			22		
			23		
			24		
6	2	SS	25		grading less sand
			26		
			27		
			28		
			29		
7	1	SS	30	CL	
			31		
			32		
			33		
			34		
8	2	SS	35		
			36		
			37		
			38		
			39		
9	2	SS	40		grading with red streaks

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-4A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			40		Hnu=1ppm
			41		
			42		
			43		
			44		
10	2	SS	45		
			46		
			47		grading with little red clay Hnu=0ppm
			48	CL	
			49		
11	2	SS	50		Hnu=0ppm
			51		
			52		
			53		
			54		
12	2	SS	55		Hnu=0ppm
			56		
13	60/2"	SS	57	GM	Moist, gray gravel with silt and clay little sand (Till)
			58		
			59		Top of rock Cored from 60-65' REC:4.8' RQD: 4.4
			60		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-4A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			60		Gray limestone (Onondaga Limestone), some fossil hash visible, strong kerosene odor, 1" seam of black lithified organic matter
			61		
			62		
			63		
			64		
			65		Boring terminated at a depth of 65.0 feet on 7/18/85

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-5B
SURFACE ELEV: 582.06'

DRILLING METHOD: Augers

SAMPLING METHOD: Split spoon

DATE STARTED: 7/24/85
DATE FINISHED: 7/25/85

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
1	10	SS	0		Black, moist, loose topsoil, fine sand, little gravel Hnu=0.4ppm
			1		
			2		Black, wet, fine sand and silt Hnu=0.4ppm
			3		
			4		
2	7	SS	5		
			6	SP	
			7		
			8		
			9		
3	13	SS	10		Gray/tan moist silt, some fine, trace clay (layered) Hnu=0.4ppm
			11	ML	
			12		
			13		Gray, moist clay with little silt Hnu=0.4ppm
			14		
4	2	SS	15		
			16	CL	
			17		
			18		
			19		
5	3	SS	20		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-5B

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			20		grading with silt lenses
			21		Hnu=0.4ppm
			22		grading with reddish color
			23		
			24		grading grayish red to pink
6	2	SS	25	CL	
			26		
			27		
			28		
			29		
7	7	SS	30		Hnu=0.3ppm
			31		
			32		
			33		Gray, wet gravel, some silt and clay, trace sand (Till)
			34		Hnu=0.3ppm
8	55	SS	35		
			36	GM	
			37		
			38		
			39		
			40		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-5B

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
9	22	SS	40	SW -- SP	Gray, very moist sand, some gravel grading to fine sand, little gravel (Till)
			41		
			42		
			43		
			44		
			45		Boring terminated at a depth of 45.0 feet on 7/25/85. Boring grouted to 17.0 feet to set shallow well

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-6A
SURFACE ELEV: 571.57'

DRILLING METHOD: Augers

SAMPLING METHOD: Split spoon

DATE STARTED: 8/6/85
DATE FINISHED: 8/6/85

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
1	13	SS	0		Black, dry, clumpy coal dust, little brown silt and gravel (Fill)
			1	Fill	
			2		
			3		
			4		Dark gray, moist silt, some fine sand, little clay
2	5	SS	5		
			6		
			7		
			8		
			9		grading less sand
3	10	SS	10	ML	
			11		
			12		
			13		
			14		Dark brown, wet, fine running sands with some silt and clay
4	13	SS	15	SM	
			16		Dark, moist silt
			17	ML	
			18		
			19		Gray, moist clay, some silt
5	8	SS	20		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-6A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			20		
			21		
			22		
			23		
			24		
6	6	SS	25		grading increase in silt
			26		
			27		
			28		
			29		
7	Rod wt.	SS	30	CL	grading increase in clay content
			31	ML	
			32		
			33		
			34		
8	Rod wt.	SS	35		
			36		
			37		
			38		
			39		
9	Rod wt.	SS	40		

DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-6A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			40		grading with reddish color
			41		
			42		
			43		
			44		
10	Rod wt.	SS	45	CL	grading reddish gray, oily sheen on cuttings
			46	—	
			47	ML	
			48		
			49		
11	Rod wt.	SS	50		
			51		
			52		grading with gravel
			53		Gray, moist silt, little gravel, fine sand and clay (Till)
			54		
12	4	SS	55	ML	
			56		
			57		
			58	-----	Start coring at 57.8 feet
			59		
			60		

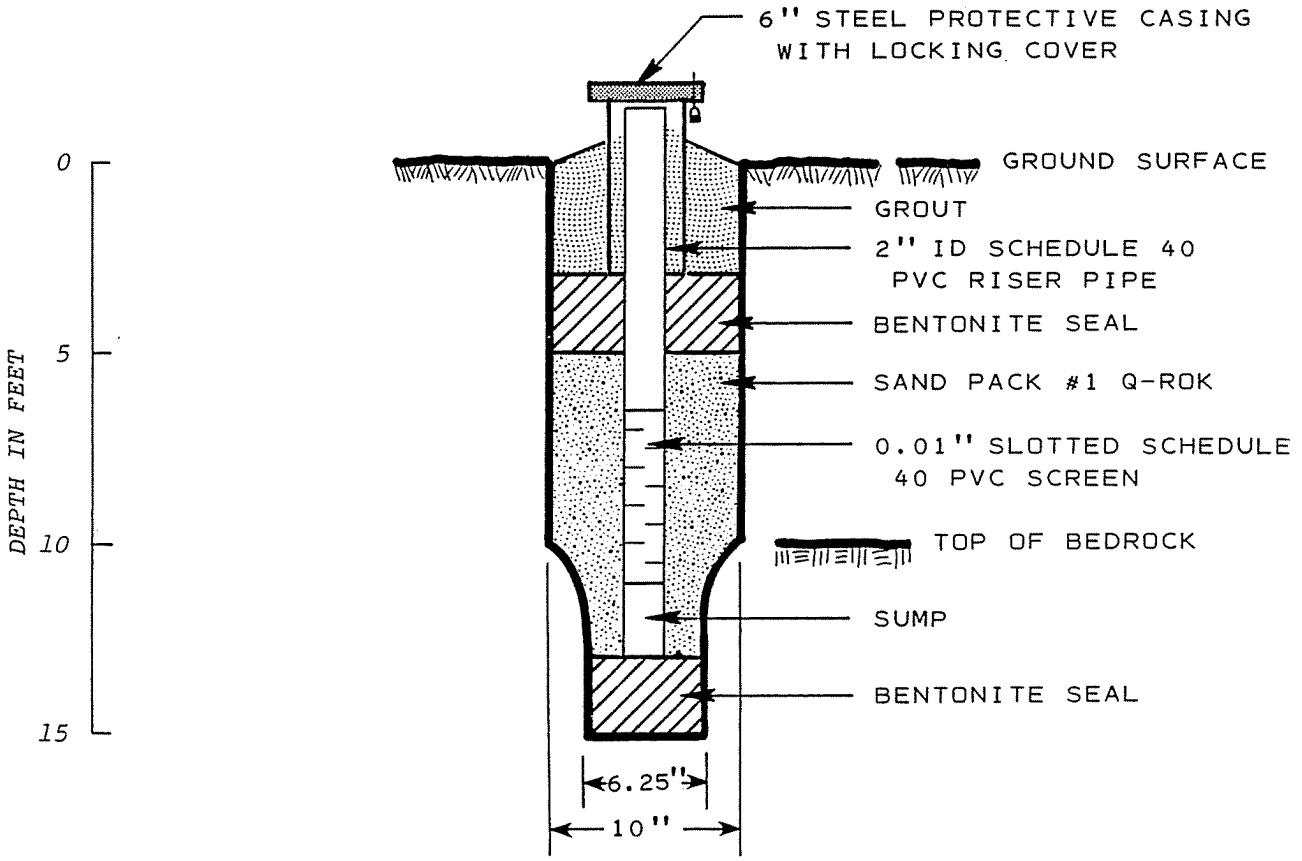
DAMES & MOORE
BORING LOG

CLIENT: NYSDEC
LOCATION: ALLTIFT REALTY

BORING NO.: CW-6A

SAMPLE NO.	BLOWS/FT	SAMPLE TYPE	DEPTH IN FT.	SOIL GRAPH	MATERIAL DESCRIPTION
			60		
			61		
			62		
			63	-----	Boring terminated at a depth of 62.8 feet on 8/6/85.

Well Schematics



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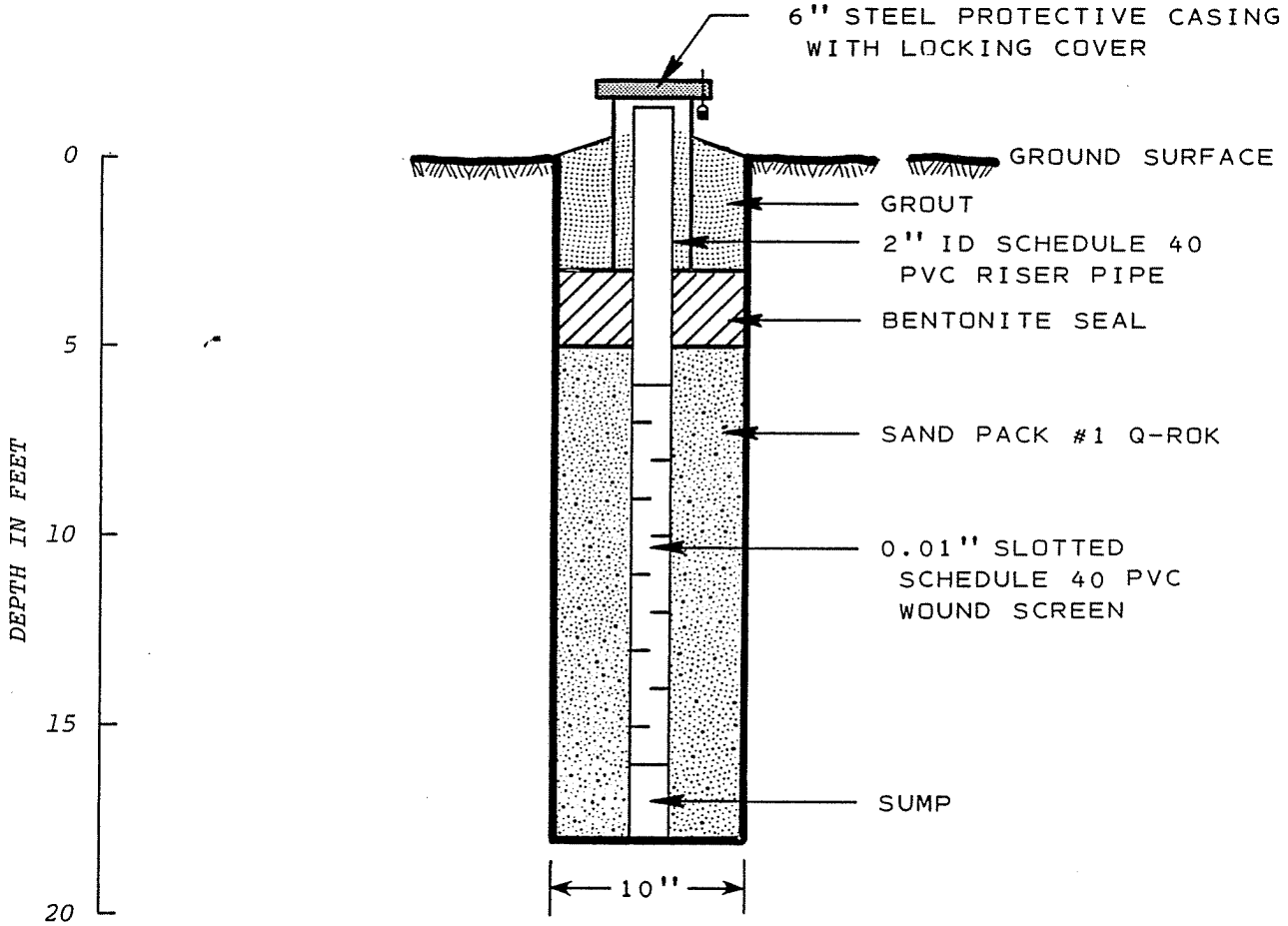
OF ENVIRONMENTAL CONSERVATION
PHASE II REPORT

WELL SCHEMATIC
BORING CW-1
ALLTIFT REALTY

APPENDIX B



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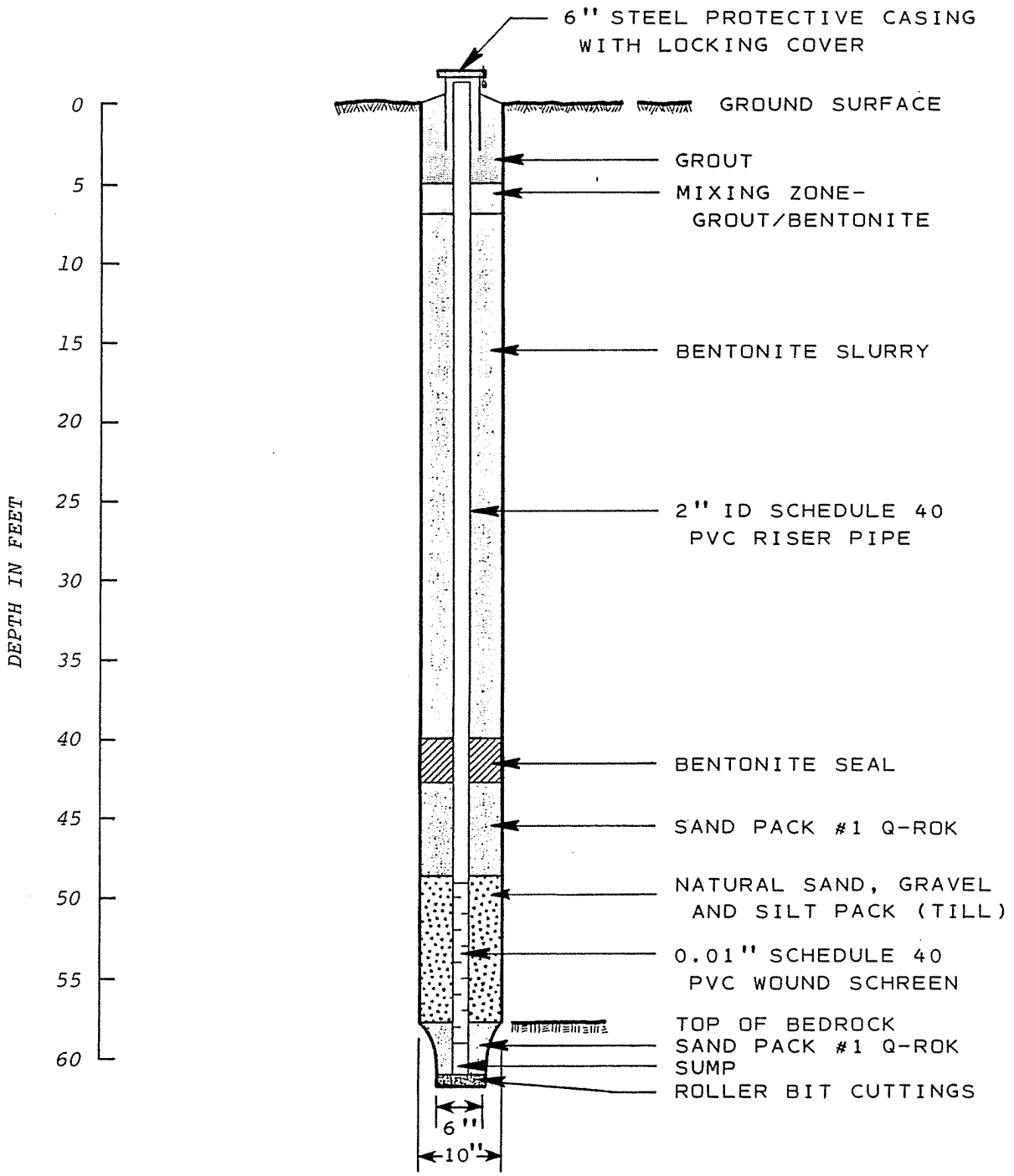
PHASE II REPORT

WELL SCHEMATIC
BORING CW-2B
ALLTIFT REALTY

APPENDIX B



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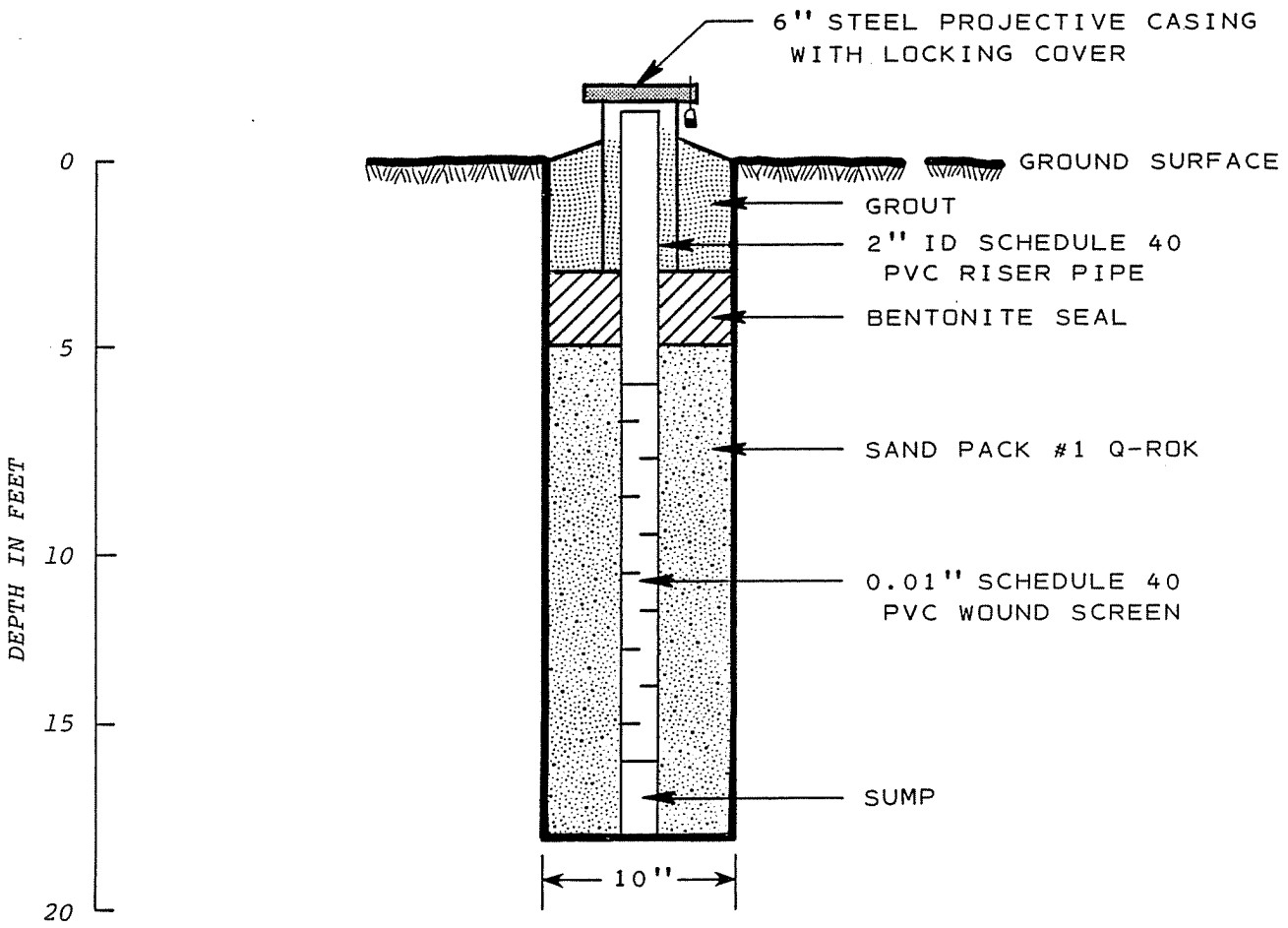
PHASE II REPORT

WELL SCHEMATIC
BORING CW-2C
ALLTIFT REALTY

APPENDIX B



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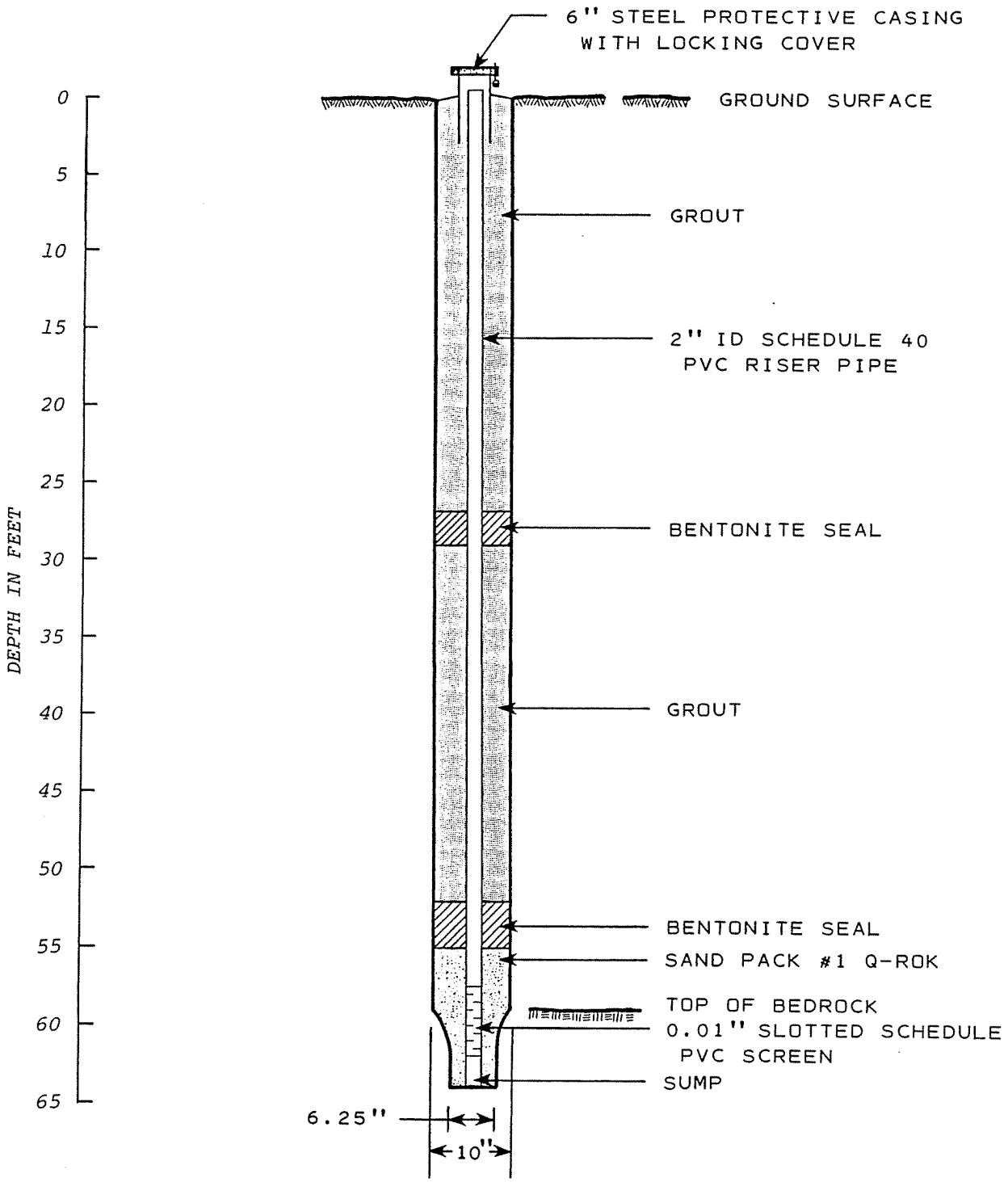
PHASE II REPORT

WELL SCHEMATIC
BORING CW-3B
ALLTIFT REALTY

APPENDIX B



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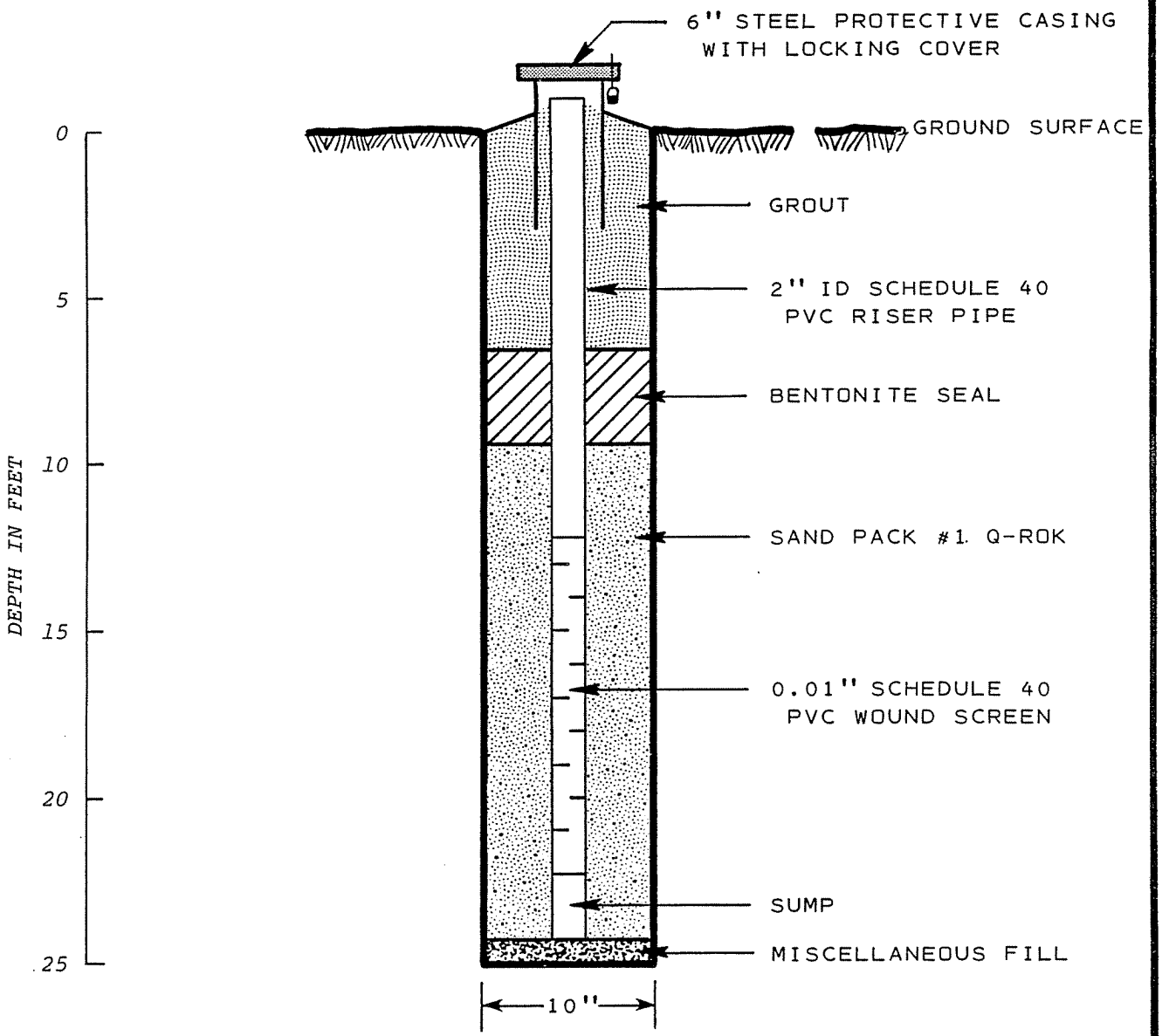
PHASE II REPORT

WELL SCHEMATIC
BORING CW-4A
ALLTIFT REALTY

APPENDIX B



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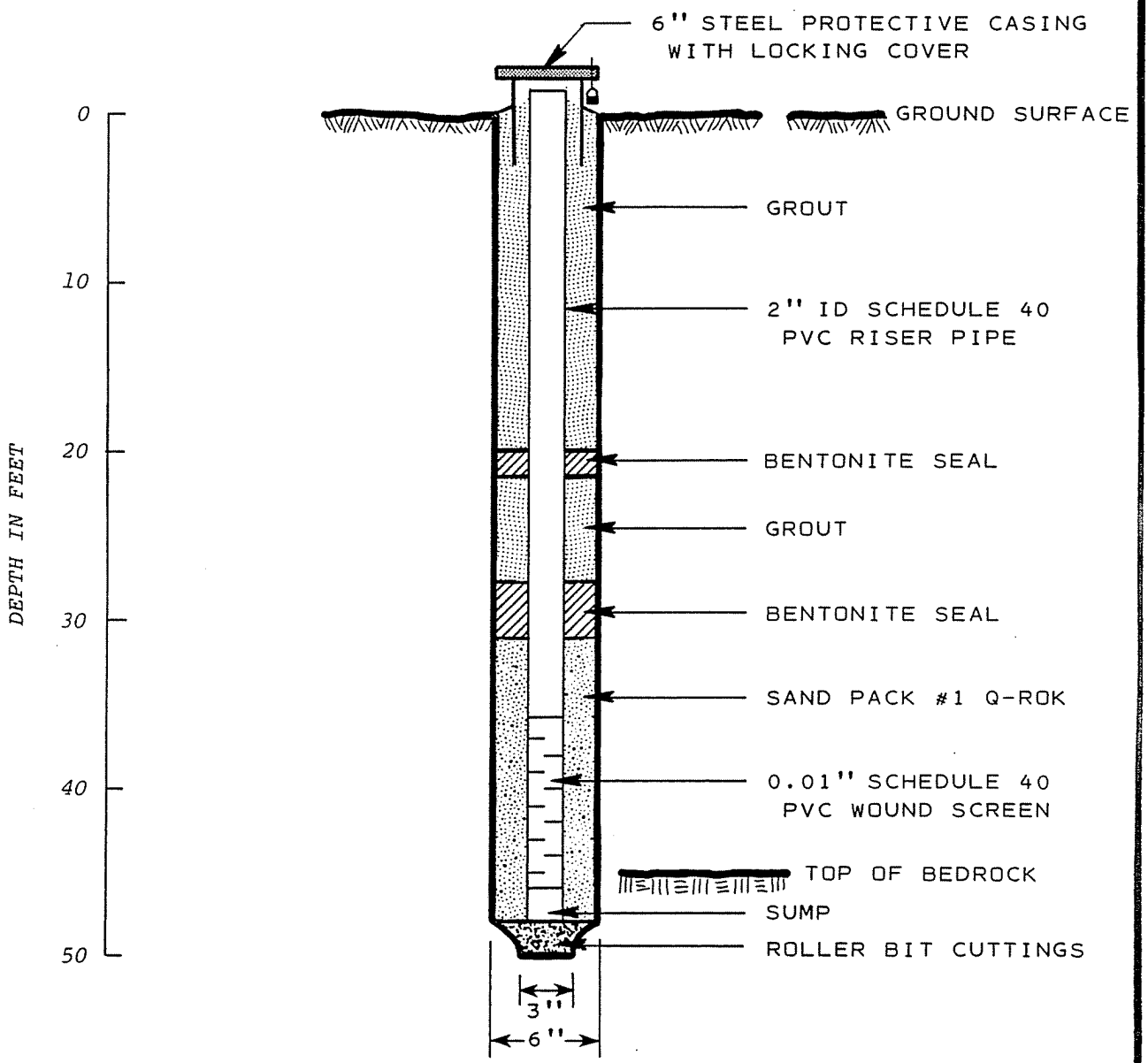
PHASE II REPORT

WELL SCHEMATIC
BORING CW-4B
ALLTIFT REALTY

APPENDIX B



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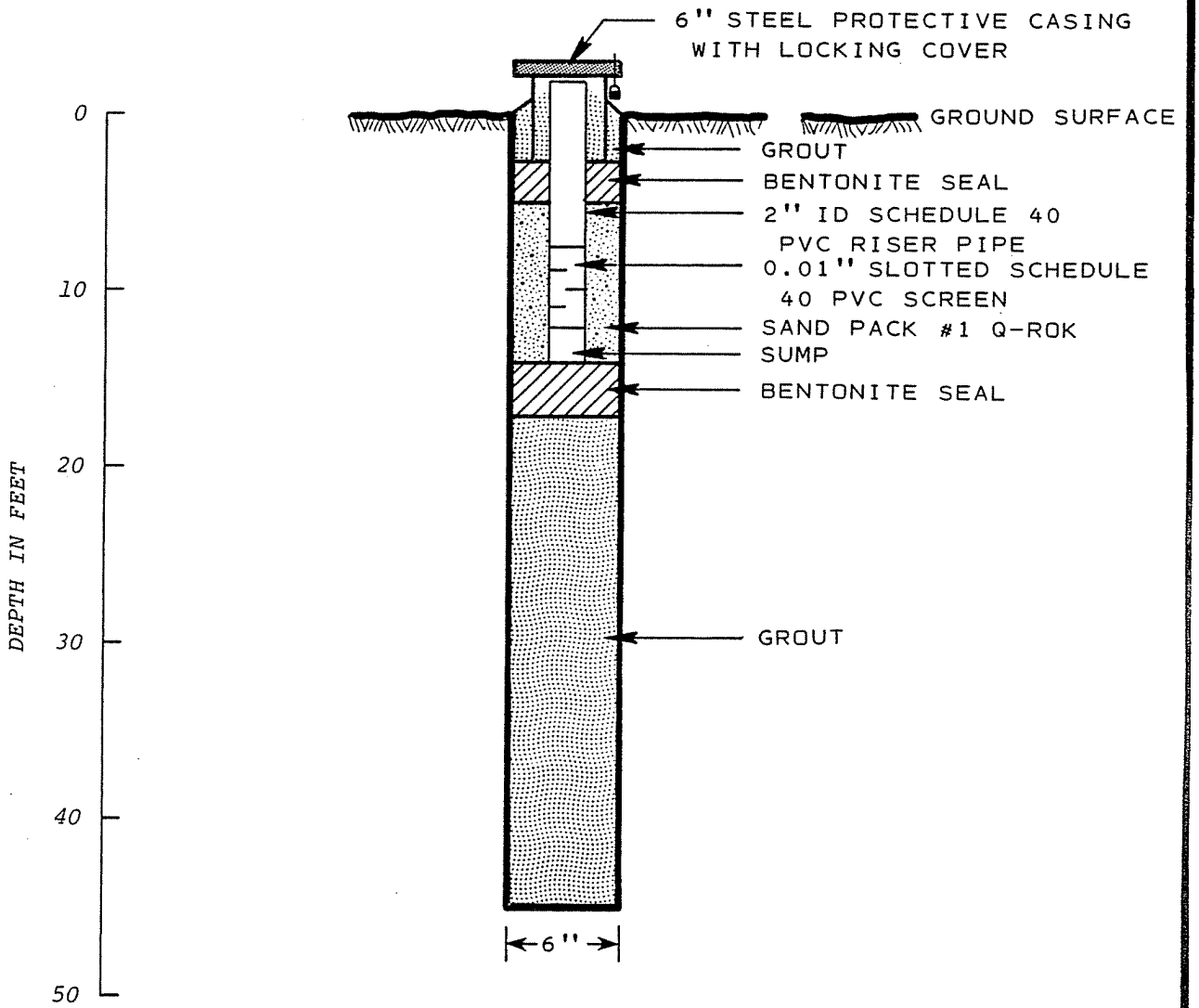
WELL SCHEMATIC
BORING CW-5A
ALLTIFT REALTY

APPENDIX B



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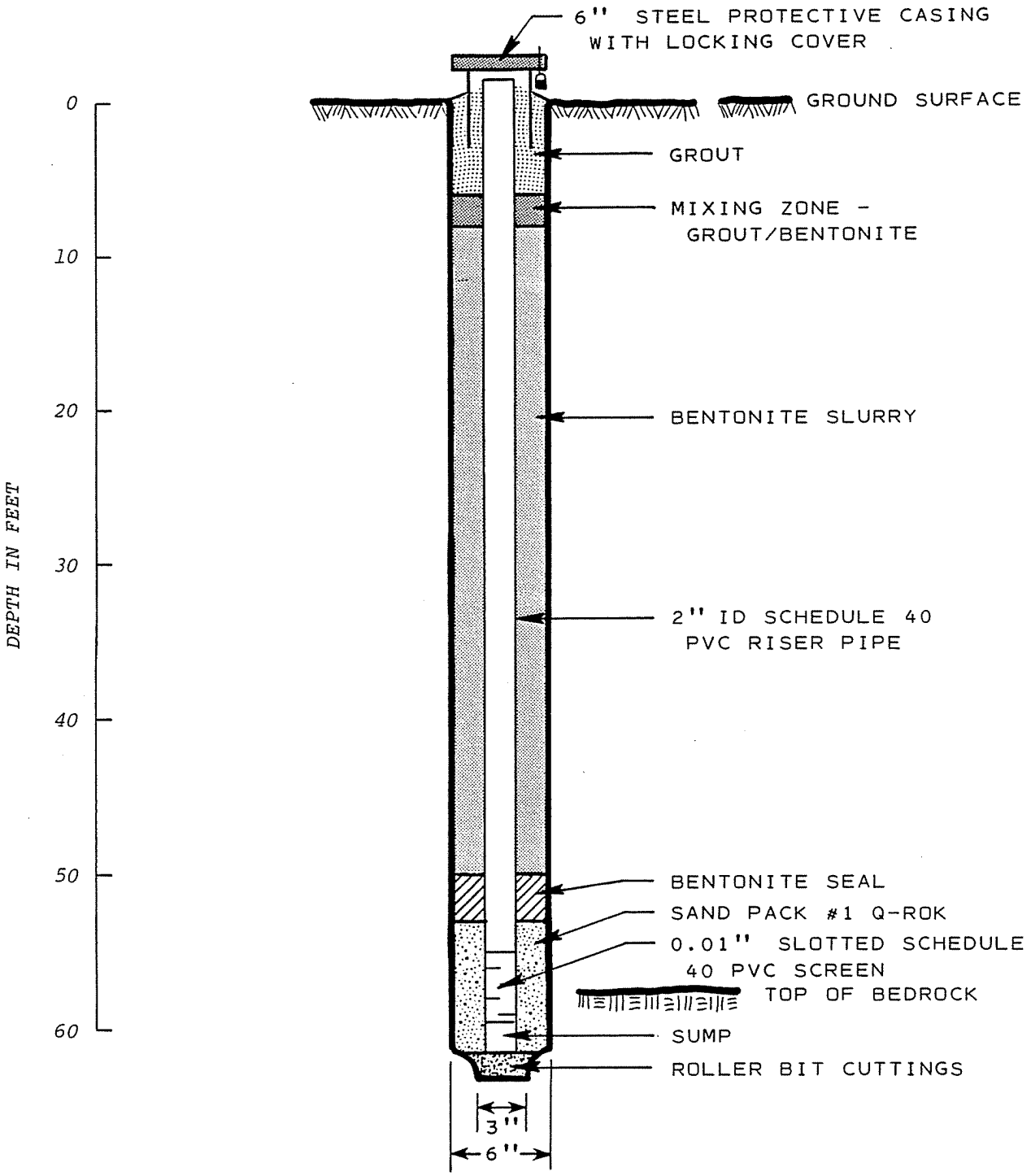
WELL SCHEMATIC
BORING CW-5B
ALLTIFT REALTY

APPENDIX B



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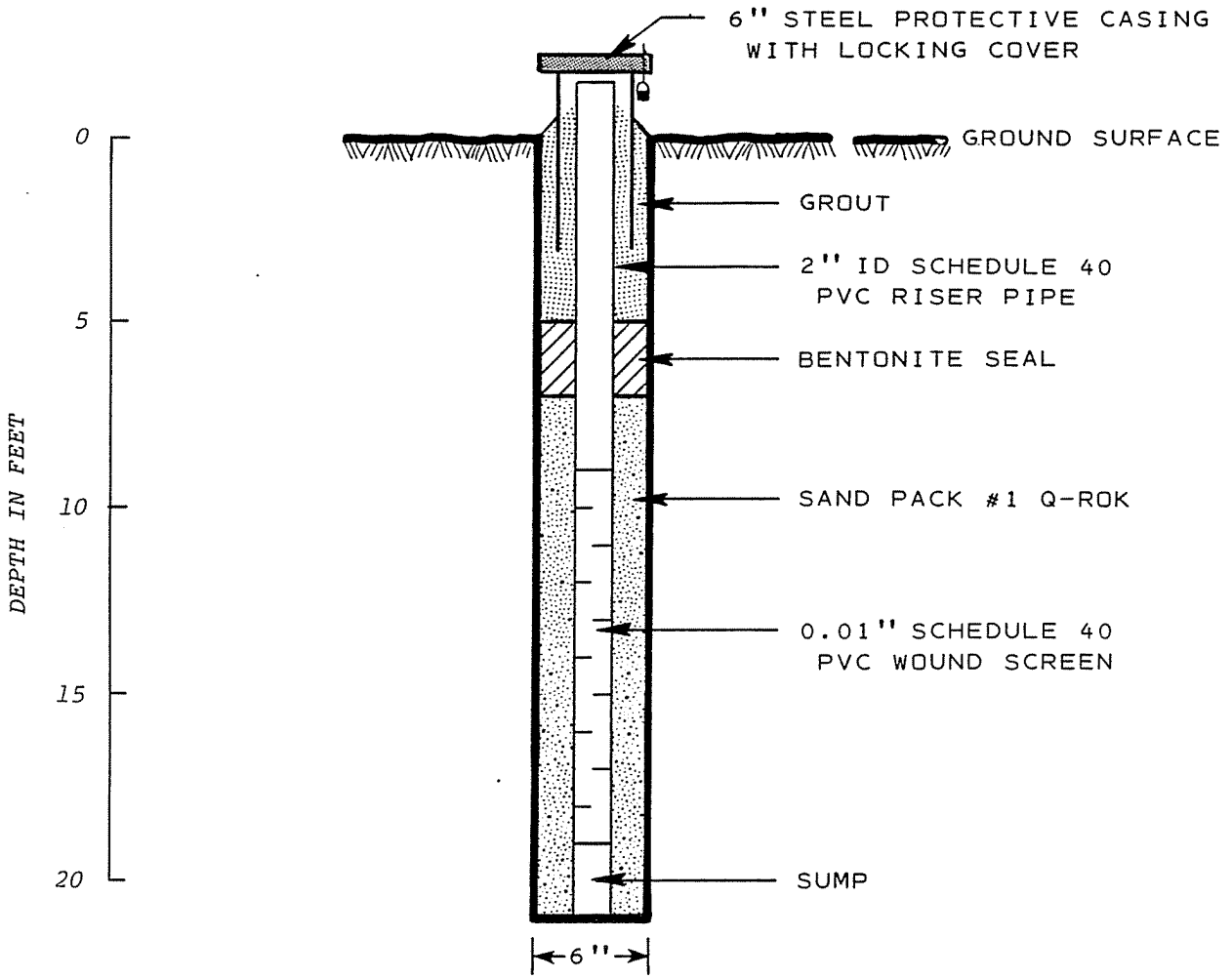
WELL SCHEMATIC
BORING CW-6A
ALLTIFT REALTY

APPENDIX B



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PHASE II REPORT

WELL SCHEMATIC
BORING CW-6B
ALLTIFT REALTY

APPENDIX B

In-Situ Permeability Test Results

SLUG TESTS

WELL NUMBER & LOCATION CW-1 Aff. Ft Realty DATE 9/13/85

DEPTH TO STATIC WATER LEVEL 7.19' TIME 11:30 A

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

VOLUME OF SLUG 0.0473 ft^3

NOTE: ALL MEASUREMENTS ARE FROM TOP OF ~~CASING~~ Protective

FALLING HEAD		RISING HEAD	
WATER LEVEL ft	ELAPSED TIME	WATER LEVEL	ELAPSED TIME
5.85	:15 sec	8.65	:15 sec
6.13	:30	8.20	:35
6.37	:45	8.05	:45
6.68	1:15	7.88	1:00
6.79	1:30	7.73	1:15
6.88	1:45	7.63	1:30
6.95	2:00	7.53	1:45
7.00	2:15	7.46	2:00
7.04	2:30	7.40	2:15
7.07	2:45	7.37	2:30
7.10	3:00	7.31	3:00
7.14	3:35	7.27	3:30
7.16	4:00	7.24	4:00
7.18	5:00	7.22	4:45
7.19	6:00	7.20	5:30
		7.20	9:30

ALTIFT CW-1 13305-009-19

STATIC HEAD= 7.19 MAX CHANGE= 5.02

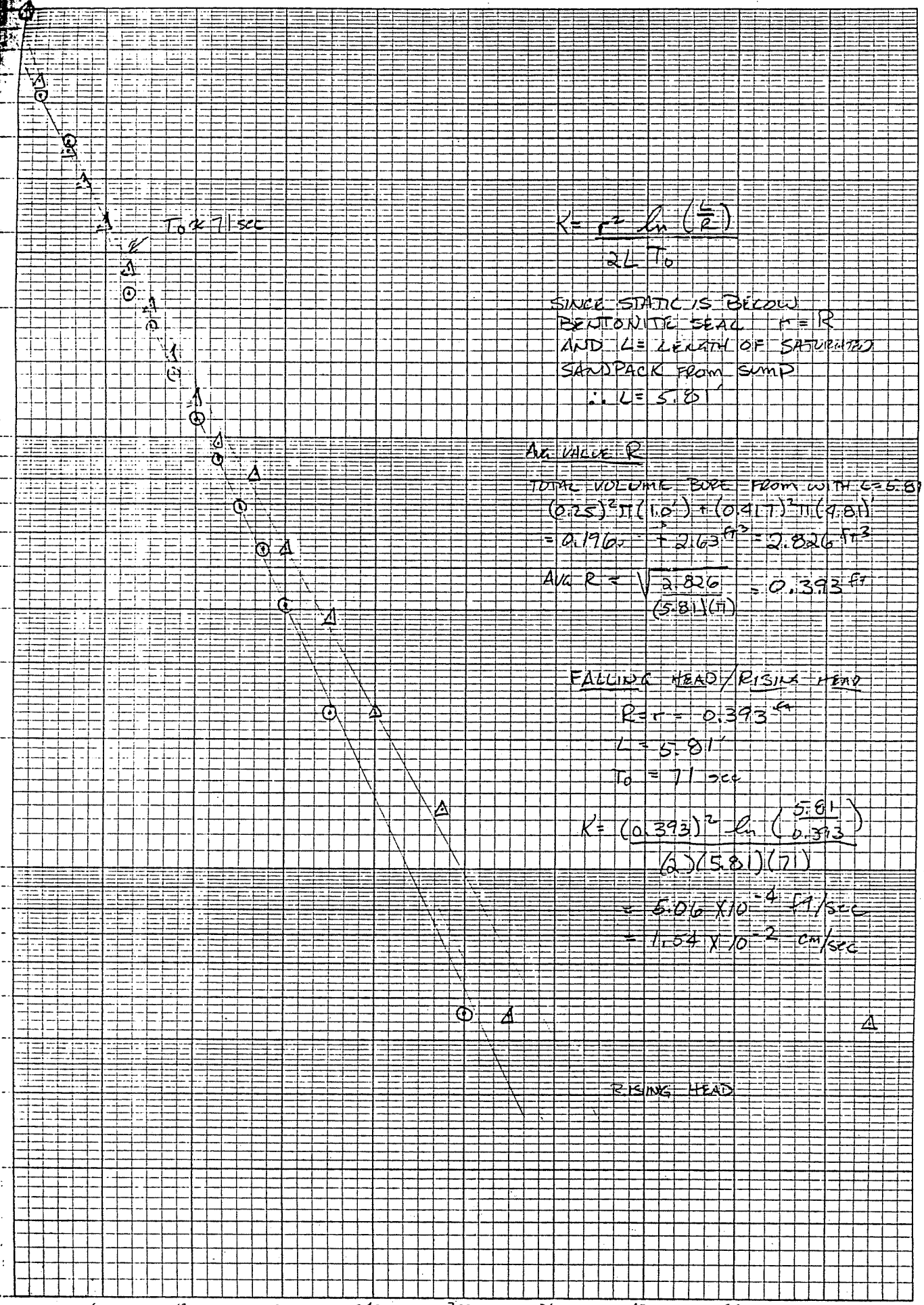
T(SEC)	H	H-H	H-H/H-HO
0	5.02	2.17	1
15	5.83	2.17	.626728110599O8
45	6.13	2.17	.48847926267281
1833.5253456221	6.68	2.17	.23502304147465
90	6.79	2.17	.18433179723502
105	6.88	2.17	.14285714285714
120	6.95	2.17	.1105990783410l
135	7	2.17	.08755760368663A
150	7.04	2.17	.069124423963133
165	7.07	2.17	.055299539170507
180	7.1	2.17	.04147465437788
210	7.14	2.17	.023041474654378
240	7.16	2.17	.013824884792626
300	7.18	2.17	4.608294930875 6E-03
360	7.19	2.17	0

ALTTFT CW-1 13305-009-19

STATIC HEAD= 7.19 MAX CHANGE= 9.3A

T(SEC)	h	H_S-h	H-h/H-H0
0	9.3A	-2.17	1
15	8.A5	-2.17	.A728110599078 3
35	8.2	-2.17	.4A5437788018 43
45	8.05	-2.17	.39A3133A40553
60	7.88	-2.17	.31797235023041
75	7.73	-2.17	.2488479262672 8
90	7.A3	-2.17	.2027A497695852
105	7.53	-2.17	.15AA8202764977
120	7.4A	-2.17	.1244239631336 4
120	7.4A	-2.17	.1244239631336 4
135	7.4	-2.17	.09A774193548387
150	7.37	-2.17	.0829493087557 6
180	7.31	-2.17	.0552995391705 07
210	7.27	-2.17	.03A8AA359447005
240	7.24	-2.17	.0230414746543 78
285	7.22	-2.17	.0138248847926 26
330	7.2	-2.17	4.6082949308756E-03
570	7.2	-2.17	4.6082949308756E-03

⊙ = FALLING HEAD SLUG TEST 9/13/85



$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2L\,T_0}$$

SINCE STATIC IS BELOW BENTONITE SEAL $r = R$ AND L = LENGTH OF SATURATED SANDPACK FROM SUMP

$\therefore L = 5.81'$

AVG VALUE R

TOTAL VOLUME BORE FROM WITH $L = 5.81'$

$(0.25)^2\pi(1.0') + (0.417)^2\pi(4.81')$

$= 0.196 ft^3 + 2.63 ft^3 = 2.826 ft^3$

$\text{AVG } R = \sqrt{\frac{2.826}{(5.81)(\pi)}} = 0.393 ft$

FALLING HEAD / RISING HEAD

$R = r = 0.393 ft$

$L = 5.81'$

$T_0 = 71$ sec

$K = \frac{(0.393)^2 \ln\left(\frac{5.81}{0.393}\right)}{(2)(5.81)(71)}$

$= 5.06 \times 10^{-4}$ ft/sec

$= 1.54 \times 10^{-2}$ cm/sec

RISING HEAD

46 5373

KEUFFEL & ESSER CO. MADE IN U.S.A.

SEMI-LOGARITHMIC 3 CYCLES X 60 DIVISIONS

10:45
1:16
9:27

SLUG TESTS

WELL NUMBER & LOCATION CW-2B ALTIFT REACT/ DATE 9/12/85

DEPTH TO STATIC WATER LEVEL 6.31' TIME 1050 A

from Top of prot. casing

TOTAL DEPTH OF WELL FROM TOP OF CASING ______

VOLUME OF SLUG 0.0638 ft3

NOTE: ALL MEASUREMENTS ARE FROM TOP OF Protective CASING

FALLING HEAD		RISING HEAD	
WATER LEVEL (feet)	ELAPSED TIME (Min)	WATER LEVEL	ELAPSED TIME
~~4.5~~ 4.53	:30 sec	8.20	:25 sec
4.58	:60	8.15	:45
4.60	1:25	8.10	:60
4.69	1:50	8.07	1:30
4.75	2:15	8.02	1:45
4.77	2:30	7.97	2:30
4.80	2:45	7.92	3:00
4.83	3:00	7.87	3:30
4.85	3:15	7.82	4:00
4.87	3:30	7.70	5:30
4.92	4:00	7.60	7:00
4.97	4:30	7.50	8:15
5.00	5:00	7.40	9:50
5.05	5:30	7.30	11:25
5.08	6:00	7.20	13:20
5.11	6:30	7.10	15:15
5.19	7:30	7.00	17:30
5.26	8:30	6.90	20:00
5.33	9:40	6.80	23:25
5.41	10:35	6.70	27:00
5.49	12:30	6.60	31:15
5.56	14:00	6.50	37:20
5.64	16.00	6.40	50:25
5.71	18.00	6.33	71:00
5.80	20:30		
5.91	25:00		
6.01	30:00		
6.10	35:00		
6.20	45:00		
6.27	60:00		
6.31	70:00		

ALTIFT CW-2B(RISING) 13305-009-19

STATIC HEAD= 6.31 MAX CHANGE= 9.24

T(SEC)	H	H-H	H-H/H-HO
0	9.24	-2.93	1
25	8.2	-1.89	.64505119453925
45	8.15	-1.84	.62798434812286
60	8.1	-1.79	.61092150170648
90	8.07	-1.76	.60068259385665
105	8.02	-1.71	.58361774744027
150	7.97	-1.66	.56655290102389
180	7.92	-1.61	.54948805460751
210	7.87	-1.56	.53242320819112
247.82	7.82	-1.51	.51535836177474
240	7.82	-1.51	.51535836177474
330	7.7	-1.39	.4744027303754266
495	7.6	-1.29	.44027303754266
420	7.6	-1.29	.44027303754266
495	7.5	-1.19	.40614334470990
590	7.4	-1.09	.37201365187713
685	7.3	-.99	.33788395904437
800	7.2	-.89	.30375426621160
915	7.1	-.79	.26962457337884
1050	7	-.69	.23549488054607
1200	6.9	-.59	.20136518771331
1405	6.8	-.49	.16723549488054
1620	6.7	-.39	.13310580204778
1875	6.6	-.29	.09897610921501
2240	6.5	-.19	.06484641638225
3025	6.4	-.09	.03071672354948
4260	6.33	-.02	6.82593855855529E-03

ALTITFT CW-2R(FALLING) 13305-009-19

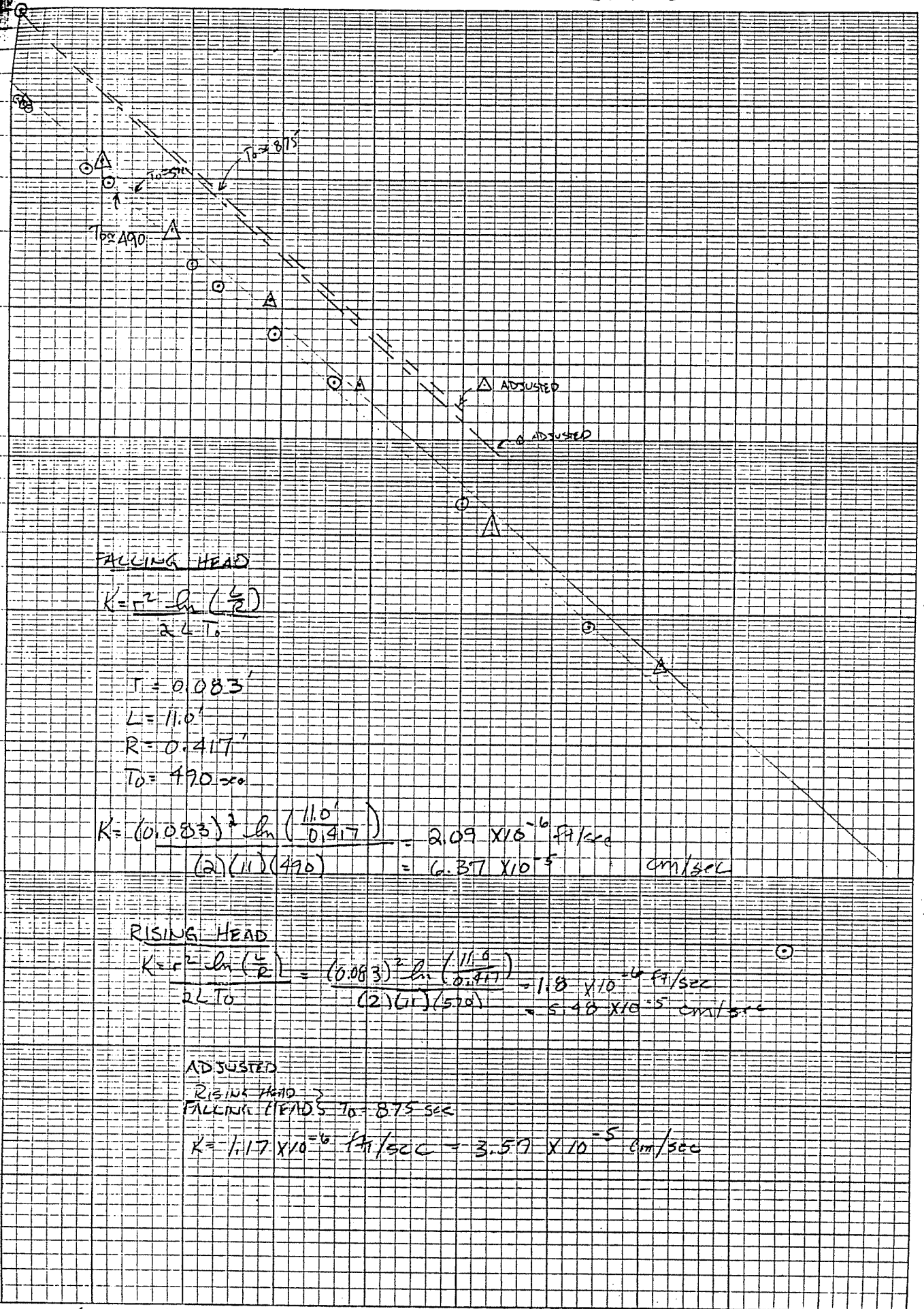
STATIC HEAD= 4.31 MAX CHANGE= 3.38

T(SEC)	H	H-H	H-H/H-H0
0	3.38	2.93	1
30	4.53	1.78	.607508533242371
60	4.58	1.73	.590443686600682
85	4.6	1.71	.583617747440027
110	4.69	1.62	.552901023890078
135	4.75	1.56	.532423208191112
150	4.77	1.54	.525597269624573
165	4.8	1.51	.515358361774744
180	4.83	1.48	.505119453924915
195	4.85	1.46	.498293515358361
210	4.87	1.44	.491467576791808
240	4.92	1.39	.474402730375426
270	4.97	1.34	.457337883959044
300	5	1.31	.447098976109215
330	5.05	1.26	.430034129692832
360	5.08	1.23	.419795221843003
390	5.11	1.2	.409556313993174
450	5.19	1.12	.382252559726962
510	5.26	1.05	.358361774744027
580	5.33	.98	.334470989761092
635	5.41	.9	.307167235494881
750	5.49	.82	.279863481228669
840	5.56	.75	.255972696245734
~~965.64~~	~~5.64~~	~~.67~~	~~.228668941979522~~
960	5.64	.67	.228668941979522
1080	5.71	.6	.204778156996587
1230	5.8	.51	.174061433447099
1500	5.91	.4	.136518771331058
1800	6.01	.3	.102389078498294
2100	6.1	.21	.071672354948805
2700	6.2	.11	.037542662116041
3600	6.29	.02	6.825938566552901E-03
4200	6.31	0	0

⊙ = FALLING HEAD

13305-009-14

CW-2B SLUG TEST



46 5373

SEMI-LOGARITHMIC 3 CYCLES X 60 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

FALLING HEAD

$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2LT_o}$$

$r = 0.083'$

$L = 11.0'$

$R = 0.417'$

$T_o = 490$ sec

$$K = \frac{(0.083)^2 \ln\left(\frac{11.0'}{0.417}\right)}{(2)(11)(490)} = 2.09 \times 10^{-6} \text{ ft/sec} = 6.37 \times 10^{-5} \text{ cm/sec}$$

RISING HEAD

$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2LT_o} = \frac{(0.083)^2 \ln\left(\frac{11.0}{0.417}\right)}{(2)(11)(570)} = 1.8 \times 10^{-6} \text{ ft/sec} = 5.48 \times 10^{-5} \text{ cm/sec}$$

ADJUSTED

RISING HEAD
FALLING HEAD $T_o = 875$ sec

$K = 1.17 \times 10^{-6}$ ft/sec $= 3.57 \times 10^{-5}$ cm/sec

SLUG TESTS

WELL NUMBER & LOCATION CW-2C ALTIFT REALTY DATE 9/12/85

DEPTH TO STATIC WATER LEVEL 13.52 Protective Tip TIME 2[15] P

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

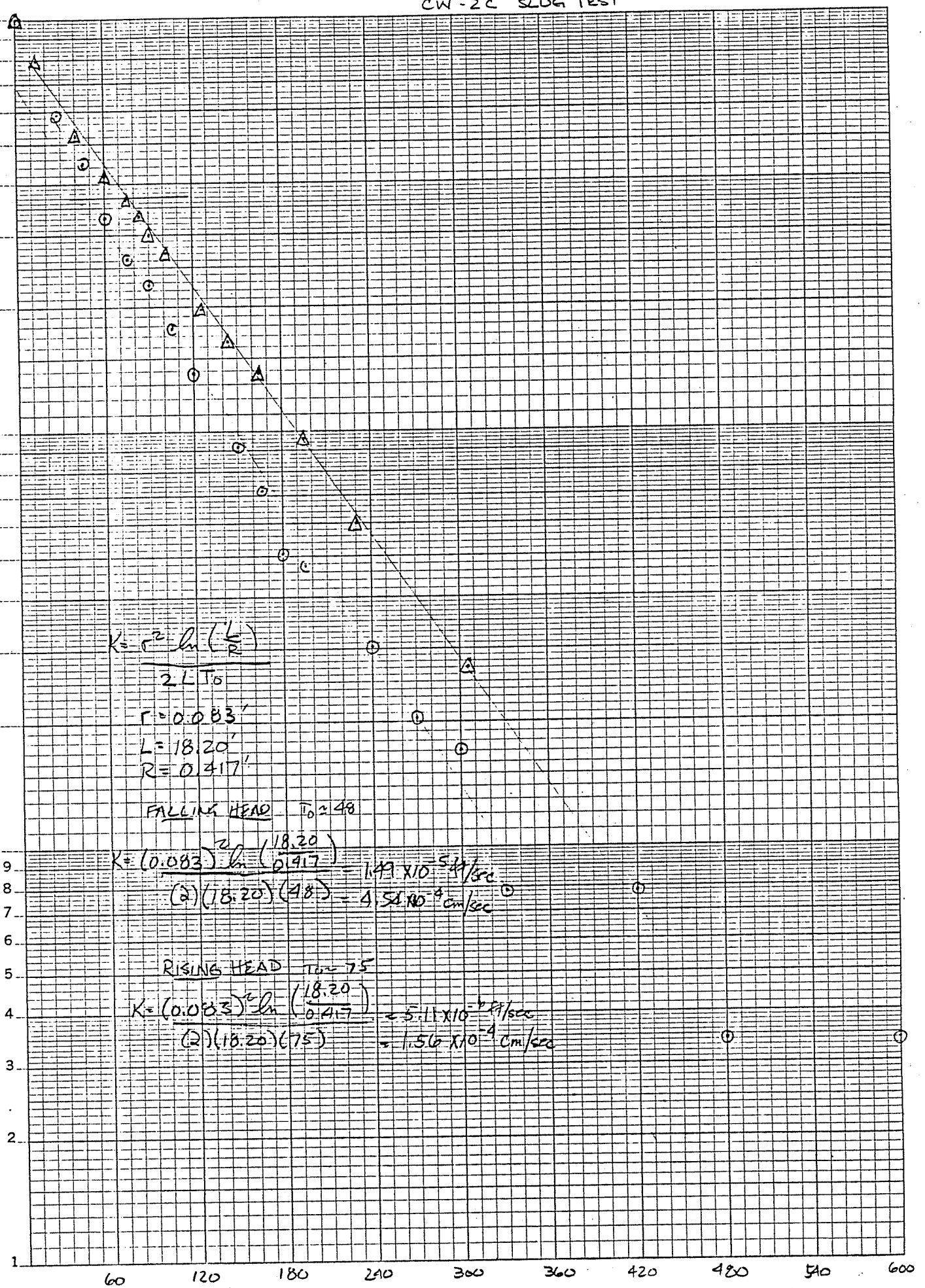
VOLUME OF SLUG 0.0638

NOTE: ALL MEASUREMENTS ARE FROM TOP OF ~~CASING~~ PROTECTIVE CASING

FALLING HEAD		RISING HEAD	
WATER LEVEL feet	ELAPSED TIME Min	WATER LEVEL	ELAPSED TIME
11.80	:27 sec	15.85	:13 sec
12.20	:45	15.05	:40
12.55	1:00	14.75	1:00
12.75	1:15	14.60	1:15
12.85	1:30	14.50	1:22
13.00	1:45	14.4	1:33
13.11	2:00	14.3	1:41
13.25	2:30	14.2	1:52
13.31	2:45	14.1	2:06
13.35	3:00	14.0	2:23
13.38	3:15	13.9	2:45
13.40	3:30	13.8	3:15
13.43	4:00	13.7	3:50
13.46	4:30	13.6	5:05
13.47	5:00	13.5	11:15
13.50	5:30		
13.50	6:00		
13.50	7:00		
13.51	8:00		
13.51	10:00		

⊙ : FALLING HEAD

CW-2C SLUG TEST



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SEMI-LOGARITHMIC 3 CYCLES X 60 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2 L T_0}$$

$r = 0.083'$

$L = 18.20'$

$R = 0.417'$

FALLING HEAD $T_0 = 48$

$$K = \frac{(0.083)^2 \ln\left(\frac{18.20}{0.417}\right)}{(2)(18.20)(48)} = 1.49 \times 10^{-5} \text{ ft/sec}$$

$$= 4.54 \times 10^{-4} \text{ cm/sec}$$

RISING HEAD $T_0 = 75$

$$K = \frac{(0.083)^2 \ln\left(\frac{18.20}{0.417}\right)}{(2)(18.20)(75)} = 5.11 \times 10^{-6} \text{ ft/sec}$$

$$= 1.56 \times 10^{-4} \text{ cm/sec}$$

ALTIFT CW-2C(FALLING) 13305-009-19

STATIC HEAD= 13.52 MAX CHANGE= 10.59

T(SEC)	H	H-H	H-H/H-H0
0	10.59	2.93	1
27	11.8	1.72	.587030716472355
45	12.2	1.32	.450511945392249
60	12.55	.97	.331058020477781
75	12.75	.77	.26279863481229
90	12.85	.67	.228668941979552
105	13	.52	.17747440273038
120	13.11	.41	.139931740614333
150	13.25	.27	.092150170648464
165	13.31	.21	.071672354948805
180	13.35	.17	.05802047781577
195	13.38	.14	.04778156996587
240	13.43	.09	.030716723549488
270	13.46	.06	.020477815699659
300	13.47	.05	.017064844416382
330	13.5	.02	6.8259385665529E-03
420	13.5	.02	6.8259385665529E-03
480	13.51	.01	3.4129692832764E-03
600	13.51	.01	3.4129692832764E-03

ALTIFT CW-2C(RISING) 13305-009-19

STATIC HEAD= 13.52 MAX CHANGE= 14.45

T(SEC)	H	H-H	H-H/H-H0
0	14.45	-2.93	1
13	15.85	-2.33	.795221843003413
40	15.05	-1.53	.52218430034131
60	14.75	-1.23	.419795221843
75	14.6	-1.08	.368600682593857
82	0	13.52	-4.6143344709898
82	14.5	-.98	.334470989761093
93	14.4	-.88	.300341296928331
101	14.3	-.78	.266211604095569
112	14.2	-.68	.232081911262808
126	14.1	-.58	.197952218430047
143	14	-.48	.163822525597286
165	13.9	-.38	.129692832764525
195	13.8	-.28	.095563139931764
230	13.7	-.18	.061433447098976
305	13.6	-.08	.027303754266211
675	13.5	.02	-6.8259385665529E-03

SLUG TESTS

WELL NUMBER & LOCATION CW-3R (Alt. ft Realty) DATE 9/13/85

DEPTH TO STATIC WATER LEVEL 14.18 TIME 9:10A

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

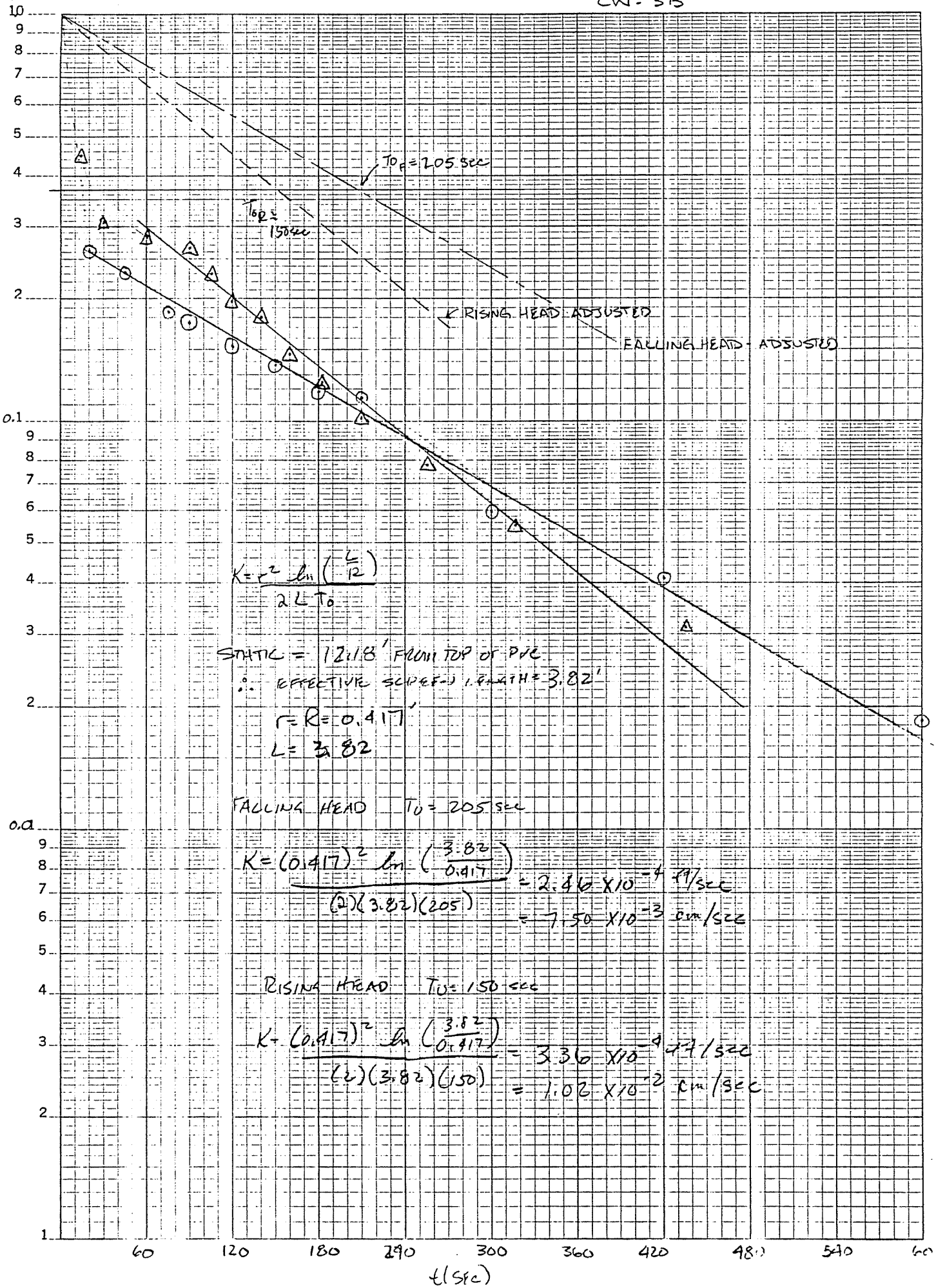
VOLUME OF SLUG 0.0473 ~~ft3~~

NOTE: ALL MEASUREMENTS ARE FROM TOP OF ~~CASING~~ Protective

FALLING HEAD		RISING HEAD	
WATER LEVEL	ELAPSED TIME	WATER LEVEL	ELAPSED TIME
		* STARTING STATIC 14.175	
13.61	:20 sec	15.15	:15 sec
13.68	:45	14.95	:30
13.80	1:15	14.80	1:00
13.82	1:30	14.76	1:30
13.85	2:00	14.68	1:45
13.88	2:30	14.61	2:00
13.92	3:00	~~14.60~~ 14.55	2:20
13.93	3:30	~~14.55~~ 14.50	2:40
14.05	5:00	~~14.50~~ 14.45	3:02
14.09	7:00	~~14.45~~ 14.40	3:30
14.14	10:00	~~14.40~~ 14.35	4:15
14.17	13:00	14.30	5:18
14.175	16:00	14.25	7:15
		14.20	12:40
		~~14.175~~	

⊙ = FALLING HEAD

13305-001-11
CW-3B



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KEUFFEL & ESSER CO. MADE IN U.S.A.
SEMI-LOGARITHMIC 3 CYCLES X 30 DIVISIONS

ALTIFT CW-3B(FALLING) 13305-009-19

STATIC HEAD= 14.18 MAX CHANGE= 12.01

T(SEC)	H	H-H	H-H/H-H0
0	12.01	2.17	1
20	13.61	.57	.2626728110599
45	13.68	.5	.23041474654378
75	13.8	.38	.17511520737327
90	13.82	.36	.16589861751152
120	13.85	.33	.15207373271889
150	13.88	.3	.13824884792626
180	13.92	.26	.11981566820276
210	13.93	.25	.11520737327189
300	14.05	.13	.059907834101382
485.09	14.098	.082	.037788018348318
420	14.09	.09	.04147465437788
749.3087557603?	14.14	.04	.018433179723502
600	14.15	.03	.013824884792626
600	14.14	.04	.018433179723502
780	14.17	.01	4.6082949308756E-03
960	14.175	5E-03	2.3041474654378E-03

ALTIFT CW-3B(RISING) 13305-009-19

STATIC HEAD= 14.18 MAX CHANGE= 16.35

T(SEC)	H	H-H	H-H/H-H0
0	16.35	-2.17	1
15	15.15	-.97	.44700460829493
30	14.85	-.67	.30875576036866
60	14.8	-.62	.2857142857142
90	14.76	-.58	.26728110599078
105	14.68	-.5	.23041474654378
120	14.61	-.43	.19815668202765
140	14.55	-.37	.17050691244239
160	14.5	-.32	.14746543778802
182	14.45	-.27	.12442396313364
210	14.4	-.22	.10138248847926
255	14.35	-.17	.078341013824885
318	14.3	-.12	.055299539170507
435	14.25	-.07	.032258064516129
760	14.2	-.02	9.216589861751?E-03

SLUG TESTS

WELL NUMBER & LOCATION CW-4A ALT FT PEACTY DATE 9/12/85

DEPTH TO STATIC WATER LEVEL 8.49' TIME 6:00pm

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

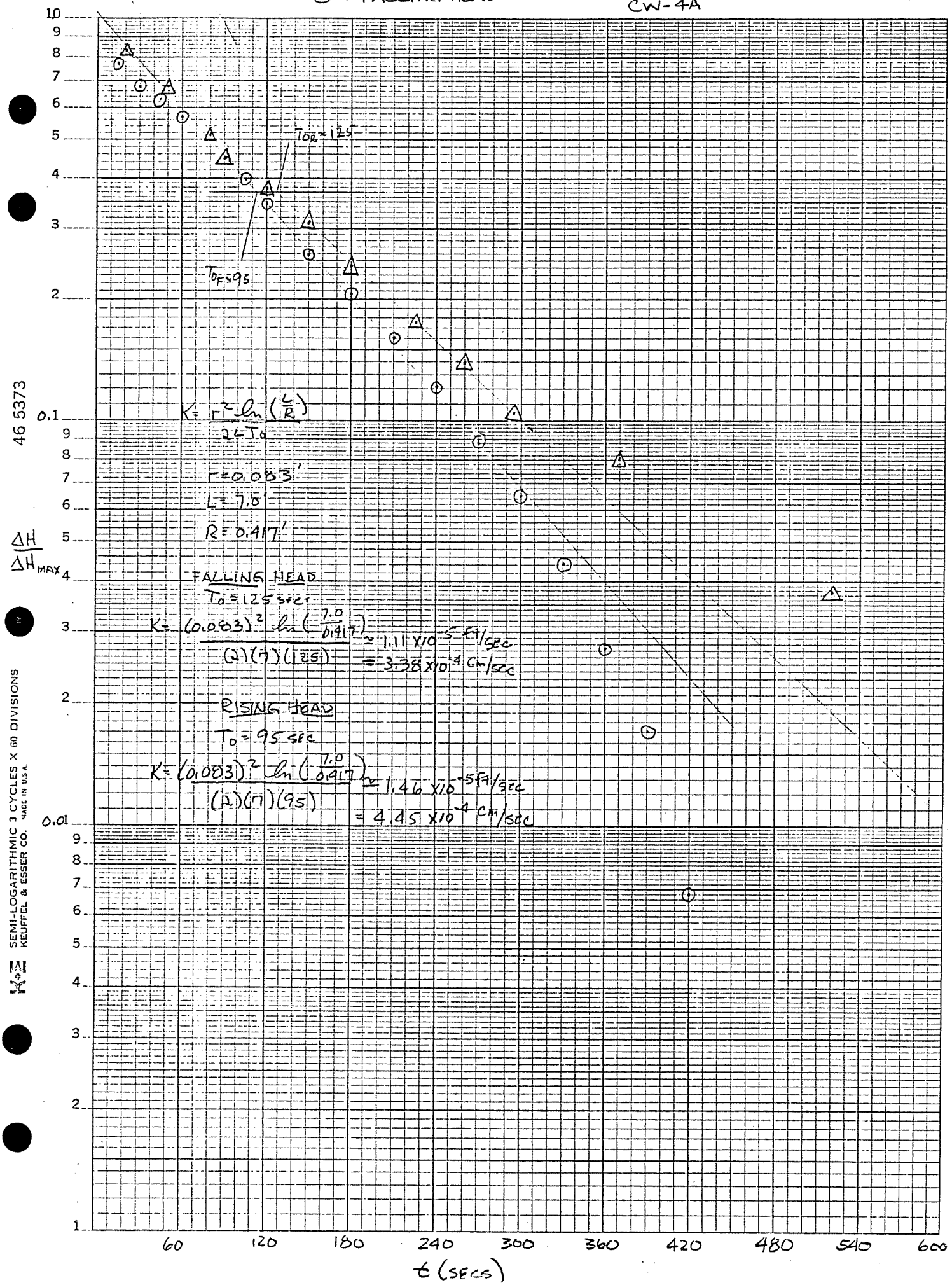
VOLUME OF SLUG 0.00638 ft³

NOTE: ALL MEASUREMENTS ARE FROM TOP OF CASING

FALLING HEAD		RISING HEAD (PROTECTIVE)	
WATER LEVEL	ELAPSED TIME	WATER LEVEL	ELAPSED TIME
6.23	0:15	10.93	:20
6.50	0:30	10.48	:50
6.63	:45	10.00	1:20
6.83	1:00	9.8	1:30
7.32	1:45	9.6	2:00
7.47	2:00	9.4	2:30
7.73	2:30	9.2	3:00
7.88	3:00	9.0	3:45
8.02	3:30	8.9	4:20
8.16	4:00	8.8	4:55
8.23	4:30	8.7	6:10
8.30	5:00	8.6	8:40
8.36	5:30	8.53	19:00
8.41	6:00		
8.44	6:30		
8.47	7:00		
8.49	7:30		

⊙ = FALLING HEAD

15305-001-14
CW-4A



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SEMI-LOGARITHMIC 3 CYCLES X 60 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

ALTIFT CW-4A(FALLING) 13305-009-19

STATIC HEAD= 8.49 MAX CHANGE= 5.56

T(SEC)	H	H-H	H-H/H-HO
0	5.56	2.93	1
15	6.23	2.26	.771331058020 48
30	6.5	1.99	.67918088737201
45	6.63	1.86	.63481228668942
60	6.83	1.66	.56655290102389
105	7.32	1.17	.39931740614334
120	7.47	1.02	.3481228668942
150	7.73	.76	.25938566552901
180	7.88	.61	.20819112627986
210	8.02	.47	.16040955631399
240	8.14	.33	.11262798634812
270	8.23	.26	.088737201365188
300	8.3	.19	.064846416382252
350	8.36	.13	.044368600682594
330	8.36	.13	.044368600682594
360	8.41	.08	.027303754266211
390	8.44	.05	.017064846416382
420	8.47	.02	6.8259385665529E-03
450	8.49	0	0

ALTIFT CW-4A(RISING) 13305-009-19

STATIC HEAD= 8.49 MAX CHANGE= 11.42

T(SEC)	H	H-H	H-H/H-HO
0	11.42	-2.93	1
20	10.93	-2.44	.83276450511945
50	10.48	-1.99	.67918088737201
80	10	-1.51	.51535836177474
90	9.8	-1.31	.44709897610921
120	9.6	-1.11	.37883959044369
150	9.4	-.91	.31058020477815
150	9.4	-.91	.31058020477815
180	9.2	-.71	.24232081911263
225	9	-.51	.1740614334471
260	8.9	-.41	.13993174061433
295	8.8	-.31	.10580204778157
370	8.7	-.21	.071672354948805
520	8.6	-.11	.037542662116041
1140	8.53	-.04	.01365187713310 6

SLUG TESTS

WELL NUMBER & LOCATION CW-4B Altift Realty / DATE 9/12/85

DEPTH TO STATIC WATER LEVEL 2.08' TIME 4:30 p

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

VOLUME OF SLUG .0473 ft³

NOTE: ALL MEASUREMENTS ARE FROM TOP OF ~~V~~ CASING Protective

FALLING HEAD		RISING HEAD	
WATER LEVEL (ft)	ELAPSED TIME	WATER LEVEL	ELAPSED TIME
*		* STARTING STATIC 1.93 FT	*
.73	:20 sec	~~2.75~~ 3.75	:11
	~~:30~~ :45	3.65	:50
.90	1:00	3.60	1:45
1.00	1:30	3.50	2:35
1.10	1:45	3.4	5:25
1.14	2:00	3.3	7:45
1.22	2:30	3.2	10:39
1.29	3:00	3.1	13:40
1.35	3:30	3.0	17:40
1.48	4:30	2.9	21:55
1.59	5:30	2.8	26:40
1.64	6:30	2.7	32:20
1.73	8:00	2.6	39:40
1.82	10:00	2.47	57:30
~~1.88~~	12:00	2.37	1:16:00
1.93	15:00		

(START 5:50 p)

* Overflow out of casing occurred as slug entered well.

* or actual change (mm) is 0.0.

need to know stick-up of PVC & Protective casing to calculate FALLING HEAD

ALTIFT CW-4R(FALLING) 13305-009-19

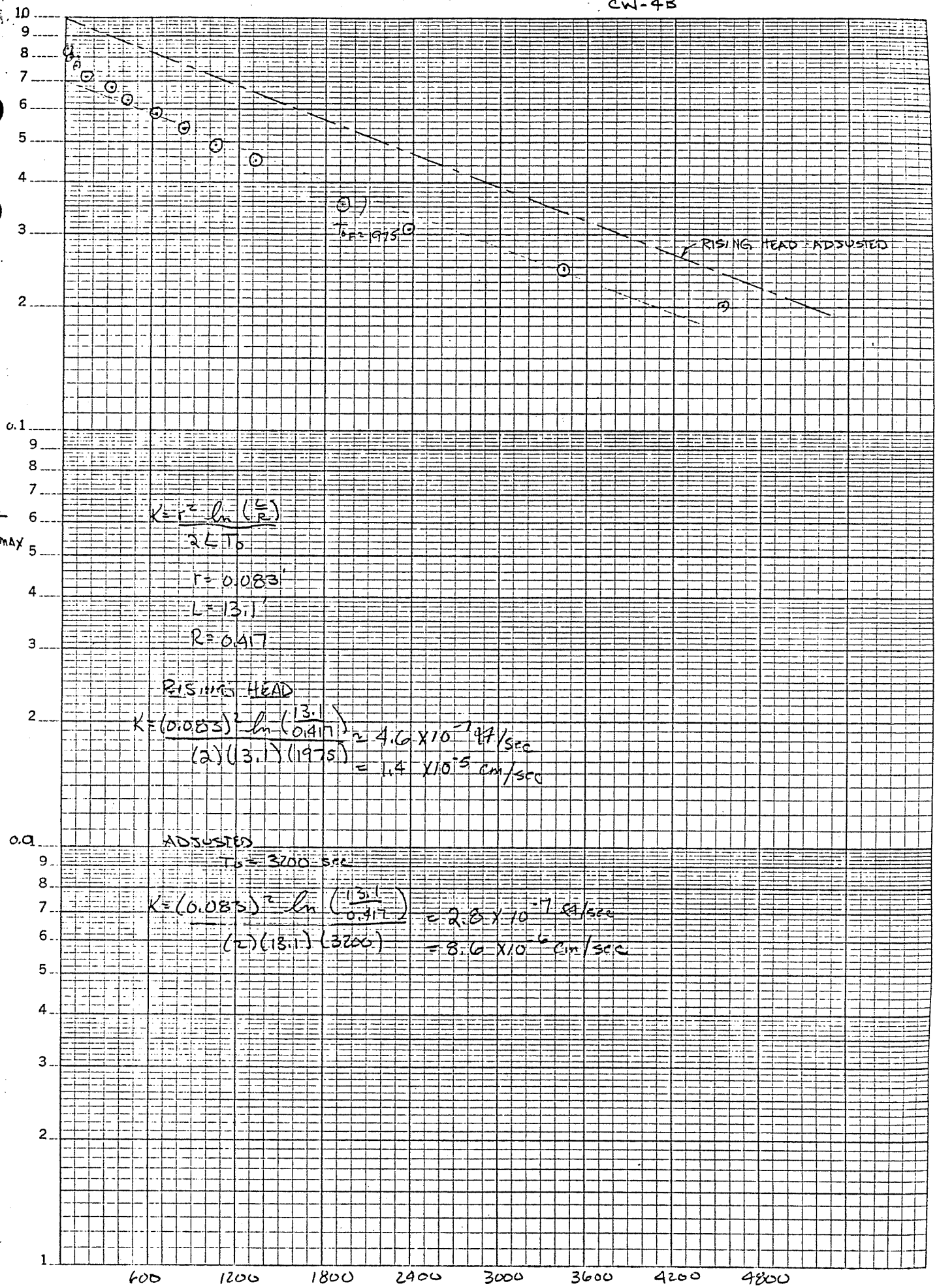
ALTIFT CW-4R(RISING) 13305-009-19

STATIC HEAD= 1.93 MAX CHANGE= 4.1

T(SEC)	H	H-H	H-H/H-HO
0	4.1	-2.17	1
11	3.75	-1.82	.83870967741935
30	3.65	-1.72	.7926267281106
45	3.6	-1.67	.76958525345622
155	3.5	-1.57	.72350230414746
325	3.4	-1.47	.67741935483871
465	3.3	-1.37	.63133640552995
639	3.2	-1.27	.5852534562212
820	3.1	-1.17	.53917050691244
1040	3	-1.07	.49308755760368
1315	2.9	-.97	.44700460829493
1950	2.7	-.77	.35483870967742
2380	2.6	-.67	.30875576036866
3450	2.47	-.54	.24884792626728
4560	2.37	-.44	.20276497695852

4.1 FALLING HEAD

13305-004-14
CW-4B



SEMI-LOGARITHMIC 3 CYCLES X 60 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 5373

$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2LT_0}$$

$r = 0.083'$

$L = 13.1'$

$R = 0.417$

RISING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{13.1}{0.417}\right)}{(2)(13.1)(1975)} = 4.6 \times 10^{-7}\ \text{ft/sec}$$

$$= 1.4 \times 10^{-5}\ \text{cm/sec}$$

ADJUSTED

$T_0 = 3200$ sec

$$K = \frac{(0.083)^2 \ln\left(\frac{13.1}{0.417}\right)}{(2)(13.1)(3200)} = 2.8 \times 10^{-7}\ \text{ft/sec}$$

$$= 8.6 \times 10^{-6}\ \text{cm/sec}$$

SLUG TESTS

WELL NUMBER & LOCATION CW-5A (Altift Realty) DATE 9/12/85

DEPTH TO STATIC WATER LEVEL 6.32' TIME 3:55 p

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

VOLUME OF SLUG 0.0638 ft³

NOTE: ALL MEASUREMENTS ARE FROM TOP OF Protective CASING

FALLING HEAD		RISING HEAD	
WATER LEVEL ft	ELAPSED TIME	WATER LEVEL	ELAPSED TIME
		* STARTING STATIC AT 6.19 FT. *	
4.52	17 sec	8.37	:16 sec
4.94	:40	8.20	:30
5.21	1:00	8.00	:45
5.33	1:15	7.80	1:00
5.46	1:30	7.70	1:15
5.58	1:45	7.60	1:30
5.65	2:00	7.50	1:41
5.80	2:30	7.4	1:54
5.90	3:00	7.3	2:10
5.98	3:30	7.2	2:20
6.07	4:30	7.1	2:44
6.14	6:00	7.0	3:10
6.18	8:00	6.9	3:33
6.19	10:00	6.8	4:02
*		6.7	4:36
		6.6	5:20
		6.5	6:25
		6.4	8:00
		6.3	12:15
		6.2	
		6.1	

*

ALTIFT CW-5A(FALLING) 13305-009-19

STATIC HEAD= 6.32 MAX CHANGE= 3.39

T(SEC)	H	H-H	H-H/H-HO
0	3.39	2.93	1
17	4.52	1.8	.61433447098976
40	4.94	1.38	.4709874109215
40	5	1.32	.45051194539249
60	5.21	1.11	.37883959044369
75	5.33	.99	.33788395904437
90	5.46	.86	.29351535836177
105	5.58	.74	.25255972696245
120	5.65	.67	.22866894197952
150	5.8	.52	.17747440273038
180	5.9	.42	.14334470989761
210	5.98	.34	.1160409556314
270	6.07	.25	.085324232081911
360	6.14	.18	.061433447098976
498	6.14	.18	.061433447098976
480	6.18	.14	.04778156996587
600	6.19	.13	.044368600682594

ALTIFT CW-5A(RISING) 13305-009-19

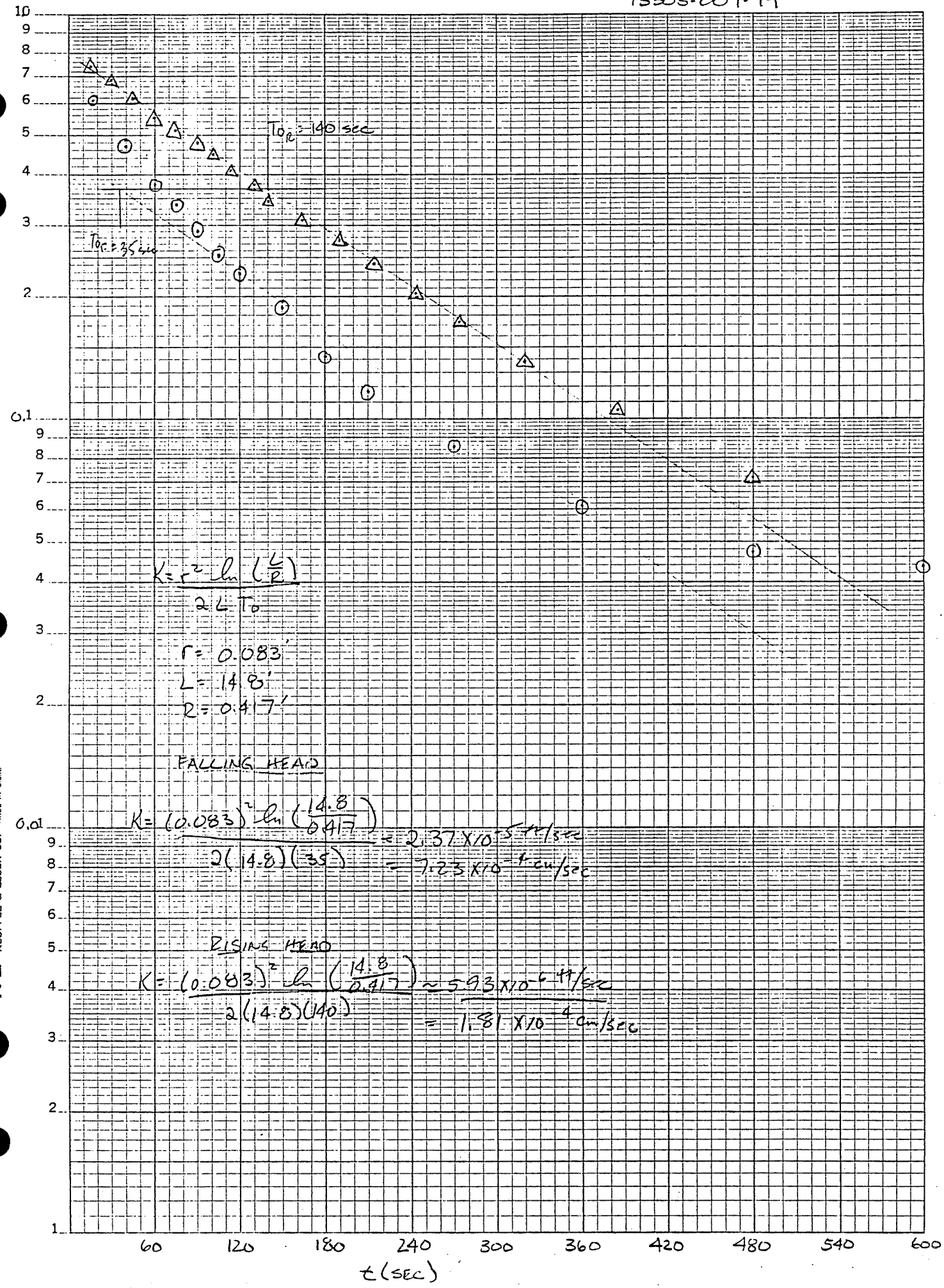
STATIC HEAD= 6.19 MAX CHANGE= 9.12

T(SEC)	H	H-H	H-H/H-HO
0	9.12	-2.93	1
16	8.37	-2.18	.74402730375426
30	8.2	-2.01	.68600682593856
45	8	-1.81	.61774744027304
60	7.8	-1.61	.54948805460751
75	7.7	-1.51	.51535836177474
90	7.6	-1.41	.48122866894198
101	7.5	-1.31	.44709897610921
114	7.4	-1.21	.41296928327645
130	7.3	-1.11	.37883959044369
140	7.2	-1.01	.34470989761092
164	7.1	-.91	.31058020477815
190	7	-.81	.27645051194539
213	6.9	-.71	.24232081911263
242	6.8	-.61	.20819112627986
276	6.7	-.51	.1740614334471
320	6.6	-.41	.13993174061433
385	6.5	-.31	.10580204778157
480	6.4	-.21	.071472354948805
735	6.3	-.11	.037542662116041

△ = RISING HEAD
⊙ = FALLING HEAD

CW-SA
13305-009-19

SLUG TEST



46 53/3

KEUFFEL & ESSER CO. MADE IN U.S.A.

$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2 L T_0}$$

$r = 0.083'$

$L = 14.8'$

$R = 0.417'$

FALLING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{14.8}{0.417}\right)}{2(14.8)(35)} = 2.37 \times 10^{-5}\ ft/sec$$

$$= 7.23 \times 10^{-4}\ cm/sec$$

RISING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{14.8}{0.417}\right)}{2(14.8)(140)} = 5.93 \times 10^{-6}\ ft/sec$$

$$= 1.81 \times 10^{-4}\ cm/sec$$

SLUG TESTS

WELL NUMBER & LOCATION CW-5B ALTIFT REALTY DATE 9/12/85

DEPTH TO STATIC WATER LEVEL 3.95' TIME 2^50 p

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

VOLUME OF SLUG 0.106 35 ft³

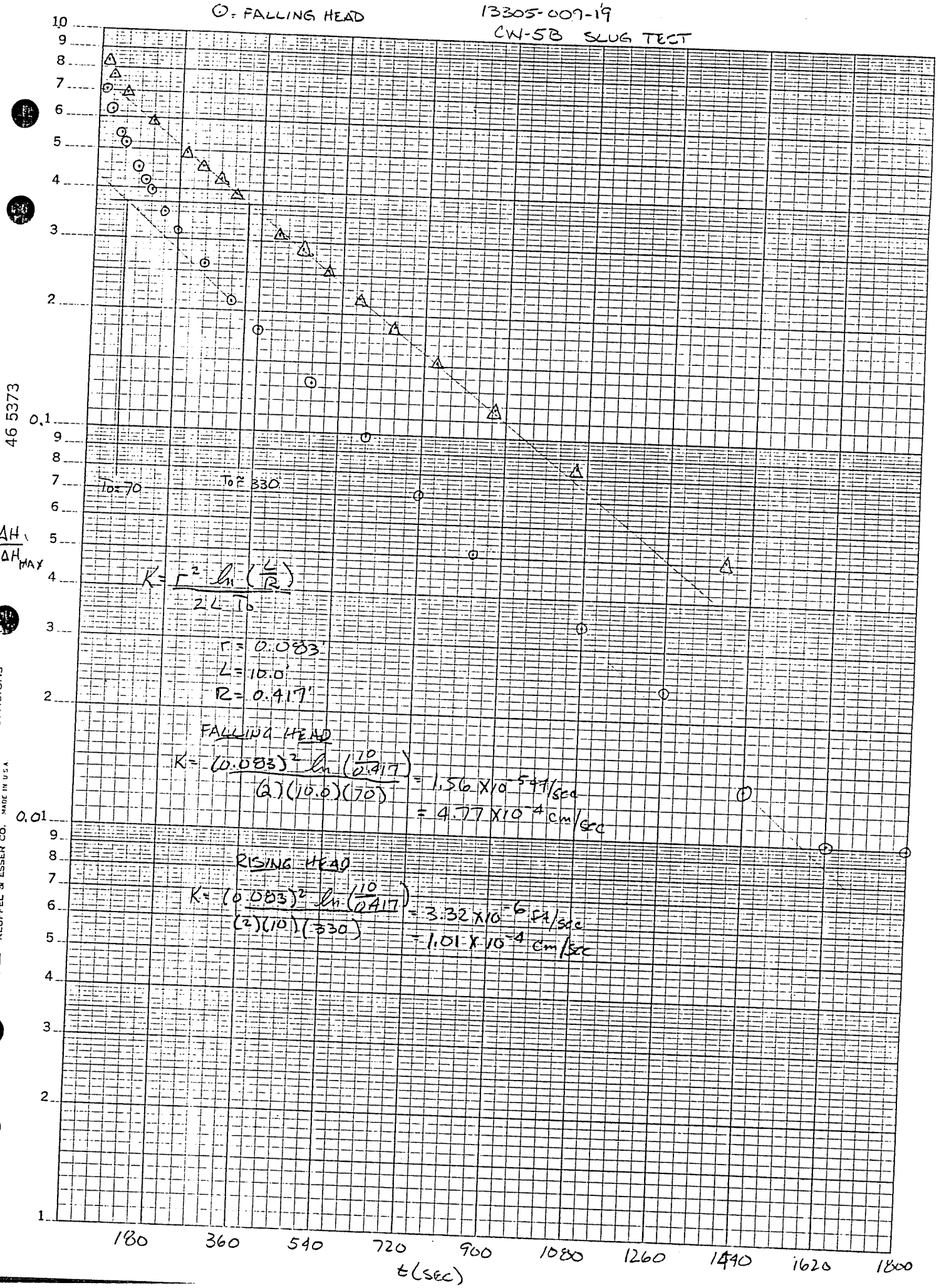
NOTE: ALL MEASUREMENTS ARE FROM TOP OF ^PROTECTIVE CASING

FALLING HEAD		RISING HEAD	
WATER LEVEL ft	ELAPSED TIME min	WATER LEVEL	ELAPSED TIME
1.86	:15 sec	6.4	:15 sec
2.10	:30	6.2	:30
2.32	:50	6.1	:46
2.43	1:00	6.0	:58
2.63	1:30	5.9	1:15
2.71	1:45	5.8	1:37
2.78	2:00	5.7	2:00
2.92	2:30	5.6	2:25
3.02	3:00	5.5	2:52
3.18	4:00	5.4	3:20
3.33	5:00	5.3	3:50
3.42	6:00	5.2	4:30
3.56	8:00	5.1	5:09
3.66	10:00	5.0	5:54
3.74	12:00	4.9	6:38
3.80	14:00	4.8	7:33
3.85	18:00	4.7	8:33
3.88	21:00	4.6	9:40
3.91	24:00	4.5	10:58
3.92	27:00	4.4	12:28
3.92	30:00	4.3	14:41
		4.2	17:35
		4.1	23:07
		4.0	33:00
		3.9	

⊙ = FALLING HEAD

13305-009-19

CW-5B SLUG TEST



$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2L T_o}$$

$r = 0.083'$

$L = 10.0'$

$R = 0.417'$

FALLING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{10}{0.417}\right)}{(2)(10.0)(70)} = 1.56 \times 10^{-5}\ ft/sec$$

$$= 4.77 \times 10^{-4}\ cm/sec$$

RISING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{10}{0.417}\right)}{(2)(10)(330)} = 3.32 \times 10^{-6}\ ft/sec$$

$$= 1.01 \times 10^{-4}\ cm/sec$$

STATIC HEAD= 3.95 MAX CHANGE= 1.02

T(SEC)	H	H-H	H-H/H-HO
0	1.02	2.93	1
15	1.86	2.09	.71331058020478
30	2.1	1.85	.63139931740614
50	2.32	1.63	.55631399317406
60	2.43	1.52	.51877133105802
90	2.63	1.32	.45051194539249
105	2.71	1.24	.42320819112628
120	2.78	1.17	.39931740614334
150	2.92	1.03	.35153583617747
180	3.02	.93	.31740614334471
240	3.18	.77	.26279863481229
300	3.33	.62	.21160409556314
360	3.42	.53	.18088737201365
480	3.56	.39	.13310580204778
600	3.66	.29	.098976109215017
720	3.74	.21	.071672354948805
840	3.8	.15	.051194539249147
1080	3.85	.1	.034129692832764
1260	3.88	.07	.023890784982935
1440	3.91	.04	.013651877133106
1620	3.92	.03	.010238907849829
1800	3.92	.03	.010238907849829

ALTIFT CW-5B(RISING) 13305-009-19

STATIC HEAD= 3.95 MAX CHANGE= 6.88

T(SEC)	H	H-H	H-H/H-HO
0	6.88	-2.93	1
15	6.4	-2.45	.83617747440273
30	6.2	-2.25	.7679180887372
46	6.1	-2.15	.73378839590443
58	6	-2.05	.69965870307167
75	5.9	-1.95	.66552901023891
97	5.8	-1.85	.63139931740614
120	5.7	-1.75	.59726962457338
145	5.6	-1.65	.56313993174061
172	5.5	-1.55	.52901023890785
200	5.4	-1.45	.49488054607509
230	5.3	-1.35	.46075085324232
350	5.2	-1.25	.42662116040955
270	5.2	-1.25	.42662116040955
309	5.1	-1.15	.39249146757679
1421.9692832764		5	-1.05 .35836177474403
354	5	-1.05	.35836177474403
398	4.9	-.95	.32423208191126
453	4.8	-.85	.2901023890785
513	4.7	-.75	.25597269624573
580	4.6	-.65	.22184300341297
658	4.5	-.55	.1877133105802
748	4.4	-.45	.15358361774744
881	4.3	-.35	.11945392491468

SLUG TESTS

WELL NUMBER & LOCATION CW-6A DATE 9/13/85

DEPTH TO STATIC WATER LEVEL 9.96 TIME 8:30 A

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

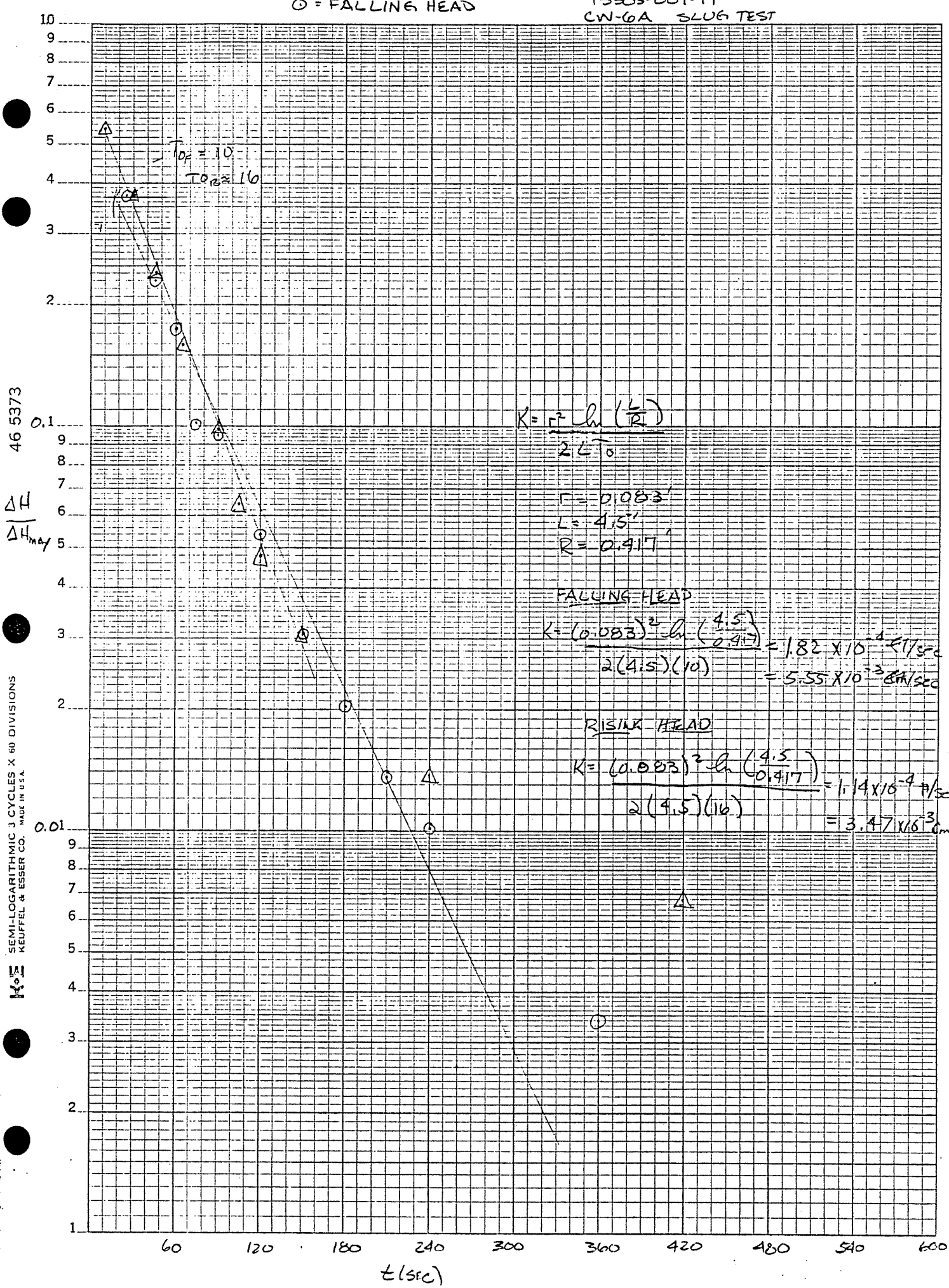
VOLUME OF SLUG 0.0638 ft³

NOTE: ALL MEASUREMENTS ARE FROM TOP OF ^ PROTECTIVE CASING

FALLING HEAD		RISING HEAD	
WATER LEVEL	ELAPSED TIME	WATER LEVEL	ELAPSED TIME
8.86	:25 Sec	11.56	:15 Sec
9.28	:45	11.05	:30
9.45	1:00	10.67	:45
9.66	1:15	10.43	1:05
9.68	1:30	10.23	1:30
9.80	2:00	10.15	1:45
9.87	2:30	10.10	2:06
9.87	2:45	10.05	2:28
9.90	3:00	10.00	4:05
9.92	3:30	9.98	7:00
9.93	4:00	9.96	12:30
9.95	6:00		
9.96	8:00		

⊙ = FALLING HEAD

13305-009-19
CW-6A SLUG TEST



46 5373

SEMI-LOGARITHMIC 3 CYCLES X 60 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

K&E

$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2L\bar{T}_0}$$

$r = 0.083'$
$L = 4.5''$
$R = 0.417'$

FALLING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{4.5}{0.417}\right)}{2(4.5)(10)} = 1.82 \times 10^{-4} \text{ FT/sec}$$
$$= 5.55 \times 10^{-3} \text{ cm/sec}$$

RISING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{4.5}{0.417}\right)}{2(9.5)(16)} = 1.14 \times 10^{-4} \text{ ft/sec}$$
$$= 3.47 \times 10^{-3} \text{ cm/sec}$$

ALTIFT CW-6A(FALLING) 13305-009-19

STATIC HEAD= 9.96 MAX CHANGE= 7.03

T(SEC)	H	H-H	H-H/H-HO
0	9.96	0	0
25	8.86	1.1	.37542662116041
45	9.28	.68	.2320819112628
60	9.45	.51	.1740614334471
75	9.66	.3	.10238907849829
90	9.68	.28	.09556313993174
120	9.8	.16	.054607508532423
150	9.87	.09	.030716723549488
180	9.9	.06	.020477815699659
210	9.92	.04	.013651877133106
240	9.93	.03	.010238907849829
360	9.95	.01	3.4129692832764E-03
480	9.96	0	0

ALTIFT CW-6A(RISING) 13305-009-19

STATIC HEAD= 9.96 MAX CHANGE= 12.89

T(SEC)	H	H-H	H-H/H-HO
0	12.89	-2.93	1
15	11.56	-1.6	.54607508532423
30	11.05	-1.09	.37201365187713
45	10.67	-.71	.24232081911263
917.35494880547		10	-.04 .013651877133106
45	10.67	-.71	.24232081911263
65	10.43	-.47	.16040955631399
90	10.23	-.27	.092150170648464
105	10.15	-.19	.064846416382252
120	10.1	-.14	.04778156996587
148	10.05	-.09	.030716723549488
245	10	-.04	.013651877133106
420	9.98	-.02	6.8259385665529E-03
900	9.97	-.01	3.4129692832764E-03
750	9.97	-.01	3.4129692832764E-03

SLUG TESTS

WELL NUMBER & LOCATION CW-6B ACTIF DATE 9/13/85

DEPTH TO STATIC WATER LEVEL 3.02' TIME 8:15 am

TOTAL DEPTH OF WELL FROM TOP OF CASING _____

VOLUME OF SLUG 0.0623 FT

NOTE: ALL MEASUREMENTS ARE FROM TOP OF √CASING Protective

FALLING HEAD		RISING HEAD	
WATER LEVEL	ELAPSED TIME	WATER LEVEL	ELAPSED TIME
		* STARTING STATIC 2.85 FT	
1.09	:12 sec	4.97	:15 sec
1.18	:30	4.90	:30
1.24	:45	4.86	:45
1.27	1:10	4.84	1:00
1.34	1:45	4.82	1:15
1.40	2:30	4.79	1:30
1.48	3:30	4.77	1:45
1.68	7:00	4.75	2:00
1.81	10:06	4.73	2:30
2.09	19:45	4.70	3:00
2.31	31:20	4.65	4:00
2.43	40:30	4.60	5:00
2.53	50:00	4.56	6:00
2.83	1:37:30	4.49	8:00
2.85	1:45:00	4.42	10:00
		4.15	20:00
		3.93	30:00
		3.62	50:00
		3.35	1:25:00
		3.20	1:57:00
			1:46:00

ALTIFT CW-6B(FALLING) 13305-009-19

STATIC HEAD= 3.02 MAX CHANGE= .16

T(SEC)	H	H-H	H-H/H-HO
0	.14	2.86	1
12	1.09	1.93	.67482517482517
30	1.18	1.84	.64335664335664
45	1.24	1.78	.62237762237762
70	1.27	1.75	.61188811188811
105	1.34	1.68	.5874125874125
7200	1.4	1.62	.56643356643357
150	1.4	1.62	.56643356643357
210	1.48	1.54	.53846153846154
420	1.68	1.34	.46853146853147
600	1.81	1.21	.42307692307692
1185	2.09	.93	.32517482517482
1880	2.31	.71	.24825174825175
2430	2.43	.59	.2062937062937
3000	2.53	.49	.17132867132867
5850	2.83	.19	.066433566433566
6300	2.85	.17	.059440559440559

ALTIFT CW-6B(RISING) 13305-009-19

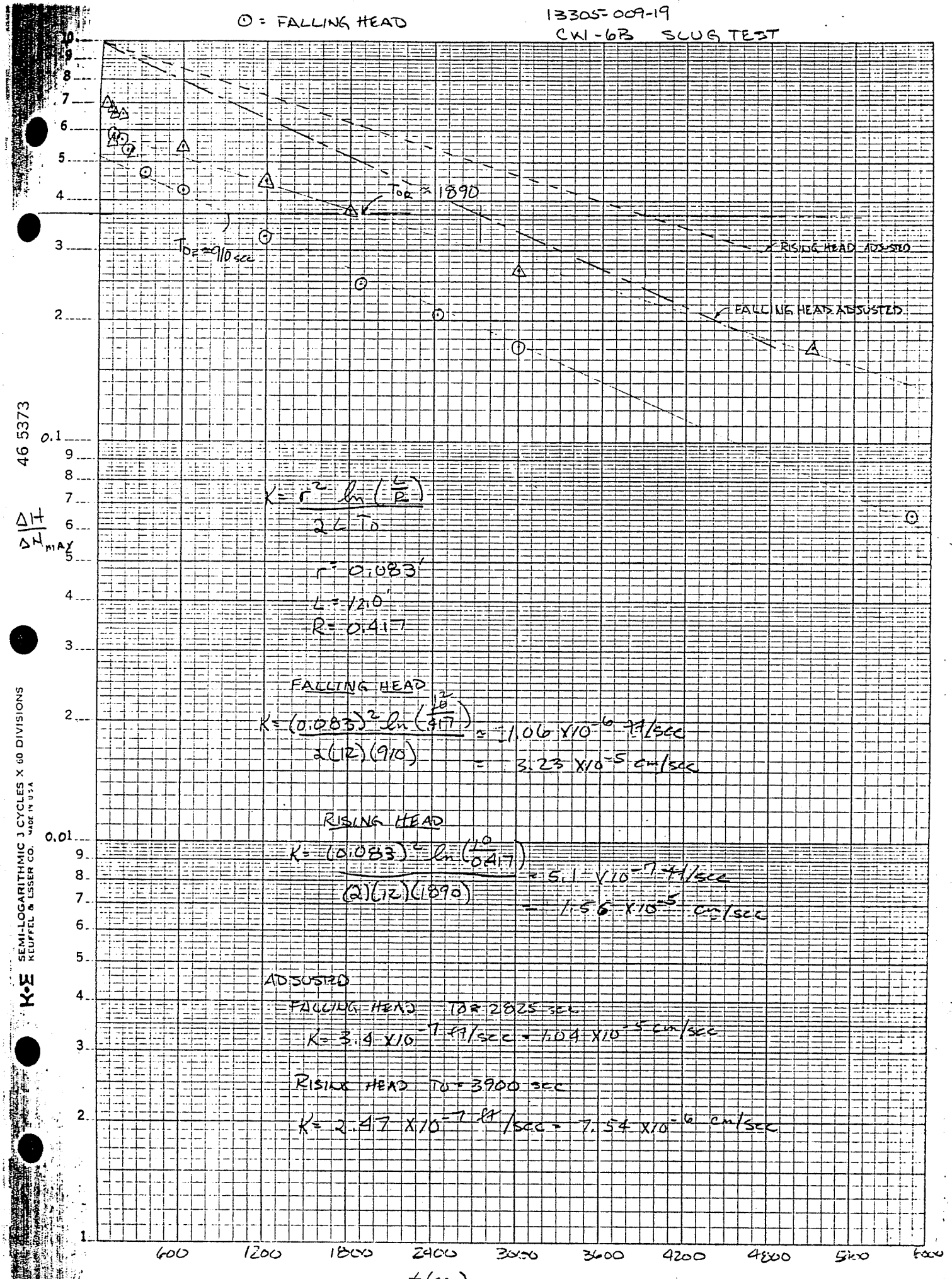
STATIC HEAD= 2.85 MAX CHANGE= 5.71

T(SEC)	H	H-H	H-H/H-HO
5.71	0	2.85	-.99650349650349
15	4.97	-2.12	.74125874125874
30	4.9	-2.05	.71678321678321
45	4.86	-2.01	.7027972027972
60	4.84	-1.99	.6958041958041
75	4.82	-1.97	.68881118881119
90	4.79	-1.94	.67832167832168
105	4.77	-1.92	.67132867132867
120	4.75	-1.9	.66433566433566
150	4.73	-1.88	.65734265734266
180	4.7	-1.85	.6468531468531
240	4.65	-1.8	.62937062937063
300	4.6	-1.75	.61188811188811
360	4.56	-1.71	.5979020979021
480	4.49	-1.64	.57342657342657
480	4.49	-1.64	.57342657342657
600	4.42	-1.57	.5489510489510
1200	4.15	-1.3	.4545454545454
1800	3.93	-1.08	.37762237762238
3000	3.62	-.77	.2692307692307
5100	3.35	-.5	.17482517482517
7020	3.2	-.35	.12237762237762

⊙ = FALLING HEAD

13305-009-19

CW-6B SLUG TEST



$$K = \frac{r^2 \ln\left(\frac{L}{R}\right)}{2L\,T_0}$$

$r = 0.083'$

$L = 12.0'$

$R = 0.417$

FALLING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{12}{.417}\right)}{2(12)(910)} = 1.06 \times 10^{-6}\ ft/sec$$

$$= 3.23 \times 10^{-5}\ cm/sec$$

RISING HEAD

$$K = \frac{(0.083)^2 \ln\left(\frac{12}{.417}\right)}{(2)(12)(1890)} = 5.1 \times 10^{-7}\ ft/sec$$

$$= 1.56 \times 10^{-5}\ cm/sec$$

ADJUSTED

FALLING HEAD $T_{0F} = 2825$ sec

$K = 3.4 \times 10^{-7}\ ft/sec = 1.04 \times 10^{-5}\ cm/sec$

RISING HEAD $T_0 = 3900$ sec

$K = 2.47 \times 10^{-7}\ ft/sec = 7.54 \times 10^{-6}\ cm/sec$

Gamma Logs

15505-004

Alltift Realty 7-3-85

CW-3 3:45 pm

JKBrod

Depth of Well: 18.0' (Ground Level)

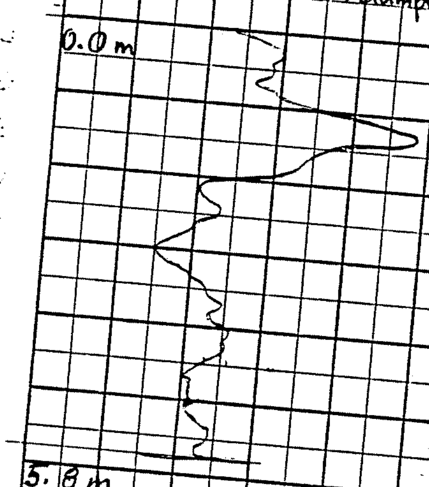
SWL: 13.32' (Top of PVC)

γ: 5 CPS/DIV

Displacement: 0 CPS x CPS/DIV

NOTES: Top tape on probe @ G.L.

Ground Electroded clamped to protective casing

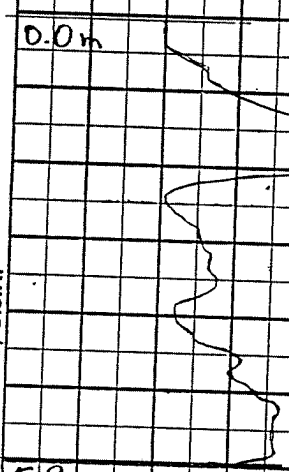


TRUMENT CO., DELTA, COLORADO, U.S.A.

13305-009 8-2-85
Alltift Realty 1:15 pm
CW-4B SCBrad
Well Depth: 24.35' (Ground Level)
SWL: 2.2' (Top of PVC)

γ: 5 CPS/DIV
Displacement: 0 CPS x CPS/DIV

NOTES: Top tape on probe @ GL.
Ground electrode clamped to protective casing



13305-009
Alltift Realty
CW-2A
Depth of Well: 60.2' (Ground level)
SWL: 13.0' (Top of PVC)

7-31-85
1:20 pm
JCBrad

X: 5 CPS/DIV
Displacement: 0 CPS x CPS/DIV

NOTES: Top tape on probe @ G.L.
Ground electrode clamped to protective casing

0.0m

17.0m

PRINTED IN U.S.A.

MOUNT SOPF

Allrift Realty 11:50 pm
CW-2B JCBrod
Depth of Well: 18.0' (Ground Level)
SWL: 5.9' (Top of PVC)

γ: 5 CPS/DIV
Displacement: 0 CPS x CPS/DIV

NOTES: Top tape on probe @ G.L.
Ground electrode clamped to protective casing.

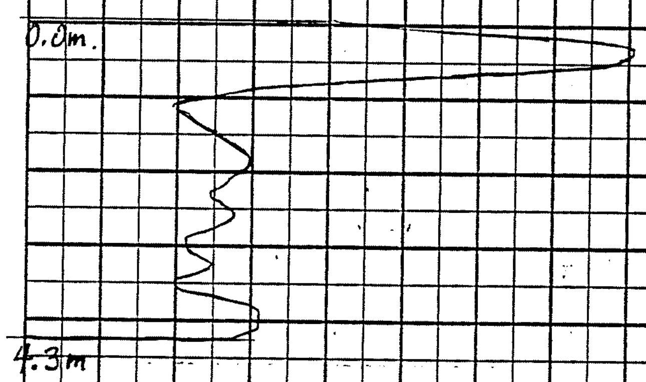


CHART NO. BP-10

13305-009 7-31-86
Allteft Realty 4:40 pm
OW-1 J.C.Brod

Depth of Well: 13.0' (Ground Level)
SWL: 6.84' (Top of PVC)

γ: 5 CPS/DIV
Displacement: 0 CPS × CPS/DIV.

NOTES: Top tape on probe @ G.L.
Ground Electrode clamped to protective casing.

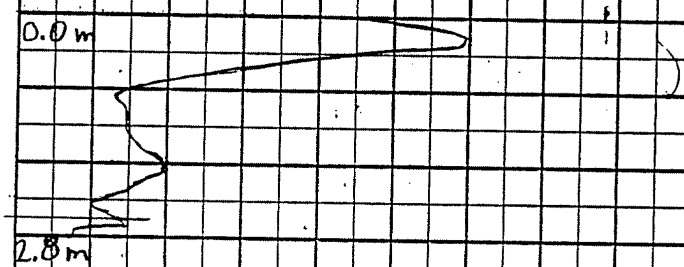


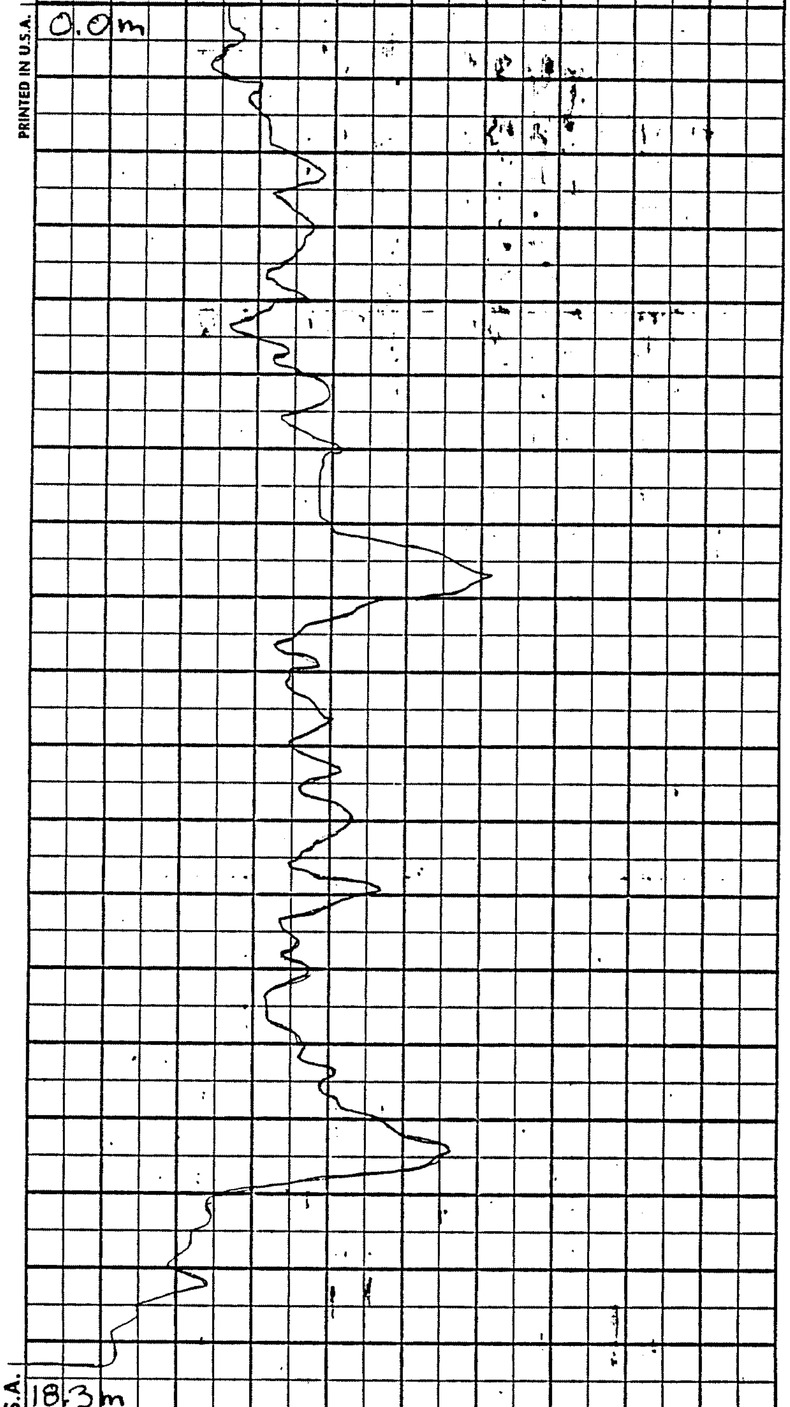
CHART NO. BP-10

...ED IN U.S.A.

Alltiff Realty 5:20 pm
OW-4A , KFord
Depth of Well: (ft ft Ground level)
SWL: 7.95' (Top of PVC)

γ: 5CPS/DIV
Displacement: 0 CPS xCPS/DIV.

NOTES: Top tape on probe @ G.L.
Ground Electrode clamped onto protective casing



13505-009 8-2-85
Alltift Realty 1:30 pm
CW-5B 14.0 J(Brod
Well Depth: (Ground Level)
SWL: 4.1' (Top of PVC)

X: 5 CPS/DIV
Displacement: 0 CPS x CPS/DIV

NOTES: Top tape on probe @ G.L.
Ground Electrode clamped to protective casing.

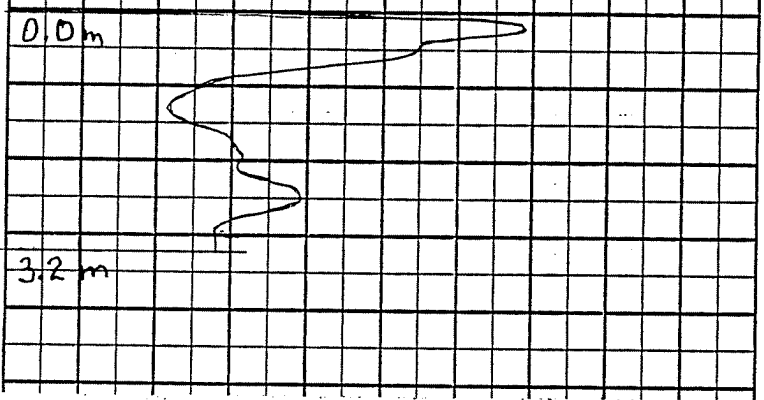


CHART NO. BP-10

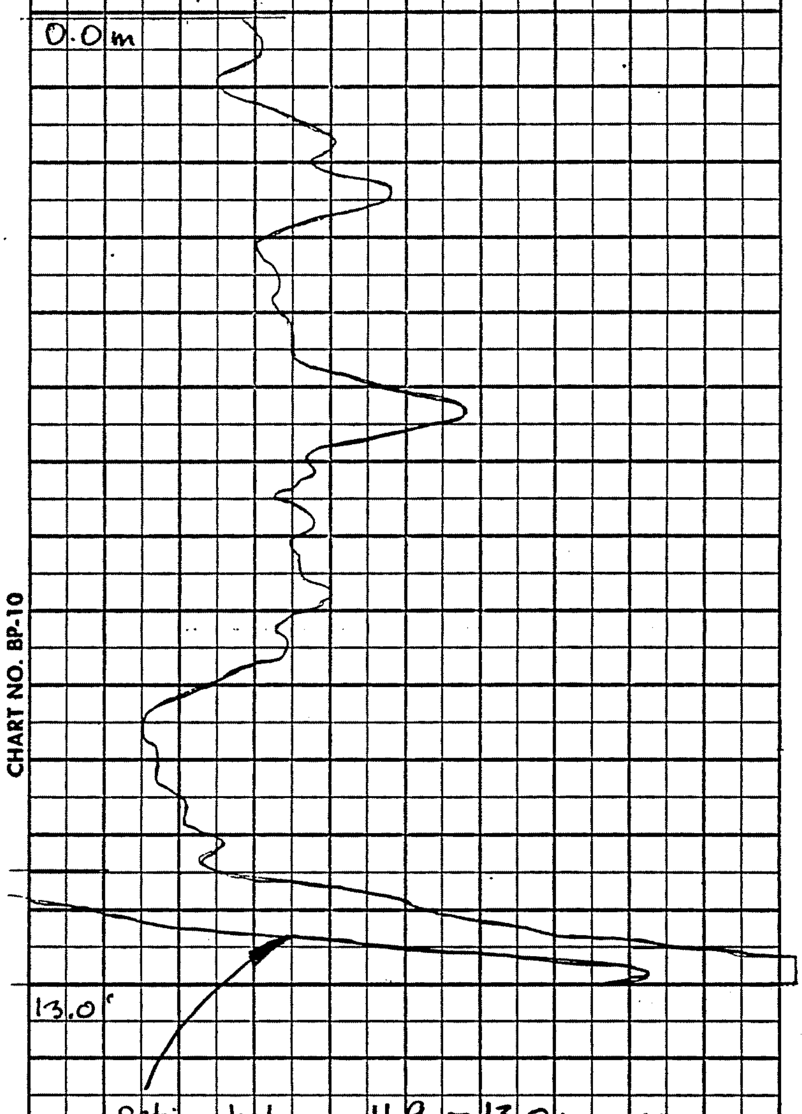
MOUNT SOPRIS INSTRUMENTS

13305-009 8-14-85
Allt ft Realty 3:00 PM
CW-5A JC Brow

Depth of Well: 47.9 (From G.L.)
SWL: 5.59' (Top of PVC)

8: 5 CPS/DIV
Displacement: 0 CPS x CPS/DIV.

NOTES: Top tape on probe @ G.L.
Ground electrode clamped to protective casing
Bottom section of well re-logged using 5 CPS x CPS/DIV Displacement so that the trace would remain on the chart paper.



Section between 11.9 - 13.0 m was re-run using:
8: 5 CPS/DIV.
Displacement 5 CPS x CPS/DIV.

CHART NO. BP-10

13305-009 — 8-14-85

Allteft Realty — 9:30 AM

CW-6B — JCBrod

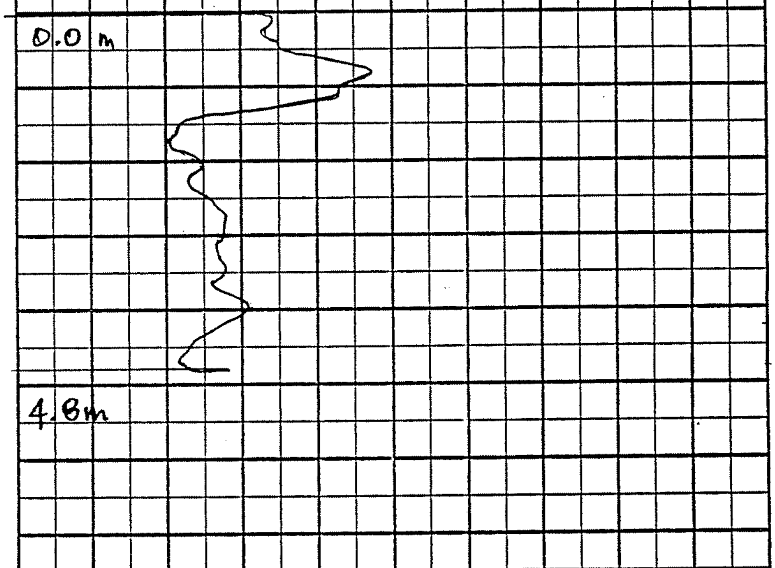
Well Depth: 21.0' (From G.L.)

SWL: 3.33' (Top of PVC)

γ: 5 cps/DIV

Displacement: 0 cps x cps/DIV

NOTES: Top tape on probe @ G.L.
Ground electrode clamped to protective casing.

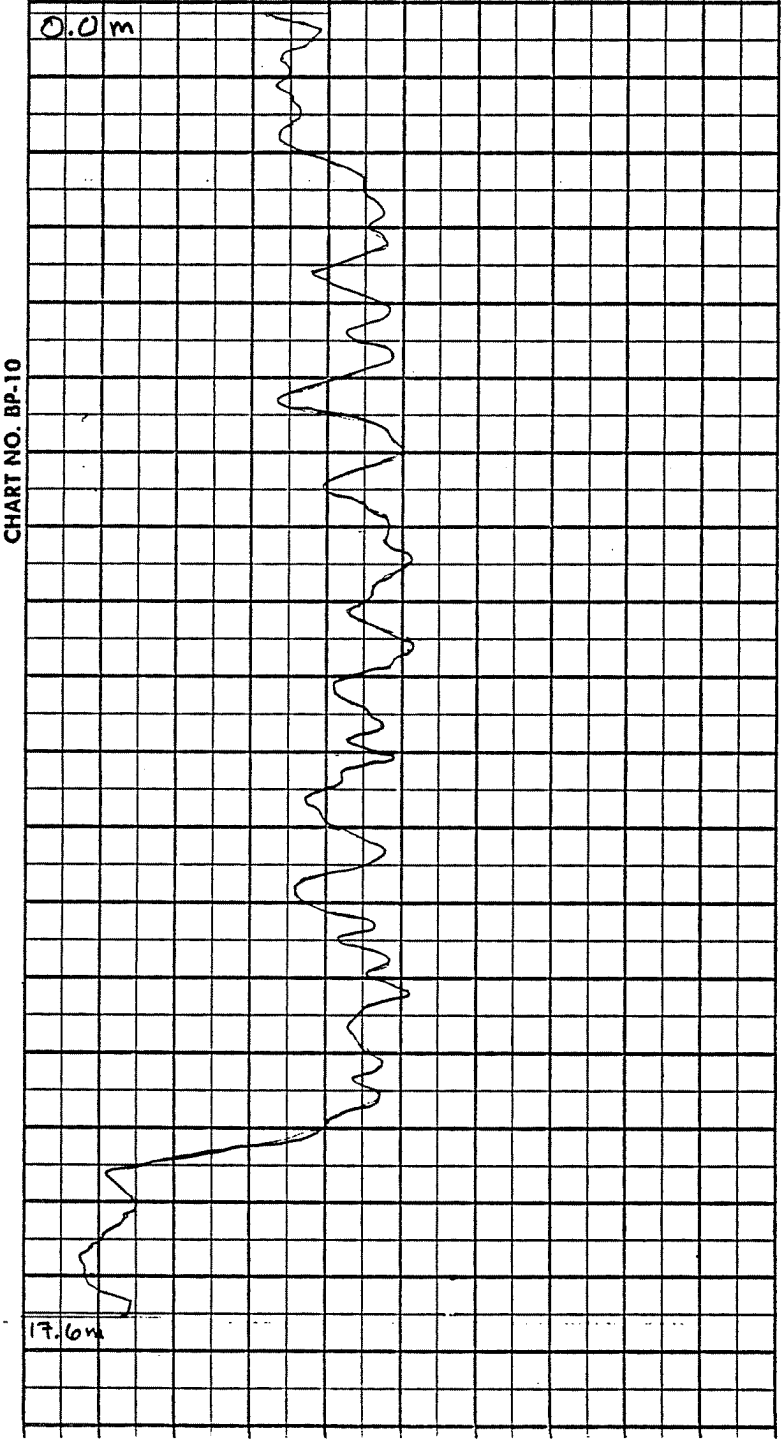


Alliott Realty 9:00 AM
CW-6A JC Brod

- Well Depth: 61.5 (From G.L.)
- SWL: 9.26' (Top of PVC)
- X: 5 CPS/DIV
- Displacement: 0 CPS X 0 PS/DIV.

NOTES: Top tape on probe @ G.L.
Ground electrode clamped to protective casing
Major divisions on paper slightly greater than 1.0 m.

0.0 m



17.6m

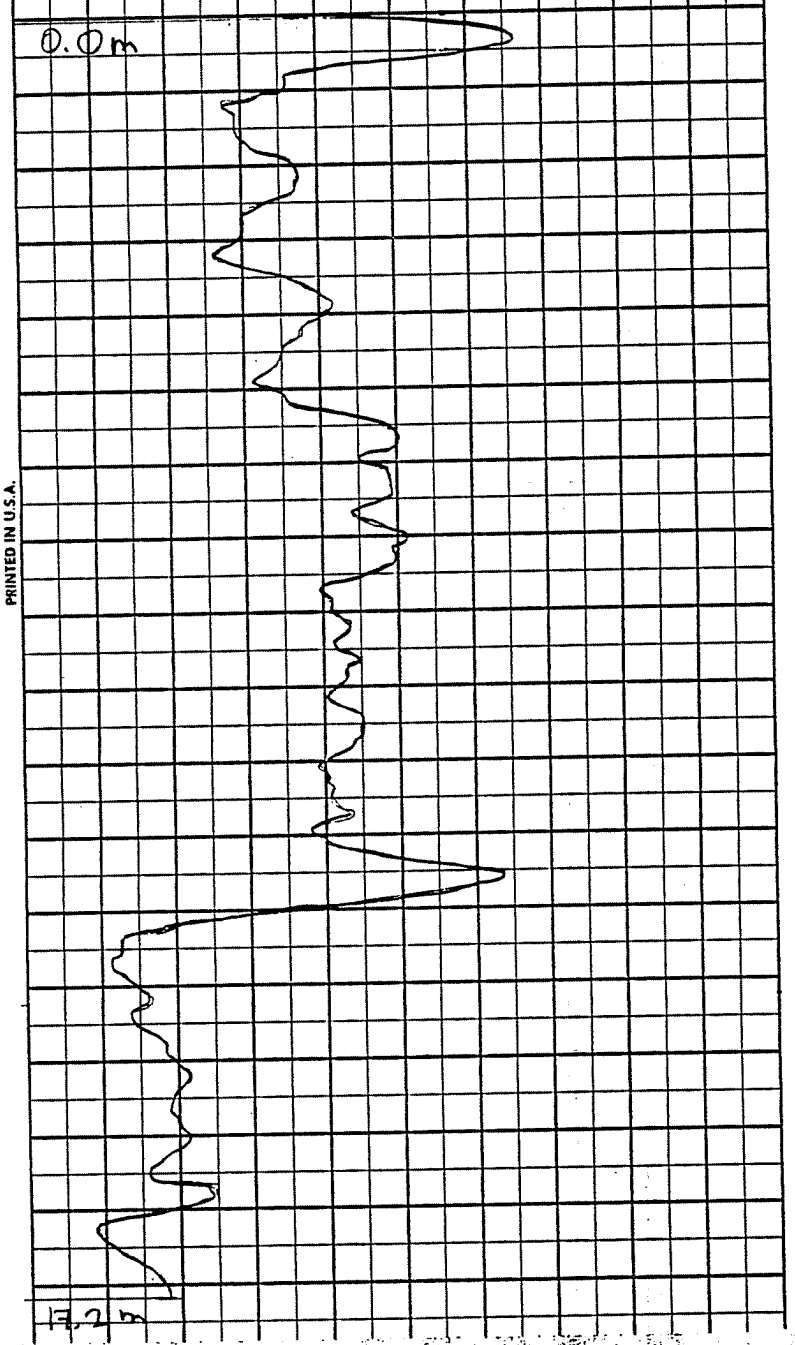
CHART NO. BP-10

Alti-Ft Realty 5:15 pm
CW-2C JC Brad

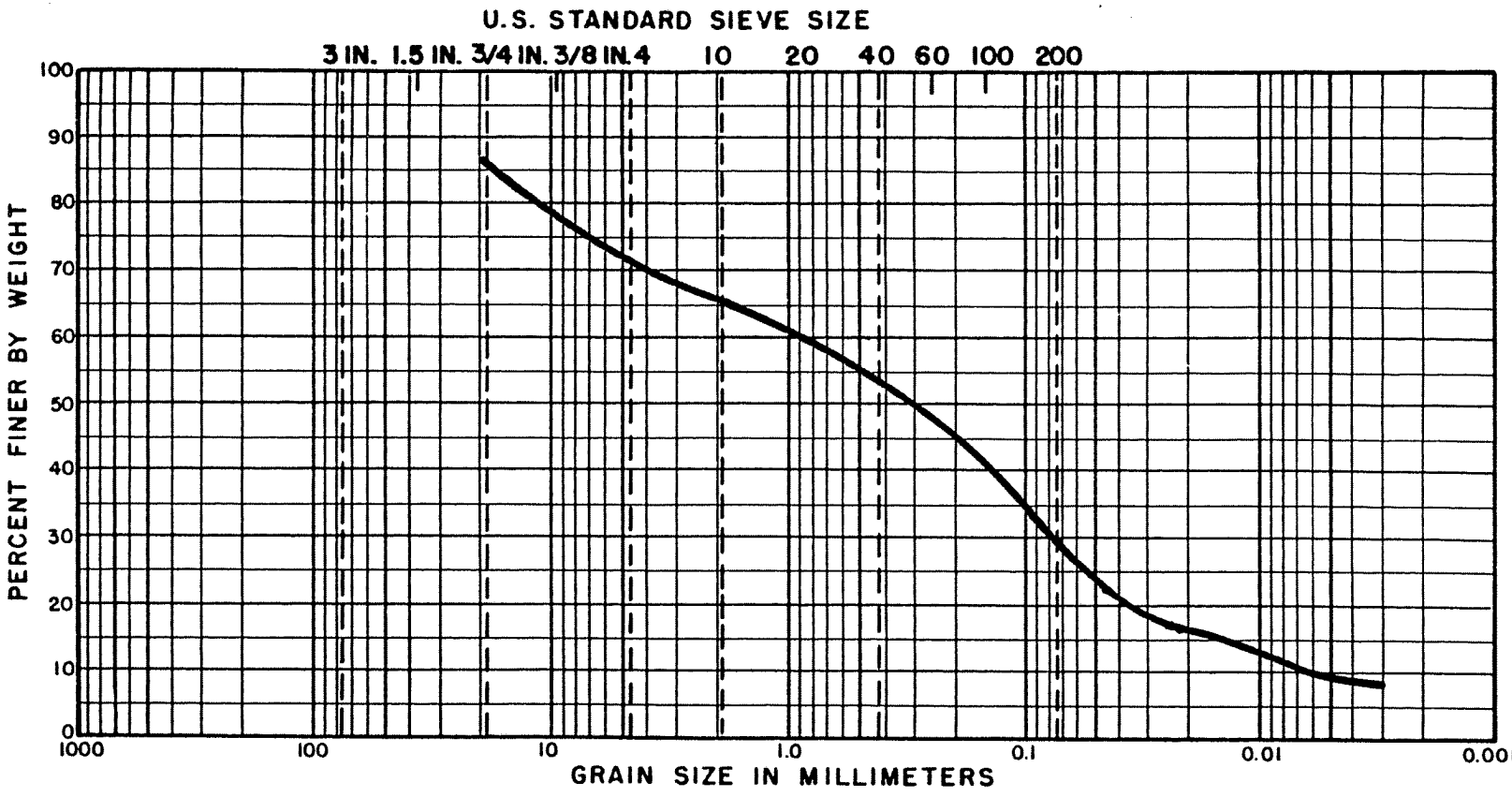
Depth of Well: Gl. 1' (From G.L.)
SWL 1306' (Top of PVC)

X: 5 CPS / DIV
Displacement: 0 CPS x CPS/DIV

NOTES: Top tape on probe @ G.L.
Ground electrode clamped to protective casing
Well developer had just left after
~3 hrs of developing — water level
may be slightly low. Developing was
not finished, still some silt in sol'n.



Grain Size Analysis



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

SAMPLE	DEPTH	CLASSIFICATION		NAT. WC	LL	PL	PI	
NO. 2	5-7'	SM	SILTY SAND					

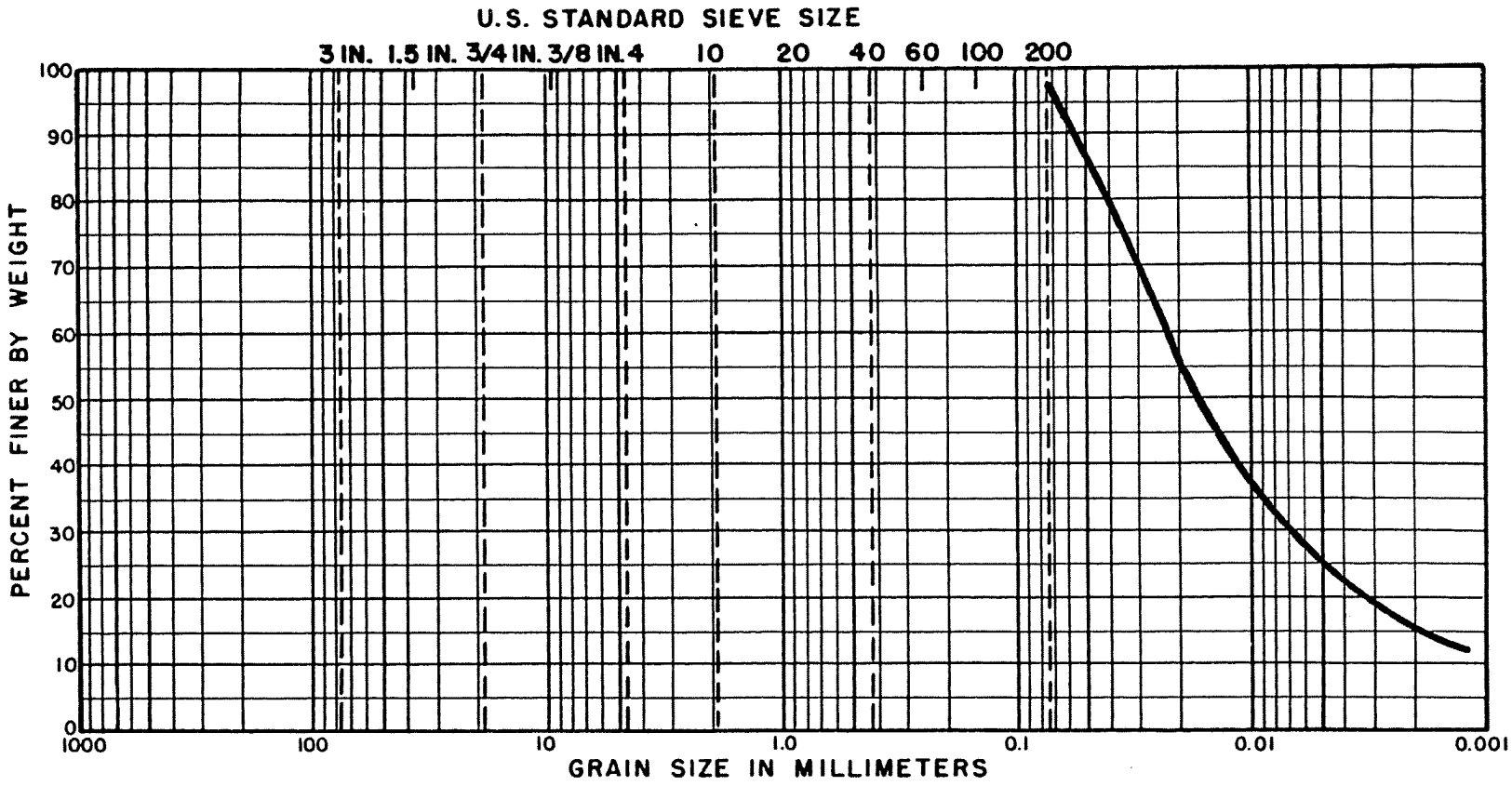
DAMES & MOORE

APPENDIX B

ALLTIFT REALTY

GRADATION CURVE

BORING CW-1



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

SAMPLE	DEPTH	CLASSIFICATION		NAT. WC	LL	PL	PI	
NO. 6	10-12'	ML	SILT					

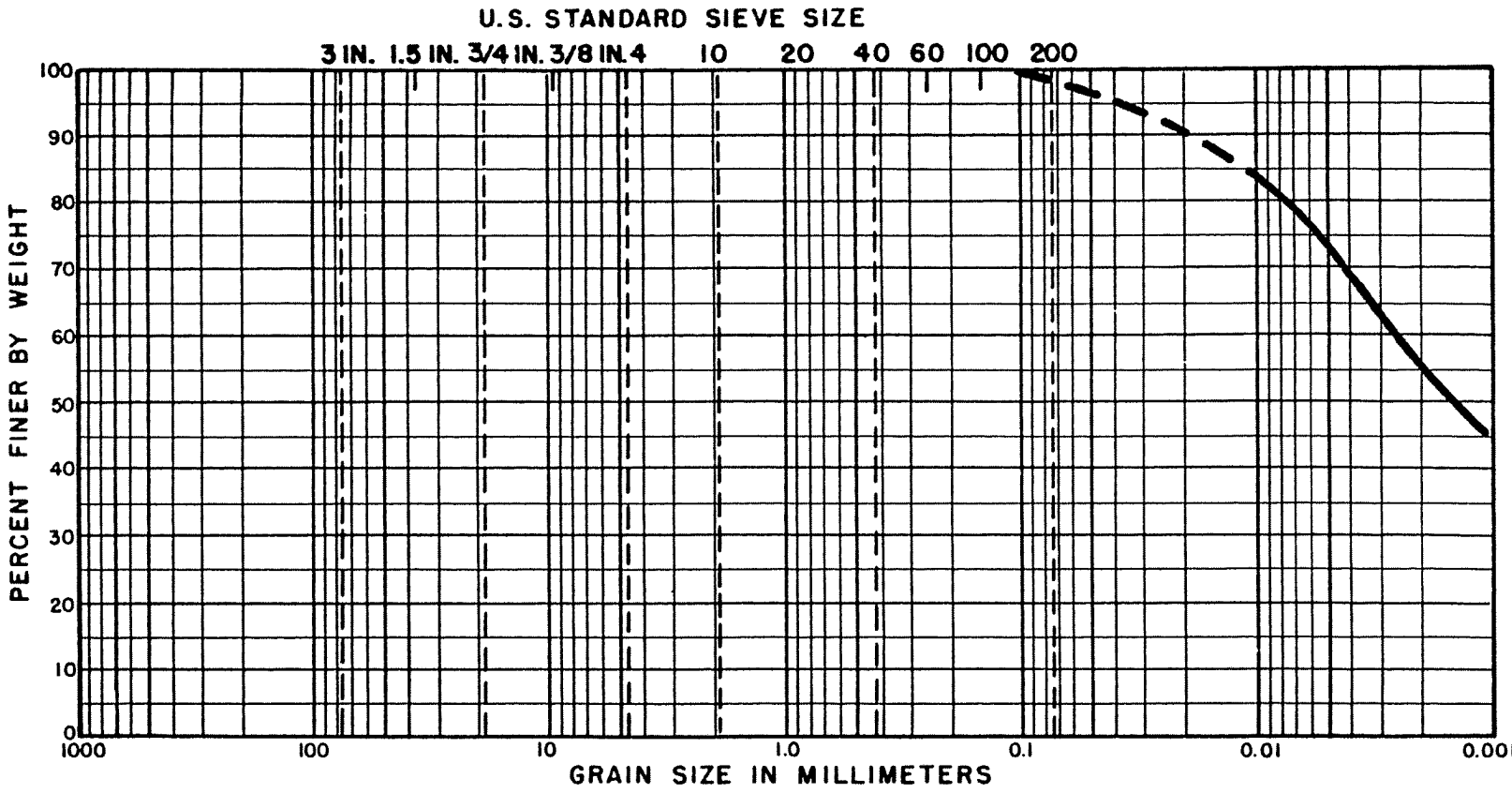
ALLTIFT REALTY

GRADATION CURVE

BORING CW-2

DAMES & MOORE

APPENDIX B



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

SAMPLE	DEPTH	CLASSIFICATION		NAT. WC	LL	PL	PI	
NO. 19	39-39.5'	CL	SILTY CLAY					

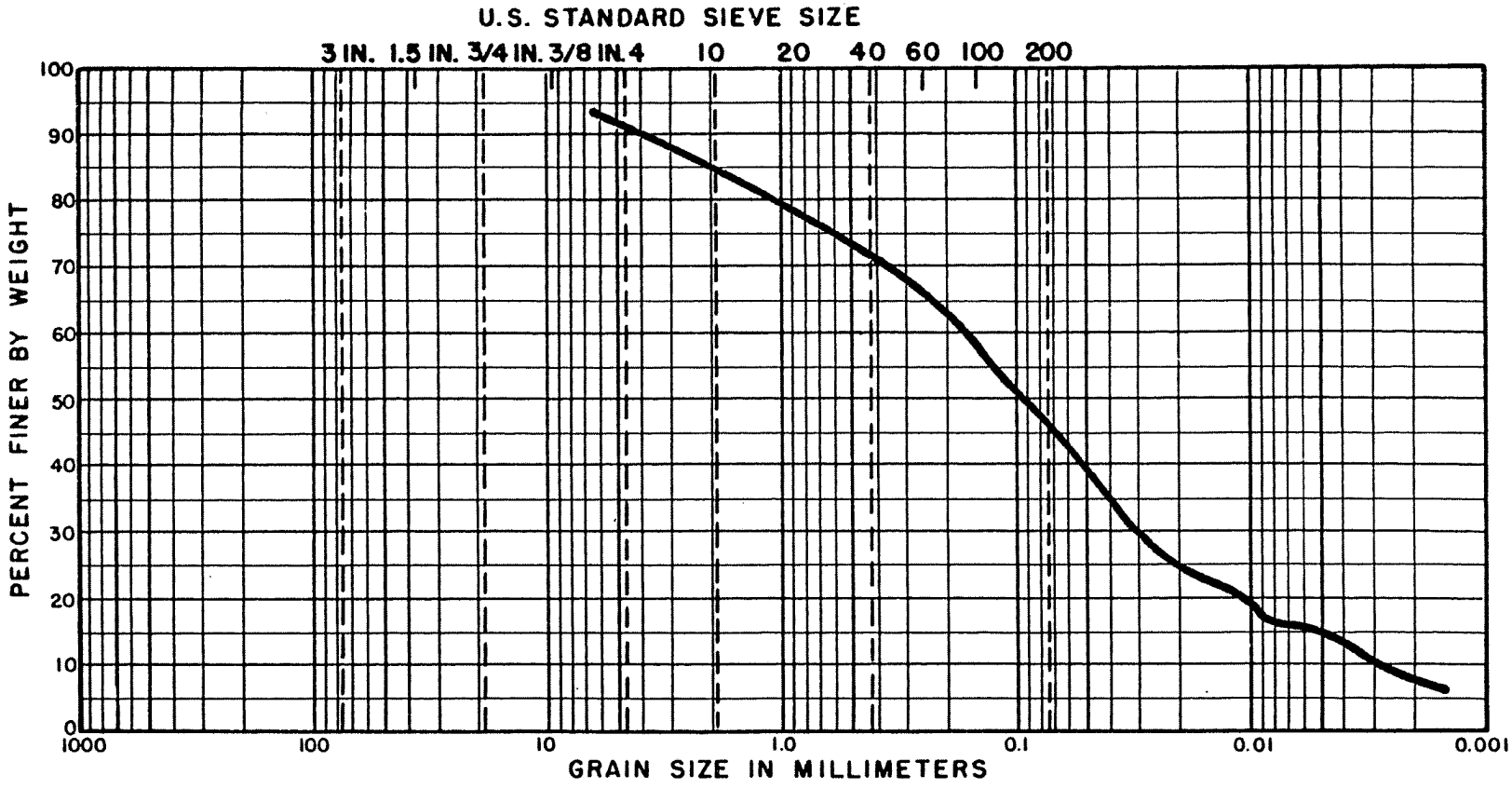
DAMES & MOORE

APPENDIX B

ALLTIFT REALTY

GRADATION CURVE

BORING CW-2



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

SAMPLE	DEPTH	CLASSIFICATION		NAT. WC	LL	PL	PI	
NO. 24	51-51.5'	SM	SILTY SAND					

DAMES & MOORE

APPENDIX B

ALLTIFT REALTY

GRADATION CURVE

BORING CW-2

APPENDIX C

GEOPHYSICAL SURVEY DATA

APPENDIX C

GEOPHYSICAL SURVEY DATA

An electrical resistivity and magnetometer survey were conducted to investigate the subsurface conditions present at the Alltift Realty site. The electrical resistivity survey consisted of vertical electrical soundings and horizontal electrical profiles to evaluate the continuity of the subsurface geologic units, locate major discontinuities and map a contaminant plume should one exist. A random magnetometer search was performed at the proposed monitoring well locations to identify any buried ferromagnetic objects which might interfere with the drilling program.

ELECTRICAL RESISTIVITY SURVEY

Vertical electrical soundings and horizontal electrical profiles were conducted using a Bison 2350B Earth Resistivity Meter.

The electrical soundings obtained apparent resistivity values of the subsurface at selected depths and locations in the immediate vicinity of the site. The sounding locations are shown in Figure C-1 while the sounding graphs are plotted in Figures C-2 through C-5. Electrode spacing, as shown in Figures C-2 through C-5, is a close approximation of depth below land surface. The "Modified" Wenner Electrode Array was used for the soundings (Carrington and Watson, 1981). Correlations and geologic interpretations of the soundings were difficult due to the absence of nearby wells with detailed geologic logs at the time the geophysical investigation was conducted. Soundings 1 through 4 (Figures C-2 through C-5) which were conducted to a depth of 100 feet, suggest the top of the bedrock surface may exist at 74 feet below land surface.

Electrical resistivity profiles were conducted using electrode spacings of 5, 10, 20, and 50 feet (electrode spacing is approximately depth below ground). The standard Wenner Electrode Array (Bison, 1975) was used for the profiles.

The profile values at the 5-foot spacing show background apparent resistivity values ranging from 203 ohm-feet at profile station 4 to 623 ohm-feet at profile station 6. Six anomalous areas were identified at the 5-foot spacing. One area located near the northeast corner of the site at profile station 5 had an apparent resistivity of 16 ohm-feet. Another anomaly located between profile stations 1 and 3 had apparent resistivity values which ranged from 22 ohm-feet at profile station 2 to 120 ohm-feet at profile station 3. These anomalies are believed to be an indication of saturated soil conditions in that area. A water transmission line is known to pass through this area. The third small anomaly is located at profile stations 9 and 10 with apparent resistivity values of 33 ohm-feet and 58 ohm-feet. These values may be an indication of shallow contamination. Drums were detected in this area during the geophysical investigation. A fourth anomaly was identified at profile station 16 with an apparent resistivity of 76 ohm-feet. This anomaly is interpreted as an indication of groundwater contamination. Evidence of chemical disposal was observed along the bank of the pond near profile station 16. A fifth anomaly was shown to exist southwest of the site across the railroad tracks at profile stations 19 and 41 through 43. The apparent resistivity values at these locations ranged from 24 ohm-feet at profile station 19 to 99 ohm-feet at profile station 42. These values may reflect off-site contaminant migration from areas southwest of the Alltift Realty site. The fifth area of low apparent resistivity extends over a large area encompassing profile stations 20 through 31 and profile stations 33 through 36, 39, and 40. The apparent resistivity values for these stations ranged from 10 ohm-feet at profile station 28 and 30 to 178 ohm-feet at profile station 35. These values are interpreted as an indication of groundwater contamination associated with the Alltift Realty site.

The profile readings at the 10-foot spacing shows the anomalies identified at profile station 5 at the 5-foot depth are still present with an apparent resistivity value of 25 ohm-feet. The small anomaly identified at profile stations 9 and 10 is still present at the 10-foot spacing. The values at these stations were 22 ohm-feet and 79 ohm-feet, respectively. The anomaly located at profile station 16 is still present with a value of 101 ohm-feet. The relatively large anomaly identified southwest of the railroad switch yard is also still present with apparent resistivity values somewhat lower, ranging from 85 ohm-feet at profile station 19 to 38 ohm-feet at profile station 43. The large anomaly identified at the 5-foot spacing has increased in size to include profile stations 1 through 3, 18, and 20 through 40 with apparent resistivity values ranging between 11 ohm-feet at profile station 30 to 192 ohm-feet at profile station 32. The pattern of this anomaly suggests groundwater flow within the shallow aquifer is to the northwest. Background apparent resistivity values at the 10-foot spacing ranged between 210 ohm-feet at profile station 35 to 405 ohm-feet at profile station 7.

The profile readings at the 20-foot spacing indicate a large anomaly is still present and encompassing profile stations 1 through 3, 20, 23 through 40 with apparent resistivity values ranging between 21 ohm-feet at profile stations 1 and 31 to 127 ohm-feet at profile station 18. This anomaly has become somewhat smaller in size. The three small anomalies identified at profile stations 5, 9, 10, and 16 are still present with the anomaly at station 5 increasing in size to include profile station 6. These stations had apparent resistivity values of 82 ohm-feet, 120 ohm-feet and 131 ohm-feet, respectively. The anomaly at profile stations 9 and 10 is larger including profile station 8 with apparent resistivity values of 32 ohm-feet to 115 ohm-feet at profile stations 9 and 10. The anomaly identified southwest of the switch yard is slightly smaller with an apparent resistivity value of 111 ohm-feet. Background values ranged between 243 ohm-feet and 850 ohm-feet at profile stations 18 and 14, respectively.

The profile values obtained at the 50-foot spacing show the background apparent resistivity values range between 225 ohm-feet at profile stations 14 and 20 to 1,825 ohm-feet at profile station 13. The large anomaly still encompasses profile stations 1 through 3, 23 through 28, 30 through 36, 39 and 40. The apparent resistivity values ranged between 15 ohm-feet at profile station 33 to 180 ohm-feet at profile station 35. This anomaly is slightly smaller at the 50-foot spacing. The small anomalies identified at the previous spacings are slightly reduced in size. The values at profile stations 5 and 6 of 103 ohm-feet and 95 ohm-feet. The anomaly at profile stations 8, 9, and 10 has been reduced to include only profile stations 8 and 9 with apparent resistivity values of 80 ohm-feet and 60 ohm-feet. The anomaly at profile station 16 has disappeared at the 50-foot spacing.

The inferred groundwater flow direction in the shallow aquifer is to the northeast. Locally, radial flow of groundwater away from the site may be occurring.

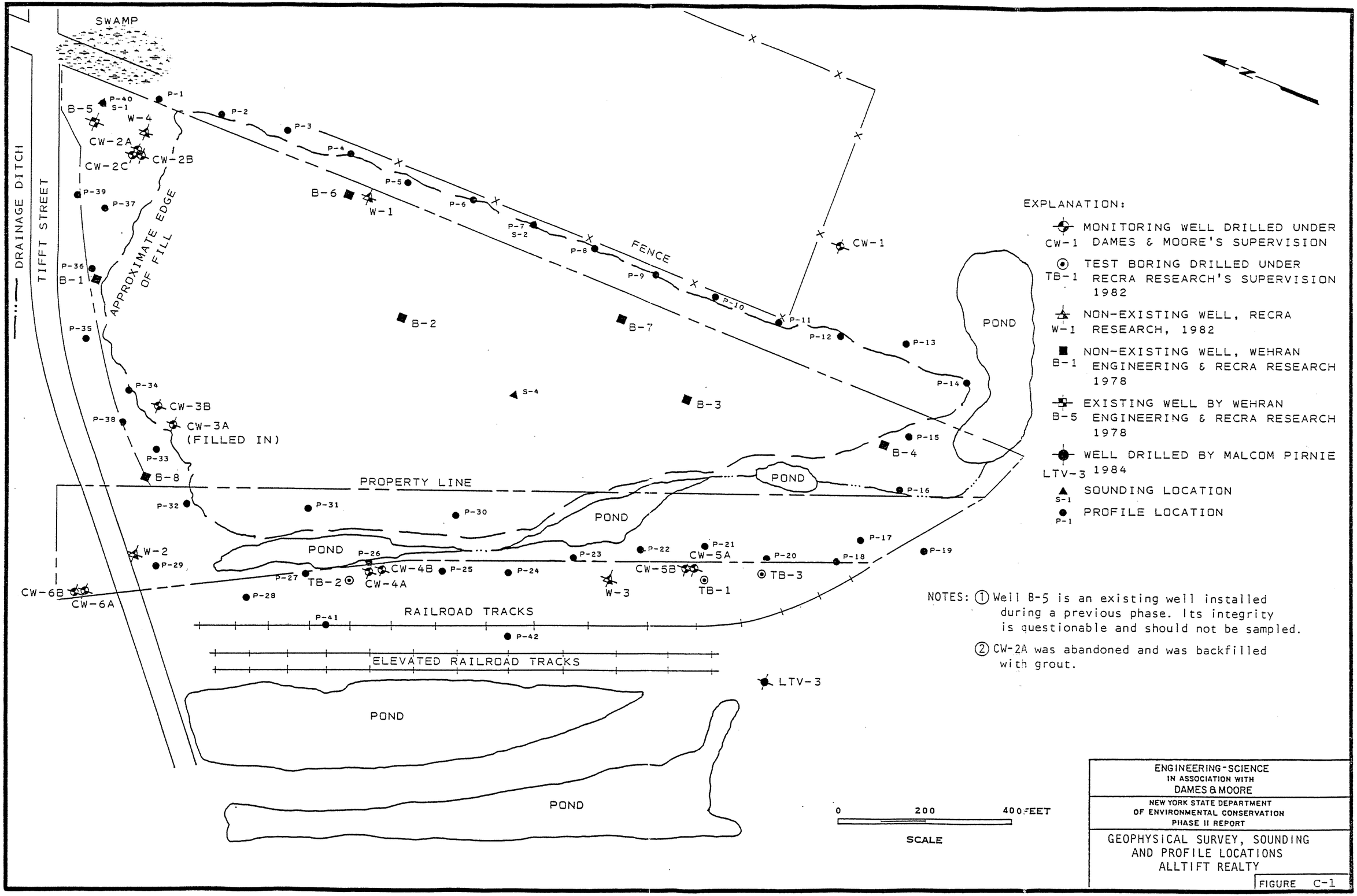
MAGNETOMETER SURVEY

A random magnetometer search was conducted in the vicinity of the proposed drilling locations using a Geometrics Model G816/826A magnetometer. The objective of the random magnetometer search was to identify any buried ferromagnetic objects which would pose a hazard for the drilling equipment. No magnetic anomalies were found to exist within the vicinity of the proposed drilling locations.

SUMMARY OF FINDINGS

The electrical resistivity survey conducted at the Alltift Realty site suggest an anomaly may exist to a depth greater than 50 feet. Past disposal of chemical wastes were obvious at various locations around the site. The depth to top of the bedrock surface is 74 feet. The implied groundwater flow direction in the shallow aquifer zone is northeast.

No buried ferromagnetic anomalies were located in the vicinity of the proposed drilling locations.



ENGINEERING-SCIENCE
IN ASSOCIATION WITH
DAMES & MOORE

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
PHASE II REPORT

GEOPHYSICAL SURVEY, SOUNDING
AND PROFILE LOCATIONS
ALLTIFT REALTY

FIGURE C-1

APP RES (OHM-FT)
0
20
40
60
80
100
120
140
160
180
200
ELECTRODE SPACING (FT)
0
10
20
30
40
50
60
70
80
90
100
SOUNDING 1 ALTIT REALITY
ANTICIPATED LOOSE SAND AND GRAVEL ZONE.
10'
ANTICIPATED COMPACT SANDY CLAY ZONE.
28'
ANTICIPATED COMPACT SILT AND CLAY ZONE WITH SAND.
42'
ANTICIPATED DEPTH TO COMPACT SAND AND GRAVEL ZONE.
74'
ANTICIPATED DEPTH TO TOP OF BEDROCK.

Figure C-2

APP. RES. (OHM-FT.)
0
100
200
300
400
500
ELECTRODE SPACING (FT.)
0
10
20
30
40
50
60
70
80
90
100
SOUNDING 2 ALTIFT REALITY
ANTICIPATED LOOSE SAND AND GRAVEL ZONE.
12'
ANTICIPATED COMPACT CLAY AND SILT ZONE WITH SAND.
32'
ANTICIPATED DEPTH TO VERY COMPACT SAND AND GRAVEL ZONE.
74'
ANTICIPATED DEPTH TO TOP OF BEDROCK.

Figure C-3

APP RES (OHM-FEET)
0
500
1000
1500
2000
2500
3000
3500
4000
ELECTRODE SPACING (FT)
0
10
20
30
40
50
60
70
80
90
100
SOUNDING 3 ALTIT REALITY
ANTICIPATED LOOSE SAND AND GRAVEL ZONE.
12'
ANTICIPATED SAND AND GRAVEL ZONE.
18'
ANTICIPATED DEPTH TO SILT AND CLAY ZONE.
28'
ANTICIPATED DEPTH TO COMPACT SAND AND GRAVEL ZONE WITH SILT AND CLAY.
74'
ANTICIPATED DEPTH TO TOP OF BEDROCK.

Figure C-4

APP RES (OHM-FT)
0
500
1000
1500
2000
2500
3000
3500
ELECTRODE SPACING (FT)
0
10
20
30
40
50
60
70
80
90
100
SOUNDING 4 ALTIFT REALITY
ANTICIPATED LOOSE SAND AND GRAVEL ZONE.
12'
ANTICIPATED SANDY CLAY ZONE.
20'
ANTICIPATED DEPTH TO COMPACT CLAY AND SILT ZONE WITH SAND.
36'
ANTICIPATED DEPTH TO VERY COMPACTED SAND AND GRAVEL ZONE WITH SILT AND CLAY.
74'
ANTICIPATED DEPTH TO TOP OF BEDROCK.

Figure C-5

Electrical Resistivity Sounding Data

SOUNDING 1 ALTIFT REALITY

p-p1 spacing (feet)	dial reading (ohms)	scale multiplier	corrected reading (ohms)	*k (feet)	apparent resistivity (ohm-ft)	cumulative resistivity (ohm-ft)
2.00	5.50	0.010	0.0550	2499.80	137.49	137.49
4.00	13.00	0.010	0.1300	1249.50	162.44	299.92
6.00	10.50	0.010	0.1050	832.60	87.42	387.35
8.00	19.00	0.010	0.1900	624.00	118.56	505.91
10.00	15.50	0.010	0.1550	498.80	77.31	583.22
12.00	19.00	0.010	0.1900	415.20	78.89	662.11
14.00	29.00	0.010	0.2900	355.40	103.07	765.18
16.00	30.00	0.010	0.3000	310.50	93.15	858.33
18.00	31.50	0.010	0.3150	275.50	86.78	945.11
20.00	27.00	0.010	0.2700	247.50	66.83	1011.93
22.00	35.00	0.010	0.3500	224.50	78.58	1090.51
24.00	36.00	0.010	0.3600	205.30	73.91	1164.42
26.00	38.50	0.010	0.3850	189.10	72.80	1237.22
28.00	43.50	0.010	0.4350	175.10	76.17	1313.39
30.00	47.00	0.010	0.4700	162.90	76.56	1389.95
32.00	49.50	0.010	0.4950	152.30	75.39	1465.34
34.00	53.50	0.010	0.5350	142.80	76.40	1541.74
36.00	55.00	0.010	0.5500	134.40	73.92	1615.66
38.00	58.00	0.010	0.5800	126.80	73.54	1689.20
40.00	59.00	0.010	0.5900	120.00	70.80	1760.00
42.00	62.00	0.010	0.6200	113.80	70.56	1830.56
44.00	69.50	0.010	0.6950	108.10	75.13	1905.69
46.00	72.00	0.010	0.7200	102.90	74.09	1979.77
48.00	74.00	0.010	0.7400	98.20	72.67	2052.44
50.00	77.00	0.010	0.7700	93.80	72.23	2124.67
52.00	80.00	0.010	0.8000	89.70	71.76	2196.43
54.00	84.50	0.010	0.8450	85.80	72.50	2268.93
56.00	89.50	0.010	0.8950	82.30	73.66	2342.59
58.00	93.00	0.010	0.9300	79.00	73.47	2416.06
60.00	95.50	0.010	0.9550	75.80	72.39	2488.45
62.00	99.00	0.010	0.9900	72.90	72.17	2560.62
64.00	102.50	0.010	1.0250	70.10	71.85	2632.47
66.00	107.00	0.010	1.0700	67.50	72.23	2704.70
68.00	110.00	0.010	1.1000	65.00	71.50	2776.20
70.00	112.50	0.010	1.1250	62.70	70.54	2846.73
72.00	115.00	0.010	1.1500	60.40	69.46	2916.19
74.00	118.50	0.010	1.1850	58.30	69.09	2985.28
76.00	125.50	0.010	1.2550	56.30	70.66	3055.94
78.00	128.50	0.010	1.2850	54.40	69.90	3125.84
80.00	132.50	0.010	1.3250	52.50	69.56	3195.40
82.00	136.50	0.010	1.3650	50.70	69.21	3264.61
84.00	139.00	0.010	1.3900	49.00	68.11	3332.72
86.00	143.00	0.010	1.4300	47.40	67.78	3400.50
88.00	149.00	0.010	1.4900	45.80	68.24	3468.74
90.00	152.50	0.010	1.5250	44.30	67.56	3536.30
92.00	156.00	0.010	1.5600	42.80	66.77	3603.07
94.00	160.00	0.010	1.6000	41.40	66.24	3669.31
96.00	164.00	0.010	1.6400	40.10	65.76	3735.07
98.00	168.50	0.010	1.6850	38.80	65.38	3800.45
100.00	168.50	0.010	1.6850	37.50	63.19	3863.64

* APPARENT RESISTIVITY=(2πR)[1/1/r1-1/r2-1/r3+1/r4]
WHERE K=[] AND 2πR=DIAL READING × SCALE MULTIPLIER

SOUNDING 2 ALTIFT REALITY

p-p1 spacing (feet)	dial reading (ohms)	scale multiplier	corrected reading (ohms)	*k (feet)	apparent resistivity (ohm-ft)	cumulative resistivity (ohm-ft)
2.00	16.00	1.000	16.0000	2499.80	39996.80	39996.80
4.00	29.00	1.000	29.0000	1249.50	36235.50	76232.30
6.00	24.50	1.000	24.5000	832.60	20398.70	96631.00
8.00	23.00	1.000	23.0000	624.00	14352.00	110983.00
10.00	24.00	1.000	24.0000	498.80	11971.20	122954.20
12.00	12.50	0.010	0.1250	415.20	51.90	123006.10
14.00	17.00	0.010	0.1700	355.40	60.42	123066.52
16.00	31.50	0.010	0.3150	310.50	97.81	123164.33
18.00	10.50	0.010	0.1050	275.50	28.93	123193.25
20.00	7.00	0.010	0.0700	247.50	17.33	123210.58
22.00	21.00	0.010	0.2100	224.50	47.15	123257.72
24.00	36.50	0.010	0.3650	205.30	74.93	123332.66
26.00	34.50	0.010	0.3450	189.10	65.24	123397.90
28.00	57.00	0.010	0.5700	175.10	99.81	123497.70
30.00	52.00	0.010	0.5200	162.90	84.71	123582.41
32.00	48.00	0.010	0.4800	152.30	73.10	123655.52
34.00	52.00	0.010	0.5200	142.80	74.26	123729.77
36.00	46.00	0.010	0.4600	134.40	61.82	123791.60
38.00	46.00	0.010	0.4600	126.80	58.33	123849.92
40.00	55.50	0.010	0.5550	120.00	66.60	123916.52
42.00	51.50	0.010	0.5150	113.80	58.61	123975.13
44.00	50.50	0.010	0.5050	108.10	54.59	124029.72
46.00	55.00	0.010	0.5500	102.90	56.60	124086.32
48.00	56.00	0.010	0.5600	98.20	54.99	124141.31
50.00	57.50	0.010	0.5750	93.80	53.94	124195.24
52.00	54.50	0.010	0.5450	89.70	48.89	124244.13
54.00	61.50	0.010	0.6150	85.80	52.77	124296.90
56.00	54.50	0.010	0.5450	82.30	44.85	124341.75
58.00	61.50	0.010	0.6150	79.00	48.59	124390.34
60.00	59.00	0.010	0.5900	75.80	44.72	124435.06
62.00	63.00	0.010	0.6300	72.90	45.93	124480.98
64.00	67.00	0.010	0.6700	70.10	46.97	124527.95
66.00	72.50	0.010	0.7250	67.50	48.94	124576.89
68.00	62.00	0.010	0.6200	65.00	40.30	124617.19
70.00	68.50	0.010	0.6850	62.70	42.95	124660.14
72.00	54.00	0.010	0.5400	60.40	32.62	124692.75
74.00	42.50	0.010	0.4250	58.30	24.78	124717.53
76.00	48.50	0.010	0.4850	56.30	27.31	124744.84
78.00	53.50	0.010	0.5350	54.40	29.10	124773.94
80.00	57.00	0.010	0.5700	52.50	29.93	124803.87
82.00	56.50	0.010	0.5650	50.70	28.65	124832.51
84.00	60.00	0.010	0.6000	49.00	29.40	124861.91
86.00	63.50	0.010	0.6350	47.40	30.10	124892.01
88.00	63.00	0.010	0.6300	45.80	28.85	124920.87
90.00	65.00	0.010	0.6500	44.30	28.80	124949.66
92.00	65.50	0.010	0.6550	42.80	28.03	124977.69
94.00	70.00	0.010	0.7000	41.40	28.98	125006.67
96.00	74.50	0.010	0.7450	40.10	29.87	125036.55
98.00	75.00	0.010	0.7500	38.80	29.10	125065.65
100.00	63.00	0.010	0.6300	37.50	23.63	125089.27

* APPARENT R STIVITY=(2iiR)[1/1/r1-1/r2-1/r3+1/r4]
WHERE ↑=[] A 2iiR=DIAL READING : SCALE MULTIPLIER

SOUNDING 3 ALTIFT REALITY

p-p1 spacing (feet)	dial reading (ohms)	scale multiplier	corrected reading (ohms)	*k (feet)	apparent resistivity (ohm-ft)	cumulative resistivity (ohm-ft)
2.00	22.00	0.100	2.2000	2499.80	5499.56	5499.56
4.00	14.00	0.100	1.4000	1249.50	1749.30	7248.86
6.00	39.00	0.100	3.9000	832.60	3247.14	10496.00
8.00	46.50	0.100	4.6500	624.00	2901.60	13397.60
10.00	45.50	0.100	4.5500	498.80	2269.54	15667.14
12.00	23.00	0.100	2.3000	415.20	954.96	16622.10
14.00	43.00	0.100	4.3000	355.40	1528.22	18150.32
16.00	34.50	0.100	3.4500	310.50	1071.23	19221.55
18.00	18.00	0.100	1.8000	275.50	495.90	19717.45
20.00	19.00	0.100	1.9000	247.50	470.25	20187.70
22.00	28.00	0.100	2.8000	224.50	628.60	20816.30
24.00	24.50	0.100	2.4500	205.30	502.99	21319.28
26.00	32.00	0.100	3.2000	189.10	605.12	21924.40
28.00	34.00	0.100	3.4000	175.10	595.34	22519.74
30.00	27.50	0.100	2.7500	162.90	447.98	22967.72
32.00	26.50	0.100	2.6500	152.30	403.60	23371.31
34.00	26.00	0.100	2.6000	142.80	371.28	23742.59
36.00	30.00	0.100	3.0000	134.40	403.20	24145.79
38.00	29.50	0.100	2.9500	126.80	374.06	24519.85
40.00	34.00	0.100	3.4000	120.00	408.00	24927.85
42.00	32.00	0.100	3.2000	113.80	364.16	25292.01
44.00	35.00	0.100	3.5000	108.10	378.35	25670.36
46.00	35.00	0.100	3.5000	102.90	360.15	26030.51
48.00	35.50	0.100	3.5500	98.20	348.61	26379.12
50.00	36.00	0.100	3.6000	93.80	337.68	26716.80
52.00	37.50	0.100	3.7500	89.70	336.38	27053.18
54.00	36.50	0.100	3.6500	85.80	313.17	27366.35
56.00	38.00	0.100	3.8000	82.30	312.74	27679.09
58.00	38.00	0.100	3.8000	79.00	300.20	27979.29
60.00	39.50	0.100	3.9500	75.80	299.41	28278.70
62.00	39.50	0.100	3.9500	72.90	287.96	28566.65
64.00	41.50	0.100	4.1500	70.10	290.92	28857.57
66.00	38.00	0.100	3.8000	67.50	256.50	29114.07
68.00	41.50	0.100	4.1500	65.00	269.75	29383.82
70.00	43.50	0.100	4.3500	62.70	272.75	29656.56
72.00	44.50	0.100	4.4500	60.40	268.78	29925.34
74.00	45.00	0.100	4.5000	58.30	262.35	30187.69
76.00	47.00	0.100	4.7000	56.30	264.61	30452.30
78.00	47.00	0.100	4.7000	54.40	255.68	30707.98
80.00	49.00	0.100	4.9000	52.50	257.25	30965.23
82.00	50.50	0.100	5.0500	50.70	256.04	31221.27
84.00	52.50	0.100	5.2500	49.00	257.25	31478.52
86.00	52.00	0.100	5.2000	47.40	246.48	31725.00
88.00	54.00	0.100	5.4000	45.80	247.32	31972.32
90.00	55.00	0.100	5.5000	44.30	243.65	32215.97
92.00	58.00	0.100	5.8000	42.80	248.24	32464.21
94.00	57.50	0.100	5.7500	41.40	238.05	32702.26
96.00	59.50	0.100	5.9500	40.10	238.60	32940.85
98.00	60.00	0.100	6.0000	38.80	232.80	33173.65
100.00	63.00	0.100	6.3000	37.50	236.25	33409.90

* APPARENT RESISTIVITY=(2πR)[1/1/r1-1/r2-1/r3+1/r4]
WHERE π=[] AND 2πR=DIAL READING * SCALE MULTIPLIER

p-p1 spacing (feet)	dial reading (ohms)	scale multiplier	corrected reading (ohms)	*k (feet)	apparent resistivity (ohm-ft)	cumulative resistivity (ohm-ft)
2.00	26.50	0.100	2.6500	2499.80	6624.47	6624.47
4.00	21.00	0.100	2.1000	1249.50	2623.95	9248.42
6.00	39.50	0.100	3.9500	832.60	3288.77	12537.19
8.00	41.00	0.100	4.1000	624.00	2558.40	15095.59
10.00	39.00	0.100	3.9000	498.80	1945.32	17040.91
12.00	5.00	0.100	0.5000	415.20	207.60	17248.51
14.00	19.50	0.100	1.9500	355.40	693.03	17941.54
16.00	29.00	0.100	2.9000	310.50	900.45	18841.99
18.00	14.50	0.100	1.4500	275.50	399.48	19241.47
20.00	11.00	0.100	1.1000	247.50	272.25	19513.72
22.00	13.00	0.100	1.3000	224.50	291.85	19805.57
24.00	12.50	0.100	1.2500	205.30	256.63	20062.19
26.00	9.00	0.100	0.9000	189.10	170.19	20232.38
28.00	12.00	0.100	1.2000	175.10	210.12	20442.50
30.00	18.50	0.100	1.8500	162.90	301.37	20743.87
32.00	18.00	0.100	1.8000	152.30	274.14	21018.01
34.00	16.00	0.100	1.6000	142.80	228.48	21246.49
36.00	22.00	0.100	2.2000	134.40	295.68	21542.17
38.00	20.50	0.100	2.0500	126.80	259.94	21802.11
40.00	19.50	0.100	1.9500	120.00	234.00	22036.11
42.00	20.00	0.100	2.0000	113.80	227.60	22263.70
44.00	19.50	0.100	1.9500	108.10	210.80	22474.50
46.00	19.50	0.100	1.9500	102.90	200.66	22675.15
48.00	19.50	0.100	1.9500	98.20	191.49	22866.64
50.00	20.00	0.100	2.0000	93.80	187.60	23054.24
52.00	18.00	0.100	1.8000	89.70	161.46	23215.70
54.00	18.50	0.100	1.8500	85.80	158.73	23374.43
56.00	18.50	0.100	1.8500	82.30	152.26	23526.69
58.00	20.00	0.100	2.0000	79.00	158.00	23684.69
60.00	19.00	0.100	1.9000	75.80	144.02	23828.71
62.00	20.50	0.100	2.0500	72.90	149.45	23978.15
64.00	20.00	0.100	2.0000	70.10	140.20	24118.35
66.00	21.00	0.100	2.1000	67.50	141.75	24260.10
68.00	18.50	0.100	1.8500	65.00	120.25	24380.35
70.00	21.50	0.100	2.1500	62.70	134.81	24515.16
72.00	20.00	0.100	2.0000	60.40	120.80	24635.96
74.00	21.50	0.100	2.1500	58.30	125.35	24761.30
76.00	20.00	0.100	2.0000	56.30	112.60	24873.90
78.00	21.00	0.100	2.1000	54.40	114.24	24988.14
80.00	21.00	0.100	2.1000	52.50	110.25	25098.39
82.00	22.00	0.100	2.2000	50.70	111.54	25209.93
84.00	19.00	0.100	1.9000	49.00	93.10	25303.03
86.00	22.00	0.100	2.2000	47.40	104.28	25407.31
88.00	24.00	0.100	2.4000	45.80	109.92	25517.23
90.00	20.50	0.100	2.0500	44.30	90.82	25608.05
92.00	20.50	0.100	2.0500	42.80	87.74	25695.79
94.00	20.50	0.100	2.0500	41.40	84.87	25780.66
96.00	21.00	0.100	2.1000	40.10	84.21	25864.87
98.00	21.00	0.100	2.1000	38.80	81.48	25946.35
100.00	23.50	0.100	2.3500	37.50	88.13	26034.47

* APPARENT RESISTIVITY=(2iiR)[1/1/r1-1/r2-1/r3+1/r4]
WHERE K=[] AND 2iiR=DIAL READING x SCALE MULTIPLIER

Electrical Resistivity Profile Data

TEST 319.5
28.5 MILLIAMPS

For 1-1
Page 1 of

ENGINEERING-SCIENCE, INC.
RESISTIVITY PROFILE DATA SHEET

Job No. 46314.03 Date APRIL 30

Site Name ACTIFT REALTY Site Location BUFFALO, N.Y.

Observer(s) BAKER / SCHULTZ Comments (soil conditions, etc.) MOIST

Equipment Used (name, serial #) BISON 2350B Electrode Array Method Used WENNER

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-1	5	81	0.1	8.1	40.5
P-1	10	205	0.01	2.05	20.5
P-1	20	115.5	0.01	1.155	23.1
P-1	50	13.5	0.1	1.35	67.5
P-2	5	44.5	0.1	4.45	22.25
P-2	10	23.0	0.1	2.3	23.00
P-2	20	30.0	0.1	3.0	60.0

Bison Unit: Apparent Resistivity = Electrode Spacing x (2 π V/I x Scale Multiplier) where ( ) = Corrected Reading

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-2	50	10.5	0.1	1.05	52.5
P-3	5	24.0	1.0	24.0	120
P-3	10	22.5	0.1	2.25	22.5
P-3	20	14.5	0.1	1.45	29.0
P-3	50	16.5	0.1	1.65	82.5
P-4	5	41.5	1	41.5	207.5
P-4	10	48.5	1	48.5	485
P-4	20	13	1	13	260
P-4	50	15.5	1	15.5	775
P-5	5	31.0	0.1	3.1	15.5

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-5	10	25	0.1	2.5	25
P-5	20	41.0	0.1	4.1	82.0
P-5	50	20.5	0.1	2.05	102.5
P-6	5	124.5	1	124.5	622.5
P-6	10	34.5	1	34.5	345
P-6	20	6	1	6	120
P-6	50	~~9~~/19	0.1	~~0.9~~/1.9	~~45~~/95
P-7	5	65	1.0	65	~~275~~ 325
P-7	10	40.5	1	40.5	405
P-7	20	22.5	1	22.5	450

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-7	50	20	1	20	1000
P-8	5	44.5	1	44.5	222.5
P-8	10	21.5	1	21.5	215
P-8	20	17.0	0.1	1.7	34
P-8	50	16	0.1	1.6	80
P-9	5	66.5	0.1	6.65	33.25
P-9	10	21.5	0.1	2.15	21.5
P-9	20	16	0.1	1.6	32.0
P-9	50	12	0.1	1.2	60
P-10	5	116.5	0.1	11.65	58.25

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-10	10	79.0	0.1	7.9	79
P-10	20	57.5	0.1	5.75	115
P-10	50	40.0	0.1	4.0	200
P-11	5	117	1	117	585
P-11	10	29.5	1	29.5	295
P-11	20	16	1	16	320
P-11	50	10	1	10	500
P-12	5	34	1	34	170
P-12	10	26	1	26	260
P-12	20	16.5	1	16.5	330

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-12	50	17	1	17	850
P-13	5	34.5	1	34.5	172.5
P-13	10	162	0.1	16.2	162
P-13	20	157	0.1	15.7	314
P-13	50	36.5	1	36.5	1825
MAY 1, 1985	TEST 319.5 CURRENT 23.5 MILLIAMPS				
P-14	5	45.5	1	45.5	227.5
P-14	10	13.0	1	13	130
P-14	20	42.5	1	42.5	850
P-14	50	24.5	1	24.5	1,225

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-15	5	67	1.0	67	335.0
P-15	10	42	1	42	420
P-15	20	56 ~~4.5~~	0.1	5.6 ~~4.5~~	112
P-15	50	32 ~~56~~	0.1 ~~0.1~~	3.2 ~~5.6~~	~~20~~ 160
P-16	5	152	0.1	15.2	76
P-16	10	101	~~1.01~~ 0.1	1.01	101 ~~10.10~~
P-16	20	65.5	0.1	6.55	131
P-17	5	54	1	54	270
P-17	10	26	1	26	260
P-17	20	136	0.1	13.6	272
P-17	50	148	0.1	14.8	740

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-18	5	51	1	51	255
P-18	10	15.5	1	15.5	155
P-18	20	121.5	0.1	12.15	243
P-18	50	51	0.1	5.1	255
P-19	5	~~48.5~~	0.1	4.85	24.25
P-19	10	85	0.1	8.5	85
P-19	20	55.5	0.1	5.55	~~110~~ 111
P-19	50	~~29~~ 32	0.1	~~2.9~~ 3.2	~~145~~ 160
P-20	5	105	0.1	10.5	52.5
P-20	10	83.5	0.1	8.35	83.5

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-20	20	63.5	0.1	6.35	127
P-20	50	45	0.1	4.5	225
P-21	5	14	1.0	14	70
P-21	10	46	1	46	460
P-21	20	30.5	1	30.5	610
P-21	50	16	1	16	80
P-22	5	13	1	13	65
P-22	10	9.5	1	9.5	95
P-22	20	13	1	13	260
P-22	50	20	1	20	1000

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-23	5	143.5	0.1	14.35	71.75
P-23	10	66	0.1	6.6	66
P-23	20	30	0.1	3.0	60
P-23	50	17.5	0.1	1.75	87.5
P-24	5	102.5	0.1	10.25	51.25
P-24	10	38	0.1	3.8	38
P-24	20	32.5	0.1	3.25	65
P-24	50	31.0	0.1	3.1	155.0
P-25	5	96.5	0.1	9.65	48.25
P-25	10	60.5	~~0.05~~ 0.1	6.05	60.5

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-25	20	58.5	0.1	5.85	117
P-25	50	19.0	0.1	1.9	45.0
P-26	5	110	0.1	1.10	55
P-26	10	76.5	0.1	7.65	76.5
P-26	20	34	0.1	3.4	68
P-26	50	21.5	0.1	2.15	107.5
P-27	5	94	0.1	9.4	47
P-27	10	47	0.1	4.7	47
P-27	20	30	0.1	3.0	60
P-27	50	17	0.1	1.7	85.0

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-28	5	19.5	0.1	1.95	9.75
P-28	10	25.5	0.1	2.55	25.5
P-28	20	26	0.1	2.6	52.0
P-28	50	19	0.1	1.9	95
P-29	5	97.5	0.1	9.75	48.75
P-29	10	27.5	0.1	2.75	27.5
P-29	20	60.5	0.1	6.05	121.0
P-29	50	60	0.6	6	300
P-30	5	20.5	0.1	2.05	10.25
P-30	10	10.5	0.1	1.05	10.5

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-30	20	17.5	0.1	1.75	23.0 ~~25.0~~
P-30	50	11.5	0.1	1.15	57.5
P-31	5	32	0.1	3.2	16.0
P-31	10	17.5	0.1	1.75	17.5
P-31	20	10.5	0.1	1.05	21.0
P-31	50	10.5	0.1	1.05	52.5
P-32	5	64 \ 656.5	1.0 \ ~~0.01~~ 0.1	64 \ 65.65	320 \ 328.25
P-32	10	19 / 191.5	1 / 0.1	19 / 19.15	190 / 191.5
P-32	20	~~15~~ 6.5 / 15.5	~~0.1~~ 1 / 0.1	~~1.5~~ 6.5 / 1.55	~~130~~ / 31
P-32	50	~~5~~ / 8	~~1~~ / 0.1	~~5~~ / 0.8	~~250~~ / 40

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-33	5	174	0.1	17.4	87
P-33	10	100.5	0.01	1.005	10.05
P-33	20	11.5	0.1	1.15	~~23~~ 23
P-33	50	3.0	0.1	0.3	15.0
P-34	5	208.5	0.1	20.85	104.25
P-34	10	31.5	0.1	3.15	31.5
P-34	20	19.5	0.1	1.95	39
P-34	50	12.5	0.1	1.25	62.5
P-35	5	35.5/~~444.5~~	1.0/0.1	35.5/~~44.45~~	177.5/222.25
P-35	10	21/156.5	1/0.1	21/15.65	210/156.5

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-35	20	15/30.5	1.0/0.1	15/3.05	300/61
P-35	50	36	0.1	3.6	180
P-36	5	62.5	0.1	6.25	31.25
P-36	10	128	0.01	1.28	12.80
P-36	20	1917	0.1	1.7	34
P-36	50	21	0.1	2.1	105
P-37	5	574	0.1	57.4	287.0
P-37	10	92.5	0.1	9.25	92.5
P-37	20	21	0.1	2.1	42
P-37	50	8	1	8	400

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-38	5	70	1.0	70	350
P-38	10	127.5	0.1	12.75	127.5
P-38	~~20~~	14.5	0.1	1.45	29
P-38	50	~~2.0~~ 6.5	0.1	~~0.2~~ 0.65	~~10.0~~ 32.5
P-39	5	152.5	0.1	15.25	76.25
P-39	10	111	0.1	11.1	111
P-39	20	~~15~~ 4.5	~~or~~ 1	~~4.5~~	90
P-39	30	14	0.1	1.4	70
P-40	5	98	0.1	9.8	49
P-40	10	47.5	0.1	4.75	47.5

Station Location	Electrode Spacing (feet)	2 π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-40	20	19	0.1	1.9	38.0
P-40	50	15	0.1	1.5	75.0
P-41	5	194	0.1	19.4	97
P-41	10	45	0.1	4.5	45
P-41	20	32.5	0.1	3.25	65
P-41	50	27	0.1	2.7	135
P-42	5	198.5	0.1	19.85	99.25
P-42	10	47	0.1	4.7	47
P-42	20	23	0.1	2.3	46
P-42	50	24.5	0.1	2.45	122.5

Station Location	Electrode Spacing (feet)	2π V/I (ohms)	Scale Multiplier	Corrected Reading (ohms)	Apparent Resistivity (ohm - feet)
P-43	5	95.5	0.1	9.55	47.75
P-43	10	38.5	0.1	3.85	38.5
P-43	20	35	0.1	3.5	70
P-43	50	24	0.1	2.4	120

APPENDIX D

CHEMICAL DATA

Analytical Results for Groundwater Samples

NUS CORPORATION

5350 CAMPBELLS RUN ROAD • PITTSBURGH, PA. 15205
412-788-1080

LABORATORY SERVICES DIVISION

I certify that the analytical procedures used in the Engineering-Science, Alltift Realty Site project are in accordance with USEPA Guidelines 44CFR46964, 40CFR136, or the NYSDEC Superfund and Contract Laboratory Protocol, January 1985.

Kathy Dildine
Inorganic Laboratory Supervisor

10/24/85
Date

David A. Danner
Organic Laboratory Supervisor

10/24/85
Date

Form I - A

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-1-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science/Alltift Realt

SOW NO. 784

LAB SAMPLE ID. NO. 15081996 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	18400 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	289	(P)
3.	Arsenic	[1] R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	40 U	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	[2670] R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	78900	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	28300	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R	(F)
10.	Copper	25 U	(P)	22.	Tin	40 U R	(F)
11.	Iron	850	(P)	23.	Vanadium	50 U	(F)
12.	Lead	5 U	(F)	24.	Zinc	20 U	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager [signature]

Environmental Protection Agency
CLP Sample Management Office
P.O. Box 818
Alexandria Virginia 22313 703/557-2490

Groundwater
CW-1

Sample Number

CW-1

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15081996
Sample Matrix: Water
Data Release Authorized By: David A. Adams
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	12	
67-64-1	Acetone	62 B	
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-1

CW-1

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

SAMPLE NUMBER
CW-1

CW-1

Organics Analysis Data Sheet
(Page 3)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/22/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
62-75-9	N-Nitrosodimethylamine	10	u
108-95-2	Phenol	10	u
62-53-3	Aniline	10	u
111-44-4	bis(2-Chloroethyl)Ether	10	u
95-57-8	2-Chlorophenol	10	u
541-73-1	1,3-Dichlorobenzene	10	u
106-46-7	1,4-Dichlorobenzene	10	u
100-51-6	Benzyl Alcohol	10	u
95-50-1	1,2-Dichlorobenzene	10	u
95-48-7	2-Methylphenol	10	u
39638-32-9	bis(2-chloroisopropyl)Ether	10	u
106-44-5	4-Methylphenol	10	u
621-64-7	N-Nitroso-Di-n-Propylamine	10	u
67-72-1	Hexachloroethane	10	u
98-95-3	Nitrobenzene	10	u
78-59-1	Isophorone	10	u
88-75-5	2-Nitrophenol	10	u
105-67-9	2,4-Dimethylphenol	10	u
65-85-0	Benzoic Acid	50	u
111-91-1	bis(2-Chloroethoxy)Methane	10	u
120-83-2	2,4-Dichlorophenol	10	u
120-82-1	1,2,4-Trichlorobenzene	10	u
91-20-3	Naphthalene	10	u
106-47-8	4-Chloroaniline	10	u
87-68-3	Hexachlorobutadiene	10	u
59-50-7	4-Chloro-3-Methylphenol	10	u
91-57-6	2-Methylnaphthalene	10	u
77-47-4	Hexachlorocyclopentadiene	10	u
88-06-2	2,4,6-Trichlorophenol	10	u
95-95-4	2,4,5-Trichlorophenol	50	u
91-58-7	2-Chloronaphthalene	10	u
88-74-4	2-Nitroaniline	50	u
131-11-3	Dimethyl Phthalate	10	u
208-96-8	Acenaphthylene	10	u
99-09-2	3-Nitroaniline	10	u

Sample Number
CW-1

CW-1

Organics Analysis Data Sheet
(Page 4)

Semivolatile Compounds (continued)

Case Number		ug/l	
		**********	
83-32-9	Acenaphthene	10	u
51-28-5	2,4-Dinitrophenol	50	u
100-02-7	4-Nitrophenol	50	u
132-64-9	Dibenzofuran	10	u
121-14-2	2,4-Dinitrotoluene	10	u
606-20-2	2,6-Dinitrotoluene	10	u
84-66-2	Diethylphthalate	10	u
7005-72-3	4-Chlorophenyl-phenylether	10	u
86-73-7	Fluorene	10	u
100-01-6	4-Nitroaniline	50	u
534-52-1	4,6-Dinitro-2-Methylphenol	50	u
86-30-6	N-Nitrosodiphenylamine(1)	10	u
101-55-3	4-Bromophenyl-phenylether	10	u
118-74-1	Hexachlorobenzene	10	u
87-86-5	Pentachlorophenol	50	u
85-01-8	Phenanthrene	10	u
120-12-7	Anthracene	10	u
84-74-2	Di-n-Butylphthalate	10	u
206-44-0	Fluoranthene	10	u
92-87-5	Benzidine	50	u
129-00-0	Pyrene	10	u
85-68-7	Butylbenzylphthalate	10	u
91-94-1	3,3 -Dichlorobenzidine	20	u
56-55-3	Benzo(a)Anthracene	10	u
117-81-7	bis(2-Ethylhexyl)Phthalate	10	u
218-01-9	Chrysene	10	u
117-84-0	Di-n-Octyl Phthalate	10	u
205-99-2	Benzo(b)Fluoranthene	10	u
207-08-9	Benzo(k)Fluoranthene	10	u
50-32-8	Benzo(a)Pyrene	10	u
193-39-5	Indeno(1,2,3-cd)Pyrene	10	u
53-70-3	Dibenzo(a,h)Anthracene	10	u
191-24-2	Benzo(g,h,i)Perylene	10	u

(1)-Cannot be separated from diphenylamine

Sample Number
CW-1

CW-1

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l
		**********
319-84-6	Alpha-BHC	0.05 u
319-85-7	Beta-BHC	0.05 u
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC(lindane)	0.05 u
76-44-8	Heptachlor	0.05 u
309-00-2	Aldrin	0.05 u
1024-57-3	Heptachlor Epoxide	0.05 u
959-98-8	Endosulfan I	0.05 u
60-57-1	Dieldrin	0.10 u
72-55-9	4,4'-DDE	0.10 u
72-20-8	Endrin	0.10 u
33213-65-9	Endosulfan II	0.10 u
72-54-8	4,4'-DDD	0.10 u
7421-93-4	Endrin Aldehyde	0.10 u
1031-07-8	Endosulfan Sulfate	0.10 u
50-29-3	4,4'-DDT	0.10 u
72-43-5	Methoxychlor	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.0 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.0 u
11096-82-5	Aroclor-1260	1.0 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-1

CW-1

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
78-78-4	Butane-2-methyl-	VOA	225	5 J
4806-61-5	CYCLOBUTANE,ETHYL-	VOA	281	10 J
584-94-1	HEXANE,2,3-DIMETHYL-	VOA	325	9 J
	NO SEMI-VOLATILE COMPOUNDS FOUND			

Form I - B

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-2B-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation
CASE NO. Engineering-Science/Alltift Realt
SOW NO. 784
LAB SAMPLE ID. NO. 15081997
QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____
Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	87000 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	1880	(P)
3.	Arsenic	[3] R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	2000 U (1)	(P)	16.	Nickel	[20]	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	11700 R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	227000	(P)	19.	Silver	10 R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	208000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R E	(F)
10.	Copper	25 U	(P)	22.	Tin	[6] R	(F)
11.	Iron	13200	(P)	23.	Vanadium	50 U	(F)
12.	Lead	5 U	(F)	24.	Zinc	20	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) 5ml/50ml dilution was required for analysis.

Lab Manager Kathy Dietzman

Environmental Protection Agency
CLP Sample Management Office
P.O. Box 818
Alexandria, Virginia 22313 703/557-2490

CW-2B

Sample Number

CW-2B

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15081997
Sample Matrix: Water
Data Release Authorized By: David C. Danner
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	8.3	
67-64-1	Acetone	10	u
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-2B

CW-2B

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l **********	
79-34-5	1,1,2,2-Tetrachloroethane	5	u
78-87-5	1,2-Dichloropropane	5	u
10061-02-6	Trans-1,3-Dichloropropene	5	u
79-01-6	Trichloroethene	5	u
124-48-1	Dibromochloromethane	5	u
79-00-5	1,1,2-Trichloroethane	5	u
71-43-2	Benzene	5	u
10061-01-5	cis-1,3-Dichloropropene	5	u
110-75-8	2-Chloroethylvinylether	10	u
75-25-2	Bromoform	5	u
591-78-6	2-Hexanone	10	u
108-10-1	4-Methyl-2-Pentanone	10	u
127-18-4	Tetrachlorethene	5	u
108-88-3	Toluene	5	u
108-90-7	Chlorobenzene	5	u
100-41-4	Ethylbenzene	5	u
100-42-5	Styrene	5	u
	Total Xylenes	5	u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

SAMPLE NUMBER
CW-2B

CW-2B

Organics Analysis Data Sheet
(Page 3)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/22/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
62-75-9	N-Nitrosodimethylamine	10	u
108-95-2	Phenol	10	u
62-53-3	Aniline	10	u
111-44-4	bis(2-Chloroethyl)Ether	10	u
95-57-8	2-Chlorophenol	10	u
541-73-1	1,3-Dichlorobenzene	10	u
106-46-7	1,4-Dichlorobenzene	10	u
100-51-6	Benzyl Alcohol	10	u
95-50-1	1,2-Dichlorobenzene	10	u
95-48-7	2-Methylphenol	10	u
39638-32-9	bis(2-chloroisopropyl)Ether	10	u
106-44-5	4-Methylphenol	10	u
621-64-7	N-Nitroso-Di-n-Propylamine	10	u
67-72-1	Hexachloroethane	10	u
98-95-3	Nitrobenzene	10	u
78-59-1	Isophorone	10	u
88-75-5	2-Nitrophenol	10	u
105-67-9	2,4-Dimethylphenol	10	u
65-85-0	Benzoic Acid	50	u
111-91-1	bis(2-Chloroethoxy)Methane	10	u
120-83-2	2,4-Dichlorophenol	10	u
120-82-1	1,2,4-Trichlorobenzene	10	u
91-20-3	Naphthalene	10	u
106-47-8	4-Chloroaniline	10	u
87-68-3	Hexachlorobutadiene	10	u
59-50-7	4-Chloro-3-Methylphenol	10	u
91-57-6	2-Methylnaphthalene	10	u
77-47-4	Hexachlorocyclopentadiene	10	u
88-06-2	2,4,6-Trichlorophenol	10	u
95-95-4	2,4,5-Trichlorophenol	50	u
91-58-7	2-Chloronaphthalene	10	u
88-74-4	2-Nitroaniline	50	u
131-11-3	Dimethyl Phthalate	10	u
208-96-8	Acenaphthylene	10	u
99-09-2	3-Nitroaniline	10	u

Sample Number
CW-2B

CW-2B

Organics Analysis Data Sheet
(Page 4)

Semivolatile Compounds (continued)

Case Number		ug/l	
		**********	
83-32-9	Acenaphthene	10	u
51-28-5	2,4-Dinitrophenol	50	u
100-02-7	4-Nitrophenol	50	u
132-64-9	Dibenzofuran	10	u
121-14-2	2,4-Dinitrotoluene	10	u
606-20-2	2,6-Dinitrotoluene	10	u
84-66-2	Diethylphthalate	10	u
7005-72-3	4-Chlorophenyl-phenylether	10	u
86-73-7	Fluorene	10	u
100-01-6	4-Nitroaniline	50	u
534-52-1	4,6-Dinitro-2-Methylphenol	50	u
86-30-6	N-Nitrosodiphenylamine(1)	10	u
101-55-3	4-Bromophenyl-phenylether	10	u
118-74-1	Hexachlorobenzene	10	u
87-86-5	Pentachlorophenol	50	u
85-01-8	Phenanthrene	10	u
120-12-7	Anthracene	10	u
84-74-2	Di-n-Butylphthalate	10	u
206-44-0	Fluoranthene	10	u
92-87-5	Benzidine	50	u
129-00-0	Pyrene	10	u
85-68-7	Butylbenzylphthalate	10	u
91-94-1	3,3 -Dichlorobenzidine	20	u
56-55-3	Benzo(a)Anthracene	10	u
117-81-7	bis(2-Ethylhexyl)Phthalate	10	u
218-01-9	Chrysene	10	u
117-84-0	Di-n-Octyl Phthalate	10	u
205-99-2	Benzo(b)Fluoranthene	10	u
207-08-9	Benzo(k)Fluoranthene	10	u
50-32-8	Benzo(a)Pyrene	10	u
193-39-5	Indeno(1,2,3-cd)Pyrene	10	u
53-70-3	Dibenzo(a,h)Anthracene	10	u
191-24-2	Benzo(g,h,i)Perylene	10	u

(1)-Cannot be separated from diphenylamine

Sample Number
CW-2B

CW-2B

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.0	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.0	u
11096-82-5	Aroclor-1260	1.0	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-28

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******

NO VOA COMPOUND FOUND
NO SEMI-VOLATILE COMPOUNDS FOUND

CW-2B

Environmental Protection Agency
CLP Sample Management Office
P.O Box 818
Alexandria Virginia 22313 703/557-2490

Sample Number

CW-2C

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15081998
Sample Matrix: Water
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	11	
67-64-1	Acetone	43 B	
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-2C

CW-2B

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

SAMPLE NUMBER
CW-2C

CW-2B

Organics Analysis Data Sheet
(Page 3)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/22/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
62-75-9	N-Nitrosodimethylamine	10	u
108-95-2	Phenol	10	u
62-53-3	Aniline	10	u
111-44-4	bis(2-Chloroethyl)Ether	10	u
95-57-8	2-Chlorophenol	10	u
541-73-1	1,3-Dichlorobenzene	10	u
106-46-7	1,4-Dichlorobenzene	10	u
100-51-6	Benzyl Alcohol	10	u
95-50-1	1,2-Dichlorobenzene	10	u
95-48-7	2-Methylphenol	10	u
39638-32-9	bis(2-chloroisopropyl)Ether	10	u
106-44-5	4-Methylphenol	10	u
621-64-7	N-Nitroso-Di-n-Propylamine	10	u
67-72-1	Hexachloroethane	10	u
98-95-3	Nitrobenzene	10	u
78-59-1	Isophorone	10	u
88-75-5	2-Nitrophenol	10	u
105-67-9	2,4-Dimethylphenol	10	u
65-85-0	Benzoic Acid	50	u
111-91-1	bis(2-Chloroethoxy)Methane	10	u
120-83-2	2,4-Dichlorophenol	10	u
120-82-1	1,2,4-Trichlorobenzene	10	u
91-20-3	Naphthalene	10	u
106-47-8	4-Chloroaniline	10	u
87-68-3	Hexachlorobutadiene	10	u
59-50-7	4-Chloro-3-Methylphenol	10	u
91-57-6	2-Methylnaphthalene	10	u
77-47-4	Hexachlorocyclopentadiene	10	u
88-06-2	2,4,6-Trichlorophenol	10	u
95-95-4	2,4,5-Trichlorophenol	50	u
91-58-7	2-Chloronaphthalene	10	u
88-74-4	2-Nitroaniline	50	u
131-11-3	Dimethyl Phthalate	10	u
208-96-8	Acenaphthylene	10	u
99-09-2	3-Nitroaniline	10	u

Sample Number
CW-2C

CW-2B

Organics Analysis Data Sheet
(Page 4)

Semivolatile Compounds (continued)

Case Number		ug/l	
		**********	
83-32-9	Acenaphthene		10 u
51-28-5	2,4-Dinitrophenol		50 u
100-02-7	4-Nitrophenol		50 u
132-64-9	Dibenzofuran		10 u
121-14-2	2,4-Dinitrotoluene		10 u
606-20-2	2,6-Dinitrotoluene		10 u
84-66-2	Diethylphthalate		10 u
7005-72-3	4-Chlorophenyl-phenylether		10 u
86-73-7	Fluorene		10 u
100-01-6	4-Nitroaniline		50 u
534-52-1	4,6-Dinitro-2-Methylphenol		50 u
86-30-6	N-Nitrosodiphenylamine(1)		10 u
101-55-3	4-Bromophenyl-phenylether		10 u
118-74-1	Hexachlorobenzene		10 u
87-86-5	Pentachlorophenol		50 u
85-01-8	Phenanthrene		10 u
120-12-7	Anthracene		10 u
84-74-2	Di-n-Butylphthalate	2.5 J	
206-44-0	Fluoranthene		10 u
92-87-5	Benzidine		50 u
129-00-0	Pyrene		10 u
85-68-7	Butylbenzylphthalate	3.5 J	
91-94-1	3,3 -Dichlorobenzidine		20 u
56-55-3	Benzo(a)Anthracene		10 u
117-81-7	bis(2-Ethylhexyl)Phthalate	10	
218-01-9	Chrysene		10 u
117-84-0	Di-n-Octyl Phthalate		10 u
205-99-2	Benzo(b)Fluoranthene		10 u
207-08-9	Benzo(k)Fluoranthene		10 u
50-32-8	Benzo(a)Pyrene		10 u
193-39-5	Indeno(1,2,3-cd)Pyrene		10 u
53-70-3	Dibenzo(a,h)Anthracene		10 u
191-24-2	Benzo(g,h,i)Perylene		10 u

(1)-Cannot be separated from diphenylamine

Sample Number
CW-2C

CW-2B

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-2C

CW-2B

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
3638-35-5	CYCLOPROPANE,(1-METHYETHYL)-	VOA	283	5 J
106-67-2	1-PENTANOL,2-ETHYL-4-METHYL-	BNA	398	10 J
	UNKNOWN	BNA	1090	9 J
10544-50-0	SULFUR,MOL. (S8)	BNA	1175	10 J

Form I - C

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-2C-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation

CASE NO. Engineering-Science/Alltift Real

SOW NO. 784

LAB SAMPLE ID. NO. 15081998

QC REPORT NO. ____________

Elements Identified and Measured

Concentration: Low ______ Medium ______

Matrix: Water X Soil ______ Sludge ______ Other ______

(ug/L) or mg/kg dry weight (Circle One) — ug/L circled

1.	Aluminum	200 U	(P)	13.	Magnesium	20900 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	52	(P)
3.	Arsenic	[1] R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	40 U	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	9480 R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	26300	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	127000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R E	(F)
10.	Copper	25 U	(P)	22.	Tin	40 U R	(F)
11.	Iron	[60]	(P)	23.	Vanadium	50 U	(F)
12.	Lead	5 U	(F)	24.	Zinc	20	(P)

Cyanide ____________ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ____________

Lab Manager Kathy [signature]

Environmental Protection Agency
CLP Sample Management Office
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

CW-2C

Sample Number

CW-2

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15081788
Sample Matrix: Water
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/28/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 08/29/85
Date Analyzed: 08/29/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	5.1 B	
67-64-1	Acetone	7.8 J,B	
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-2

CW-2C

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
CW-2

CW-2C

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/29/85
Date Analyzed: 09/03/85
Conc/Dil Factor: 1

CAS Number		ug/l **********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-2

CW-2C

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******

NO VOA COMPOUND FOUND

Form I - D

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-3-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science/Alltift Real

SOW NO. 784

LAB SAMPLE ID. NO. 15081999 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	105000 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	1049	(P)
3.	Arsenic	[6] R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	60	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	122000 R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	167000	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10	(P)	20.	Sodium	852000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R E	(F)
10.	Copper	28	(P)	22.	Tin	43 R	(F)
11.	Iron	5950	(P)	23.	Vanadium	[6]	(F)
12.	Lead	5	(F)	24.	Zinc	90	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager Kathy Del Signore

Environmental Protection Agency
CLP Sample Management Office
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

CW-3

Sample Number

CW-3

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15081999
Sample Matrix: Water
Data Release Authorized By: David C. Dawson
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	11	
67-64-1	Acetone	29 B	
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-3

CW-3

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l	
		**********	
79-34-5	1,1,2,2-Tetrachloroethane		5 u
78-87-5	1,2-Dichloropropane		5 u
10061-02-6	Trans-1,3-Dichloropropene		5 u
79-01-6	Trichloroethene		5 u
124-48-1	Dibromochloromethane		5 u
79-00-5	1,1,2-Trichloroethane		5 u
71-43-2	Benzene	12	
10061-01-5	cis-1,3-Dichloropropene		5 u
110-75-8	2-Chloroethylvinylether		10 u
75-25-2	Bromoform		5 u
591-78-6	2-Hexanone		10 u
108-10-1	4-Methyl-2-Pentanone		10 u
127-18-4	Tetrachlorethene		5 u
108-88-3	Toluene		5 u
108-90-7	Chlorobenzene		5 u
100-41-4	Ethylbenzene	11	
100-42-5	Styrene		5 u
	Total Xylenes	7.7	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

SAMPLE NUMBER
CW-3

CW-3

Organics Analysis Data Sheet
(Page 3)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/22/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
62-75-9	N-Nitrosodimethylamine		10 u
108-95-2	Phenol		10 u
62-53-3	Aniline		10 u
111-44-4	bis(2-Chloroethyl)Ether		10 u
95-57-8	2-Chlorophenol		10 u
541-73-1	1,3-Dichlorobenzene		10 u
106-46-7	1,4-Dichlorobenzene		10 u
100-51-6	Benzyl Alcohol		10 u
95-50-1	1,2-Dichlorobenzene		10 u
95-48-7	2-Methylphenol		10 u
39638-32-9	bis(2-chloroisopropyl)Ether		10 u
106-44-5	4-Methylphenol		10 u
621-64-7	N-Nitroso-Di-n-Propylamine		10 u
67-72-1	Hexachloroethane		10 u
98-95-3	Nitrobenzene		10 u
78-59-1	Isophorone		10 u
88-75-5	2-Nitrophenol		10 u
105-67-9	2,4-Dimethylphenol		10 u
65-85-0	Benzoic Acid		50 u
111-91-1	bis(2-Chloroethoxy)Methane		10 u
120-83-2	2,4-Dichlorophenol		10 u
120-82-1	1,2,4-Trichlorobenzene		10 u
91-20-3	Naphthalene	12	
106-47-8	4-Chloroaniline		10 u
87-68-3	Hexachlorobutadiene		10 u
59-50-7	4-Chloro-3-Methylphenol		10 u
91-57-6	2-Methylnaphthalene		10 u
77-47-4	Hexachlorocyclopentadiene		10 u
88-06-2	2,4,6-Trichlorophenol		10 u
95-95-4	2,4,5-Trichlorophenol		50 u
91-58-7	2-Chloronaphthalene		10 u
88-74-4	2-Nitroaniline		50 u
131-11-3	Dimethyl Phthalate		10 u
208-96-8	Acenaphthylene		10 u
99-09-2	3-Nitroaniline		10 u

Sample Number
CW-3

CW-3

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor 1

CAS Number		ug/l	
		**********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-3

CW-3

Organics Analysis Data Sheet
(Page 4)

Semivolatile Compounds (continued)

Case Number		ug/l	
		**********	
83-32-9	Acenaphthene	10	u
51-28-5	2,4-Dinitrophenol	50	u
100-02-7	4-Nitrophenol	50	u
132-64-9	Dibenzofuran	10	u
121-14-2	2,4-Dinitrotoluene	10	u
606-20-2	2,6-Dinitrotoluene	10	u
84-66-2	Diethylphthalate	10	u
7005-72-3	4-Chlorophenyl-phenylether	10	u
86-73-7	Fluorene	10	u
100-01-6	4-Nitroaniline	50	u
534-52-1	4,6-Dinitro-2-Methylphenol	50	u
86-30-6	N-Nitrosodiphenylamine(1)	6.2 J	
101-55-3	4-Bromophenyl-phenylether	10	u
118-74-1	Hexachlorobenzene	10	u
87-86-5	Pentachlorophenol	50	u
85-01-8	Phenanthrene	10	u
120-12-7	Anthracene	10	u
84-74-2	Di-n-Butylphthalate	2.4 J	
206-44-0	Fluoranthene	10	u
92-87-5	Benzidine	50	u
129-00-0	Pyrene	10	u
85-68-7	Butylbenzylphthalate	10	u
91-94-1	3,3 -Dichlorobenzidine	20	u
56-55-3	Benzo(a)Anthracene	10	u
117-81-7	bis(2-Ethylhexyl)Phthalate	6.5 J	
218-01-9	Chrysene	10	u
117-84-0	Di-n-Octyl Phthalate	10	u
205-99-2	Benzo(b)Fluoranthene	10	u
207-08-9	Benzo(k)Fluoranthene	10	u
50-32-8	Benzo(a)Pyrene	10	u
193-39-5	Indeno(1,2,3-cd)Pyrene	10	u
53-70-3	Dibenzo(a,h)Anthracene	10	u
191-24-2	Benzo(g,h,i)Perylene	10	u

(1)-Cannot be separated from diphenylamine

Sample Number
CW-3

CW-3

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
	NO VOA COMPOUND FOUND			
2094-97-5	1,3-OXATHIOLANE	BNA	176	20 J
	UNKNOWN	BNA	228	30 J
110-88-3	1,3,5-TRIOXANE	BNA	278	20 J
	UNKNOWN	BNA	305	30 J
95-63-6	BENZENE,1,2,4-TRIMETHYL-	BNA	357	40 J
	UNKNOWN	BNA	392	100 J
	UNKNOWN	BNA	491	100 J
	UNKNOWN	BNA	500	70 J
	UNKNOWN	BNA	512	40 J
	UNKNOWN	BNA	534	300 J
	UNKNOWN	BNA	559	50 J
	UNKNOWN	BNA	571	40 J
	UNKNOWN	BNA	582	30 J
	UNKNOWN	BNA	613	100 J
	UNKNOWN	BNA	649	300 J
	UNKNOWN	BNA	726	200 J
	UNKNOWN	BNA	744	70 J
98-73-7	BENZOICACID,4-(1,1-DIMETHYLETHYL)-	BNA	828	300 J
	UNKNOWN	BNA	925	200 J
	UNKNOWN	BNA	983	30 J

Form I - E

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-4A-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science/Alltift Realt

SOW NO. 784

LAB SAMPLE ID. NO. 15082000 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	550	(P)	13.	Magnesium	[70] R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	15 U	(P)
3.	Arsenic	12 s R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	[20]	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	1380000 R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	12000	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10	(P)	20.	Sodium	364000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R	(F)
10.	Copper	[21]	(P)	22.	Tin	240 R	(F)
11.	Iron	[60]	(P)	23.	Vanadium	[9]	(F)
12.	Lead	5 U	(F)	24.	Zinc	80	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager [signature]

Environmental Protection Agency
CLP Sample Management Office
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

CW-4A

Sample Number

CW-4A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15082000
Sample Matrix: Water
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
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	13	
67-64-1	Acetone	75	
75-15-0	Carbon Disulfide		5 u
75-35-4	1,1-Dichloroethene		5 u
75-34-3	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
78-93-3	2-Butanone		10 u
71-55-6	1,1,1-Trichloroethane		5 u
56-23-5	Carbon Tetrachloride		5 u
108-05-4	Vinyl Acetate		10 u
75-27-4	Bromodichloromethane		5 u

Data reporting qualifiers are explained on Page 2

Sample Number
CW-4A

CW-4A

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l **********	
79-34-5	1,1,2,2-Tetrachloroethane	5	u
78-87-5	1,2-Dichloropropane	5	u
10061-02-6	Trans-1,3-Dichloropropene	5	u
79-01-6	Trichloroethene	5	u
124-48-1	Dibromochloromethane	5	u
79-00-5	1,1,2-Trichloroethane	5	u
71-43-2	Benzene	5	u
10061-01-5	cis-1,3-Dichloropropene	5	u
110-75-8	2-Chloroethylvinylether	10	u
75-25-2	Bromoform	5	u
591-78-6	2-Hexanone	10	u
108-10-1	4-Methyl-2-Pentanone	10	u
127-18-4	Tetrachlorethene	5	u
108-88-3	Toluene	5	u
108-90-7	Chlorobenzene	5	u
100-41-4	Ethylbenzene	5	u
100-42-5	Styrene	5	u
	Total Xylenes	5	u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample It indicates possible/probable blank contamination and warns the data user to take appropriate action

S - Spiked compound.

NR - No value required.

SAMPLE NUMBER
CW-4A

CW-4A

Organics Analysis Data Sheet
(Page 3)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/22/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
62-75-9	N-Nitrosodimethylamine	10	u
108-95-2	Phenol	10	u
• 62-53-3	Aniline	10	u
111-44-4	bis(2-Chloroethyl)Ether	10	u
95-57-8	2-Chlorophenol	10	u
541-73-1	1,3-Dichlorobenzene	10	u
106-46-7	1,4-Dichlorobenzene	10	u
100-51-6	Benzyl Alcohol	10	u
95-50-1	1,2-Dichlorobenzene	10	u
95-48-7	2-Methylphenol	10	u
39638-32-9	bis(2-chloroisopropyl)Ether	10	u
106-44-5	4-Methylphenol	10	u
621-64-7	N-Nitroso-Di-n-Propylamine	10	u
67-72-1	Hexachloroethane	10	u
98-95-3	Nitrobenzene	10	u
78-59-1	Isophorone	10	u
88-75-5	2-Nitrophenol	10	u
105-67-9	2,4-Dimethylphenol	10	u
65-85-0	Benzoic Acid	50	u
111-91-1	bis(2-Chloroethoxy)Methane	10	u
120-83-2	2,4-Dichlorophenol	10	u
120-82-1	1,2,4-Trichlorobenzene	10	u
91-20-3	Naphthalene	10	u
106-47-8	4-Chloroaniline	10	u
87-68-3	Hexachlorobutadiene	10	u
59-50-7	4-Chloro-3-Methylphenol	10	u
91-57-6	2-Methylnaphthalene	10	u
77-47-4	Hexachlorocyclopentadiene	10	u
88-06-2	2,4,6-Trichlorophenol	10	u
95-95-4	2,4,5-Trichlorophenol	50	u
91-58-7	2-Chloronaphthalene	10	u
88-74-4	2-Nitroaniline	50	u
131-11-3	Dimethyl Phthalate	10	u
208-96-8	Acenaphthylene	10	u
99-09-2	3-Nitroaniline	10	u

Sample Number
CW-4A

CW-4A

Organics Analysis Data Sheet
(Page 4)

Semivolatile Compounds (continued)

Case Number		ug/l	
		**********	
83-32-9	Acenaphthene		10 u
51-28-5	2,4-Dinitrophenol		50 u
100-02-7	4-Nitrophenol		50 u
132-64-9	Dibenzofuran		10 u
121-14-2	2,4-Dinitrotoluene		10 u
606-20-2	2,6-Dinitrotoluene		10 u
84-66-2	Diethylphthalate		10 u
7005-72-3	4-Chlorophenyl-phenylether		10 u
86-73-7	Fluorene		10 u
100-01-6	4-Nitroaniline		50 u
534-52-1	4,6-Dinitro-2-Methylphenol		50 u
86-30-6	N-Nitrosodiphenylamine(1)		10 u
101-55-3	4-Bromophenyl-phenylether		10 u
118-74-1	Hexachlorobenzene		10 u
87-86-5	Pentachlorophenol		50 u
85-01-8	Phenanthrene		10 u
120-12-7	Anthracene		10 u
84-74-2	Di-n-Butylphthalate	12	
206-44-0	Fluoranthene		10 u
92-87-5	Benzidine		50 u
129-00-0	Pyrene		10 u
85-68-7	Butylbenzylphthalate		10 u
91-94-1	3,3 -Dichlorobenzidine		20 u
56-55-3	Benzo(a)Anthracene		10 u
117-81-7	bis(2-Ethylhexyl)Phthalate	19	
218-01-9	Chrysene		10 u
117-84-0	Di-n-Octyl Phthalate		10 u
205-99-2	Benzo(b)Fluoranthene		10 u
207-08-9	Benzo(k)Fluoranthene		10 u
50-32-8	Benzo(a)Pyrene		10 u
193-39-5	Indeno(1,2,3-cd)Pyrene		10 u
53-70-3	Dibenzo(a,h)Anthracene		10 u
191-24-2	Benzo(g,h,i)Perylene		10 u

(1)-Cannot be separated from diphenylamine

Sample Number
CW-4A

CW-4A

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l **********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(Lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-4A

CW-4A

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
78-78-4	BUTANE,2-METHYL	VOA	222	5 J
611-14-3	BENZENE,1-ETHYL-2-METHYL-	VOA	603	30 J
111-76-2	ETHANOL,2-BUTOXY-	BNA	273	20 J
104-76-7	1-HEXANOL, 2-ETHYL-	BNA	397	20 J
	UNKNOWN	BNA	631	90 J
62016-37-9	OCTANE,2,4,6-TRIMETHYL-	BNA	648	10 J
62016-37-9	OCTANE,2,4,6-TRIMETHYL-	BNA	731	30 J
563-16-6	HEXANE,3,3-DIMETHYL-	BNA	781	10 J
17301-32-5	UNDECANE,4,7-DIMETHYL-	BNA	810	30 J
	UNKNOWN	BNA	861	90 J
17301-32-5	UNDECANE,4,7-DIMETHYL-	BNA	885	30 J
62016-37-9	OCTANE,2,4,6-TRIMETHYL-	BNA	920	10 J
17301-32-5	UNDECANE,4,7-DIMETHYL-	BNA	956	30 J
	UNKNOWN	BNA	997	10 J
	UNKNOWN (HYDROCARBON)	BNA	1023	30 J
	UNKNOWN (HYDROCARBON)	BNA	1029	9 J
	UNKNOWN (HYDROCARBON)	BNA	1087	30 J
	UNKNOWN (HYDROCARBON)	BNA	1149	40 J
62016-37-9	OCTANE,2,4,6-TRIMETHYL-	BNA	1208	30 J
62016-37-9	OCTANE,2,4,6-TRIMETHYL-	BNA	1264	20 J
29812-79-1	HYDROXYLAMINE,O-DECYL-	BNA	1310	20 J

Form I - F

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. CW-4B-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation

CASE NO. Engineering-Science/Alltift Realt

SOW NO. 784

LAB SAMPLE ID. NO. 15082001

QC REPORT NO. ______

Elements Identified and Measured

Concentration: Low ______ Medium ______

Matrix: Water X Soil ______ Sludge ______ Other ______

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	31200 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	718	(P)
3.	Arsenic	14 s R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	40 U	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	[1690] R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	76100	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	35500	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R	(F)
10.	Copper	28	(P)	22.	Tin	40 U R	(F)
11.	Iron	1720	(P)	23.	Vanadium	50 U	(F)
12.	Lead	[1]	(F)	24.	Zinc	20 U	(P)

Cyanide ______ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ______

Lab Manager Kelly Del Signore

Environmental Protection Agency
CLP Sample Management Office
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

CW-4B

Sample Number

CW-4B

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15082001
Sample Matrix: Water
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
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	14	
67-64-1	Acetone	35	B
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

CW-4B

Sample Number
CW-4B

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

S - Spiked compound.

NR - No value required.

Sample Number
CW-4B

CW-4B

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l
		**********
319-84-6	Alpha-BHC	0.05 u
319-85-7	Beta-BHC	0.05 u
319-86-8	Delta-BHC	0.05 u
58-89-9	Gamma-BHC(lindane)	0.05 u
76-44-8	Heptachlor	0.05 u
309-00-2	Aldrin	0.05 u
1024-57-3	Heptachlor Epoxide	0.05 u
959-98-8	Endosulfan I	0.05 u
60-57-1	Dieldrin	0.10 u
72-55-9	4,4'-DDE	0.10 u
72-20-8	Endrin	0.10 u
33213-65-9	Endosulfan II	0.10 u
72-54-8	4,4'-DDD	0.10 u
7421-93-4	Endrin Aldehyde	0.10 u
1031-07-8	Endosulfan Sulfate	0.10 u
50-29-3	4,4'-DDT	0.10 u
72-43-5	Methoxychlor	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.00 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.00 u
11096-82-5	Aroclor-1260	1.00 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-4B

CW-4B

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******

NO VOA COMPOUND FOUND
NO SEMI-VOLATILE COMPOUNDS FOUND

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY
Lab Sample ID No: 16860732
QC Report No:
Sample Matrix: Water
Contract No:
Data Release Authorized By:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S — Spiked Compound

NR — No value required.

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analysed: 07/26/86
Conc/Dil Factor: 1.0
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l	CAS Number		ug/l
108-95-2	Phenol	10 U	83-32-9	Acenaphthene	10 U
111-44-4	bis(2-Chloroethyl)Ether	10 U	51-28-5	2,4-Dinitrophenol	50 U
95-57-8	2-Chlorophenol	10 U	100-02-7	4-Nitrophenol	50 U
541-73-1	1,3-Dichlorobenzene	10 U	132-64-9	Dibenzofuran	10 U
106-46-7	1,4-Dichlorobenzene	10 U	121-14-2	2,4-Dinitrotoluene	10 U
100-51-6	Benzyl Alcohol	10 U	606-20-2	2,6-Dinitrotoluene	10 U
95-50-1	1,2-Dichlorobenzene	10 U	84-66-2	Diethylphthalate	10 U
95-48-7	2-Methylphenol	10 U	7005-72-3	4-Chlorophenyl-phenylether	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U	86-73-7	Fluorene	10 U
106-44-5	4-Methylphenol	10 U	100-01-6	4-Nitroaniline	50 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U	534-52-1	4,6-Dinitro-2-Methylphenol	- 50 U
67-72-1	Hexachloroethane	10 U	86-30-6	N-Nitrosodiphenylamine(1)	10 U
98-95-3	Nitrobenzene	10 U	101-55-3	4-Bromophenyl-phenylether	10 U
78-59-1	Isophorone	10 U	118-74-1	Hexachlorobenzene	10 U
88-75-5	2-Nitrophenol	10 U	87-86-5	Pentachlorophenol	50 U
105-67-9	2,4-Dimethylphenol	10 U	85-01-8	Phenanthrene	10 U
65-85-0	Benzoic Acid	50 U	120-12-7	Anthracene	10 U
111-91-1	bis(2-Chloroethoxy)Methane	10 U	84-74-2	Di-n-Butylphthalate	10 U
120-83-2	2,4-Dichlorophenol	10 U	206-44-0	Fluoranthene	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U	129-00-0	Pyrene	10 U
91-20-3	Naphthalene	10 U	85-68-7	Butylbenzylphthalate	10 U
106-47-8	4-Chloroaniline	10 U	91-94-1	3,3'-Dichlorobenzidine	20 U
87-68-3	Hexachlorobutadiene	10 U	56-55-3	Benzo (a)Anthracene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	3 J
91-57-6	2-Methylnaphthalene	10 U	218-01-9	Chrysene	10 U
77-47-4	Hexachlorocyclopentadiene	10 U	117-84-0	Di-n-Octyl Phthalate	2 J
88-06-2	2,4,6-Trichlorophenol	10 U	205-99-2	Benzo(b)Fluoranthene	10 U
95-95-4	2,4,5-Trichlorophenol	50 U	207-08-9	Benzo(k)Fluoranthene	10 U
91-58-7	2-Chloronaphthalene	10 U	50-32-8	Benzo(a)Pyrene	10 U
88-74-4	2-Nitroaniline	50 U	193-39-5	Indeno(1,2,3-cd)Pyrene	10 U
131-11-3	Dimethyl Phthalate	10 U	53-70-3	Dibenz(a,h)Anthracene	10 U
208-96-8	Acenaphthylene	10 U	191-24-2	Benzo(g,h,i)Perylene	10 U
99-09-2	3-Nitroaniline	50 U			

(1)-Cannot be separated from diphenylamine

Form I - G

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-5A-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science/Alltift Real

SOW NO. 784

LAB SAMPLE ID. NO. 15082002 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	29000 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	22	(P)
3.	Arsenic	10 U R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	40 U	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	124000 R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	16500	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	185000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R	(F)
10.	Copper	[21]	(P)	22.	Tin	180 R	(F)
11.	Iron	[80]	(P)	23.	Vanadium	50 U	(F)
12.	Lead	[1]	(F)	24.	Zinc	[10]	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager Kathy Del Signore

Environmental Protection Agency
CLP Sample Management Office
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

CW-5A

Sample Number

CW-5A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15082002
Sample Matrix: Water
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l
		**********
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	12
67-64-1	Acetone	1800 B
75-15-0	Carbon Disulfide	5 u
75-35-4	1,1-Dichloroethene	5 u
75-34-3	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
78-93-3	2-Butanone	10 u
71-55-6	1,1,1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-5A

CW-5A

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	85
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	140
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	20
100-42-5	Styrene	5 u
	Total Xylenes	110

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
CW-5A

CW-5A

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l **********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-5A

CW-5A

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l	
**********	**********	****	****	******	
	UNKNOWN	VOA	109	20	J
	UNKNOWN	VOA	223	100	J
	UNKNOWN	VOA	253	50	J
	UNKNOWN	VOA	280	70	J
	UNKNOWN	VOA	318	20	J
	UNKNOWN	VOA	355	20	J
108-87-2	CYCLOHEXANE,METHYL-	VOA	373	100	J
	UNKNOWN	VOA	413	7	J
95-47-6	BENZENE,1,2-DIMETHYL-	BNA	222	20	J
111-84-2	NONANE	BNA	230	10	J
	UNKNOWN	BNA	262	5	J
	UNKNOWN	BNA	287	20	J
	UNKNOWN	BNA	307	20	J
124-18-5	DECANE	BNA	327	10	J
108-67-8	BENZENE,1,3,5-TRIMETHYL-	BNA	345	9	J
	UNKNOWN	BNA	349	5	J
	UNKNOWN	BNA	356	8	J
1120-21-4	UNDECANE	BNA	425	20	J
112-40-3	DODECANE	BNA	518	20	J
	UNKNOWN (HYDROCARBON)	BNA	606	20	J
1120-21-4	UNDECANE	BNA	689	20	J
	UNKNOWN (HYDROCARBON)	BNA	768	20	J
	UNKNOWN (HYDROCARBON)	BNA	842	20	J
	UNKNOWN (HYDROCARBON)	BNA	914	10	J

Sample Number

CW-5A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16060733.
Sample Matrix: Water
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S — Spiked Compound

NR — No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
CV-5A

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analyzed: 07/26/86
Conc/Dil Factor: 1
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l	CAS Number		ug/l
108-95-2	Phenol	10 u	83-32-9	Acenaphthene	10 u
111-44-4	bis(2-Chloroethyl)Ether	10 u	51-28-5	2,4-Dinitrophenol	50 u
95-57-8	2-Chlorophenol	10 u	100-02-7	4-Nitrophenol	50 u
541-73-1	1,3-Dichlorobenzene	10 u	132-64-9	Dibenzofuran	10 u
106-46-7	1,4-Dichlorobenzene	10 u	121-14-2	2,4-Dinitrotoluene	10 u
100-51-6	Benzyl Alcohol	10 u	606-20-2	2,6-Dinitrotoluene	10 u
95-50-1	1,2-Dichlorobenzene	10 u	84-66-2	Diethylphthalate	10 u
95-48-7	2-Methylphenol	10 u	7005-72-3	4-Chlorophenyl-phenylether	10 u
39638-32-9	bis(2-chloroisopropyl)Ether	10 u	86-73-7	Fluorene	10 u
106-44-5	4-Methylphenol	10 u	100-01-6	4-Nitroaniline	50 u
621-64-7	N-Nitroso-Di-n-Propylamine	10 u	534-52-1	4,6-Dinitro-2-Methylphenol	50 u
67-72-1	Hexachloroethane	10 u	86-30-6	N-Nitrosodiphenylamine(1)	10 u
98-95-3	Nitrobenzene	10 u	101-55-3	4-Bromophenyl-phenylether	10 u
78-59-1	Isophorone	10 u	118-74-1	Hexachlorobenzene	10 u
88-75-5	2-Nitrophenol	10 u	87-86-5	Pentachlorophenol	50 u
105-67-9	2,4-Dimethylphenol	10 u	85-01-8	Phenanthrene	10 u
65-85-0	Benzoic Acid	50 u	120-12-7	Anthracene	10 u
111-91-1	bis(2-Chloroethoxy)Methane	10 u	84-74-2	Di-n-Butylphthalate	10 u
120-83-2	2,4-Dichlorophenol	10 u	206-44-0	Fluoranthene	10 u
120-82-1	1,2,4-Trichlorobenzene	10 u	129-00-0	Pyrene	10 u
91-20-3	Naphthalene	10 u	85-68-7	Butylbenzylphthalate	10 u
106-47-8	4-Chloroaniline	10 u	91-94-1	3,3'-Dichlorobenzidine	20 u
87-68-3	Hexachlorobutadiene	10 u	56-55-3	Benzo (a)Anthracene	10 u
59-50-7	4-Chloro-3-Methylphenol	10 u	117-81-7	bis(2-Ethylhexyl)Phthalate	10 u
91-57-6	2-Methylnaphthalene	10 u	218-01-9	Chrysene	10 u
77-47-4	Hexachlorocyclopentadiene	10 u	117-84-0	Di-n-Octyl Phthalate	10 u
88-06-2	2,4,6-Trichlorophenol	10 u	205-99-2	Benzo(b)Fluoranthene	10 u
95-95-4	2,4,5-Trichlorophenol	50 u	207-08-9	Benzo(k)Fluoranthene	10 u
91-58-7	2-Chloronaphthalene	10 u	50-32-8	Benzo(a)Pyrene	10 u
88-74-4	2-Nitroaniline	50 u	193-39-5	Indeno(1,2,3-cd)Pyrene	10 u
131-11-3	Dimethyl Phthalate	10 u	53-70-3	Dibenz(a,h)Anthracene	10 u
208-96-8	Acenaphthylene	10 u	191-24-2	Benzo(g,h,i)Perylene	10 u
99-09-2	3-Nitroaniline	50 u			

(1)-Cannot be separated from diphenylamine

Form I - H

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-5B-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science/Alltift Realt

SOW NO. 784

LAB SAMPLE ID. NO. 15082003 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	7500 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	15 U	(P)
3.	Arsenic	[4] R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	[30]	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	14400 R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	282000	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	113000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R	(F)
10.	Copper	25 U	(P)	22.	Tin	[6] R	(F)
11.	Iron	100 U	(P)	23.	Vanadium	[7]	(F)
12.	Lead	5 U	(F)	24.	Zinc	20 U	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager Kathy Del Signore

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

CW-5B

Sample Number

CW-5B

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15082003
Sample Matrix: Water
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	16	
67-64-1	Acetone	10	u
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-5B

CW-5B

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound

NR - No value required

Sample Number
CW-5B

CW-5B

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-5B

CW-5B

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
	NO VOA COMPOUND FOUND			
104-76-7	1-HEXANOL, 2-ETHYL-	BNA	356	10 J
	UNKNOWN	BNA	717	10 J
	UNKNOWN	BNA	1146	9 J

Sample Number

CV-58

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16060734
Sample Matrix: Water
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/ probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
CV-5B

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analyzed: 07/26/86
Conc/Dil Factor: 1
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
108-95-2	Phenol	14
111-44-4	bis(2-Chloroethyl)Ether	10 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	10 U
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U
67-72-1	Hexachloroethane	10 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	10 U
105-67-9	2,4-Dimethylphenol	10 U
65-85-0	Benzoic Acid	50 U
111-91-1	bis(2-Chloroethoxy)Methane	10 U
120-83-2	2,4-Dichlorophenol	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	Naphthalene	10 U
106-47-8	4-Chloroaniline	10 U
87-68-3	Hexachlorobutadiene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U
91-57-6	2-Methylnaphthalene	10 U
77-47-4	Hexachlorocyclopentadiene	10 U
88-06-2	2,4,6-Trichlorophenol	10 U
95-95-4	2,4,5-Trichlorophenol	50 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	50 U
131-11-3	Dimethyl Phthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	50 U

CAS Number		ug/l
83-32-9	Acenaphthene	10 U
51-28-5	2,4-Dinitrophenol	50 U
100-02-7	4-Nitrophenol	50 U
132-64-9	Dibenzofuran	10 U
121-14-2	2,4-Dinitrotoluene	10 U
606-20-2	2,6-Dinitrotoluene	10 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	Fluorene	10 U
100-01-6	4-Nitroaniline	50 U
534-52-1	4,6-Dinitro-2-Methylphenol	50 U
86-30-6	N-Nitrosodiphenylamine(1)	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10 U
120-12-7	Anthracene	10 U
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	Fluoranthene	10 U
129-00-0	Pyrene	10 U
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	20 U
56-55-3	Benzo (a)Anthracene	10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	10 U
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl Phthalate	10 U
205-99-2	Benzo(b)Fluoranthene	10 U
207-08-9	Benzo(k)Fluoranthene	10 U
50-32-8	Benzo(a)Pyrene	10 U
193-39-5	Indeno(1,2,3-cd)Pyrene	10 U
53-70-3	Dibenz(a,h)Anthracene	10 U
191-24-2	Benzo(g,h,i)Perylene	10 U

(1)-Cannot be separated from diphenylamine

Form I - I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-6A-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science/Alltift Real

SOW NO. 784

LAB SAMPLE ID. NO. 15082004 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	17700 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	25	(P)
3.	Arsenic	10 U R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	40 U	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	[4410] R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	26400	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	111000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R	(F)
10.	Copper	25 U	(P)	22.	Tin	[6] R	(F)
11.	Iron	120	(P)	23.	Vanadium	50 U	(F)
12.	Lead	5 U	(F)	24.	Zinc	20 U	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager [signature]

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

CW-6A

Sample Number

CW-6A

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15082004
Sample Matrix: Water
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

****

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
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	15	
67-64-1	Acetone	10	u
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

CW-6A

Sample Number
CW-6A

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
CW-6A

CW-6A

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l **********
319-84-6	Alpha-BHC	0.05 u
319-85-7	Beta-BHC	0.05 u
319-86-8	Delta-BHC	0.05 u
58-89-9	Gamma-BHC(Lindane)	0.05 u
76-44-8	Heptachlor	0.05 u
309-00-2	Aldrin	0.05 u
1024-57-3	Heptachlor Epoxide	0.05 u
959-98-8	Endosulfan I	0.05 u
60-57-1	Dieldrin	0.10 u
72-55-9	4,4'-DDE	0.10 u
72-20-8	Endrin	0.10 u
33213-65-9	Endosulfan II	0.10 u
72-54-8	4,4'-DDD	0.10 u
7421-93-4	Endrin Aldehyde	0.10 u
1031-07-8	Endosulfan Sulfate	0.10 u
50-29-3	4,4'-DDT	0.10 u
72-43-5	Methoxychlor	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.00 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.00 u
11096-82-5	Aroclor-1260	1.00 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-6A

CW-6A

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
763-29-1	1-PENTENE,2-METHYL-	VOA	279	10 J
	UNKNOWN	VOA	324	7 J
96-14-0	PENTANE, 3-METHYL-	VOA	317	7 J
110-54-3	HEXANE	VOA	355	9 J
112-05-0	NONANOICACID	BNA	588	40 J
	UNKNOWN	BNA	972	50 J
10544-50-0	SULFUR,MOL. (S8)	BNA	1137	800 J

Sample Number

CW-6A

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16868735
Sample Matrix: Water
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT NLTY

Sample Number
CV-6A

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analysed: 07/26/86
Conc/Dil Factor: 1
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l		CAS Number		ug/l	
108-95-2	Phenol	10 U		83-32-9	Acenaphthene	10 U	
111-44-4	bis(2-Chloroethyl)Ether	10 U		51-28-5	2,4-Dinitrophenol	50 U	
95-57-8	2-Chlorophenol	10 U		100-02-7	4-Nitrophenol	50 U	
541-73-1	1,3-Dichlorobenzene	10 U		132-64-9	Dibenzofuran	10 U	
106-46-7	1,4-Dichlorobenzene	10 U		121-14-2	2,4-Dinitrotoluene	10 U	
100-51-6	Benzyl Alcohol	10 U		606-20-2	2,6-Dinitrotoluene	10 U	
95-50-1	1,2-Dichlorobenzene	10 U		84-66-2	Diethylphthalate	10 U	
95-48-7	2-Methylphenol	10 U		7005-72-3	4-Chlorophenyl-phenylether	10 U	
39638-32-9	bis(2-chloroisopropyl)Ether	10 U		86-73-7	Fluorene	10 U	
106-44-5	4-Methylphenol	10 U		100-01-6	4-Nitroaniline	50 U	
621-64-7	N-Nitroso-Di-n-Propylamine	10 U		534-52-1	4,6-Dinitro-2-Methylphenol	50 U	
67-72-1	Hexachloroethane	10 U		86-30-6	N-Nitrosodiphenylamine(1)	10 U	
98-95-3	Nitrobenzene	10 U		101-55-3	4-Bromophenyl-phenylether	10 U	
78-59-1	Isophorone	10 U		118-74-1	Hexachlorobenzene	10 U	
88-75-5	2-Nitrophenol	10 U		87-86-5	Pentachlorophenol	50 U	
105-67-9	2,4-Dimethylphenol	10 U		85-01-8	Phenanthrene	10 U	
65-85-0	Benzoic Acid	50 U		120-12-7	Anthracene	10 U	
111-91-1	bis(2-Chloroethoxy)Methane	10 U		84-74-2	Di-n-Butylphthalate	10 U	
120-83-2	2,4-Dichlorophenol	10 U		206-44-0	Fluoranthene	10 U	
120-82-1	1,2,4-Trichlorobenzene	10 U		129-00-0	Pyrene	10 U	
91-20-3	Naphthalene	10 U		85-68-7	Butylbenzylphthalate	10 U	
106-47-8	4-Chloroaniline	10 U		91-94-1	3,3'-Dichlorobenzidine	20 U	
87-68-3	Hexachlorobutadiene	10 U		56-55-3	Benzo (a)Anthracene	10 U	
59-50-7	4-Chloro-3-Methylphenol	10 U		117-81-7	bis(2-Ethylhexyl)Phthalate	2 J	
91-57-6	2-Methylnaphthalene	10 U		218-01-9	Chrysene	10 U	
77-47-4	Hexachlorocyclopentadiene	10 U		117-84-0	Di-n-Octyl Phthalate	3 J	
88-06-2	2,4,6-Trichlorophenol	10 U		205-99-2	Benzo(b)Fluoranthene	10 U	
95-95-4	2,4,5-Trichlorophenol	50 U		207-08-9	Benzo(k)Fluoranthene	10 U	
91-58-7	2-Chloronaphthalene	10 U		50-32-8	Benzo(a)Pyrene	10 U	
88-74-4	2-Nitroaniline	50 U		193-39-5	Indeno(1,2,3-cd)Pyrene	10 U	
131-11-3	Dimethyl Phthalate	10 U		53-70-3	Dibenz(a,h)Anthracene	10 U	
208-96-8	Acenaphthylene	10 U		191-24-2	Benzo(g,h,i)Perylene	10 U	
99-09-2	3-Nitroaniline	50 U					

(1)-Cannot be separated from diphenylamine

Form I - J

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
CW-6B-Water

Date October 17, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science/Alltift Realt

SOW NO. 784

LAB SAMPLE ID. NO. 15082005 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	21000 R	(P)
2.	Antimony	60 U	(F)	14.	Manganese	532	(P)
3.	Arsenic	10 U R	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	270	(P)	16.	Nickel	[20]	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	5140 R	(P)
6.	Cadmium	5 U	(P)	18.	Selenium	5 U	(F)
7.	Calcium	78100	(P)	19.	Silver	10 U R	(P)
8.	Chromium	10 U	(P)	20.	Sodium	243000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10 U R	(F)
10.	Copper	[23]	(P)	22.	Tin	[10] R	(F)
11.	Iron	[80]	(P)	23.	Vanadium	50 U	(F)
12.	Lead	[2]	(F)	24.	Zinc	80	(P)

Cyanide _____ Percent Solids (%) N/A

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager [signature]

CW-6B

Environmental Protection Agency
CLP Sample Management Office
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

CW-6B

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15082005
Sample Matrix: Water
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 08/30/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/05/85
Date Analyzed: 09/05/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	11	
67-64-1	Acetone	10	u
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
CW-6B

CW-6B

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
CW-6B

CW-6B

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 08/31/85
Date Analyzed: 09/04/85
Conc/Dil Factor: 1

CAS Number		ug/l	
		**********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
• 58-89-9	Gamma-BHC(Lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Sample Number
CW-6B

CW-6B

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l	
**********	**********	****	****	******	
	NO VOA COMPOUND FOUND				
123-79-5	HEXANEDIOICACID, DIOCTYLESTER	BNA	1338	20	J

Sample Number

CW-6B

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Case No: ENG. SCIENCE
Lab Sample ID No: 16061849
QC Report No:
Sample Matrix: Water
Contract No:
Data Release Authorized By:
Date Sample Received: 06/20/86

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: NR
Date Analysed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S — Spiked Compound

NR — No value required.

Laboratory Name: NUS CORPORATION
Case No: ENG. SCIENCE

Sample Number
CW-6B

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/24/86
Date Analyzed: 07/31/86
Conc/Dil Factor: 1
Percent Moisture (Decanted): NR

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l	CAS Number		ug/l
108-95-2	Phenol	10 u	83-32-9	Acenaphthene	10 u
111-44-4	bis(2-Chloroethyl)Ether	10 u	51-28-5	2,4-Dinitrophenol	50 u
95-57-8	2-Chlorophenol	10 u	100-02-7	4-Nitrophenol	50 u
541-73-1	1,3-Dichlorobenzene	10 u	132-64-9	Dibenzofuran	10 u
106-46-7	1,4-Dichlorobenzene	10 u	121-14-2	2,4-Dinitrotoluene	10 u
100-51-6	Benzyl Alcohol	10 u	606-20-2	2,6-Dinitrotoluene	10 u
95-50-1	1,2-Dichlorobenzene	10 u	84-66-2	Diethylphthalate	10 u
95-48-7	2-Methylphenol	10 u	7005-72-3	4-Chlorophenyl-phenylether	10 u
39638-32-9	bis(2-chloroisopropyl)Ether	10 u	86-73-7	Fluorene	10 u
106-44-5	4-Methylphenol	10 u	100-01-6	4-Nitroaniline	50 u
621-64-7	N-Nitroso-Di-n-Propylamine	10 u	534-52-1	4,6-Dinitro-2-Methylphenol	50 u
67-72-1	Hexachloroethane	10 u	86-30-6	N-Nitrosodiphenylamine(1)	10 u
98-95-3	Nitrobenzene	10 u	101-55-3	4-Bromophenyl-phenylether	10 u
78-59-1	Isophorone	10 u	118-74-1	Hexachlorobenzene	10 u
88-75-5	2-Nitrophenol	10 u	87-86-5	Pentachlorophenol	1400
105-67-9	2,4-Dimethylphenol	10 u	85-01-8	Phenanthrene	10 u
65-85-0	Benzoic Acid	50 u	120-12-7	Anthracene	10 u
111-91-1	bis(2-Chloroethoxy)Methane	10 u	84-74-2	Di-n-Butylphthalate	10 u
120-83-2	2,4-Dichlorophenol	10 u	206-44-0	Fluoranthene	10 u
120-82-1	1,2,4-Trichlorobenzene	10 u	129-00-0	Pyrene	10 u
91-20-3	Naphthalene	10 u	85-68-7	Butylbenzylphthalate	10 u
106-47-8	4-Chloroaniline	10 u	91-94-1	3,3'-Dichlorobenzidine	20 u
87-68-3	Hexachlorobutadiene	10 u	56-55-3	Benzo (a)Anthracene	10 u
59-50-7	4-Chloro-3-Methylphenol	10 u	117-81-7	bis(2-Ethylhexyl)Phthalate	~~2 7 J~~ 3 J
91-57-6	2-Methylnaphthalene	10 u	218-01-9	Chrysene	10 u
77-47-4	Hexachlorocyclopentadiene	10 u	117-84-0	Di-n-Octyl Phthalate	10 u
88-06-2	2,4,6-Trichlorophenol	10 u	205-99-2	Benzo(b)Fluoranthene	10 u
95-95-4	2,4,5-Trichlorophenol	50 u	207-08-9	Benzo(k)Fluoranthene	10 u
91-58-7	2-Chloronaphthalene	10 u	50-32-8	Benzo(a)Pyrene	10 u
88-74-4	2-Nitroaniline	50 u	193-39-5	Indeno(1,2,3-cd)Pyrene	10 u
131-11-3	Dimethyl Phthalate	10 u	53-70-3	Dibenz(a,h)Anthracene	10 u
208-96-8	Acenaphthylene	10 u	191-24-2	Benzo(g,h,i)Perylene	10 u
99-09-2	3-Nitroaniline	50 u			

8-11

(1)-Cannot be separated from diphenylamine

Analytical Results for Surface Water Samples

NUS CORPORATION

5350 CAMPBELLS RUN ROAD • PITTSBURGH, PA. 15205
412-788-1080

LABORATORY SERVICES DIVISION

I certify that the analytical procedures used in the Engineering-Science, Alltift Realty Site project are in accordance with USEPA Guidelines 44CFR46964, 40CFR136, or the NYSDEC Superfund and Contract Laboratory Protocol, January 1985.

Inorganic Laboratory Supervisor — Date: 6-26-85

Organic Laboratory Supervisor — Date: 6-26-85

SAMPLE IDENTIFICATION

ENGINEERING-SCIENCE IDENTIFICATION	NUS SAMPLE NUMBER
Alltift Realty S-1 sediment	15040812
Alltift Realty S-2 sediment	15040813
Alltift Realty S-3 sediment	15040814
Alltift Realty S-4 sediment	15040815
Alltift Realty S-5 sediment	15040816
Alltift Realty S-1 surface water	15040817
Alltift Realty S-2 surface water	15040818
Alltift Realty S-3 surface water	15040819
Alltift Realty S-4 surface water	15040820
Alltift Realty S-5 surface water	15040821

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
S-1 Surface Water
Alltift Realty (1)

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040817 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U (P)	13.	Magnesium	24000 (P)
2.	Antimony	60 U (F)	14.	Manganese	630 (P)
3.	Arsenic	[1] (F)	15.	Mercury	0.2 U (C)
4.	Barium	200 U (P)	16.	Nickel	40 U (P)
5.	Beryllium	5 U (P)	17.	Potassium	10000 (P)
6.	Cadmium	5 U (F)	18.	Selenium	5 U (F)
7.	Calcium	150000 (P)	19.	Silver	10 U (P)
8.	Chromium	10 U (P)	20.	Sodium	25000 (P)
9.	Cobalt	50 U (P)	21.	Thallium	[1] (F)
10.	Copper	[13] (P)	22.	Tin	[5] (F)
11.	Iron	1400 (P)	23.	Vanadium	50 U (F)
12.	Lead	[2] (F)	24.	Zinc	30 (P)

Cyanide _____ Percent Solids (%) _____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) ref: Identification immediately following the Cover Page.

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-1

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040817
Sample Matrix: Water
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: 04/18/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l
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	4.3 J,B
67-64-1	Acetone	17
75-15-0	Carbon Disulfide	5 u
75-35-4	1,1-Dichloroethene	5 u
75-34-3	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
78-93-3	2-Butanone	10 u
71-55-6	1,1,1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

Data reporting qualifiers are explained on Page 2.

Sample Number
S-1

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-1

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/15/85
Date Analyzed: ~~04/30/85~~ UM 05/01/85
Conc/Dil Factor: 1

CAS Number		ug/l **********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 1

Sample Number
S-1

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******

NO VOA COMPOUND FOUND
NO SEMI-VOLATILE COMPOUNDS FOUND

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16060723
Sample Matrix: Water
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/l
78-87-5	1,2-Dichloropropane	
10061-02-6	Trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
108-10-1	4-Methyl-2-Pentanone	
591-78-6	2-Hexanone	
127-18-4	Tetrachloroethene	
79-34-5	1,1,2,2-Tetrachloroethane	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in th blank as well as a sample. It indicates possible/ probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
S-1

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analyzed: 07/25/86
Conc/Dil Factor: 1.0
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
108-95-2	Phenol	10 u
111-44-4	bis(2-Chloroethyl)Ether	10 u
95-57-8	2-Chlorophenol	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u
100-51-6	Benzyl Alcohol	10 u
95-50-1	1,2-Dichlorobenzene	10 u
95-48-7	2-Methylphenol	10 u
39638-32-9	bis(2-chloroisopropyl)Ether	10 u
106-44-5	4-Methylphenol	10 u
621-64-7	N-Nitroso-Di-n-Propylamine	10 u
67-72-1	Hexachloroethane	10 u
98-95-3	Nitrobenzene	10 u
78-59-1	Isophorone	10 u
88-75-5	2-Nitrophenol	10 u
105-67-9	2,4-Dimethylphenol	10 u
65-85-0	Benzoic Acid	50 u
111-91-1	bis(2-Chloroethoxy)Methane	10 u
120-83-2	2,4-Dichlorophenol	10 u
120-82-1	1,2,4-Trichlorobenzene	10 u
91-20-3	Naphthalene	10 u
106-47-8	4-Chloroaniline	10 u
87-68-3	Hexachlorobutadiene	10 u
59-50-7	4-Chloro-3-Methylphenol	10 u
91-57-6	2-Methylnaphthalene	10 u
77-47-4	Hexachlorocyclopentadiene	10 u
88-06-2	2,4,6-Trichlorophenol	10 u
95-95-4	2,4,5-Trichlorophenol	50 u
91-58-7	2-Chloronaphthalene	10 u
88-74-4	2-Nitroaniline	50 u
131-11-3	Dimethyl Phthalate	10 u
208-96-8	Acenaphthylene	10 u
99-09-2	3-Nitroaniline	50 u

CAS Number		ug/l
83-32-9	Acenaphthene	10 u
51-28-5	2,4-Dinitrophenol	50 u
100-02-7	4-Nitrophenol	50 u
132-64-9	Dibenzofuran	10 u
121-14-2	2,4-Dinitrotoluene	10 u
606-20-2	2,6-Dinitrotoluene	10 u
84-66-2	Diethylphthalate	10 u
7005-72-3	4-Chlorophenyl-phenylether	10 u
86-73-7	Fluorene	10 u
100-01-6	4-Nitroaniline	50 u
534-52-1	4,6-Dinitro-2-Methylphenol	50 u
86-30-6	N-Nitrosodiphenylamine(1)	10 u
101-55-3	4-Bromophenyl-phenylether	10 u
118-74-1	Hexachlorobenzene	10 u
87-86-5	Pentachlorophenol	50 u
85-01-8	Phenanthrene	10 u
120-12-7	Anthracene	10 u
84-74-2	Di-n-Butylphthalate	10 u
206-44-0	Fluoranthene	10 u
129-00-0	Pyrene	10 u
85-68-7	Butylbenzylphthalate	10 u
91-94-1	3,3'-Dichlorobenzidine	20 u
56-55-3	Benzo (a)Anthracene	10 u
117-81-7	bis(2-Ethylhexyl)Phthalate	10 u
218-01-9	Chrysene	10 u
117-84-0	Di-n-Octyl Phthalate	10 u
205-99-2	Benzo(b)Fluoranthene	10 u
207-08-9	Benzo(k)Fluoranthene	10 u
50-32-8	Benzo(a)Pyrene	10 u
193-39-5	Indeno(1,2,3-cd)Pyrene	10 u
53-70-3	Dibenz(a,h)Anthracene	10 u
191-24-2	Benzo(g,h,i)Perylene	10 u

(1)-Cannot be separated from diphenylamine

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
SW Surface Water
Alltift Realty (1)

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040818 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	800	(P)	13.	Magnesium	80000	(P)
2.	Antimony	340	(F)	14.	Manganese	2100	(P)
3.	Arsenic	[1]	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	50	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	64000	(P)
6.	Cadmium	5 U	(F)	18.	Selenium	5 U	(F)
7.	Calcium	260000	(P)	19.	Silver	10 U	(P)
8.	Chromium	50	(P)	20.	Sodium	240000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	10	(F)
10.	Copper	73	(P)	22.	Tin	44	(F)
11.	Iron	1900	(P)	23.	Vanadium	[4]	(F)
12.	Lead	9	(F)	24.	Zinc	140	(P)

Cyanide _____ Percent Solids (%) _____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) ref: Identification immediately following the Cover Page

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-2

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040818
Sample Matrix: Water
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

****

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: 04/18/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	3.2 J,B	
67-64-1	Acetone	11	
75-15-0	Carbon Disulfide		5 u
75-35-4	1,1-Dichloroethene		5 u
75-34-3	1,1-Dichloroethane		5 u
156-60-5	Trans-1,2-Dichloroethene	~~3.5~~ 3.5 J	
67-66-3	Chloroform		5 u
107-06-2	1,2-Dichloroethane		5 u
78-93-3	2-Butanone		10 u
71-55-6	1,1,1-Trichloroethane		5 u
56-23-5	Carbon Tetrachloride		5 u
108-05-4	Vinyl Acetate		10 u
75-27-4	Bromodichloromethane		5 u

mk 6/25/85

Data reporting qualifiers are explained on Page 2.
****

Sample Number
S-2

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	2.8 J

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-2

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/15/85
Date Analyzed: ~~04/30/85 LM~~ 05/01/85
Conc/Dil Factor: 1

CAS Number		ug/l
		**********
319-84-6	Alpha-BHC	0.05 u
319-85-7	Beta-BHC	0.05 u
319-86-8	Delta-BHC	0.05 u
58-89-9	Gamma-BHC(lindane)	0.05 u
76-44-8	Heptachlor	0.05 u
309-00-2	Aldrin	0.05 u
1024-57-3	Heptachlor Epoxide	0.05 u
959-98-8	Endosulfan I	0.05 u
60-57-1	Dieldrin	0.10 u
72-55-9	4,4'-DDE	0.10 u
72-20-8	Endrin	0.10 u
33213-65-9	Endosulfan II	0.10 u
72-54-8	4,4'-DDD	0.10 u
7421-93-4	Endrin Aldehyde	0.10 u
1031-07-8	Endosulfan Sulfate	0.10 u
50-29-3	4,4'-DDT	0.10 u
72-43-5	Methoxychlor	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.00 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.00 u
11096-82-5	Aroclor-1260	1.00 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 1

Sample Number
S-2

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
	NO VOA COMPOUND FOUND			
95-51-2	BENZENAMINE,2-CHLORO-	BNA	492	9 J
121-73-3	BENZENE,1-CHLORO-3-NITRO-	BNA	586	20 J
7364-25-2	3H-INDAZOL-3-ONE,1,2-DIHYDRO-	BNA	866	10 J
	UNKNOWN	BNA	1260	200 J
123-79-5	HEXANEDIOICACID, DIOCTYLESTER Note1:	BNA	1395	1000 J,B
27554-26-3	1,2-BENZENEDICARBOXYLICACID,DIISOOCTYLESTER	BNA	1470	300 J
27554-26-3	1,2-BENZENEDICARBOXYLICACID,DIISOOCTYLESTER	BNA	1518	20 J
	UNKNOWN (PHTHALATE)	BNA	1559	10 J
	UNKNOWN (PHTHALATE)	BNA	1650	20 J

Note1 possible lab contamination

cwk
6/25/15

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16868724
Sample Matrix: Water
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/l
78-87-5	1,2-Dichloropropane	
10061-02-6	Trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
108-10-1	4-Methyl-2-Pentanone	
591-78-6	2-Hexanone	
127-18-4	Tetrachloroethene	
79-34-5	1,1,2,2-Tetrachloroethane	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
S-2

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analyzed: 07/25/86
Conc/Dil Factor: 2.0
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l	CAS Number		ug/l
108-95-2	Phenol	20 U	83-32-9	Acenaphthene	20 U
111-44-4	bis(2-Chloroethyl)Ether	20 U	51-28-5	2,4-Dinitrophenol	100 U
95-57-8	2-Chlorophenol	20 U	100-02-7	4-Nitrophenol	100 U
541-73-1	1,3-Dichlorobenzene	20 U	132-64-9	Dibenzofuran	20 U
106-46-7	1,4-Dichlorobenzene	20 U	121-14-2	2,4-Dinitrotoluene	20 U
100-51-6	Benzyl Alcohol	20 U	606-20-2	2,6-Dinitrotoluene	20 U
95-50-1	1,2-Dichlorobenzene	20 U	84-66-2	Diethylphthalate	20 U
95-48-7	2-Methylphenol	20 U	7005-72-3	4-Chlorophenyl-phenylether	20 U
39638-32-9	bis(2-chloroisopropyl)Ether	20 U	86-73-7	Fluorene	20 U
106-44-5	4-Methylphenol	20 U	100-01-6	4-Nitroaniline	100 U
621-64-7	N-Nitroso-Di-n-Propylamine	20 U	534-52-1	4,6-Dinitro-2-Methylphenol	100 U
67-72-1	Hexachloroethane	20 U	86-30-6	N-Nitrosodiphenylamine(1)	20 U
98-95-3	Nitrobenzene	20 U	101-55-3	4-Bromophenyl-phenylether	20 U
78-59-1	Isophorone	20 U	118-74-1	Hexachlorobenzene	20 U
88-75-5	2-Nitrophenol	20 U	87-86-5	Pentachlorophenol	100 U
105-67-9	2,4-Dimethylphenol	20 U	85-01-8	Phenanthrene	20 U
65-85-0	Benzoic Acid	100 U	120-12-7	Anthracene	20 U
111-91-1	bis(2-Chloroethoxy)Methane	20 U	84-74-2	Di-n-Butylphthalate	20 U
120-83-2	2,4-Dichlorophenol	20 U	206-44-0	Fluoranthene	20 U
120-82-1	1,2,4-Trichlorobenzene	20 U	129-00-0	Pyrene	20 U
91-20-3	Naphthalene	20 U	85-68-7	Butylbenzylphthalate	20 U
106-47-8	4-Chloroaniline	20 U	91-94-1	3,3'-Dichlorobenzidine	40 U
87-68-3	Hexachlorobutadiene	20 U	56-55-3	Benzo (a)Anthracene	20 U
59-50-7	4-Chloro-3-Methylphenol	20 U	117-81-7	bis(2-Ethylhexyl)Phthalate	20 U
91-57-6	2-Methylnaphthalene	20 U	218-01-9	Chrysene	20 U
77-47-4	Hexachlorocyclopentadiene	20 U	117-84-0	Di-n-Octyl Phthalate	20 U
88-06-2	2,4,6-Trichlorophenol	20 U	205-99-2	Benzo(b)Fluoranthene	20 U
95-95-4	2,4,5-Trichlorophenol	100 U	207-08-9	Benzo(k)Fluoranthene	20 U
91-58-7	2-Chloronaphthalene	20 U	50-32-8	Benzo(a)Pyrene	20 U
88-74-4	2-Nitroaniline	100 U	193-39-5	Indeno(1,2,3-cd)Pyrene	20 U
131-11-3	Dimethyl Phthalate	20 U	53-70-3	Dibenz(a,h)Anthracene	20 U
208-96-8	Acenaphthylene	20 U	191-24-2	Benzo(g,h,i)Perylene	20 U
99-09-2	3-Nitroaniline	100 U			

(1)-Cannot be separated from diphenylamine

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
53 Surface water
Alltift Realty (1)

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040819 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	78000	(P)
2.	Antimony	74	(F)	14.	Manganese	1100	(P)
3.	Arsenic	[2]	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200	(P)	16.	Nickel	40 U	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	68000	(P)
6.	Cadmium	5 U	(F)	18.	Selenium	5 U	(F)
7.	Calcium	250000	(P)	19.	Silver	10 U	(P)
8.	Chromium	20	(P)	20.	Sodium	280000	(P)
9.	Cobalt	[30]	(P)	21.	Thallium	[9]	(F)
10.	Copper	30	(P)	22.	Tin	58	(F)
11.	Iron	1600	(P)	23.	Vanadium	[6]	(F)
12.	Lead	12	(F)	24.	Zinc	90	(P)

Cyanide _____ Percent Solids (%) _____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) ref: Identification immediately following the Cover Page

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-3

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040819
Sample Matrix: Water
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: 04/18/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l
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	3.0 J,B
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1,1-Dichloroethene	5 u
75-34-3	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
78-93-3	2-Butanone	10 u
71-55-6	1,1,1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

Data reporting qualifiers are explained on Page 2.

Sample Number
S-3

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-3

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/15/85
Date Analyzed: ~~04/30/85 LM~~ 05/01/85
Conc/Dil Factor: 1

CAS Number		ug/l **********	
319-84-6	Alpha-BHC	0.05	u
319-85-7	Beta-BHC	0.05	u
319-86-8	Delta-BHC	0.05	u
58-89-9	Gamma-BHC(lindane)	0.05	u
76-44-8	Heptachlor	0.05	u
309-00-2	Aldrin	0.05	u
1024-57-3	Heptachlor Epoxide	0.05	u
959-98-8	Endosulfan I	0.05	u
60-57-1	Dieldrin	0.10	u
72-55-9	4,4'-DDE	0.10	u
72-20-8	Endrin	0.10	u
33213-65-9	Endosulfan II	0.10	u
72-54-8	4,4'-DDD	0.10	u
7421-93-4	Endrin Aldehyde	0.10	u
1031-07-8	Endosulfan Sulfate	0.10	u
50-29-3	4,4'-DDT	0.10	u
72-43-5	Methoxychlor	0.50	u
53494-70-5	Endrin Ketone	0.10	u
57-74-9	Chlordane	0.50	u
8001-35-2	Toxaphene	1.00	u
12674-11-2	Aroclor-1016	0.50	u
11104-28-2	Aroclor-1221	0.50	u
11141-16-5	Aroclor-1232	0.50	u
53469-21-9	Aroclor-1242	0.50	u
12672-29-6	Aroclor-1248	0.50	u
11097-69-1	Aroclor-1254	1.00	u
11096-82-5	Aroclor-1260	1.00	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 1

Sample Number
S-3

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
	NO VOA COMPOUND FOUND			
1003-64-1	CYCLOHEXANE,ETHYLIDENE-	BNA	647	10 J
934-34-9	2(3H)-BENZOTHIAZOLONE	BNA	948	8 J
53907-95-2	2-PROPANOL,1-(1-METHYLPROPOXY)-	BNA	1262	300 J

Sample Number

S-3

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16068726
Sample Matrix: Water
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/l
78-87-5	1,2-Dichloropropane	
10061-02-6	Trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
108-10-1	4-Methyl-2-Pentanone	
591-78-6	2-Hexanone	
127-18-4	Tetrachloroethene	
79-34-5	1,1,2,2-Tetrachloroethane	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S — Spiked Compound

NR — No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
S-3

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analyzed: 07/25/86
Conc/Dil Factor: 1.0
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
108-95-2	Phenol	10 u
111-44-4	bis(2-Chloroethyl)Ether	10 u
95-57-8	2-Chlorophenol	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u
100-51-6	Benzyl Alcohol	10 u
95-50-1	1,2-Dichlorobenzene	10 u
95-48-7	2-Methylphenol	10 u
39638-32-9	bis(2-chloroisopropyl)Ether	10 u
106-44-5	4-Methylphenol	10 u
621-64-7	N-Nitroso-Di-n-Propylamine	10 u
67-72-1	Hexachloroethane	10 u
98-95-3	Nitrobenzene	10 u
78-59-1	Isophorone	10 u
88-75-5	2-Nitrophenol	10 u
105-67-9	2,4-Dimethylphenol	10 u
65-85-0	Benzoic Acid	50 u
111-91-1	bis(2-Chloroethoxy)Methane	10 u
120-83-2	2,4-Dichlorophenol	10 u
120-82-1	1,2,4-Trichlorobenzene	10 u
91-20-3	Naphthalene	10 u
106-47-8	4-Chloroaniline	10 u
87-68-3	Hexachlorobutadiene	10 u
59-50-7	4-Chloro-3-Methylphenol	10 u
91-57-6	2-Methylnaphthalene	10 u
77-47-4	Hexachlorocyclopentadiene	10 u
88-06-2	2,4,6-Trichlorophenol	10 u
95-95-4	2,4,5-Trichlorophenol	50 u
91-58-7	2-Chloronaphthalene	10 u
88-74-4	2-Nitroaniline	50 u
131-11-3	Dimethyl Phthalate	10 u
208-96-8	Acenaphthylene	10 u
99-09-2	3-Nitroaniline	50 u

CAS Number		ug/l
83-32-9	Acenaphthene	10 u
51-28-5	2,4-Dinitrophenol	50 u
100-02-7	4-Nitrophenol	50 u
132-64-9	Dibenzofuran	10 u
121-14-2	2,4-Dinitrotoluene	10 u
606-20-2	2,6-Dinitrotoluene	10 u
84-66-2	Diethylphthalate	10 u
7005-72-3	4-Chlorophenyl-phenylether	10 u
86-73-7	Fluorene	10 u
100-01-6	4-Nitroaniline	50 u
534-52-1	4,6-Dinitro-2-Methylphenol	50 u
86-30-6	N-Nitrosodiphenylamine(1)	10 u
101-55-3	4-Bromophenyl-phenylether	10 u
118-74-1	Hexachlorobenzene	10 u
87-86-5	Pentachlorophenol	50 u
85-01-8	Phenanthrene	10 u
120-12-7	Anthracene	10 u
84-74-2	Di-n-Butylphthalate	10 u
206-44-0	Fluoranthene	10 u
129-00-0	Pyrene	10 u
85-68-7	Butylbenzylphthalate	10 u
91-94-1	3,3'-Dichlorobenzidine	20 u
56-55-3	Benzo (a)Anthracene	10 u
117-81-7	bis(2-Ethylhexyl)Phthalate	10 u
218-01-9	Chrysene	10 u
117-84-0	Di-n-Octyl Phthalate	10 u
205-99-2	Benzo(b)Fluoranthene	10 u
207-08-9	Benzo(k)Fluoranthene	10 u
50-32-8	Benzo(a)Pyrene	10 u
193-39-5	Indeno(1,2,3-cd)Pyrene	10 u
53-70-3	Dibenz(a,h)Anthracene	10 u
191-24-2	Benzo(g,h,i)Perylene	10 u

(1)-Cannot be separated from diphenylamine

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
S4 surface Water
Alltift Realty (1)

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040820 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 (P)	13.	Magnesium	65000 (P)
2.	Antimony	[47] (F)	14.	Manganese	970 (P)
3.	Arsenic	[4] (F)	15.	Mercury	0.2 (C)
4.	Barium	200 (P)	16.	Nickel	40 (P)
5.	Beryllium	5 U (P)	17.	Potassium	67000 (P)
6.	Cadmium	5 U (F)	18.	Selenium	5 U (F)
7.	Calcium	230000 (P)	19.	Silver	10 U (P)
8.	Chromium	30 (P)	20.	Sodium	290000 (P)
9.	Cobalt	[30] (P)	21.	Thallium	[9] (F)
10.	Copper	37 (P)	22.	Tin	45 (F)
11.	Iron	2100 (P)	23.	Vanadium	[5] (F)
12.	Lead	16 (F)	24.	Zinc	120 (P)

Cyanide _____ Percent Solids (%) _____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) ref: Identification immediately following the Cover Page.

Lab Manager M J Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-4

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040820
Sample Matrix: Water
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

****

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: 04/18/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l	
		**********	
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	2.7 J,B	
67-64-1	Acetone	10	u
75-15-0	Carbon Disulfide	5	u
75-35-4	1,1-Dichloroethene	5	u
75-34-3	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
78-93-3	2-Butanone	10	u
71-55-6	1,1,1-Trichloroethane	5	u
56-23-5	Carbon Tetrachloride	5	u
108-05-4	Vinyl Acetate	10	u
75-27-4	Bromodichloromethane	5	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
S-4

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-4

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/15/85
Date Analyzed: ~~04/30/85~~ LM 05/01/85
Conc/Dil Factor: 1

CAS Number		ug/l
		**********
319-84-6	Alpha-BHC	0.05 u
319-85-7	Beta-BHC	0.05 u
319-86-8	Delta-BHC	0.05 u
58-89-9	Gamma-BHC(lindane)	0.05 u
76-44-8	Heptachlor	0.05 u
309-00-2	Aldrin	0.05 u
1024-57-3	Heptachlor Epoxide	0.05 u
959-98-8	Endosulfan I	0.05 u
60-57-1	Dieldrin	0.10 u
72-55-9	4,4'-DDE	0.10 u
72-20-8	Endrin	0.10 u
33213-65-9	Endosulfan II	0.10 u
72-54-8	4,4'-DDD	0.10 u
7421-93-4	Endrin Aldehyde	0.10 u
1031-07-8	Endosulfan Sulfate	0.10 u
50-29-3	4,4'-DDT	0.10 u
72-43-5	Methoxychlor	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.00 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.00 u
11096-82-5	Aroclor-1260	1.00 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 1

Sample Number
S-4

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l
**********	**********	****	****	******
	NO VOA COMPOUND FOUND			
95-51-2	BENZENAMINE,2-CHLORO-	BNA	484	9 J
	UNKNOWN	BNA	1246	200 J
	UNKNOWN	BNA	1369	10 J

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16060727
Sample Matrix: Water
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S — Spiked Compound

NR — No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
S-4

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analyzed: 07/28/86
Conc/Dil Factor: 1
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l	CAS Number		ug/l
108-95-2	Phenol	10 U	83-32-9	Acenaphthene	10 U
111-44-4	bis(2-Chloroethyl)Ether	10 U	51-28-5	2,4-Dinitrophenol	50 U
95-57-8	2-Chlorophenol	10 U	100-02-7	4-Nitrophenol	50 U
541-73-1	1,3-Dichlorobenzene	10 U	132-64-9	Dibenzofuran	10 U
106-46-7	1,4-Dichlorobenzene	10 U	121-14-2	2,4-Dinitrotoluene	10 U
100-51-6	Benzyl Alcohol	10 U	606-20-2	2,6-Dinitrotoluene	10 U
95-50-1	1,2-Dichlorobenzene	10 U	84-66-2	Diethylphthalate	10 U
95-48-7	2-Methylphenol	10 U	7005-72-3	4-Chlorophenyl-phenylether	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U	86-73-7	Fluorene	10 U
106-44-5	4-Methylphenol	10 U	100-01-6	4-Nitroaniline	50 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U	534-52-1	4,6-Dinitro-2-Methylphenol	50 U
67-72-1	Hexachloroethane	10 U	86-30-6	N-Nitrosodiphenylamine(1)	10 U
98-95-3	Nitrobenzene	10 U	101-55-3	4-Bromophenyl-phenylether	10 U
78-59-1	Isophorone	10 U	118-74-1	Hexachlorobenzene	10 U
88-75-5	2-Nitrophenol	10 U	87-86-5	Pentachlorophenol	50 U
105-67-9	2,4-Dimethylphenol	10 U	85-01-8	Phenanthrene	10 U
65-85-0	Benzoic Acid	50 U	120-12-7	Anthracene	10 U
111-91-1	bis(2-Chloroethoxy)Methane	10 U	84-74-2	Di-n-Butylphthalate	10 U
120-83-2	2,4-Dichlorophenol	10 U	206-44-0	Fluoranthene	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U	129-00-0	Pyrene	10 U
91-20-3	Naphthalene	7 J	85-68-7	Butylbenzylphthalate	10 U
106-47-8	4-Chloroaniline	99	91-94-1	3,3'-Dichlorobenzidine	20 U
87-68-3	Hexachlorobutadiene	10 U	56-55-3	Benzo (a)Anthracene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	10 U
91-57-6	2-Methylnaphthalene	10 U	218-01-9	Chrysene	10 U
77-47-4	Hexachlorocyclopentadiene	10 U	117-84-0	Di-n-Octyl Phthalate	10 U
88-06-2	2,4,6-Trichlorophenol	10 U	205-99-2	Benzo(b)Fluoranthene	10 U
95-95-4	2,4,5-Trichlorophenol	50 U	207-08-9	Benzo(k)Fluoranthene	10 U
91-58-7	2-Chloronaphthalene	10 U	50-32-8	Benzo(a)Pyrene	10 U
88-74-4	2-Nitroaniline	50 U	193-39-5	Indeno(1,2,3-cd)Pyrene	10 U
131-11-3	Dimethyl Phthalate	10 U	53-70-3	Dibenz(a,h)Anthracene	10 U
208-96-8	Acenaphthylene	10 U	191-24-2	Benzo(g,h,i)Perylene	10 U
99-09-2	3-Nitroaniline	50 U			

(1)-Cannot be separated from diphenylamine

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
S-5 Surface Water (1)
Alltift Realty

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040821 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	200 U	(P)	13.	Magnesium	32000	(P)
2.	Antimony	[18]	(F)	14.	Manganese	440	(P)
3.	Arsenic	[3]	(F)	15.	Mercury	0.2 U	(C)
4.	Barium	200 U	(P)	16.	Nickel	[30]	(P)
5.	Beryllium	5 U	(P)	17.	Potassium	26000	(P)
6.	Cadmium	5 U	(F)	18.	Selenium	5 U	(F)
7.	Calcium	210000	(P)	19.	Silver	10 U	(P)
8.	Chromium	20	(P)	20.	Sodium	120000	(P)
9.	Cobalt	50 U	(P)	21.	Thallium	[4]	(F)
10.	Copper	27	(P)	22.	Tin	[13]	(F)
11.	Iron	690	(P)	23.	Vanadium	[3]	(F)
12.	Lead	28	(F)	24.	Zinc	90	(P)
	Cyanide	_____			Percent Solids (%)	_____	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) ref: Identification immediately following the Cover Page.

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-5

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040821
Sample Matrix: Water
Data Release Authorized By:
****

Case No.: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: 04/18/85
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/l
		**********
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	3.2 J,B
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1,1-Dichloroethene	5 u
75-34-3	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
78-93-3	2-Butanone	10 u
71-55-6	1,1,1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
S-5

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/l
		**********
79-34-5	1,1,2,2-Tetrachloroethane	5 u
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	2-Hexanone	10 u
108-10-1	4-Methyl-2-Pentanone	10 u
127-18-4	Tetrachlorethene	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-5

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/15/85
Date Analyzed: ~~04/30/85~~ LM 05/01/85
Conc/Dil Factor: 1

CAS Number		ug/l
		**********
319-84-6	Alpha-BHC	0.05 u
319-85-7	Beta-BHC	0.05 u
319-86-8	Delta-BHC	0.05 u
58-89-9	Gamma-BHC(lindane)	0.05 u
76-44-8	Heptachlor	0.05 u
309-00-2	Aldrin	0.05 u
1024-57-3	Heptachlor Epoxide	0.05 u
959-98-8	Endosulfan I	0.05 u
60-57-1	Dieldrin	0.10 u
72-55-9	4,4'-DDE	0.10 u
72-20-8	Endrin	0.10 u
33213-65-9	Endosulfan II	0.10 u
72-54-8	4,4'-DDD	0.10 u
7421-93-4	Endrin Aldehyde	0.10 u
1031-07-8	Endosulfan Sulfate	0.10 u
50-29-3	4,4'-DDT	0.10 u
72-43-5	Methoxychlor	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.00 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.00 u
11096-82-5	Aroclor-1260	1.00 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 1

Sample Number
S-5

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/l	
**********	**********	****	****	******	
	NO VOA COMPOUND FOUND				
53907-95-2	2-PROPANOL,1-(1-METHYLPROPOXY)-	BNA	1252	10	J

Sample Number

S-3

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY
Lab Sample ID No: 16068728
QC Report No:
Sample Matrix: Water
Contract No:
Data Release Authorized By:
Date Sample Received: 06/14/86

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 0

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ml in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S — Spiked Compound

NR — No value required.

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/18/86
Date Analyzed: 07/25/86
Conc/Dil Factor: 1.0
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l	CAS Number		ug/l
108-95-2	Phenol	10 U	83-32-9	Acenaphthene	10 U
111-44-4	bis(2-Chloroethyl)Ether	10 U	51-28-5	2,4-Dinitrophenol	50 U
95-57-8	2-Chlorophenol	10 U	100-02-7	4-Nitrophenol	50 U
541-73-1	1,3-Dichlorobenzene	10 U	132-64-9	Dibenzofuran	10 U
106-46-7	1,4-Dichlorobenzene	10 U	121-14-2	2,4-Dinitrotoluene	10 U
100-51-6	Benzyl Alcohol	10 U	606-20-2	2,6-Dinitrotoluene	10 U
95-50-1	1,2-Dichlorobenzene	10 U	84-66-2	Diethylphthalate	10 U
95-48-7	2-Methylphenol	10 U	7005-72-3	4-Chlorophenyl-phenylether	10 U
39638-32-9	bis(2-chloroisopropyl)Ether	10 U	86-73-7	Fluorene	10 U
106-44-5	4-Methylphenol	10 U	100-01-6	4-Nitroaniline	50 U
621-64-7	N-Nitroso-Di-n-Propylamine	10 U	534-52-1	4,6-Dinitro-2-Methylphenol	50 U
67-72-1	Hexachloroethane	10 U	86-30-6	N-Nitrosodiphenylamine(1)	10 U
98-95-3	Nitrobenzene	10 U	101-55-3	4-Bromophenyl-phenylether	10 U
78-59-1	Isophorone	10 U	118-74-1	Hexachlorobenzene	10 U
88-75-5	2-Nitrophenol	10 U	87-86-5	Pentachlorophenol	50 U
105-67-9	2,4-Dimethylphenol	10 U	85-01-8	Phenanthrene	10 U
65-85-0	Benzoic Acid	50 U	120-12-7	Anthracene	10 U
111-91-1	bis(2-Chloroethoxy)Methane	10 U	84-74-2	Di-n-Butylphthalate	10 U
120-83-2	2,4-Dichlorophenol	10 U	206-44-0	Fluoranthene	10 U
120-82-1	1,2,4-Trichlorobenzene	10 U	129-00-0	Pyrene	10 U
91-20-3	Naphthalene	10 U	85-68-7	Butylbenzylphthalate	10 U
106-47-8	4-Chloroaniline	49	91-94-1	3,3'-Dichlorobenzidine	20 U
87-68-3	Hexachlorobutadiene	10 U	56-55-3	Benzo (a)Anthracene	10 U
59-50-7	4-Chloro-3-Methylphenol	10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	10 U
91-57-6	2-Methylnaphthalene	10 U	218-01-9	Chrysene	10 U
77-47-4	Hexachlorocyclopentadiene	10 U	117-84-0	Di-n-Octyl Phthalate	10 U
88-06-2	2,4,6-Trichlorophenol	10 U	205-99-2	Benzo(b)Fluoranthene	10 U
95-95-4	2,4,5-Trichlorophenol	50 U	207-08-9	Benzo(k)Fluoranthene	10 U
91-58-7	2-Chloronaphthalene	10 U	50-32-8	Benzo(a)Pyrene	10 U
88-74-4	2-Nitroaniline	50 U	193-39-5	Indeno(1,2,3-cd)Pyrene	10 U
131-11-3	Dimethyl Phthalate	10 U	53-70-3	Dibenz(a,h)Anthracene	10 U
208-96-8	Acenaphthylene	10 U	191-24-2	Benzo(g,h,i)Perylene	10 U
99-09-2	3-Nitroaniline	50 U			

(1)-Cannot be separated from diphenylamine

Analytical Results for Sediment Samples

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
5-1 Sediment
Alltift Realty ①

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040812 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or (mg/kg dry weight) (Circle One)

1.	Aluminum	2200	(P)	13.	Magnesium	1100	(P)
2.	Antimony	[1.8]	(F)	14.	Manganese	2300 R	(P)
3.	Arsenic	6.7	(F)	15.	Mercury	0.21 U	(C)
4.	Barium	100	(P)	16.	Nickel	50	(P)
5.	Beryllium	1.0 U	(P)	17.	Potassium	2900	(P)
6.	Cadmium	2.4	(F)	18.	Selenium	1.9	(F)
7.	Calcium	[960]	(P)	19.	Silver	2.1	(P)
8.	Chromium	110 R	(P)	20.	Sodium	2300	(P)
9.	Cobalt	35	(P)	21.	Thallium	3.4	(F)
10.	Copper	130 R	(P)	22.	Tin	10	(F)
11.	Iron	300000	(P)	23.	Vanadium	41	(F)
12.	Lead	600	(F)	24.	Zinc	1300	(P)

Cyanide _____ Percent Solids (%) 47

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ① ref: Identification immediately following the Cover Page.

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-1

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040812
Sample Matrix: Soil
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/17/85
Date Analyzed: 04/17/85
Conc/Dil Factor: 1 pH 7
Percent Moisture: 53
Percent Moisture (Decanted): NR

CAS Number		ug/kg
		**********
74-87-3	Chloromethane	21 u
74-83-9	Bromomethane	21 u
75-01-4	Vinyl chloride	21 u
75-00-3	Chloroethane	21 u
75-09-2	Methylene Chloride	66 B
67-64-1	Acetone	70 B
75-15-0	Carbon Disulfide	10 u
75-35-4	1,1-Dichloroethene	10 u
75-34-3	1,1-Dichloroethane	10 u
156-60-5	Trans-1,2-Dichloroethene	10 u
67-66-3	Chloroform	8.1 J,B
107-06-2	1,2-Dichloroethane	10 u
78-93-3	2-Butanone	21 u
71-55-6	1,1,1-Trichloroethane	10 u
56-23-5	Carbon Tetrachloride	10 u
108-05-4	Vinyl Acetate	21 u
75-27-4	Bromodichloromethane	10 u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
S-1

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/kg **********
79-34-5	1,1,2,2-Tetrachloroethane	10 u
78-87-5	1,2-Dichloropropane	10 u
10061-02-6	Trans-1,3-Dichloropropene	10 u
79-01-6	Trichloroethene	10 u
124-48-1	Dibromochloromethane	10 u
79-00-5	1,1,2-Trichloroethane	10 u
71-43-2	Benzene	10 u
10061-01-5	cis-1,3-Dichloropropene	10 u
110-75-8	2-Chloroethylvinylether	21 u
75-25-2	Bromoform	10 u
591-78-6	2-Hexanone	21 u
108-10-1	4-Methyl-2-Pentanone	21 u
127-18-4	Tetrachlorethene	10 u
108-88-3	Toluene	7.1 J
108-90-7	Chlorobenzene	10 u
100-41-4	Ethylbenzene	10 u
100-42-5	Styrene	10 u
	Total Xylenes	10 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-1

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: 05/28/85
Conc/Dil Factor: 10

CAS Number		ug/kg	
		**********	
319-84-6	Alpha-BHC	168.0	u
319-85-7	Beta-BHC	168.0	u
319-86-8	Delta-BHC	168.0	u
58-89-9	Gamma-BHC(lindane)	168.0	u
76-44-8	Heptachlor	168.0	u
309-00-2	Aldrin	168.0	u
1024-57-3	Heptachlor Epoxide	168.0	u
959-98-8	Endosulfan I	168.0	u
60-57-1	Dieldrin	336.0	u
72-55-9	4,4'-DDE	336.0	u
72-20-8	Endrin	336.0	u
33213-65-9	Endosulfan II	336.0	u
72-54-8	4,4'-DDD	336.0	u
7421-93-4	Endrin Aldehyde	336.0	u
1031-07-8	Endosulfan Sulfate	336.0	u
50-29-3	4,4'-DDT	336.0	u
72-43-5	Methoxychlor	1680.0	u
53494-70-5	Endrin Ketone	336.0	u
57-74-9	Chlordane	1680.0	u
8001-35-2	Toxaphene	3360.0	u
12674-11-2	Aroclor-1016	1680.0	u
11104-28-2	Aroclor-1221	1680.0	u
11141-16-5	Aroclor-1232	1680.0	u
53469-21-9	Aroclor-1242	1680.0	u
12672-29-6	Aroclor-1248	1680.0	u
11097-69-1	Aroclor-1254	3360.0	u
11096-82-5	Aroclor-1260	3360.0	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 14.1 Vt 20000 Vi 4

Sample Number
S-1

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/kg	
**********	**********	****	****	******	
76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	236	90	J,B
	UNKNOWN	BNA	1032	3000	J

Sample Number

SED-1

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16090726
Sample Matrix: Soil
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 09/17/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: 40
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in th blank as well as a sample. It indicates possible/ probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
SED-1

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 09/23/86
Date Analyzed: 10/01/86
Conc/Dil Factor: 40
Percent Moisture (Decanted): 44

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg	CAS Number		ug/kg
108-95-2	Phenol	23760 u	83-32-9	Acenaphthene	23760 u
111-44-4	bis(2-Chloroethyl)Ether	23760 u	51-28-5	2,4-Dinitrophenol	115200 u
95-57-8	2-Chlorophenol	23760 u	100-02-7	4-Nitrophenol	115200 u
541-73-1	1,3-Dichlorobenzene	23760 u	132-64-9	Dibenzofuran	23760 u
106-46-7	1,4-Dichlorobenzene	23760 u	121-14-2	2,4-Dinitrotoluene	23760 u
100-51-6	Benzyl Alcohol	23760 u	606-20-2	2,6-Dinitrotoluene	23760 u
95-50-1	1,2-Dichlorobenzene	23760 u	84-66-2	Diethylphthalate	23760 u
95-48-7	2-Methylphenol	23760 u	7005-72-3	4-Chlorophenyl-phenylether	23760 u
39638-32-9	bis(2-chloroisopropyl)Ether	23760 u	86-73-7	Fluorene	23760 u
106-44-5	4-Methylphenol	23760 u	100-01-6	4-Nitroaniline	115200 u
621-64-7	N-Nitroso-Di-n-Propylamine	23760 u	534-52-1	4,6-Dinitro-2-Methylphenol	115200 u
67-72-1	Hexachloroethane	23760 u	86-30-6	N-Nitrosodiphenylamine(1)	23760 u
98-95-3	Nitrobenzene	23760 u	101-55-3	4-Bromophenyl-phenylether	23760 u
78-59-1	Isophorone	23760 u	118-74-1	Hexachlorobenzene	23760 u
88-75-5	2-Nitrophenol	23760 u	87-86-5	Pentachlorophenol	115200 u
105-67-9	2,4-Dimethylphenol	23760 u	85-01-8	Phenanthrene	23760 u
65-85-0	Benzoic Acid	115200 u	120-12-7	Anthracene	23760 u
111-91-1	bis(2-Chloroethoxy)Methane	23760 u	84-74-2	Di-n-Butylphthalate	23760 u
120-83-2	2,4-Dichlorophenol	23760 u	206-44-0	Fluoranthene	23760 u
120-82-1	1,2,4-Trichlorobenzene	23760 u	129-00-0	Pyrene	23760 u
91-20-3	Naphthalene	23760 u	85-68-7	Butylbenzylphthalate	23760 u
106-47-8	4-Chloroaniline	23760 u	91-94-1	3,3'-Dichlorobenzidine	47520 u
87-68-3	Hexachlorobutadiene	23760 u	56-55-3	Benzo (a)Anthracene	23760 u
59-50-7	4-Chloro-3-Methylphenol	23760 u	117-81-7	bis(2-Ethylhexyl)Phthalate	23760 u
91-57-6	2-Methylnaphthalene	23760 u	218-01-9	Chrysene	23760 u
77-47-4	Hexachlorocyclopentadiene	23760 u	117-84-0	Di-n-Octyl Phthalate	23760 u
88-06-2	2,4,6-Trichlorophenol	23760 u	205-99-2	Benzo(b)Fluoranthene	23760 u
95-95-4	2,4,5-Trichlorophenol	115200 u	207-08-9	Benzo(k)Fluoranthene	23760 u
91-58-7	2-Chloronaphthalene	23760 u	50-32-8	Benzo(a)Pyrene	23760 u
88-74-4	2-Nitroaniline	115200 u	193-39-5	Indeno(1,2,3-cd)Pyrene	23760 u
131-11-3	Dimethyl Phthalate	23760 u	53-70-3	Dibenz(a,h)Anthracene	23760 u
208-96-8	Acenaphthylene	23760 u	191-24-2	Benzo(g,h,i)Perylene	23760 u
99-09-2	3-Nitroaniline	115200 u			

(1)-Cannot be separated from diphenylamine

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
SED-1

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1.		UNKNOWN	BNA	237	10000 J
2.	541-05-9	CYCLOTRISILOXANE, HEXAMETHYL-	BNA	242	20000 J
3.		UNKNOWN (ALDOL CONDENSATION PRODUCT)	BNA	258	200000 J
4.		UNKNOWN (HYDROCARBON)	BNA	985	20000 J
5.		UNKNOWN (HYDROCARBON)	BNA	989	10000 J
6.		UNKNOWN (HYDROCARBON)	BNA	1052	20000 J
7.		UNKNOWN (HYDROCARBON)	BNA	1059	10000 J
8.		UNKNOWN (HYDROCARBON)	BNA	1117	20000 J
9.		UNKNOWN (HYDROCARBON)	BNA	1178	20000 J
10.	10544-50-0	SULFUR, MOL.(S8)	BNA	1206	10000 J
11.		UNKNOWN	BNA	1223	10000 J
12.		UNKNOWN	BNA	1259	10000 J
13.		UNKNOWN (HYDROCARBON)	BNA	1294	10000 J
14.		UNKNOWN (HYDROCARBON)	BNA	1314	20000 J
15.		UNKNOWN (HYDROCARBON)	BNA	1357	10000 J
16.		UNKNOWN	BNA	1370	10000 J
17.		UNKNOWN (HYDROCARBON)	BNA	1449	10000 J
18.		UNKNOWN	BNA	1476	10000 J
19.		UNKNOWN (HYDROCARBON)	BNA	1525	10000 J
20.		UNKNOWN	BNA	1710	40000 J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
S-2 Sediment
Alltift Realty ①

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation
CASE NO. Engineering-Science
SOW NO. 784
LAB SAMPLE ID. NO. 15040813
QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or (mg/kg dry weight) (Circle One)

1.	Aluminum	12000	(P)	13.	Magnesium	3800	(P)
2.	Antimony	78	(F)	14.	Manganese	1400 R	(P)
3.	Arsenic	16	(F)	15.	Mercury	1.4	(C)
4.	Barium	200	(P)	16.	Nickel	200	(P)
5.	Beryllium	0.83 U	(P)	17.	Potassium	3500	(P)
6.	Cadmium	2.6	(F)	18.	Selenium	0.8 U	(F)
7.	Calcium	35000	(P)	19.	Silver	1.7 U	(P)
8.	Chromium	10000 R	(P)	20.	Sodium	1500	(P)
9.	Cobalt	35	(P)	21.	Thallium	1.8 U	(F)
10.	Copper	3600 R	(P)	22.	Tin	14	(F)
11.	Iron	140000	(P)	23.	Vanadium	19	(F)
12.	Lead	370	(F)	24.	Zinc	650	(P)
Cyanide				Percent Solids (%)		59	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ① ref: Identification immediately following the Cover Page

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-2

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040813
Sample Matrix: Soil
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

****

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/17/85
Date Analyzed: 04/17/85
Conc/Dil Factor: 1 pH 7
Percent Moisture: 41
Percent Moisture (Decanted): NR

CAS Number		ug/kg	
74-87-3	Chloromethane	17	u
74-83-9	Bromomethane	17	u
75-01-4	Vinyl chloride	17	u
75-00-3	Chloroethane	17	u
75-09-2	Methylene Chloride	46 B	
67-64-1	Acetone	43 B	
75-15-0	Carbon Disulfide	8	u
75-35-4	1,1-Dichloroethene	8	u
75-34-3	1,1-Dichloroethane	8	u
156-60-5	Trans-1,2-Dichloroethene	8	u
67-66-3	Chloroform	4.6 J,B	
107-06-2	1,2-Dichloroethane	8	u
78-93-3	2-Butanone	17	u
71-55-6	1,1,1-Trichloroethane	8	u
56-23-5	Carbon Tetrachloride	8	u
108-05-4	Vinyl Acetate	17	u
75-27-4	Bromodichloromethane	8	u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
S-2

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/kg	
		**********	
79-34-5	1,1,2,2-Tetrachloroethane	8	u
78-87-5	1,2-Dichloropropane	8	u
10061-02-6	Trans-1,3-Dichloropropene	8	u
79-01-6	Trichloroethene	8	u
124-48-1	Dibromochloromethane	8	u
79-00-5	1,1,2-Trichloroethane	8	u
71-43-2	Benzene	33	
10061-01-5	cis-1,3-Dichloropropene	8	u
110-75-8	2-Chloroethylvinylether	17	u
75-25-2	Bromoform	8	u
591-78-6	2-Hexanone	17	u
108-10-1	4-Methyl-2-Pentanone	17	u
127-18-4	Tetrachlorethene	8	u
108-88-3	Toluene	8	u
108-90-7	Chlorobenzene	75	
100-41-4	Ethylbenzene	8	u
100-42-5	Styrene	8	u
	Total Xylenes	8	u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-2

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: ~~05/28/85~~ AM 05/29/85
Conc/Dil Factor: 100

CAS Number		ug/kg **********	
319-84-6	Alpha-BHC	1360.0	u
319-85-7	Beta-BHC	1360.0	u
319-86-8	Delta-BHC	1360.0	u
58-89-9	Gamma-BHC(lindane)	1360.0	u
76-44-8	Heptachlor	1360.0	u
309-00-2	Aldrin	1360.0	u
1024-57-3	Heptachlor Epoxide	1360.0	u
959-98-8	Endosulfan I	1360.0	u
60-57-1	Dieldrin	-2720.0	u
72-55-9	4,4'-DDE	2720.0	u
72-20-8	Endrin	2720.0	u
33213-65-9	Endosulfan II	2720.0	u
72-54-8	4,4'-DDD	2720.0	u
7421-93-4	Endrin Aldehyde	2720.0	u
1031-07-8	Endosulfan Sulfate	2720.0	u
50-29-3	4,4'-DDT	2720.0	u
72-43-5	Methoxychlor	13600.0	u
53494-70-5	Endrin Ketone	2720.0	u
57-74-9	Chlordane	13600.0	u
8001-35-2	Toxaphene	27200.0	u
12674-11-2	Aroclor-1016	13600.0	u
11104-28-2	Aroclor-1221	13600.0	u
11141-16-5	Aroclor-1232	13600.0	u
53469-21-9	Aroclor-1242	13600.0	u
12672-29-6	Aroclor-1248	13600.0	u
11097-69-1	Aroclor-1254	27200.0	u
11096-82-5	Aroclor-1260	27200.0	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 17.7 Vt 20000 Vi 4

Sample Number
S-2

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/kg
**********	**********	****	****	******
76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	235	60 J,B
110-54-3	HEXANE	VOA	360	9 J,B
6287-38-3	BENZALDEHYDE,3,4-DICHLORO-	BNA	1561	100000 J

Sample Number

SED-2

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16060718
Sample Matrix: Soil
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH 7
Percent Moisture: 58
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/kg
78-87-5	1,2-Dichloropropane	
10061-02-6	Trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
108-10-1	4-Methyl-2-Pentanone	
591-78-6	2-Hexanone	
127-18-4	Tetrachloroethene	
79-34-5	1,1,2,2-Tetrachloroethane	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S — Spiked Compound

NR — No value required.

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/20/86
Date Analyzed: 07/23/86
Conc/Dil Factor: 20
Percent Moisture (Decanted): 58

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg	CAS Number		ug/kg
108-95-2	Phenol	15840 U	83-32-9	Acenaphthene	15840 U
111-44-4	bis(2-Chloroethyl)Ether	15840 U	51-28-5	2,4-Dinitrophenol	76800 U
95-57-8	2-Chlorophenol	15840 U	100-02-7	4-Nitrophenol	76800 U
541-73-1	1,3-Dichlorobenzene	15840 U	132-64-9	Dibenzofuran	15840 U
106-46-7	1,4-Dichlorobenzene	15840 U	121-14-2	2,4-Dinitrotoluene	15840 U
100-51-6	Benzyl Alcohol	15840 U	606-20-2	2,6-Dinitrotoluene	15840 U
95-50-1	1,2-Dichlorobenzene	15840 U	84-66-2	Diethylphthalate	15840 U
95-48-7	2-Methylphenol	15840 U	7005-72-3	4-Chlorophenyl-phenylether	15840 U
39638-32-9	bis(2-chloroisopropyl)Ether	15840 U	86-73-7	Fluorene	15840 U
106-44-5	4-Methylphenol	15840 U	100-01-6	4-Nitroaniline	76800 U
621-64-7	N-Nitroso-Di-n-Propylamine	15840 U	534-52-1	4,6-Dinitro-2-Methylphenol	76800 U
67-72-1	Hexachloroethane	15840 U	86-30-6	N-Nitrosodiphenylamine(1)	15840 U
98-95-3	Nitrobenzene	15840 U	101-55-3	4-Bromophenyl-phenylether	15840 U
78-59-1	Isophorone	15840 U	118-74-1	Hexachlorobenzene	15840 U
88-75-5	2-Nitrophenol	15840 U	87-86-5	Pentachlorophenol	76800 U
105-67-9	2,4-Dimethylphenol	15840 U	85-01-8	Phenanthrene	15840 U
65-85-0	Benzoic Acid	76800 U	120-12-7	Anthracene	15840 U
111-91-1	bis(2-Chloroethoxy)Methane	15840 U	84-74-2	Di-n-Butylphthalate	2400 J,B
120-83-2	2,4-Dichlorophenol	15840 U	206-44-0	Fluoranthene	4900 J
120-82-1	1,2,4-Trichlorobenzene	15840 U	129-00-0	Pyrene	5300 J
91-20-3	Naphthalene	15840 U	85-68-7	Butylbenzylphthalate	15840 U
106-47-8	4-Chloroaniline	15840 U	91-94-1	3,3'-Dichlorobenzidine	31680 U
87-68-3	Hexachlorobutadiene	15840 U	56-55-3	Benzo (a)Anthracene	15840 U
59-50-7	4-Chloro-3-Methylphenol	15840 U	117-81-7	bis(2-Ethylhexyl)Phthalate	15840 U
91-57-6	2-Methylnaphthalene	15840 U	218-01-9	Chrysene	4900 J
77-47-4	Hexachlorocyclopentadiene	15840 U	117-84-0	Di-n-Octyl Phthalate	15840 U
88-06-2	2,4,6-Trichlorophenol	15840 U	205-99-2	Benzo(b)Fluoranthene	3400 J
95-95-4	2,4,5-Trichlorophenol	76800 U	207-08-9	Benzo(k)Fluoranthene	15840 U
91-58-7	2-Chloronaphthalene	15840 U	50-32-8	Benzo(a)Pyrene	15840 U
88-74-4	2-Nitroaniline	76800 U	193-39-5	Indeno(1,2,3-cd)Pyrene	15840 U
131-11-3	Dimethyl Phthalate	15840 U	53-70-3	Dibenz(a,h)Anthracene	15840 U
208-96-8	Acenaphthylene	15840 U	191-24-2	Benzo(g,h,i)Perylene	15840 U
99-09-2	3-Nitroaniline	76800 U			

(1)-Cannot be separated from diphenylamine

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
S-3 Sediment
Alltift Realty ①

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040814 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or (mg/kg dry weight) (Circle One)

1.	Aluminum	10000	(P)	13.	Magnesium	3100	(P)
2.	Antimony	[5.2]	(F)	14.	Manganese	500 R	(P)
3.	Arsenic	28	(F)	15.	Mercury	0.93	(C)
4.	Barium	670	(P)	16.	Nickel	59	(P)
5.	Beryllium	2.2	(P)	17.	Potassium	1700	(P)
6.	Cadmium	4.2	(F)	18.	Selenium	1.2	(F)
7.	Calcium	27000	(P)	19.	Silver	1.7	(P)
8.	Chromium	170 R	(P)	20.	Sodium	1400	(P)
9.	Cobalt	17	(P)	21.	Thallium	[0.3]	(F)
10.	Copper	370 R	(P)	22.	Tin	120	(F)
11.	Iron	61000	(P)	23.	Vanadium	33	(F)
12.	Lead	730	(F)	24.	Zinc	1200	(P)

Cyanide _____ Percent Solids (%) 57

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ① ref: Identification immediately following the Cover Page.

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

ALLTIFT REALTY S-3 ~~FOR BNA MS AND MSD~~
cak 6/26/85

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040814
Sample Matrix: Soil
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/17/85
Date Analyzed: 04/17/85
Conc/Dil Factor: 1 pH 7
Percent Moisture: 43
Percent Moisture (Decanted): NR

CAS Number		ug/kg
		**********
74-87-3	Chloromethane	18.0 u
74-83-9	Bromomethane	18.0 u
75-01-4	Vinyl chloride	18.0 u
75-00-3	Chloroethane	18.0 u
75-09-2	Methylene Chloride	49 B
67-64-1	Acetone	40 B
75-15-0	Carbon Disulfide	9.0 u
75-35-4	1,1-Dichloroethene	9.0 u
75-34-3	1,1-Dichloroethane	9.0 u
156-60-5	Trans-1,2-Dichloroethene	9.0 u
67-66-3	Chloroform	7.6 J
107-06-2	1,2-Dichloroethane	9.0 u
78-93-3	2-Butanone	18.0 u
71-55-6	1,1,1-Trichloroethane	9.0 u
56-23-5	Carbon Tetrachloride	9.0 u
108-05-4	Vinyl Acetate	18.0 u
75-27-4	Bromodichloromethane	9.0 u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
ALLTIFT REALTY S-3 ~~FOR BNA MS AND MSD~~
Lab 6/26/05

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/kg
		**********
79-34-5	1,1,2,2-Tetrachloroethane	9.0 u
78-87-5	1,2-Dichloropropane	9.0 u
10061-02-6	Trans-1,3-Dichloropropene	9.0 u
79-01-6	Trichloroethene	9.0 u
124-48-1	Dibromochloromethane	9.0 u
79-00-5	1,1,2-Trichloroethane	9.0 u
71-43-2	Benzene	9.0 u
10061-01-5	cis-1,3-Dichloropropene	9.0 u
110-75-8	2-Chloroethylvinylether	18.0 u
75-25-2	Bromoform	9.0 u
591-78-6	2-Hexanone	18.0 u
108-10-1	4-Methyl-2-Pentanone	18.0 u
127-18-4	Tetrachlorethene	9.0 u
108-88-3	Toluene	9.0 u
108-90-7	Chlorobenzene	15
100-41-4	Ethylbenzene	9.0 u
100-42-5	Styrene	9.0 u
	Total Xylenes	9.0 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
ALLTIFT REALTY S-3 ~~FOR BNA MS AND MSD~~
(ok 6/24/85

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: 05/28/85
Conc/Dil Factor: 100

CAS Number		ug/kg	
		**********	
319-84-6	Alpha-BHC	1440.0	u
319-85-7	Beta-BHC	1440.0	u
319-86-8	Delta-BHC	1440.0	u
58-89-9	Gamma-BHC(lindane)	1440.0	u
76-44-8	Heptachlor	1440.0	u
309-00-2	Aldrin	1440.0	u
1024-57-3	Heptachlor Epoxide	1440.0	u
959-98-8	Endosulfan I	1440.0	u
60-57-1	Dieldrin	2880.0	u
72-55-9	4,4'-DDE	2880.0	u
72-20-8	Endrin	2880.0	u
33213-65-9	Endosulfan II	2880.0	u
72-54-8	4,4'-DDD	2880.0	u
7421-93-4	Endrin Aldehyde	2880.0	u
1031-07-8	Endosulfan Sulfate	2880.0	u
50-29-3	4,4'-DDT	2880.0	u
72-43-5	Methoxychlor	14400.0	u
53494-70-5	Endrin Ketone	2880.0	u
57-74-9	Chlordane	14400.0	u
8001-35-2	Toxaphene	288000.0	u
12674-11-2	Aroclor-1016	14400.0	u
11104-28-2	Aroclor-1221	14400.0	u
11141-16-5	Aroclor-1232	14400.0	u
53469-21-9	Aroclor-1242	14400.0	u
12672-29-6	Aroclor-1248	14400.0	u
11097-69-1	Aroclor-1254	288000.0	u
11096-82-5	Aroclor-1260	288000.0	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 17.1 Vt 20000 Vi 4

Sample Number
ALLTIFT REALTY S-3 ~~FOR BNA MS AND MSD~~
cdl 6/26/85

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/kg
**********	**********	****	****	******
	NO SEMI-VOLATILE COMPOUNDS FOUND			
76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	239	50 J,B
110-54-3	HEXANE	VOA	364	9 J,B

Sample Number

SED-3

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16068719
Sample Matrix: Soil
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): 87

CAS Number		ug/kg
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/kg
78-87-5	1,2-Dichloropropane	
10061-02-6	Trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
108-10-1	4-Methyl-2-Pentanone	
591-78-6	2-Hexanone	
127-18-4	Tetrachloroethene	
79-34-5	1,1,2,2-Tetrachloroethane	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
SED-3

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/20/86
Date Analyzed: 07/24/86
Conc/Dil Factor: 10
Percent Moisture (Decanted): 87

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg
108-95-2	Phenol	24750 U
111-44-4	bis(2-Chloroethyl)Ether	24750 U
95-57-8	2-Chlorophenol	24750 U
541-73-1	1,3-Dichlorobenzene	24750 U
106-46-7	1,4-Dichlorobenzene	24750 U
100-51-6	Benzyl Alcohol	24750 U
95-50-1	1,2-Dichlorobenzene	24750 U
95-48-7	2-Methylphenol	24750 U
39638-32-9	bis(2-chloroisopropyl)Ether	24750 U
106-44-5	4-Methylphenol	24750 U
621-64-7	N-Nitroso-Di-n-Propylamine	24750 U
67-72-1	Hexachloroethane	24750 U
98-95-3	Nitrobenzene	24750 U
78-59-1	Isophorone	24750 U
88-75-5	2-Nitrophenol	24750 U
105-67-9	2,4-Dimethylphenol	24750 U
65-85-0	Benzoic Acid	120000 U
111-91-1	bis(2-Chloroethoxy)Methane	24750 U
120-83-2	2,4-Dichlorophenol	24750 U
120-82-1	1,2,4-Trichlorobenzene	24750 U
91-20-3	Naphthalene	24750 U
106-47-8	4-Chloroaniline	24750 U
87-68-3	Hexachlorobutadiene	24750 U
59-50-7	4-Chloro-3-Methylphenol	24750 U
91-57-6	2-Methylnaphthalene	24750 U
77-47-4	Hexachlorocyclopentadiene	24750 U
88-06-2	2,4,6-Trichlorophenol	24750 U
95-95-4	2,4,5-Trichlorophenol	120000 U
91-58-7	2-Chloronaphthalene	24750 U
88-74-4	2-Nitroaniline	120000 U
131-11-3	Dimethyl Phthalate	24750 U
208-96-8	Acenaphthylene	24750 U
99-09-2	3-Nitroaniline	120000 U

CAS Number		ug/kg
83-32-9	Acenaphthene	24750 U
51-28-5	2,4-Dinitrophenol	120000 U
100-02-7	4-Nitrophenol	120000 U
132-64-9	Dibenzofuran	24750 U
121-14-2	2,4-Dinitrotoluene	24750 U
606-20-2	2,6-Dinitrotoluene	24750 U
84-66-2	Diethylphthalate	24750 U
7005-72-3	4-Chlorophenyl-phenylether	24750 U
86-73-7	Fluorene	24750 U
100-01-6	4-Nitroaniline	120000 U
534-52-1	4,6-Dinitro-2-Methylphenol	120000 U
86-30-6	N-Nitrosodiphenylamine(1)	24750 U
101-55-3	4-Bromophenyl-phenylether	24750 U
118-74-1	Hexachlorobenzene	24750 U
87-86-5	Pentachlorophenol	120000 U
85-01-8	Phenanthrene	24750 U
120-12-7	Anthracene	24750 U
84-74-2	Di-n-Butylphthalate	2200 J,B
206-44-0	Fluoranthene	24750 U
129-00-0	Pyrene	24750 U
85-68-7	Butylbenzylphthalate	24750 U
91-94-1	3,3'-Dichlorobenzidine	49500 U
56-55-3	Benzo (a)Anthracene	24750 U
117-81-7	bis(2-Ethylhexyl)Phthalate	24750 U
218-01-9	Chrysene	24750 U
117-84-0	Di-n-Octyl Phthalate	24750 U
205-99-2	Benzo(b)Fluoranthene	24750 U
207-08-9	Benzo(k)Fluoranthene	24750 U
50-32-8	Benzo(a)Pyrene	24750 U
193-39-5	Indeno(1,2,3-cd)Pyrene	24750 U
53-70-3	Dibenz(a,h)Anthracene	24750 U
191-24-2	Benzo(g,h,i)Perylene	24750 U

(1)-Cannot be separated from diphenylamine

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
5-4 Sediment
Alltift Realty (1)

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040815 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	8200	(P)	13.	Magnesium	3500	(P)
2.	Antimony	[6.8]	(F)	14.	Manganese	710 R	(P)
3.	Arsenic	51	(F)	15.	Mercury	1.6	(C)
4.	Barium	870	(P)	16.	Nickel	59	(P)
5.	Beryllium	[0.91]	(P)	17.	Potassium	1400	(P)
6.	Cadmium	5.9	(F)	18.	Selenium	[0.98]	(F)
7.	Calcium	69000	(P)	19.	Silver	2.3	(P)
8.	Chromium	2000 R	(P)	20.	Sodium	2400	(P)
9.	Cobalt	20	(P)	21.	Thallium	2.3 U	(F)
10.	Copper	430 R	(P)	22.	Tin	13	(F)
11.	Iron	61000	(P)	23.	Vanadium	68	(F)
12.	Lead	520	(F)	24.	Zinc	130	(P)

Cyanide _____ Percent Solids (%) 42

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) ref: Identification immediately following the Cover Page

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-4

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040815
Sample Matrix: Soil
Data Release Authorized By:

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

****

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/17/85
Date Analyzed: 07/17/85
Conc/Dil Factor: 1 pH 7
Percent Moisture: 58
Percent Moisture (Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	24 u
74-83-9	Bromomethane	24 u
75-01-4	Vinyl chloride	24 u
75-00-3	Chloroethane	24 u
75-09-2	Methylene Chloride	55 B
67-64-1	Acetone	130 B
75-15-0	Carbon Disulfide	12 u
75-35-4	1,1-Dichloroethene	12 u
75-34-3	1,1-Dichloroethane	12 u
156-60-5	Trans-1,2-Dichloroethene	12 u
67-66-3	Chloroform	9.1 J,B
107-06-2	1,2-Dichloroethane	12 u
78-93-3	2-Butanone	24 u
71-55-6	1,1,1-Trichloroethane	12 u
56-23-5	Carbon Tetrachloride	12 u
108-05-4	Vinyl Acetate	24 u
75-27-4	Bromodichloromethane	12 u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
S-4

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number			ug/kg
			**********
79-34-5	1,1,2,2-Tetrachloroethane		12 u
78-87-5	1,2-Dichloropropane		12 u
10061-02-6	Trans-1,3-Dichloropropene		12 u
79-01-6	Trichloroethene		12 u
124-48-1	Dibromochloromethane		12 u
79-00-5	1,1,2-Trichloroethane		12 u
71-43-2	Benzene		12 u
10061-01-5	cis-1,3-Dichloropropene		12 u
110-75-8	2-Chloroethylvinylether		24 u
75-25-2	Bromoform		12 u
591-78-6	2-Hexanone		24 u
108-10-1	4-Methyl-2-Pentanone		24 u
127-18-4	Tetrachlorethene		12 u
108-88-3	Toluene		12 u
108-90-7	Chlorobenzene	58	
100-41-4	Ethylbenzene		12 u
100-42-5	Styrene		12 u
	Total Xylenes		12 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-4

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: ~~05/28/85~~ LM ~~05~~/29/85
Conc/Dil Factor: 10

CAS Number		ug/kg **********	
319-84-6	Alpha-BHC	192.0	u
319-85-7	Beta-BHC	192.0	u
319-86-8	Delta-BHC	192.0	u
58-89-9	Gamma-BHC(lindane)	192.0	u
76-44-8	Heptachlor	192.0	u
309-00-2	Aldrin	192.0	u
1024-57-3	Heptachlor Epoxide	192.0	u
959-98-8	Endosulfan I	192.0	u
60-57-1	Dieldrin	384.0	u
72-55-9	4,4'-DDE	384.0	u
72-20-8	Endrin	384.0	u
33213-65-9	Endosulfan II	384.0	u
72-54-8	4,4'-DDD	384.0	u
7421-93-4	Endrin Aldehyde	384.0	u
1031-07-8	Endosulfan Sulfate	384.0	u
50-29-3	4,4'-DDT	384.0	u
72-43-5	Methoxychlor	1920.0	u
53494-70-5	Endrin Ketone	384.0	u
57-74-9	Chlordane	1920.0	u
8001-35-2	Toxaphene	3840.0	u
12674-11-2	Aroclor-1016	1920.0	u
11104-28-2	Aroclor-1221	1920.0	u
11141-16-5	Aroclor-1232	1920.0	u
53469-21-9	Aroclor-1242	1920.0	u
12672-29-6	Aroclor-1248	1920.0	u
11097-69-1	Aroclor-1254	3840.0	u
11096-82-5	Aroclor-1260	3840.0	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 12.6 Vt 20000 Vi 4

Sample Number
S-4

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/kg
**********	**********	****	****	******
76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	241	80 J,B
110-54-3	HEXANE	VOA	367	10 J,B
	UNKNOWN	BNA	1468	30000 J
	unknown	BNA	1692	5000 J

k
6/25/85

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16060722
Sample Matrix: Soil
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH 7
Percent Moisture: 37
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/kg
78-87-5	1,2-Dichloropropane	
10061-02-6	Trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
108-10-1	4-Methyl-2-Pentanone	
591-78-6	2-Hexanone	
127-18-4	Tetrachloroethene	
79-34-5	1,1,2,2-Tetrachloroethane	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in th blank as well as a sample. It indicates possible/ probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
SED-4

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted/Prepared: 06/20/86
Date Analysed: 07/26/86
Conc/Dil Factor: 10
Percent Moisture (Decanted): 37

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg
108-95-2	Phenol	5280 U
111-44-4	bis(2-Chloroethyl)Ether	5280 U
95-57-8	2-Chlorophenol	5280 U
541-73-1	1,3-Dichlorobenzene	5280 U
106-46-7	1,4-Dichlorobenzene	5280 U
100-51-6	Benzyl Alcohol	5280 U
95-50-1	1,2-Dichlorobenzene	5280 U
95-48-7	2-Methylphenol	5280 U
39638-32-9	bis(2-chloroisopropyl)Ether	5280 U
106-44-5	4-Methylphenol	5280 U
621-64-7	N-Nitroso-Di-n-Propylamine	5280 U
67-72-1	Hexachloroethane	5280 U
98-95-3	Nitrobenzene	5280 U
78-59-1	Isophorone	5280 U
88-75-5	2-Nitrophenol	5280 U
105-67-9	2,4-Dimethylphenol	5280 U
65-85-0	Benzoic Acid	25600 U
111-91-1	bis(2-Chloroethoxy)Methane	5280 U
120-83-2	2,4-Dichlorophenol	5280 U
120-82-1	1,2,4-Trichlorobenzene	5280 U
91-20-3	Naphthalene	5280 U
106-47-8	4-Chloroaniline	5280 U
87-68-3	Hexachlorobutadiene	5280 U
59-50-7	4-Chloro-3-Methylphenol	5280 U
91-57-6	2-Methylnaphthalene	5280 U
77-47-4	Hexachlorocyclopentadiene	5280 U
88-06-2	2,4,6-Trichlorophenol	5280 U
95-95-4	2,4,5-Trichlorophenol	25600 U
91-58-7	2-Chloronaphthalene	5280 U
88-74-4	2-Nitroaniline	25600 U
131-11-3	Dimethyl Phthalate	5280 U
208-96-8	Acenaphthylene	5280 U
99-09-2	3-Nitroaniline	25600 U

CAS Number		ug/kg
83-32-9	Acenaphthene	5280 U
51-28-5	2,4-Dinitrophenol	25600 U
100-02-7	4-Nitrophenol	25600 U
132-64-9	Dibenzofuran	5280 U
121-14-2	2,4-Dinitrotoluene	5280 U
606-20-2	2,6-Dinitrotoluene	5280 U
84-66-2	Diethylphthalate	5280 U
7005-72-3	4-Chlorophenyl-phenylether	5280 U
86-73-7	Fluorene	5280 U
100-01-6	4-Nitroaniline	25600 U
534-52-1	4,6-Dinitro-2-Methylphenol	25600 U
86-30-6	N-Nitrosodiphenylamine(1)	5280 U
101-55-3	4-Bromophenyl-phenylether	5280 U
118-74-1	Hexachlorobenzene	5280 U
87-86-5	Pentachlorophenol	25600 U
85-01-8	Phenanthrene	5280 U
120-12-7	Anthracene	5280 U
84-74-2	Di-n-Butylphthalate	1100 B,J
206-44-0	Fluoranthene	1200 J
129-00-0	Pyrene	1300 J
85-68-7	Butylbenzylphthalate	5280 U
91-94-1	3,3'-Dichlorobenzidine	10560 U
56-55-3	Benzo (a)Anthracene	5280 U
117-81-7	bis(2-Ethylhexyl)Phthalate	5280 U
218-01-9	Chrysene	5280 U
117-84-0	Di-n-Octyl Phthalate	5280 U
205-99-2	Benzo(b)Fluoranthene	5280 U
207-08-9	Benzo(k)Fluoranthene	5280 U
50-32-8	Benzo(a)Pyrene	5280 U
193-39-5	Indeno(1,2,3-cd)Pyrene	5280 U
53-70-3	Dibenz(a,h)Anthracene	5280 U
191-24-2	Benzo(g,h,i)Perylene	5280 U

(1)-Cannot be separated from diphenylamine

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
S-5 Sediment
Alltift Realty (1)

Date June 11, 1985

INORGANIC ANALYSIS DATA SHEET

LAB NAME NUS Corporation

CASE NO. Engineering-Science

SOW NO. 784

LAB SAMPLE ID. NO. 15040816

QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	5200	(P)	13.	Magnesium	4500	(P)
2.	Antimony	76	(F)	14.	Manganese	1100 R	(P)
3.	Arsenic	21	(F)	15.	Mercury	12	(C)
4.	Barium	610	(P)	16.	Nickel	760	(P)
5.	Beryllium	0.68 U	(P)	17.	Potassium	490	(P)
6.	Cadmium	13	(F)	18.	Selenium	[0.38]	(F)
7.	Calcium	2400	(P)	19.	Silver	1.4	(P)
8.	Chromium	20000 R	(P)	20.	Sodium	760	(P)
9.	Cobalt	310	(P)	21.	Thallium	[0.2]	(F)
10.	Copper	1600 R	(P)	22.	Tin	67	(F)
11.	Iron	94000	(P)	23.	Vanadium	26	(F)
12.	Lead	8900	(F)	24.	Zinc	3800	(P)

Cyanide _____ Percent Solids (%) 74

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: (1) ref: Identification immediately following the Cover Page.

Lab Manager M. J. Marple

Environmental Protection Agency
CLP Sample Management Office.
P.O.Box 818
Alexandria, Virginia 22313 703/557-2490

Sample Number

S-5

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 15040816
Sample Matrix: Soil
Data Release Authorized By:
****

Case No: ES-ALLTIFT
QC Report No:
Contract No:
Date Sample Received: 04/12/85

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 04/17/85
Date Analyzed: 04/17/85
Conc/Dil Factor: 1 pH 7
Percent Moisture: 26
Percent Moisture (Decanted): NR

CAS Number		ug/kg
		**********
74-87-3	Chloromethane	14 u
74-83-9	Bromomethane	14 u
75-01-4	Vinyl chloride	14 u
75-00-3	Chloroethane	14 u
75-09-2	Methylene Chloride	54 B
67-64-1	Acetone	120 B
75-15-0	Carbon Disulfide	7 u
75-35-4	1,1-Dichloroethene	7 u
75-34-3	1,1-Dichloroethane	3.8 J
156-60-5	Trans-1,2-Dichloroethene	7 u
67-66-3	Chloroform	5.6 J,B
107-06-2	1,2-Dichloroethane	7 u
78-93-3	2-Butanone	14 u
71-55-6	1,1,1-Trichloroethane	7 u
56-23-5	Carbon Tetrachloride	7 u
108-05-4	Vinyl Acetate	14 u
75-27-4	Bromodichloromethane	7 u

Data reporting qualifiers are explained on Page 2.
****

Sample Number
S-5

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

Case Number		ug/kg	
		**********	
79-34-5	1,1,2,2-Tetrachloroethane		7 u
78-87-5	1,2-Dichloropropane		7 u
10061-02-6	Trans-1,3-Dichloropropene		7 u
79-01-6	Trichloroethene		7 u
124-48-1	Dibromochloromethane		7 u
79-00-5	1,1,2-Trichloroethane		7 u
71-43-2	Benzene	29	
10061-01-5	cis-1,3-Dichloropropene		7 u
110-75-8	2-Chloroethylvinylether		14 u
75-25-2	Bromoform		7 u
591-78-6	2-Hexanone		14 u
108-10-1	4-Methyl-2-Pentanone		14 u
127-18-4	Tetrachlorethene		7 u
108-88-3	Toluene	11	
108-90-7	Chlorobenzene	-190	
100-41-4	Ethylbenzene	12	
100-42-5	Styrene		7 u
	Total Xylenes	70	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explained.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

S - Spiked compound.

NR - No value required.

Sample Number
S-5

Organics Analysis Data Sheet
(Page 5)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 04/18/85
Date Analyzed: ~~05/28/85~~ LM 05/29/85
Conc/Dil Factor: 200

CAS Number		ug/kg **********	
319-84-6	Alpha-BHC	2160.0	u
319-85-7	Beta-BHC	2160.0	u
319-86-8	Delta-BHC	2160.0	u
58-89-9	Gamma-BHC(lindane)	2160.0	u
76-44-8	Heptachlor	2160.0	u
309-00-2	Aldrin	2160.0	u
1024-57-3	Heptachlor Epoxide	2160.0	u
959-98-8	Endosulfan I	2160.0	u
60-57-1	Dieldrin	4320.0	u
72-55-9	4,4'-DDE	4320.0	u
72-20-8	Endrin	4320.0	u
33213-65-9	Endosulfan II	4320.0	u
72-54-8	4,4'-DDD	4320.0	u
7421-93-4	Endrin Aldehyde	4320.0	u
1031-07-8	Endosulfan Sulfate	4320.0	u
50-29-3	4,4'-DDT	4320.0	u
72-43-5	Methoxychlor	21600.0	u
53494-70-5	Endrin Ketone	4320.0	u
57-74-9	Chlordane	21600.0	u
8001-35-2	Toxaphene	43200.0	u
12674-11-2	Aroclor-1016	21600.0	u
11104-28-2	Aroclor-1221	21600.0	u
11141-16-5	Aroclor-1232	21600.0	u
53469-21-9	Aroclor-1242	21600.0	u
12672-29-6	Aroclor-1248	21600.0	u
11097-69-1	Aroclor-1254	43200.0	u
11096-82-5	Aroclor-1260	43200.0	u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 22.2 Vt 20000 Vi 4

Sample Number
S-5

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan	Estimated concentration ug/kg	
**********	**********	****	****	******	
76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	235	40	J,B
2415-72-7	CYCLOPROPANE,PROPYL-	VOA	286	10	J
110-54-3	HEXANE	VOA	361	10	J,B
	NO SEMI-VOLATILE COMPOUNDS FOUND				

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16860721RA
Sample Matrix: Soil
Data Release Authorized By:

Case No: ES/ALLTIFT RLTY
QC Report No:
Contract No:
Date Sample Received: 06/14/86

Volatile Compounds

Concentration: Medium
Date Extracted/Prepared: NR
Date Analysed: NR
Conc/Dil Factor: NR pH 8
Percent Moisture: 34
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethene	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/kg
78-87-5	1,2-Dichloropropane	
10061-02-6	Trans-1,3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
108-10-1	4-Methyl-2-Pentanone	
591-78-6	2-Hexanone	
127-18-4	Tetrachloroethene	
79-34-5	1,1,2,2-Tetrachloroethane	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: ES/ALLTIFT RLTY

Sample Number
SED-5 RA

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Medium
Date Extracted/Prepared: 06/20/86
Date Analysed: 07/30/86
Conc/Dil Factor: 1.0
Percent Moisture (Decanted): 34

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg	CAS Number		ug/kg
108-95-2	Phenol	29700 U	83-32-9	Acenaphthene	29700 U
111-44-4	bis(2-Chloroethyl)Ether	29700 U	51-28-5	2,4-Dinitrophenol	144000 U
95-57-8	2-Chlorophenol	29700 U	100-02-7	4-Nitrophenol	144000 U
541-73-1	1,3-Dichlorobenzene	29700 U	132-64-9	Dibenzofuran	29700 U
106-46-7	1,4-Dichlorobenzene	29700 U	121-14-2	2,4-Dinitrotoluene	29700 U
100-51-6	Benzyl Alcohol	29700 U	606-20-2	2,6-Dinitrotoluene	29700 U
95-50-1	1,2-Dichlorobenzene	29700 U	84-66-2	Diethylphthalate	29700 U
95-48-7	2-Methylphenol	29700 U	7005-72-3	4-Chlorophenyl-phenylether	29700 U
39638-32-9	bis(2-chloroisopropyl)Ether	29700 U	86-73-7	Fluorene	29700 U
106-44-5	4-Methylphenol	29700 U	100-01-6	4-Nitroaniline	144000 U
621-64-7	N-Nitroso-Di-n-Propylamine	29700 U	534-52-1	4,6-Dinitro-2-Methylphenol	144000 U
67-72-1	Hexachloroethane	29700 U	86-30-6	N-Nitrosodiphenylamine(1)	29700 U
98-95-3	Nitrobenzene	29700 U	101-55-3	4-Bromophenyl-phenylether	29700 U
78-59-1	Isophorone	29700 U	118-74-1	Hexachlorobenzene	29700 U
88-75-5	2-Nitrophenol	29700 U	87-86-5	Pentachlorophenol	144000 U
105-67-9	2,4-Dimethylphenol	29700 U	85-01-8	Phenanthrene	29700 U
65-85-0	Benzoic Acid	144000 U	120-12-7	Anthracene	29700 U
111-91-1	bis(2-Chloroethoxy)Methane	29700 U	84-74-2	Di-n-Butylphthalate	29700 U
120-83-2	2,4-Dichlorophenol	29700 U	206-44-0	Fluoranthene	29700 U
120-82-1	1,2,4-Trichlorobenzene	29700 U	129-00-0	Pyrene	29700 U
91-20-3	Naphthalene	29700 U	85-68-7	Butylbenzylphthalate	29700 U
106-47-8	4-Chloroaniline	29700 U	91-94-1	3,3'-Dichlorobenzidine	59400 U
87-68-3	Hexachlorobutadiene	29700 U	56-55-3	Benzo (a)Anthracene	29700 U
59-50-7	4-Chloro-3-Methylphenol	29700 U	117-81-7	bis(2-Ethylhexyl)Phthalate	29700 U
91-57-6	2-Methylnaphthalene	29700 U	218-01-9	Chrysene	29700 U
77-47-4	Hexachlorocyclopentadiene	29700 U	117-84-0	Di-n-Octyl Phthalate	29700 U
88-06-2	2,4,6-Trichlorophenol	29700 U	205-99-2	Benzo(b)Fluoranthene	29700 U
95-95-4	2,4,5-Trichlorophenol	144000 U	207-08-9	Benzo(k)Fluoranthene	29700 U
91-58-7	2-Chloronaphthalene	29700 U	50-32-8	Benzo(a)Pyrene	29700 U
88-74-4	2-Nitroaniline	144000 U	193-39-5	Indeno(1,2,3-cd)Pyrene	29700 U
131-11-3	Dimethyl Phthalate	29700 U	53-70-3	Dibenz(a,h)Anthracene	29700 U
208-96-8	Acenaphthylene	29700 U	191-24-2	Benzo(g,h,i)Perylene	29700 U
99-09-2	3-Nitroaniline	144000 U			

(1)-Cannot be separated from diphenylamine

Field Sampling Records

FIELD SAMPLING RECORD

JOB NYS DEC AUDIT BERRY JOB NO. 13305-002-19 DATE 8/29/85
WELL CW-4B

SAMPLERS: L. KEEFE OF DOM
S. BROD OF DOM

INITIAL STATIC WATER LEVEL. . . . . 20.4'
(from top of well casing)

PUMPING:
USING: SUBMERSIBLE ___ CENTRIFUGAL ___
NITROGEN ___ POSITIVE DISPLACEMENT ___
BAILED X 8 gal ~~times~~

DEPTH TO INTAKE FROM TOP OF WELL CASING 13.25' (25.35' total)
PUMPED _____ MINUTES AT _____ GPM (> 2 EXCHANGES)

SAMPLING: TIME 8:45 X a.m. / 5:45 ___ p.m.

BAILER TYPE: KEMMERER ___
STAINLESS STEEL BUCKET BAILER ___
FROM POS. DIS. PUMP DISCHARGE TUBE ___
OTHER TEFLON BAILER X

TRIP BLANK I.D. TB1
NO. CONTAINERS FILLED (PRIMARY LAB) 5
NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . . _____
FIELD BLANK FB-3
PHYSICAL APPEARANCE AND ODOR ~~V~~ CLEAR, YELLOW TINT, NO ODOR

REFRIGERATED: DATE 8/29/85 TIME 8:45?

FIELD TESTS: BEFORE PUMPING ___ AFTER PUMPING X

TEMPERATURE (C°/°F)	_____	13.1 °C
pH	_____	8.12
SPEC. CONDUC (umhos/cm)	_____	681
DISSOLVED OXYGEN (mg/l)	_____	4.85

WEATHER PARTLY CLOUDY 70°F

COMMENTS LAB BOTTLES MARKED #6

FIELD SAMPLING RECORD

JOB NYSDEC ALTUIT REALY JOB NO. 13305-009-19 DATE 8/29/85

WELL CW-4A

SAMPLERS: L. KEEFE OF D&M

E. BROD OF D&M

INITIAL STATIC WATER LEVEL. . . . . 8.06'
(from top of well casing)

PUMPING:
USING: SUBMERSIBLE ___ CENTRIFUGAL X
NITROGEN ___ POSITIVE DISPLACEMENT ___
BAILED ___ ___ times

DEPTH TO INTAKE FROM TOP OF WELL CASING 58.0' (6~~4~~.5 total)
PUMPED 20 gal ~~MINUTES AT~~ ___ GPM (> 2 EXCHANGES)

SAMPLING:
TIME ~~8:45~~ 9:15 X a.m. ___ p.m.

BAILER TYPE: KEMMERER ___
STAINLESS STEEL BUCKET BAILER ___
FROM POS. DIS. PUMP DISCHARGE TUBE ___
OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-1
NO. CONTAINERS FILLED (PRIMARY LAB) 5
NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . ___
FIELD BLANK FB-3

PHYSICAL APPEARANCE AND ODOR TAN, SILTY/CLAYEY - PETROLEUM ODOR

REFRIGERATED: DATE 8/29/85 TIME 9:15 a

FIELD TESTS: BEFORE PUMPING ___ AFTER PUMPING X

	BEFORE PUMPING	AFTER PUMPING
TEMPERATURE (C°/°F)		~~13.1 C°~~ 13.3 C°
pH		~~8~~ 11.0 ?
SPEC. CONDUC (umhos/cm)		4,000
DISSOLVED OXYGEN (mg/l)		2.60

WEATHER PARTLY CLOUDY, 70°F

COMMENTS LAB BOTTLES MARKED 05

FIELD SAMPLING RECORD

JOB NYS DEC AZTDT JOB NO. 13305-009-19 DATE 8/29/85
WELL OW-5B

SAMPLERS: C. Kierce OF DEM
E. Brod OF DEM

INITIAL STATIC WATER LEVEL. . . . . 4.04'
(from top of well casing)

PUMPING:
USING: SUBMERSIBLE ___ CENTRIFUGAL ___
NITROGEN ___ POSITIVE DISPLACEMENT ___
BAILED X 5 gal ~~times~~

DEPTH TO INTAKE FROM TOP OF WELL CASING 9.8' TOTAL (16.4)
PUMPED ___ MINUTES AT ___ GPM (> 2 EXCHANGES)

SAMPLING: TIME 11:15 X a.m. __ p.m.

BAILER TYPE: KEMMERER ___
STAINLESS STEEL BUCKET BAILER ___
FROM POS. DIS. PUMP DISCHARGE TUBE ___
OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-1
NO. CONTAINERS FILLED (PRIMARY LAB) 5
NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . ___
FIELD BLANK FB-3
PHYSICAL APPEARANCE AND ODOR CLEAR - NO ODOR

REFRIGERATED: DATE 8/29/85 TIME 11:15

FIELD TESTS: BEFORE PUMPING ___ AFTER PUMPING X

	BEFORE PUMPING	AFTER PUMPING
TEMPERATURE (C°/°F)		15.1 °C
pH		10.2 ?
SPEC. CONDUC (umhos/cm)		1930
DISSOLVED OXYGEN (mg/l)		

WEATHER OVERCAST, 70°F

COMMENTS LAB BOTTLES MARKED #8

FIELD SAMPLING RECORD

JOB NYS DEC ALTIFT JOB NO. 13305-009-19 DATE 8/29/85

WELL GW-5A

SAMPLERS: C. KREEK OF DEM

J. BEDO OF DAM

INITIAL STATIC WATER LEVEL. . . . . 5.85'
(from top of well casing)

PUMPING:

USING: SUBMERSIBLE ___ CENTRIFUGAL X

NITROGEN ___ POSITIVE DISPLACEMENT ___

BAILED ___ _____ times

DEPTH TO INTAKE FROM TOP OF WELL CASING 37.6' (TOTAL = 49.7')

PUMPED 20g ~~MINUTES AT~~ _____ GPM (> 2 EXCHANGES)

SAMPLING:

TIME 11:45 X a.m. ___ p.m.

BAILER TYPE: KEMMERER ___

STAINLESS STEEL BUCKET BAILER ___

FROM POS. DIS. PUMP DISCHARGE TUBE ___

OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-1

NO. CONTAINERS FILLED (PRIMARY LAB) 5

NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . . _____

FIELD BLANK FB-3

PHYSICAL APPEARANCE AND ODOR SLIGHTLY CLOUDY / LIGHT BROWN - PETRO ODOR

REFRIGERATED: DATE 8/29/85 TIME 1145P

FIELD TESTS: BEFORE PUMPING ___ AFTER PUMPING X

TEMPERATURE (C°/°F)	_____	13C°
pH	_____	—
SPEC. CONDUC (umhos/cm)	_____	1065 (Pump malfunction)
DISSOLVED OXYGEN (mg/l)	_____	— (Pump malfunction)

WEATHER OVERCAST, 70°F

COMMENTS LAB BOTTLES MARKED BY

EQUIPMENT FAILURE - MEANS SAMPLE NOT FILTERED

FIELD SAMPLING RECORD

JOB NYS DEC AZTEC REALTY   JOB NO. 13305-007-19   DATE 8/29/85
WELL ~~CW-3B~~ CW-3B

SAMPLERS: L. Keeffe OF DOM
J. Brod OF DOM

INITIAL STATIC WATER LEVEL. . . . . 13.73'
(from top of well casing)

PUMPING:
USING: SUBMERSIBLE ___   CENTRIFUGAL ___
NITROGEN ___   POSITIVE DISPLACEMENT ___
BAILED X   5gal ~~times~~

DEPTH TO INTAKE FROM TOP OF WELL CASING ~~16~~ 17.8' (19.8 TOTAL)
PUMPED ______ MINUTES AT ______ GPM (> 2 EXCHANGES)

SAMPLING: TIME 3:00   a.m. / X p.m.

BAILER TYPE: KEMMERER ___
STAINLESS STEEL BUCKET BAILER ___
FROM POS. DIS. PUMP DISCHARGE TUBE ___
OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-1
NO. CONTAINERS FILLED (PRIMARY LAB) 5
NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . ______
FIELD BLANK - FB-3

PHYSICAL APPEARANCE AND ODOR CLEAR YELLOW/GREEN - STRONG CHEMICAL (?) ODOR

REFRIGERATED: DATE 8/29/85   TIME 3:00 p

FIELD TESTS: BEFORE PUMPING ___   AFTER PUMPING X

	Before Pumping	After Pumping
TEMPERATURE (C°/°F)		17 C°
pH		
SPEC. CONDUC (umhos/cm)		5,950
DISSOLVED OXYGEN (mg/l)		7.80

WEATHER OVERCAST, 70°F

COMMENTS LAB BOTTLES MARKED #4
WB-3 TAKEN AFTER SAMPLING CW-3B
EQUIPMENT FAILURE - METALS SAMPLE NOT FILTERED

FIELD SAMPLING RECORD

JOB NYSDEC ALLIED PLATING JOB NO. 13305-009-19 DATE 8/28/85
WELL CW-1

SAMPLERS: L. KEEFE OF DRM
S. BLOOD OF DRM

INITIAL STATIC WATER LEVEL. . . . . 7.38'
(from top of well casing)

PUMPING:
USING: SUBMERSIBLE ___ CENTRIFUGAL ___
NITROGEN ___ POSITIVE DISPLACEMENT ___
BAILED X 5gal times

DEPTH TO INTAKE FROM TOP OF WELL CASING 8.3 (14.8 TOTAL)
PUMPED _____ MINUTES AT _____ GPM (> 2 EXCHANGES)

SAMPLING: ___ a.m.
TIME 3:30 X p.m.

BAILER TYPE: KEMMERER ___
STAINLESS STEEL BUCKET BAILER ___
FROM POS. DIS. PUMP DISCHARGE TUBE ___
OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-1
NO. CONTAINERS FILLED (PRIMARY LAB) 5
NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . . _____
FIELD BLANK FB-3
PHYSICAL APPEARANCE AND ODOR SLIGHTLY SANDY, LIGHT BRN, SLIGHT ODOR

REFRIGERATED: DATE 8/28/85 TIME 3:30

FIELD TESTS:	BEFORE PUMPING ___	AFTER PUMPING X (1:38)
TEMPERATURE (C°/°F)		14.5 C°
pH		7.82 7.72
SPEC. CONDUC (umhos/cm)		637
DISSOLVED OXYGEN (mg/l)		2.86

WEATHER BREEZY, PARTLY CLOUDY, 70°F

COMMENTS LAB BOTTLES MARKED #1

FIELD SAMPLING RECORD

JOB NYS DEC ALCOA JOB NO. 13305-009-19 DATE 8/26/85
WELL CW-2B

SAMPLERS: L. KEEFE OF PEM
S. BOOD OF DEM

INITIAL STATIC WATER LEVEL. . . . . 6.29'
(from top of well casing)

PUMPING:
USING: SUBMERSIBLE ___ CENTRIFUGAL ___
NITROGEN ___ POSITIVE DISPLACEMENT ___
BAILED X 5gals ~~times~~

DEPTH TO INTAKE FROM TOP OF WELL CASING 7.8' (19.8 TOTAL)
PUMPED _____ MINUTES AT _____ GPM (> 2 EXCHANGES)

SAMPLING: TIME 4:30 ___ a.m. X p.m.

BAILER TYPE: KEMMERER ___
STAINLESS STEEL BUCKET BAILER ___
FROM POS., DIS. PUMP DISCHARGE TUBE ___
OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-1
NO. CONTAINERS FILLED (PRIMARY LAB) 5
NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . . _____
FIELD BLANK FB-3
PHYSICAL APPEARANCE AND ODOR SLIGHT SAND, TAN, SLIGHT ODOR

REFRIGERATED: DATE 8/26/85 TIME 4:30p

FIELD TESTS: BEFORE PUMPING ___ AFTER PUMPING X

TEMPERATURE (C°/°F)	_____	19.3°C
pH	_____	7.37
SPEC. CONDUC (umhos/cm)	_____	~~2050~~ 2570
DISSOLVED OXYGEN (mg/l)	_____	5.74

WEATHER BREEZY, OVERCAST, 70°F

COMMENTS LAB BOTTLES MARKED ~~2~~ 2

FIELD SAMPLING RECORD

JOB NYS DEC AZCUT Pentry   JOB NO. 13305-009-19   DATE 8/28/85
WELL CW-2C

SAMPLERS: L. KEEFE   OF DCM
J. BROD   OF DCM

INITIAL STATIC WATER LEVEL. . . . . 13.0'
(from top of well casing)

PUMPING:
USING: SUBMERSIBLE ___   CENTRIFUGAL X
NITROGEN ___   POSITIVE DISPLACEMENT ___
BAILED ___ ________ times

DEPTH TO INTAKE FROM TOP OF WELL CASING 50.9' (62.9 total)
PUMPED 18 gal ~~MINUTES AT~~ ________ ~~GPM~~ (> 2 EXCHANGES)

SAMPLING: TIME 5:00   a.m. X p.m.

BAILER TYPE: KEMMERER ___
STAINLESS STEEL BUCKET BAILER ___
FROM POS. DIS. PUMP DISCHARGE TUBE ___
OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-1
NO. CONTAINERS FILLED (PRIMARY LAB) 5
NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . .
FIELD BLANK - FB 3
PHYSICAL APPEARANCE AND ODOR TAN, SILTY/CLAYEY, SLIGHT PETROLEUM ODOR

REFRIGERATED: DATE 8/28/85   TIME 5:00 P

FIELD TESTS: BEFORE PUMPING ___   AFTER PUMPING X

	BEFORE PUMPING	AFTER PUMPING
TEMPERATURE (C°/°F)		15.5 C°
pH		6.65
SPEC. CONDUC (umhos/cm)	/	7.81
DISSOLVED OXYGEN (mg/l)	/	4.50

WEATHER WINDY, OVERCAST, 70°F

COMMENTS LAB BOTTLES MARKED #3

FIELD SAMPLING RECORD

JOB NYS DEC ACCUTEST JOB NO. 13305-009-19 DATE 5/28/85

WELL CW-6B

SAMPLERS: L. KERFFE OF DEM

J. BROD OF DEM

INITIAL STATIC WATER LEVEL. . . . . 3.00'
(from top of well casing)

PUMPING:

USING: SUBMERSIBLE ___ CENTRIFUGAL ___

NITROGEN ___ POSITIVE DISPLACEMENT ___

BAILED X 7 gal ~~times~~ 10.5' 22.5' (total)

DEPTH TO INTAKE FROM TOP OF WELL CASING ~~56.8'~~ (63.3 ~~total~~)

PUMPED _____ MINUTES AT _____ GPM (> 2 EXCHANGES)

SAMPLING: TIME 6:00 ___ a.m. X p.m.

BAILER TYPE: KEMMERER ___

STAINLESS STEEL BUCKET BAILER ___

FROM POS. DIS. PUMP DISCHARGE TUBE ___

OTHER TEFLON BAILER X

TRIP BLANK I.D. TB-5

NO. CONTAINERS FILLED (PRIMARY LAB) . . . . . ___

NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . . ___

FIELD BLANK FB-3

PHYSICAL APPEARANCE AND ODOR TAN, SILTY, NO ODOR

REFRIGERATED: DATE 5/28/85 TIME 6:00P

FIELD TESTS: BEFORE PUMPING ___ AFTER PUMPING X

TEMPERATURE (C°/°F)	___	18.0 °C
pH	___	6.36
SPEC. CONDUC (umhos/cm)	___	820
DISSOLVED OXYGEN (mg/l)	___	6.79

WEATHER WINDY, OVERCAST 70°F

COMMENTS LAB BOTTLES MARKED #CO

FIELD SAMPLING RECORD

JOB NYS DEC ALCOA JOB NO. 13305-009-19 DATE 8/28/85

WELL GW-6A

SAMPLERS: L. KEEFE OF DCM

J. BROD OF DCM

INITIAL STATIC WATER LEVEL. . . . . 9.15'
(from top of well casing)

PUMPING:

USING: SUBMERSIBLE ___ CENTRIFUGAL X

NITROGEN ___ POSITIVE DISPLACEMENT ___

BAILED ___ _____ times

DEPTH TO INTAKE FROM TOP OF WELL CASING 56.8' (63.3' TOTAL)

PUMPED 20g ~~MINUTES AT~~ _____ GPM (> 2 EXCHANGES)

SAMPLING: TIME 6:30 ___ a.m. X p.m.

BAILER TYPE: KEMMERER ___

STAINLESS STEEL BUCKET BAILER ___

FROM POS. DIS. PUMP DISCHARGE TUBE ___

OTHER TEFLON X

TRIP BLANK I.D. TB-1

NO. CONTAINERS FILLED (PRIMARY LAB) 5

NO. CONTAINERS FILLED (REPLICATE SAMPLES) . . . . . _____

PHYSICAL APPEARANCE AND ODOR GRAY W/SILT, SULFUR ODOR

REFRIGERATED: DATE 8/28/85 TIME 6:30P

FIELD TESTS: BEFORE PUMPING ___ AFTER PUMPING X

TEMPERATURE (C°/°F)	_____	16 °C
pH	_____	_____ } pH meter
SPEC. CONDUC (umhos/cm)	_____	720 } malfunction
DISSOLVED OXYGEN (mg/l)	_____	_____

WEATHER WINDY, OVERCAST 70°F

COMMENTS LAB BOTTLES MARKED #9

FIGURE 6.2

FIELD ~~SURFACE~~ GROUND WATER SAMPLING RECORD

JOB Altift Realty JOB NUMBER ______ DATE 6/ 12/ 86

SAMPLING POINT GW-4B

SAMPLERS: Elizabeth Dobson OF Engineering Science

Jim Short OF Engineering Science

SAMPLING: TIME 1300 ___ a.m. ___ p.m.

SAMPLER TYPE Bailer

SAMPLE DEPTH ______

~~DEPTH OF WATER~~ [illegible] BODY [illegible] .00 above [illegible] Water level is [illegible] from top of [illegible] → [illegible] ground surface.

DESCRIPTION OF SAMPLING POINT:

DRAINAGE DIRECTION ______

UPSTREAM FROM: 55 bails to bail 4 volumes.

DOWNSTREAM FROM: Bailed 26 to dry

PHYSICAL APPEARANCE/ODOR ______

WILDLIFE OBSERVED ______

SAMPLE DESCRIPTION:

SUSPENDED MATTER: ______

COLOR/STAIN ______

ODOR ______

OTHER ______

ANALYZE FOR: ______

REFRIGERATED: DATE: __/__/__ TIME ___ a.m. ___ p.m.

FIELD TESTS:

TEMPERATURE (C°/°F) ______ WEATHER ______

pH ______

OTHER (SPECIFY BELOW)

COMMENTS Water remained clean throughout bailing.

FIGURE 6.2

Grande ~~FIELD~~ SURFACE WATER SAMPLING RECORD

JOB Alltift Ro[illegible] JOB NUMBER ______ DATE 6/12/86

SAMPLING POINT CW5-A'

SAMPLERS: E. Do[illegible] OF E[illegible] Science

[illegible] OF E[illegible]

SAMPLING: TIME 1100 ___ a.m. ___ p.m.

SAMPLER TYPE ______

SAMPLE DEPTH ______

Static Water ~~DEPTH OF WATER BODY~~ 4.96 H_2O from Top of Well, Well is 1.81 above ground

DESCRIPTION OF SAMPLING POINT:

~~DRAINAGE DIRECTION~~ [illegible] bails to bail 4 volumes water level is 3.15' below ground

~~UPSTREAM FROM:~~ Bailed dry @ 31 bails

~~DOWNSTREAM FROM:~~ ______

PHYSICAL APPEARANCE/ODOR Well does not appear to be 48' deep → from length of bailer rope, it looks about 30'

WILDLIFE OBSERVED ______

SAMPLE DESCRIPTION:

SUSPENDED MATTER: ______

COLOR/STAIN ______

ODOR ______

OTHER ______

ANALYZE FOR: ______

REFRIGERATED: ______ DATE: __/__/__ TIME ___ a.m. ___ p.m.

FIELD TESTS:

TEMPERATURE (C°/°F) ______ WEATHER ______

pH ______

OTHER (SPECIFY BELOW)

COMMENTS groundwater started to appear cloudy around 25'

3-4, SED 4 collected @ this time [illegible]

FIGURE 6.2

Grand
~~FIELD SURFACE~~ WATER SAMPLING RECORD

JOB Alkali Road Landfill JOB NUMBER _____ DATE 6/13/84

SAMPLING POINT CW5-B

SAMPLERS: E. Dobson OF Engineering Science

_____ OF _____

SAMPLING: TIME _____ ___a.m. ___p.m.

SAMPLER TYPE _____

SAMPLE DEPTH _____

~~DEPTH OF WATER BODY~~ STATIC WATER LEVEL 2.87 From Top of Well 2.32' Not a true ground Water level / .49' below ground.

DESCRIPTION OF SAMPLING POINT: needed

DRAINAGE DIRECTION 32 bails → ~3 volumes

UPSTREAM FROM: Baled dry at 30 bails

DOWNSTREAM FROM: _____

PHYSICAL APPEARANCE/ODOR _____

_____

_____

WILDLIFE OBSERVED _____

SAMPLE DESCRIPTION:

SUSPENDED MATTER: _____

COLOR/STAIN _____

ODOR _____

OTHER _____

_____

ANALYZE FOR: _____

REFRIGERATED: DATE: ___/___/___ TIME ____a.m. ____p.m.

FIELD TESTS:

TEMPERATURE (C°/°F) _____ WEATHER _____

pH _____ _____

OTHER (SPECIFY BELOW)

_____ _____

COMMENTS _____

_____

_____

FIGURE 6.2

Ground
~~FIELD SURFACE~~ WATER SAMPLING RECORD

JOB Allied Realty JOB NUMBER _____ DATE 6/13/86

SAMPLING POINT CW-6A

SAMPLERS: E. Dobson OF Engineering Science

_____ OF _____

SAMPLING: TIME 1130 X a.m. ___ p.m.

SAMPLER TYPE _____

SAMPLE DEPTH _____

~~DEPTH OF WATER BODY~~ STATIC WATER Well is 1.6' above ground. Water level 8.44 from Top of well

DESCRIPTION OF SAMPLING POINT: Water level = 6.78 below ground level

DRAINAGE DIRECTION _____

UPSTREAM FROM: 108 bails needed to bail 4 Volumes depth = 48

DOWNSTREAM FROM: 108 bails bailed - well recharges fairly fast

PHYSICAL APPEARANCE/ODOR _____

Strong odor in groundwater

WILDLIFE OBSERVED _____

SAMPLE DESCRIPTION:

SUSPENDED MATTER: _____

COLOR/STAIN _____

ODOR _____

OTHER _____

ANALYZE FOR: _____

REFRIGERATED: _____ DATE: ___/___/___ TIME ___ a.m. ___ p.m.

FIELD TESTS:

TEMPERATURE (C°/°F) _____ WEATHER _____

pH _____ _____

OTHER (SPECIFY BELOW)

_____ _____

COMMENTS Weather: Cloudy, Chilly

FIGURE 6.2

FIELD SURFACE WATER SAMPLING RECORD

JOB Allhift Realty JOB NUMBER _____ DATE 6/12/86

SAMPLING POINT [illegible]

SAMPLERS: [illegible] OF Engineering Science

[illegible] OF Engineering Science

TIME 3:15 X a.m. ___ p.m.

SAMPLING:

SAMPLER TYPE _____

SAMPLE DEPTH _____

~~DEPTH OF WATER BODY~~ 2.21 ft to bottom of well and well 1.43 above grade

Water level = .78' below ground

DESCRIPTION OF SAMPLING POINT:

DRAINAGE DIRECTION 44 cans to rinse 4 volumes

UPSTREAM FROM: _____

DOWNSTREAM FROM: _____

PHYSICAL APPEARANCE/ODOR [illegible] 2' → obstruction in casing - [illegible]

tried 1/2 bailer - negative - water probe goes down past this point so it is not totally blocking.

WILDLIFE OBSERVED _____

SAMPLE DESCRIPTION:

SUSPENDED MATTER: _____

COLOR/STAIN _____

ODOR _____

OTHER _____

ANALYZE FOR: _____

REFRIGERATED: _____ DATE: __/__/__ TIME ___ a.m. ___ p.m.

FIELD TESTS:

TEMPERATURE (C°/°F) _____ WEATHER _____

pH _____

OTHER (SPECIFY BELOW)

_____ _____

COMMENTS _____

HNu Air Quality Survey

Alltift Realty

1349 HNu survey
0.3 ppm background.
1352 on site 0.3 ppm
(northern end)
1357 middle of site 0.3 ppm
1402 southern end 0.3 ppm
Wind from south - southwest.
1409 Background 0.3 ppm
Survey complete.

Allied Chemical Site

1415 Background 0.4 ppm.
1420 on site - west of pond
0.6 ppm
1421 on site - near burn pit
area 0.5 ppm
1424 Background 0.4 ppm
Survey complete.

Above surveys conducted by
Gary Christopher and Dan Hamman.

FIELD MEMORANDUM

ACTION	INFO	
To:	EDG	File: 13305-009-019 Allift Realty
		X-Ref:
		Date:

From: JC Brod — Reply Required By:

Subject: Air quality monitoring at Allift ~~Realty~~ Realty site.

Reference(s):

Upwind and downwind air quality monitoring was done on-site on 6-20-95 with an HNu photoionization meter. No detectable concentrations were registered on the meter. Plumes of white smoke approximately 3-5 feet high were ~~observed~~ observed on the landfill area. HNu readings were taken from several of these plumes, however, no detectable concentrations were registered.

JC Brod

ROUTING