



6601 Kirkville Road  
E. Syracuse, NY 13057  
Tel: (315) 432-0506  
FAX: (315) 437-0509

November 3, 1995

Spill #9411938  
Rech.  
Moran Co.

Mr. Michael Zarniarski  
NYS Dept. of Environmental Conservation  
Region 8  
6274 Avon-Lima Rd.  
Avon, NY 14414

Re: The Gleason Works  
Draft Tank Closure Report  
Tanks 1 & 2  
Galson Project No. 95L3079

Dear Mr. Zarniarski:

Enclosed please find a copy of the tank closure report for Tank 1 and Tank 2. If you have any questions or require further information, please call.

Sincerely,

Galson Corporation

A handwritten signature in black ink, appearing to read "Thomas W. Moran", is written over the printed name.

Thomas W. Moran, PE  
Project Manager

cc: T. Freeman - Gleason Works (w/report)  
S. Fein - Whiteman, Osterman & Hanna (w/report)

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NOV 26 1995

DIV. OF SPILLS INVEST.



**Tank Closure Report  
Tank 1 & Tank 2  
NYSDEC Spill #9411938  
The Gleason Works  
1000 University Avenue  
Rochester, New York 14692**

The Gleason Works, located at 1000 University Avenue, Rochester, New York, is a manufacturer of gear-cutting machines. The firm has been undergoing a voluntary tank closure and modification program. Included in this program are two underground storage tanks (USTs) (Tank 1 and Tank 2) located on the western end of the property (see Figure 1).

### **Tank System Description**

This system consisted of two 2,000-gallon USTs and associated appurtenances. Tank 1 contained naphtha, and Tank 2 contained lacquer thinner. Both of these tanks were located outside the west building wall, near the assembly shop floor area, and were installed in 1982. Tanks 1 and 2 had their contents extracted for use by a hand pump arrangement, whose spigots are located over a steel basin. This basin drained to the water pump under the adjacent paint spray booth.

Tanks 1 and 2 were to be closed in place due to their proximity to the building foundation wall. The volume of naphtha and paint thinner used at the facility has been dramatically reduced compared with the usage rates from the time that the tanks were originally installed. The replacement for these two tanks therefore consists only of a fire cabinet and small, fire-safe cans.

### **Tank Closure Procedure**

The tanks were closed in accordance with the requirements of 40 CFR 280 Subpart G. The closure was performed in August 1994 by Allwash under contract to Gleason. Remaining product in the tank was removed for use elsewhere in the facility. No sludge was found to be present at the bottom of the tank. The interior of the tanks was sprayed with high-pressure washers and rinsed with citrol degreaser. The wash water was drummed for proper disposal (see Materials Disposition). The tanks were left empty pending successful closure documentation sampling. All tank piping and associated fittings, including supply piping to the sink inside the building, vent piping outside the building, and connecting underground piping to the USTs, were cleaned and removed.

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DIV. OF SPILLS MGMT.



## **Materials Disposition**

The wash water from cleaning the tanks was containerized in a 55-gallon drum. It was shipped off-site for disposal to Petro-Chem Processing, Inc., Michigan DNR manifest No. MI 3048454 (see attached copy).

The tank piping and associated fittings were cleaned and removed from the site as scrap metal and sent to Frank Metal.

## **Closure Documentation**

The closure documentation efforts for Tanks 1 and 2 consisted of two investigations.

### **Initial Investigation (August 1994)**

The initial investigation consisted of soil borings near the tanks. Visual inspection of the tanks could not be performed since they were being closed in place. However, the soil borings that occurred during soil sampling were performed to determine any contamination.

#### *Field Procedure*

Two soil borings were advanced near the tanks (see Figure 2). Soil vapor headspace was evaluated with a HNu from split spoons during drilling. Two soil samples were selected from these borings for analysis of New York State Department of Environmental Conservation (NYSDEC) STARS list volatiles by EPA Method 8021. These two samples were selected based upon elevated HNu readings. The first sample (from boring TB2) was collected northwest of Tank 1 at a depth interval of 8 to 10 feet below grade. At 170 parts per million (ppm), it had the highest HNu reading in that boring. The second sample (from boring TB3) was southwest of Tank 2 at a depth interval of 10 to 10.2 feet below grade. This interval had the highest HNu reading, at 100 ppm. Boring refusal was at 12.2 feet for TB2 and 11.2 feet for TB3 (see Attachment A).

#### *Laboratory Analysis*

Laboratory analysis was performed by EPA Method 8021 (NYSDEC STARS list volatiles). The results of the soil sample analyses yielded values of volatiles summarized below (see Attachment B).

*Results*

The following table summarizes the laboratory results for parameters detected in either one of the samples submitted. All data are in micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ).

Compound	TB2	TB3	NYSDEC STARS Alternative Guidance Value
n-Butylbenzne	< 270	230	
Ethylbenzene	5600	2300	100
Isopropylbenzene	< 270	200	
n-Propylbenzene	< 270	600	100
Toluene	< 270	6400	100
Trimethylbenzene	< 270	1400	
m,p-Xylene	6000	1600	100
o-Xylene	2000	680	100

These values indicated one or more compounds were above the Guidance Value for designation as clean soil. The findings of this investigation were reported to NYSDEC Region 8. The Petroleum and Chemical Bulk Storage group assigned the release Spill Number 9411938.

The results of this initial investigation and assigned spill file warranted additional investigation to further determine the nature and extent of the contamination. Due to practical and financial considerations, it was agreed upon by Gleason and NYSDEC Region 8 that this follow-up investigation would be performed in conjunction with other investigative efforts on-site.

**Additional Investigation (September 1995)**

The additional investigation, to determine the lateral and vertical extent of the contamination, consisted of Geoprobe borings, HNu and field gas chromatograph (GC) headspace screening, and laboratory analyses of selected soil samples.

### *Sampling Procedure*

Test borings were completed by Geoprobe drilling method, which was used because of the minimal amounts of waste it would produce and because it is typically considerably faster than conventional drilling methods (such as hollow stem auger).

Boring locations were sited interactively based upon results of HNu and field GC soil headspace results. Initial boring locations were sited near the USTs and progressively moved outward in a radial pattern until no, or minimal, detection of contamination was observed. The resultant pattern and specific boring locations are presented in Figure 3.

Soil screening sampling with a Geoprobe was accomplished in 4-foot intervals, with 2-foot intervals screened with an HNu. Samples were submitted for field GC analysis based on elevated HNu readings and visual or olfactory evidence of contamination. Selected soil samples were submitted for laboratory analysis. Soil boring logs were completed for each borehole (see Attachment C).

### *Field Analysis*

Soil headspace was evaluated by two methods in the field. Hnu (photoionization detector, 10.2 eV lamp) data were collected by placing the probe in the soil sample container reserved for field analyses. Based upon HNu results, soil sample containers were forwarded to the on-site GC for additional analyses. The GC was calibrated against known standard solutions. Soil sample headspace was extracted directly by hollow needle through the sample vial top. This vapor sample was directly injected into the GC.

### *Laboratory Analysis*

Laboratory analysis was conducted on selected soil samples based on the results of the field sampling. Five of the samples analyzed were selected from the outer boundary of where there appeared to be little or no contamination. The sixth sample (TB4) was from the area of apparently higher contamination, based on field screening results. A total of six samples were analyzed by Method 8021 for NYSDEC STARS list VOAs with MEK; two of these samples were also analyzed by EPA Method 8270 for NYSDEC STARS semivolatiles. A third analytical method consisted of NYSDEC STARS VOA (with MEK) and semiVOA analyses of a TCLP extract of a sample.

### *Discussion of Results*

Figure 3 shows the boring locations with corresponding HNu readings and GC results. Table 1 summarizes the analytical results for the samples submitted. The laboratory results, including on-site GC screening, are included in Attachment D.

The laboratory results from the additional investigation yielded values less than the Guidance Value concentrations under NYSDEC STARS for the presumed noncontaminated areas, coinciding with the field screening results. Based upon the results, it can be inferred that the area of potential contamination is less than the extent of this additional investigation.

In addition, the sample taken from the presumed area of contamination (B-4) showed volatile organic compounds (VOCs) to be less than the NYSDEC STARS Guidance Values. The semivolatile organic compound analytical results showed all compounds below detection limits (although some detection limits are greater than the Guidance Values). This indicates that the field screening methods were more conservative in results. The laboratory data also indicate that the area of potential contamination does not extend away from Tanks 1 and 2 as far as boring TB4.

The results from the more conservative field screening analysis indicated that potential contamination from the tanks was located in an area to the north-northwest. The depth of the contamination was located at 8 to 12 feet below grade, with overall thickness of potential contamination approximately 1 foot. At these refusal depths, the highest readings with the HNu were taken at a maximum of 200 ppm.

### **Conclusions**

The results from the initial investigation concluded that there was contamination found near (within 10 feet) the USTs, based on the results from borings TB2 and TB3. Based on the additional investigation, field screening during the soil borings showed low amounts or nondetectable amounts of contamination to the south, west, and north of the USTs. Field screening indicated some level of potential contamination close to the tanks. Laboratory data confirmed the presence of contaminants, but at low concentrations, less than NYSDEC STARS Guidance Values, even for the sample of the presumed contaminated area. Likewise, the analyses of the TCLP extract show no detectable levels for any of the guidance document potential semiVOA contaminants.

Tank Closure Report, The Gleason Works  
Tanks 1 and 2  
Page 6

Tanks 1 and 2 should be closed out as a clean closure, and the spill file should be closed. This conclusion is based on the findings during the initial and additional investigations of minimal concentration of contaminants localized to the immediate vicinity of the tanks. It is also based on the consideration that the entire area is covered by pavement or building.

Due to the location of the USTs (their proximity to the building foundation), the USTs are to be filled in place with concrete as a mechanical closure.

**Table 1**  
**Tanks 1 & 2 Laboratory Analysis**  
**The Gleason Works**  
**Additional Investigation Program**  
**Galson Project No. 95L3079**  
**September 13 & 14, 1995**

Location	Volatile Organic Compounds (VOCs)		
Depth (ft)	Compound	Alt. Guidance Value (ppb)	Sample Result (ng/kg)
<b>TB-4</b>	Ethylbenzene	100	64.0
10.5-11.0	n-Propylbenzene	100	11.0
	Toluene	100	7.1
	1,2,4-Trimethylbenzene	100	12.0
	1,3,5-Trimethylbenzene	100	6.8
	m,p-Xylene	100	48.0
	o-Xylene	100	7.5
<b>TB-10</b>	Toluene	100	0.9
11.0-11.9			
<b>TB-12</b>	Benzene	14	1.2
10.0-11.3	Toluene	100	1.9
	m,p-Xylene	100	0.8
<b>TB-16</b>	Toluene	100	1.7
9.0-10.0	m,p-Xylene	100	1.2
<b>TB-17</b>	Ethylbenzene	100	58.0
11.5-12.0	m,p-Xylene	100	15.0
<b>TB-18</b>	Toluene	100	1.6
10.0-10.8	m,p-Xylene	100	1.1

THE GLEASON WORKS & TANK 1 1/2

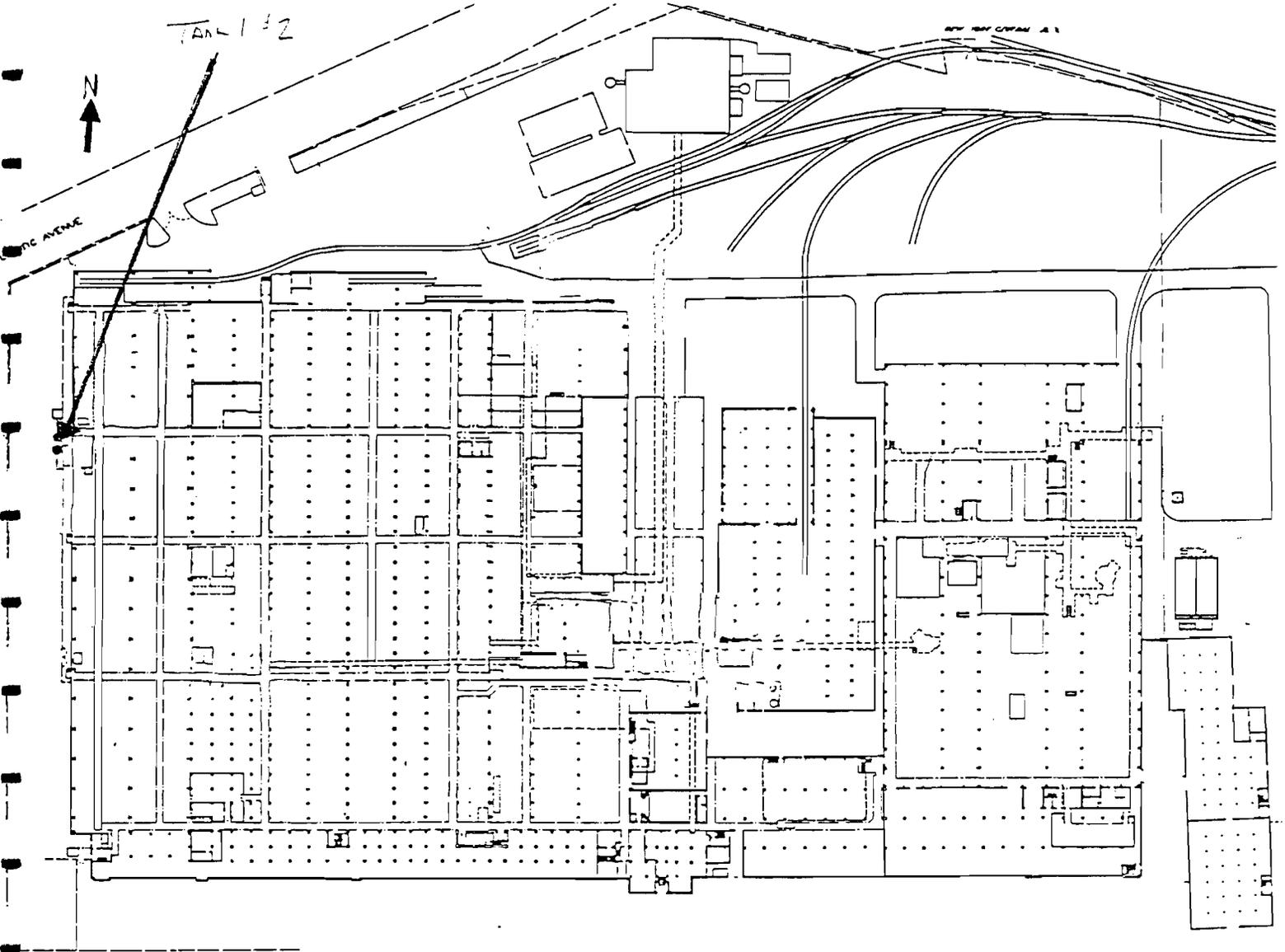
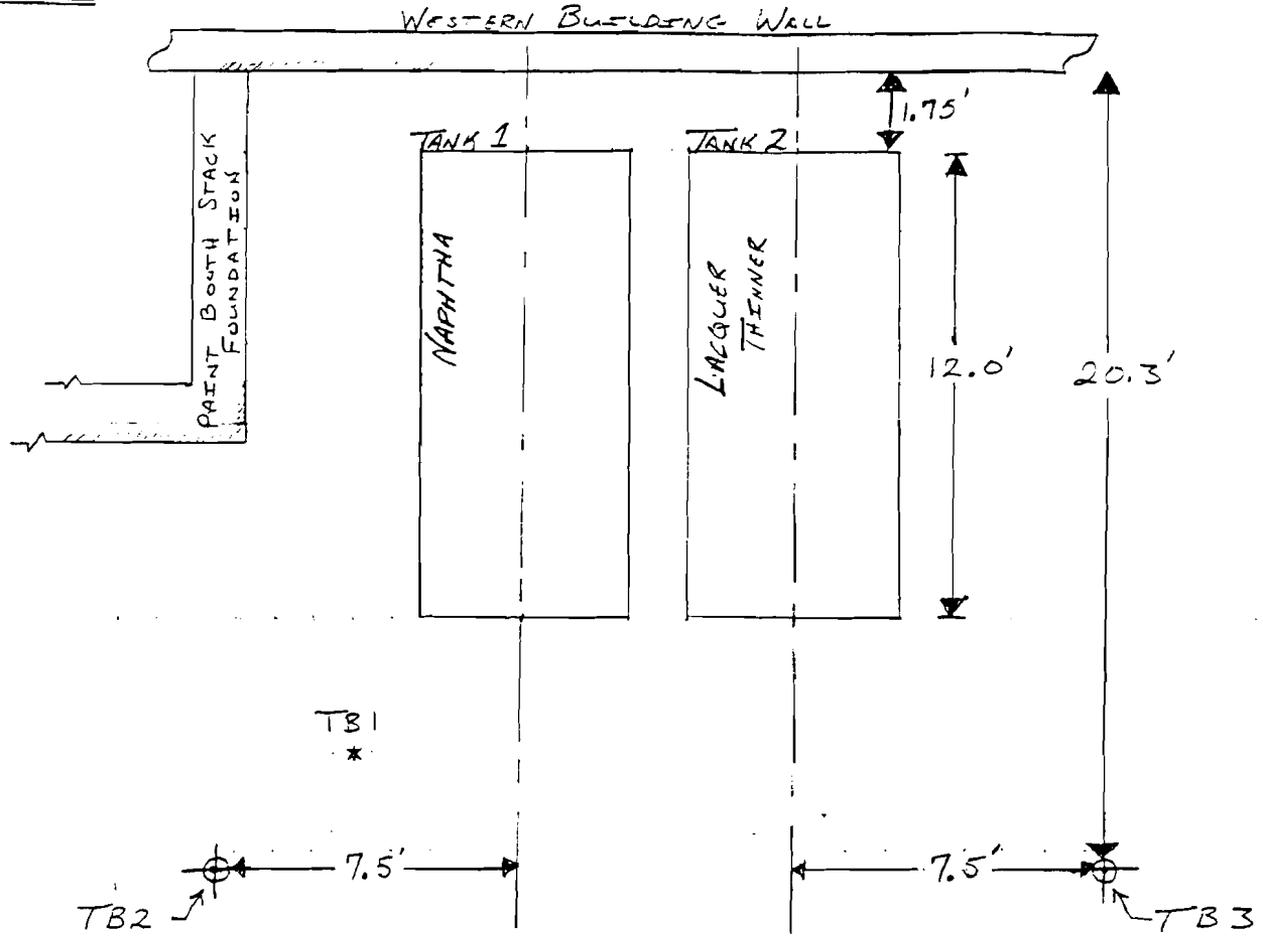


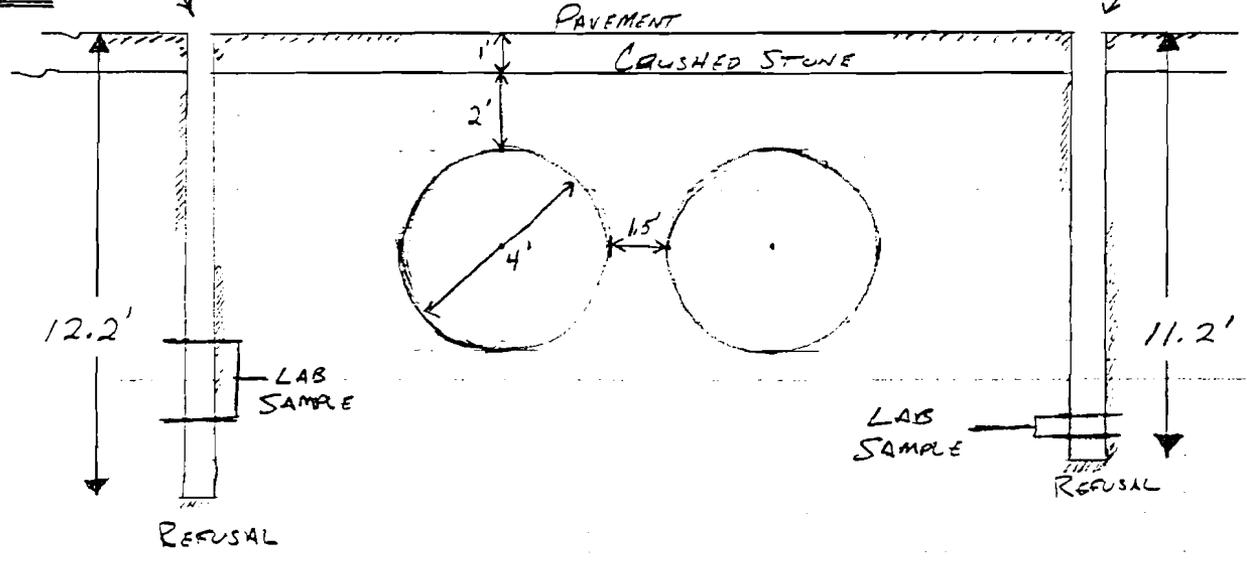
FIGURE #1  
(TANK LOCATION)

VIEW I

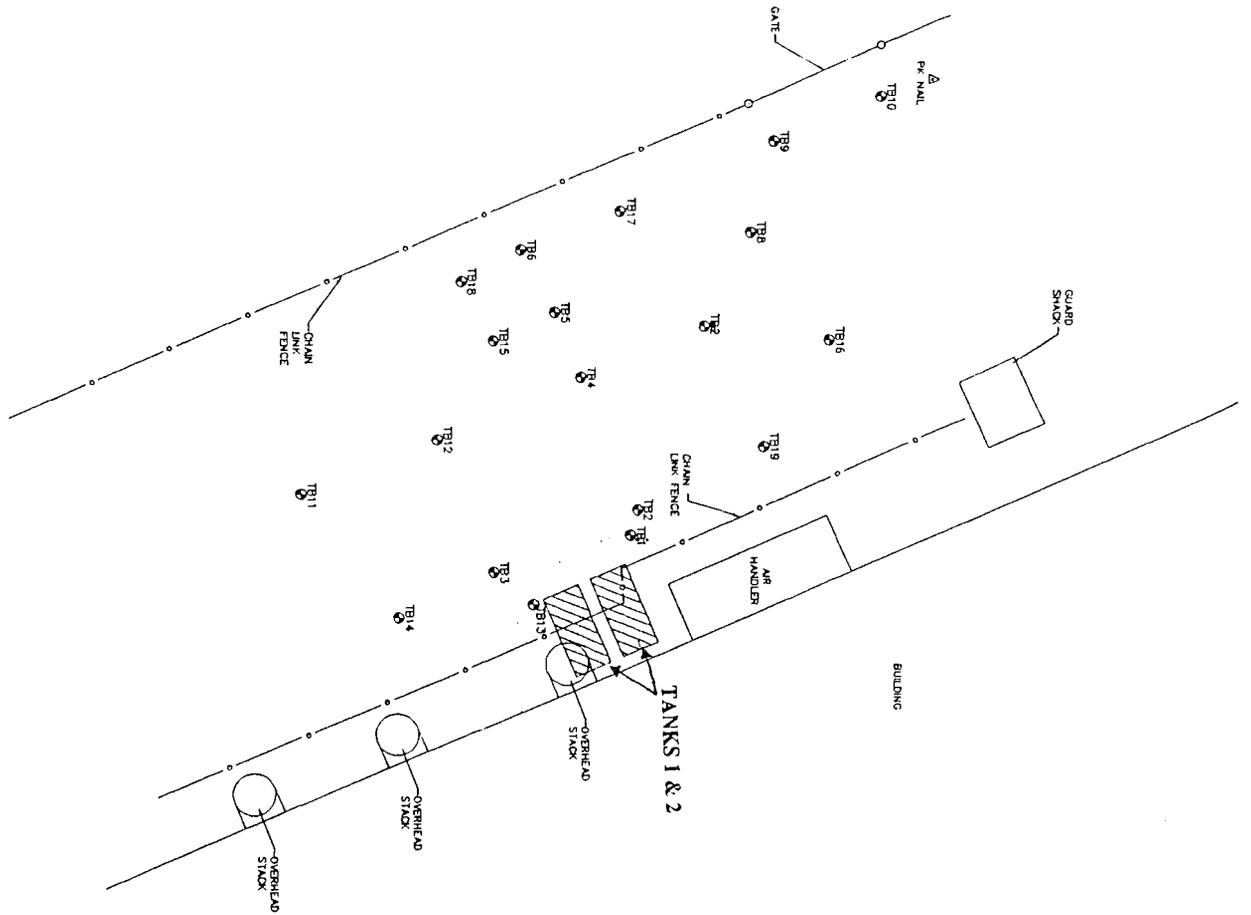
N ←



VIEW II



 <p><b>Galson</b> CORPORATION</p> <p>Engineers/Architects E. Syracuse, NY    Rochester, NY</p>	JOB NUMBER: <b>G0242, TANKS #1 &amp; #2 (USTs)</b>		<b>FIGURE 2</b>	
	DATE: <b>SEPTEMBER 6, 1994</b>	CALC. BY:	PROJECT: <b>THE GLEASON WORKS TANK CLOSURE</b>	PAGE: <b>1</b>



**FIELD SCREENING DATA**

ID	DEPTH(ft)	SHAUL(ghm)	CC(Gpm)
TB1	ABANDONED AT START		NA
TB2	8.0-10.0	170	NA
TB3	9.0-10.0	190	NA
TB4	10.5-11.0	200	55.0
TB5	10.0-11.0	200	1.6
TB6	11.0-12.0	<2	0.1
TB7	9.0-10.0	200	12.0
TB8	11.0-12.0	200	25.0
TB9	11.0-12.0	15	0.5
TB10	11.0-12.0	<1	ND
TB11	10.0-11.0	<1	ND
TB12	10.0-11.0	<1	ND
TB13	8.5-9.5	200	6.0
TB14	8.5-9.5	<2	ND
TB15	10.5-11.0	<1	ND
TB16	9.0-10.0	3	ND
TB17	11.5-12.5	50	5.7
TB18	10.0-10.8	3	9.5
TB19	11.0-11.5	100	6.9

ND NON-DETECT  
 NA NOT AVAILABLE

**BORING LOCATIONS MAP**

GLEASON WORKS  
 1000 UNIVERSITY AVENUE  
 ROCHESTER, NEW YORK 14607

BORING LOCATIONS/RUSSELL STREET



DRAWN	DESIGNED	CHECKED	REFERENCE
L. WATSON			
DATE	SCALE	PROJECT NO.	
9/95	1"=10'	1031-016	
			10311001.DWG

1000 PITTSFORD-VICTOR ROAD,  
 PITTSFORD, N.Y. 14534  
 (716) 381-2210

SYRACUSE, NEW YORK CITY,  
 ALBANY, PHILADELPHIA,  
 OAKLAND

REVISIONS			
NO.	DESCRIPTION	DATE	BY

DATE: \_\_\_\_\_  
 WARNING: For Engineering A Surveyor or  
 Map: It is a violation of Art. 148, Sect. 7  
 of the New York State Education Law for  
 anyone to use this drawing under the direction  
 of a Licensed Professional Engineer or Land Surveyor  
 to alter any drawing, to extend any PE's  
 seal after his seal signature, the date,  
 notation "drawn by" and a specific description  
 of the alteration.

SHEET NO. 2  
 FILE NO. 44355

Required under authority of Act 64, P.A. 1979, as amended and Act 136, P.A. 1969.  
 Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

**DNR**  
**MICHIGAN DEPARTMENT OF NATURAL RESOURCES**

DO NOT WRITE IN THIS SPACE

ATT.  DIS.  REJ.  PR.

Please print or type

Form Approved OMB No. 2050-0039 Expires 9-30-94

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>NYD00220575500333</b>	Manifest Document No. <b>00333</b>	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address <b>GLEASON WORKS (ATTN: H.R. ALLEN) 1000 UNIVERSITY AVENUE, P.O. BOX 22970 ROCHESTER, NY 14692-2970</b>				A. State Manifest Document Number <b>MI 3048454</b>	
4. Generator's Phone (716) 473-1000				B. State Generator's ID <b>NAME</b>	
5. Transporter 1 Company Name <b>THE ENVIRONMENTAL SERVICE GROUP (NY), INC.</b>		6. US EPA ID Number <b>NYD986903904</b>		C. State Transporter's ID <b>71596207</b>	
7. Transporter 2 Company Name <b>THE ENVIRONMENTAL SERVICE GROUP</b>		8. US EPA ID Number <b>NYD986903904</b>		D. Transporter's Phone <b>(716) 695-6720</b>	
9. Designated Facility Name and Site Address <b>PETRO-CHEM PROCESSING, INC. 421 LYCASTE STREET DETROIT, MI 48214</b>				E. State Transporter's ID <b>877922N9</b>	
				F. Transporter's Phone <b>716-695-6720</b>	
				G. State Facility's ID	
				H. Facility's Phone <b>(313) 824-5840</b>	

a.	11. US DOT Description (including Proper Shipping Name, Hazard Class, and HM)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	1. Waste	
		No.	Type			No.	N/H
X	RQ, HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III (D018, D035)	002	DM	01245	P	D018	H
X	HAZARDOUS WASTE, LIQUID, N.O.S., 9, NA3082, PG III (OIL, CONTAINS SOME 1,1,1 TRICHLOROETHANE)	004	DM	01760	P	P001	H
X	RQ, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, UN1993, PG II (D001, D018, NAPHTHA, LACQUER THINNER)	001	DM	00135	P	P005	H
d.							

J. Additional Descriptions for Materials Listed Above

a) U35773 SOLIDIFIED CATALYZED URETHANE PAINT (D035)

b) U43097 USED OIL WITH H.O.C.s

c) U50596 USED CLEANING SOLVENT - FLAMMABLE (D001, D018, D035)

K. Handling Codes for Wastes Listed Above

NYS CODES:

a) B c) B

b) B

a/ /

b/ /

c/ /

d/ /

15. Special Handling Instructions and Additional Information  
**EMERGENCY RESPONSE: CALL INPOTRAC AT 1-800-535-5053. SEE ATTACHED FORMS.**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name <b>Herbert R. Allen</b>	Signature <i>Herbert R. Allen</i>	Date <b>08/11/94</b>
---	--------------------------------------	-------------------------

17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name <b>Michael LeBaron</b>	Signature <i>Michael LeBaron</i>	Date <b>08/11/94</b>

18. Transporter 2 Acknowledgement or Receipt of Materials		
Printed/Typed Name <b>Michael LeBaron</b>	Signature <i>Michael LeBaron</i>	Date <b>08/11/94</b>

19. Discrepancy Indication Space  
**300 TRANSFERRED TO OTHER CONTAINERS  
 11430684088  
 08/19/94**

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		
Printed/Typed Name <b>Michael LeBaron</b>	Signature <i>Michael LeBaron</i>	Date <b>08/11/94</b>

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

**Attachment A**

**GALSON CORPORATION  
SAMPLING LOG**

PROJECT The Gleason Works  
UST/AST Bulk Storage Closure  
LOCATION 1000 University Avenue  
Rochester, New York

CLIENT The Gleason Works

DATE(S) 8/5/94

JOB NUMBER GQ-242

TIME(S) \_\_\_\_\_

TASK T1-2

SAMPLE I.D.: TB2

SAMPLE LOCATION: West Side of Building  
Trucks 1 & 2 NW - 5' N. of Building  
20.5' W, 7.5' N

DEPTH: (12.2' Max) Sample A 8-10'

DESCRIPTION: Brown Clay 8-9.5' med  
9.5' Sandy layer w/ gravel  
Dark Brown Clay w/ gravel

SAMPLING METHOD USED: Auger / Soil Pen

LIST OF CONTAINERS AND AMOUNT SAMPLED: \_\_\_\_\_

COMMENTS: HL 170 ppm

SAMPLED BY: Michael J. [Signature]

# GALSON CORPORATION TEST BOREHOLE / WELL LOG

PROJECT GLACIAL TANK (BORING) (TIT 2)

LOCATION T32

(N.W. of NORMAN TANK)

JOB NUMBER G-242 TIT 2

DATE(S) DRILLED 8/15/94

WELL DIAMETER \_\_\_\_\_

DRILLING METHOD AUGER

G W DEPTH NA

TOTAL DEPTH 12.2'

SHEET 1 OF 2

DRILLING CO. PERCOTT WELLS

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	OVA (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
1	0.5	1	<1	FINE SAND/SILT DARK BROWN		6" YIELD HEADSPACE 1-5-2 2 <1 ppm
2	2.0	7		MODERATE SAND/GRAVEL		
3		3		POORLY SORTED CLAY TO GRAVEL SEDIMENT		
4		4	<1			H.S. 2-4 : <1
5		6				
6	4.0	7		BROWN, CLAY		
7		3				
8		3	<1			H.S. 6-7.1 : <1 6-8 : <1
9		5				
10	6.0	6		BROWN, DAMP, CLAY		
11		15	<1			
12		30				
13	7.1	50/1				10-20 at Top
14		<del>16</del>				
15	8	16	170	Brown clay		170 was at bottom of spoon
16		11		2 - 9.5' med. 9.5 sand & gravel		8'-10' Sample TAKEN
17		13		Dark Brown clay		
18		16		wt gravel		
19						
20						H.S. 10-10.3 : 114 ppm

ppm - parts per million in methane equivalents  
soil sample head space measurements

SAMPLING METHOD ASTM D-1586-67

LOGGED BY NORMAN PERCOTT

BORING NUMBER B-TA 2

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT \_\_\_\_\_

LOCATION \_\_\_\_\_

JOB NUMBER GC242

DATE(S) DRILLED 8/5/64

WELL DIAMETER \_\_\_\_\_

DRILLING METHOD Hand

G W DEPTH \_\_\_\_\_

TOTAL DEPTH \_\_\_\_\_

SHEET 2 OF 2

DRILLING CO. Parent Well

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	OVA (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
11	10.0 10.3	75/3	140	Dark Brown clay matrix w/ med grain sand		Refused @ 10.3 6" yield
12	12.0 12.2	75	>20	LARGE ROCK FRAGMENT AT BOTTOM OF SAMPLE (12.2) WET/SATURATED CLAY		OVA READING 20 ON 0-20 SCALE, SWITCHED TO 0-200 SCALE & READ 200  HEADSPACE 12-12.2 11.5-140 ppm
13						
14						
15						

ppm - parts per million in methane equivalents soil sample head space measurements

SAMPLING METHOD  
ASTM D- 1586-67

LOGGED BY  
NEILSON F. [Signature]

BORING NUMBER  
TB-2

**GALSON CORPORATION  
SAMPLING LOG**

PROJECT The Gleason Works  
UST/AST Bulk Storage Closure  
LOCATION 1000 University Avenue  
Rochester, New York

CLIENT The Gleason Works

DATE(S) 8/5/68

JOB NUMBER GQ-242

TIME(S) 17:50

TASK TIT2

SAMPLE I.D.: TB3

SAMPLE LOCATION: West of Plant  
Truss 142 SW of Truss 140  
20.3' W, 7.5' S

DEPTH: 10' - 10.2'

DESCRIPTION: CLAY / DAMP  
Lot 4' clay w/ gravel

SAMPLING METHOD USED: Auger / Soil Screen

LIST OF CONTAINERS AND AMOUNT SAMPLED:

COMMENTS: Moisture = 90 ppm

SAMPLED BY: Nicholas / [Signature]

PAGE \_\_\_\_\_ OF \_\_\_\_\_

# GALSON CORPORATION TEST BOREHOLE / WELL LOG

PROJECT Green Tank (Lease) T12

LOCATION TB #3

(S.W. of TANK)

JOB NUMBER 6024

DATE(S) DRILLED 8/5/94

WELL DIAMETER \_\_\_\_\_

DRILLING METHOD Auger

G W DEPTH N/A

TOTAL DEPTH 11.2'

SHEET 1 OF 2

DRILLING CO. Proctor Wells

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	OVA (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
1	0.5	12	L1	Brown Soil Some Clay		1' yield Head space 1.5' - 2' = 21
2	2.0	3		SAND, MED → FINE GRAIN		6" yield
3		4	L1	GRAVEL		CONCRETE 3.0 ft
4		2		[THROUGH PIECE OF CEMENT AND RED BRICK]		H.S. 2'-4' = 20 ppm
5	4.0	14				
		2	L1	BROWN DAMP / CLAY		
5		4		6" of BLACK / ASPHALT DEBRIS		H.S. 4'-6' = 21
		4		1.5' of CLAY / SAND		
6	6.0	7				
		7		CLAY, DAMP BROWN		
7		9	7.0			LAST 4" OF 2' SAMPLE DIFFERENT MATERIAL
		12				TB2 HAD SAME LAYER @ 9.5 ft
8	8.0	16		4" SAND (COARSE TO MED) DARK GRAYISH COLOR		H.S. 6'-8' = 30 ppm

ppm - parts per million in methane equivalents  
soil sample head space measurements

SAMPLING METHOD  
ASTM D-1586-67

LOGGED BY  
NICK KRAWN / SCHEIDELMAN

BORING NUMBER  
TB #3

# GALSON CORPORATION TEST BOREHOLE / WELL LOG

PROJECT Galson

LOCATION TB3

JOB NUMBER 20242

DATE(S) DRILLED 8/15/94

WELL DIAMETER \_\_\_\_\_

DRILLING METHOD \_\_\_\_\_

G W DEPTH N/A

TOTAL DEPTH \_\_\_\_\_

SHEET 2 OF 2

DRILLING CO. \_\_\_\_\_

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	OVA (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
8		7		CLAY / SAND		SMELL ODOR
9		11	110	LAT 6" CLAY W/ GRAVEL AVERAGE OVA - 90 ppm		H.S. @ 8'-10' : 200 ppm 250 ppm
10	10.0 10.2	42 75	90	CLAY / SAND / GRAVEL		<del>SAMPLED</del> <del>SMELL ODOR</del>
11	11.0 11.2	RETRIAL	36	POORLY SORTED R&K FRAGMENTS		4" YIELD REFUSE AT 11.2' HEADSPACE 11-11.2' : 110 ppm

ppm - parts per million in methane equivalents  
soil sample head space measurements

SAMPLING METHOD ASTM D-1586-67

LOGGED BY Nickolas / [Signature]

BORING NUMBER TB3

**Attachment B**



GC VOLATILE ANALYTICAL REPORT

Client : Gleason Works
Account # : 12021
Site : Gleason Tank Removal

Date Received : 16-AUG-94
Date Sampled : 15-AUG-94
Matrix : Soil
Method : SW846/8021
Units : UG/KG

Table with 4 columns: Galson ID, Client ID, L19420-1, L19420-2, QC8081894-1. Rows include Benzene, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Ethylbenzene, Isopropylbenzene, p-Isopropyltoluene, Naphthalene, n-Propylbenzene, Toluene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, m,p-Xylene, o-Xylene, Percent Moisture (%), Dilution Factor, Analysis Date, and Method Blank.

ug - microgram
mg - milligram
kg - kilogram
> - Greater than

NR - Not Requested
NS - Not Specified
L - Liter
< - Less than

Approved by :JT
Date :30-AUG-94
QC by :
Date : 8/30/94

Footnotes:





# Galson Laboratories

## Inorganic ANALYTICAL REPORT

Client : Gleason Works  
 Account # : 12021  
 Site : Gleason Tank Removal

Date Received : 16-AUG-94 Matrix : Soil  
 Date Sampled : 15-AUG-94

Galson ID: L19420-3  
 Client ID: T15

	Method	Units	
Total Petroleum Hydrocarbo	418.1	mg/kg	<70

ug - microgram  
 mg - milligram  
 kg - kilogram  
 > - Greater than

NR - Not Requested  
 NS - Not Specified  
 L - Liter  
 < - Less than

Approved by : Mary Withrow  
 Date : 23-AUG-94  
 QC by : *[Signature]*  
 Date : 8/29/94

Footnotes:



SOIL MOISTURE ANALYSIS

LOGIN: L19420 QC BATCH: REFERENCE NUMBER: 449

Wet Weight by: CR  
 Date : 22-AUG-94  
 Time : 13:00

Dry Weight by: CR  
 Date : 23-AUG-94  
 Time : 9:30

GALSON ID	SAMPLE DESC	PAN WT (gm)	NET WET WT (gm)	GROSS DRY WT (gm)	NET DRY WT (gm)	% MOIST	% SOLID
L19420-1	TB3	1.52	10.87	11.39	9.87	9.2	90.8
L19420-2	TB2	1.50	10.60	11.15	9.65	9.0	91.0

$$\text{Percent Moisture} = \frac{(\text{net wet weight}) - (\text{net dry weight})}{\text{net wet weight}} \times 100$$



Attachment C

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WORKS  
TANKS 1 & 2  
 LOCATION GLEASON WORKS  
ROCHESTER, NY

BORING NUMBER 952 30 79  
 WELL DIAMETER 1.5  
 TOTAL DEPTH 11.3  
 FEET 1 OF           

DATE(S) DRILLED SEPTEMBER 13, 1995  
 DRILLING METHOD GEOP2086 FS1  
 TOTAL DEPTH 11.3 ft  
 DRILLING CO. NOTHMAN

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	H <sub>2</sub> S (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0 - 2				1' PLACEMENT 2' BROWN SAND (DARK) 1' SAND (HND Comp)	Z1	3'-4' INTERVAL
2 - 4		3-4	Z1	FULL RECOVERY BROWN MIST CLAY TYPE (SAND MIX)	Z1	7'-8' INT
4 - 6		7-8	Z1	3' Recovery	Z2	8.5-10 VIB/2d
6 - 8			Z2	BROWN CLAY (2.5)		
8 - 10			Z2	.5" BLACK, fine		
10 - 11.3			Z00	10.5" - 11"	200	10.5' - 11 VIB/2d
11.3				REUSE @ 11.3'		

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD GEOP2086 LOGGED BY SCOTT SCHNEIDERMAN BORING NUMBER TB4

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WORKS  
TANKS 1 & 2  
 LOCATION GLEASON WORKS  
ROCHESTER, NY

BORING NUMBER 95L 3079  
 WELL DIAMETER NA  
 G.W. DEPTH NA  
 SHEET 2 OF       

DATE(S) DRILLED SEPTEMBER 13, 1995 930  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 11.1  
 DRILLING CO. NOT AVAILABLE

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	H <sub>2</sub> S (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
				2.0' PAVE		
2	2-4			2.5' BROWN / SAND mix		BAG ONLY
4		2-4	<1			
6	4-6	5-6	<1	BROWN SAND / CLAY MIX		
8		7-8	<1			BAG ONLY
10	8-11.1	9-10	<2	BROWN CLAY TYPE	<2	VOID / LAB
11.1	10-11	10-11	200	TOP OF 15-1 Grey Blue Moist clay	200	VOID / LAB
	11.1	11.1		REFUSAL		

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD \_\_\_\_\_ LOGGED BY SCOTT SCHNEIDERMAN BORING NUMBER TB5

# GALSON CORPORATION TEST BOREHOLE / WELL LOG

PROJECT CLEASON WELLS

TANKS 1 & 2

LOCATION CLEASON WELLS

ROCHESTER, NY

WELL NUMBER 952 3079

DATE(S) DRILLED SEPTEMBER 13, 1995 10:10

WELL DIAMETER NA

DRILLING METHOD GEOPROBE

G.W. DEPTH: NA

TOTAL DEPTH 12.0'

PAGE 3 OF     

DRILLING CO. NOTHING

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	U/NH (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0	-1.0			3.5 ft recovery		
2	-3.0			Brown Dark Sand		
4	3-4	<1		Med Brown Sand fine clay	<1	3-4 BAG
6	4-6	<1		Brown Coar Typf	<1	JAR
8	6-8	<1		SAND MS	<1	JAR
10	9-10	<2		2.5-3.0 clay	<2	vid/LAS
12	8-12	<2		1st SAND	<2	vid/LAS
	REFUSE			REFUSE		

ppm - parts per million in methane equivalents  
soil sample head space measurements

SAMPLING METHOD GEOPROBE LOGGED BY SCOTT SENSIDEMAR BORING NUMBER TB6

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WELLS  
TANKS 1 & 2  
 LOCATION GLEASON WELLS  
ROCHESTER, NY

BORING NUMBER 952 30 79  
 WELL DIAMETER NA  
 G.W. DEPTH NA  
 SHEET 4 OF       

DATE(S) DRILLED SEPTEMBER 13, 1995  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 10.7  
 DRILLING CO. NOTHING

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	HM (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
				1.0' Pavement		
4	4-6		41	Clay Type Brown		
7	7-8		41		22	7-8 Jar
8	8-9		52	Brown Clay Type	50	8-9 vid / Jar
9	9-10.0		200		200	9-10 vid / Lid
10	10-7			R. Fine	ppm	

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD GEOPROBE      LOGGED BY Scott Schneiderman      BORING NUMBER TBT

# GALSON CORPORATION TEST BOREHOLE / WELL LOG

PROJECT GLEASON WORKS  
TANKS 1 & 2  
 LOCATION GLEASON WORKS  
ROCHESTER, NY

BOREHOLE NUMBER 9523079  
 WELL DIAMETER NA  
 G.W. DEPTH NA  
 SHEET 5 OF       

DATE(S) DRILLED SEPTEMBER 13, 1995 1115  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 12.0'  
 DRILLING CO. NOTHUSOLE

DEPTH	SAMPLE INTERVAL	SPOON BLOWS (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
4-6		21	Brown CLAY		
6-8		21			
9-10			Brown clay > Moist 1.5'	22	9-10 Juv / mid
10-11			CLAY 1.0'	20	10-11 mid / bot
11-12		700	SAND (Brown) / CLAY 0.5'	200	11-12 Juv / bot
			GRAY CLAY (moist) 1.0'		
			REFUSAL		

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD GEOPROBE LOGGED BY Scott Schaeferman BORING NUMBER TE8

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WORKS

TANKS 1 & 2

LOCATION GLEASON WORKS

ROCHESTER, NY

JOB NUMBER 9523079

DATE(S) DRILLED SEPTEMBER 13, 1995 1315

WELL DIAMETER NA

DRILLING METHOD GEOPROBE

GW DEPTH NA

TOTAL DEPTH 12.0'

HEET 6 OF         

DRILLING CO. NOT KNOWN

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	--- (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
				1' Pure		
2	0-4		21	Brown Sand		
4						
6	5-6		21	Mud Brown Clay		
8	7-8		21		21	Big
10				Mud		
11	9.5-11		22	Clay Brown	22	view / Jar
12					15	view / Lab
13	11-12		15	Sand / GRAY		
				Referenced 12' 2"	5	Lab / view
				2" of clay		

ppm - parts per million in methane equivalents  
soil sample head space measurements

SAMPLING METHOD GEOPROBE

LOGGED BY JOE SCHNEIDERMAN

BORING NUMBER 759

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WELLS  
TANKS 1 & 2  
 LOCATION GLEASON WELLS  
ROCHESTER, NY

BORING NUMBER 952 3079  
 WELL DIAMETER NA  
 G.W. DEPTH NA  
 SHEET 7 OF       

DATE(S) DRILLED SEPTEMBER 13, 1995 1400  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 11.9'  
 DRILLING CO. NOT KNOWN

DEPTH	SAMPLE INTERVAL	SPOON BLOWS (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0			2110' pure		
5-6		<1	Brown CLAY MIST - WET		
7-8		<1	"	21	Bag 7-8
8-10		<1	MIST / SATURATED SAND	21	
10-11		<1	SAND / BLACK	21	vid / Lab
11.9		21	RECESSAL CLAY Brown / grey	21	vid / Lab

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD GEOPROBE      LOGGED BY SCOTT SCHNEIDERMAN      BORING NUMBER 7D10

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WELLS  
TANKS 1 & 2  
 LOCATION GLEASON WELLS  
ROCHESTER, NY

BORING NUMBER 95L 3079  
 WELL DIAMETER NA  
 G.W. DEPTH NA  
 FEET 8 OF

DATE(S) DRILLED SEPTEMBER 17, 1995 1430  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 11.3  
 DRILLING CO. NORTH HOLE

DEPTH	SAMPLE INTERVAL	SPOON BLOWS (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
2					
4					
6	5-6	<1	Brown Clay		
8	7-8	<1	1.0' SAND/MIX CLAY		
10	9-10	<1	Mud/Sand Clay Sand	<1	urb
11.3	10-11'	<1	0.5' Sand, gray brown clay REF. 546	<1	urb / 6 ft

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD GEOPROBE LOGGED BY SCOTT SCHNEIDERMAN BORING NUMBER TB11

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WORKS

TANKS 1 & 2

LOCATION GLEASON WORKS

ROCHESTER, NY

B NUMBER 952 3079

DATE(S) DRILLED SEPTEMBER 13, 1995 1540

WELL DIAMETER NA

DRILLING METHOD GEOPROBE

WATER DEPTH NA

TOTAL DEPTH 11.3

FEET 9 OF

DRILLING CO. NOT AVAILABLE

DEPTH	SAMPLE INTERVAL	SPOON BLOWS (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
			0-1 PavE		
2	1.5-2.5	<1	Black, Brown Sand CLAY		
4	3-4	<1	Brown, Silt Sand		
	5-6	<1	" "		
6	6.5-8	<1	MULT Brown / Sand Clay Silt		
8					
	8.5-10	<1	Brown / tan, type Clay	<1	8.5-10 v. 1 / <1
11.3	10-11.3	<1	BLACK SAND MIX Brown Clay REFUSED	<1	10-11.3 v. 1 / <1

ppm - parts per million in methane equivalents  
soil sample head space measurements

SAMPLING METHOD GEOPROBE

LOGGED BY Scott Schaefer

BORING NUMBER TB12

# GALSON CORPORATION TEST BOREHOLE / WELL LOG

PROJECT GLEASON WORKS  
TANKS 1 & 2  
 LOCATION GLEASON WORKS  
ROCHESTER, N.Y.

BORING NUMBER 95L 3079  
 WELL DIAMETER NA  
 WELL DEPTH NA  
 FEET 10 OF

DATE(S) DRILLED SEPTEMBER 14, 1995  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 9.3  
 DRILLING CO. NORTH HAVEN

DEPTH	SAMPLE INTERVAL	SPOON BLOWS (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0 - 2			3.6' Brown 1.0' WHITE 2.0' Brown Sand	3-4	3-4
2 - 4	3-4	41	Moist / Brown Sand		
4 - 7	7-8	41	SAND BROWN Grey Clay, Moist 0.5	7-8	7-8
7 - 9.3	8.5-9	200	REFUSAL	8.5-9	8.5-9

ppm - parts per million in methane equivalents  
 soil sample head space measurements

AMPLING METHOD GEOPROBE LOGGED BY SCOTT SCHNEIDERMAN BORING NUMBER TB13

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WORKS  
TANKS 1 & 2  
 LOCATION GLEASON WORKS  
ROCHESTER, NY

B NUMBER 952 3079  
 WELL DIAMETER NA  
 WELL DEPTH NA  
 FEET 11 OF         

DATE(S) DRILLED SEPTEMBER 17, 1995  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 9.5  
 DRILLING CO. NOTHURBLE

PTH	SAMPLE INTERVAL	SPOON BLOWS	Hum (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
2				1.0 FINE		
3-4	3-4	41		2.5-3.0' Brown Med Sand Clay		
4				4-7.5 Brown Clay Sand		
7	7-8	42		7.5-8 brown SAND		
9.5	9.5-9.5	2		3.0-4.0' Brown Med Clay/Sand REFUSAL	42	9.5-9.5 V-L/LRB

ppm - parts per million in methane equivalents  
 soil sample head space measurements

DRILLING METHOD GEOPROBE      LOGGED BY Scott SENSELWART      BORING NUMBER TB14

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON WORKS  
TANKS 1 & 2  
 LOCATION GLEASON WORKS  
ROCHESTER, NY

BORING NUMBER 952 30 79  
 WELL DIAMETER NA  
 BORE DEPTH N/A  
 SHEET 12 OF       

DATE(S) DRILLED SEPTEMBER 14, 1995 1020  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 11.7'  
 DRILLING CO. NOTHINGABLE

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	H <sub>2</sub> S (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0 - 1'				1' pure		
1 - 3'				2' Brown Moist Clay		
3 - 4'		3-4	41		3-4	41,000
4 - 9.5'				Brown Moist Sandy Brown Clay		
9.5 - 10.5'	9.5-10.5		<2	Black streak thin grey clay with Sandy Dark Grey	22	9.5-10.5 Vial/L
10.5 - 11.7'	10.5-11.7		41	Brown Sandy Clay	21	10.5-11.7 Vial/L
11.7'				RESIDUAL		

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD GEOPROBE      LOGGED BY SCOTT SCHNEIDERMAN      BORING NUMBER TC15

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT Gleason Works  
Tanks 1 & 2  
 LOCATION Gleason Works  
Rochester, NY

WELL NUMBER 952 30 79  
 WELL DIAMETER NA  
 BOREHOLE DEPTH NA  
 SHEET 13 OF       

DATE(S) DRILLED September 14, 1995 1050  
 DRILLING METHOD Geoprobe  
 TOTAL DEPTH 10.3  
 DRILLING CO. NORTH HAVEN

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	HM <sup>+</sup> (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0 - 1				probe 1.0' gap		
1 - 2				} Sand, Crushed Stone fill		
2 - 3						
3 - 4						
4 - 8				Wet, Shale type 1' - 1.5' Recovered	21	
8 - 10		9-10	3	Red, Crushed Brown Clay type Brown Sand/Clay	21 3 ppm	4-10 view/LAS
10.3				REFUSAL		

ppm - parts per million in methane equivalents  
 soil sample head space measurements

SAMPLING METHOD GEOPROBE LOGGED BY Scott Seegerman BORING NUMBER TB16

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON Works  
TANKS 1 & 2  
 LOCATION GLEASON Works  
ROCHESTER, NY

BORING NUMBER 952 3079  
 WELL DIAMETER ND  
 BORE DEPTH NA  
 FEET 14 OF \_\_\_\_\_

DATE(S) DRILLED September 14, 1995 1130  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 12.1  
 DRILLING CO. NORTHMOBLE

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	H <sub>2</sub> S (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0-1				PRIMER		
2				~ 2.0' gravel		
3-4				SAND / some Moist Brown silty sand		
4-8				MUST, Brown Sand (thin clay)	< 1 ft	
				2.5' Gravel		
				8.5-10.5 Brown Moist Sand	< 2 ft	8.5-10.5
		50		11.5-12 Blue Sand	50 ppm	11.5-12
-12.1				REFUSED		
				1.0' water		
				11.3' H <sub>2</sub> O		

ppm - parts per million in methane equivalents  
 soil sample head space measurements

AMPLING METHOD GEOPROBE LOGGED BY Scott Schrederman BORING NUMBER TB17

**GALSON CORPORATION  
TEST BOREHOLE / WELL LOG**

PROJECT GLEASON Works

TANKS 1 & 2

LOCATION GLEASON Works

ROCHESTER, NY

B NUMBER 952 30 79

DATE(S) DRILLED SEPTEMBER 14, 1995

WELL DIAMETER NA

DRILLING METHOD GEOPROBE

WELL DEPTH NA

TOTAL DEPTH 10.8

SHEET 15 OF       

DRILLING CO. Northrup

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	ANN (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0-1				1' Pure		
1-2	2-4			Brown Moist Sand		
2-3	3-4	21				
3-4				Moist - Wet		
4-5	5-6	21		Brown Sand		
5-6						
6-7	7-8	21				
7-8				Brown - Wet Sand		
8-9	8.5-9.0			GREY SAND	2 ppm	vial
9-10	9.5-10				2 ppm	vial / lab
10-10.8	10-10.8				3 ppm	vial / lab
10.8				REFUSAL		

ppm - parts per million in methane equivalents  
soil sample head space measurements

AMPLING METHOD GEOPROBE

LOGGED BY Scott J. Schneiderman

BORING NUMBER TB18

# GALSON CORPORATION TEST BOREHOLE / WELL LOG

PROJECT GLEASON WORKS  
TANKS 1 & 2  
 LOCATION GLEASON WORKS  
ROCHESTER, N.Y.

JOB NUMBER ESL 3079  
 WELL DIAMETER NA  
 WELL DEPTH NA  
 SHEET 16 OF       

DATE(S) DRILLED SEPTEMBER 14, 1995  
 DRILLING METHOD GEOPROBE  
 TOTAL DEPTH 11.8  
 DRILLING CO. NOT KNOWN

DEPTH	SAMPLE INTERVAL	SPOON BLOWS	h <sub>max</sub> (ppm)	SOIL / ROCK CLASSIFICATION	PROFILE	NOTES
0 - 1.5			<1	1.5' Redwood		
5.5 - 6.0				Red Bank Fill	2)	Lab
6 - 8			<1	Moist Brown Sand		
9.5 - 10			1	SAND (coarse)	100	vis / Lab 10-11
10 - 11				Moist Brown Sand / clay		
11 - 11.5			100	4" Blue-gray Moist clay	100	vis / Lab 11-11.5
11.8				GLEASON 11.8		

ppm - parts per million in methane equivalents  
 soil sample head space measurements

DRILLING METHOD GEOPROBE      LOGGED BY Scott Jensen      BORING NUMBER 1819

**Attachment D**

TABLE 2  
SOIL HEADSPACE SCREENING RESULTS  
TANKS 1 AND 2 INVESTIGATION PROGRAM  
THE GLEASON WORKS

SAMPLE LOCATION	SAMPLE DEPTH (FT.)	DATE	BENZENE	TOLUENE	ETHYL-BENZENE	M-XYLENE	O-XYLENE	UNKNOWN*	TOTAL VOCs (PPM)	
									by G.C.	by HPLC
TB-4	8.5-10	9/13/95	--	--	--	--	--	0.07	0.07	<2
	10.6-11	9/13/95	--	--	6.30	--	7.40	41.50	55.20	200
TB-5	9-10	9/13/95	--	--	--	--	0.01	0.03	0.04	<2
	10-11	9/13/95	--	--	0.22	--	0.09	1.16	1.47	200
TB-6	10-11	9/13/95	--	--	--	--	--	0.02	0.02	<2
	11-12	9/13/95	--	--	0.02	--	0.02	0.06	0.10	<2
TB-7	8-9	9/13/95	--	--	--	--	--	0.02	0.02	50
	9-10	9/13/95	--	--	--	--	1.90	10.00	11.90	200
TB-8	9-10	9/13/95	--	--	--	--	--	0.06	0.06	<2
	10-11	9/13/95	--	--	0.19	--	--	0.09	0.28	<20
	11-12	9/13/95	0.06	--	2.00	--	4.90	18.00	24.96	200
TB-9	9.5-11.5	9/13/95	--	--	--	--	--	--	ND	<2
	11-12	9/13/95	--	--	0.10	--	0.11	0.59	0.80	15
	12-12.2	9/13/95	--	--	--	--	0.02	0.48	0.50	5
TB-10	10-11	9/13/95	--	--	0.19	--	0.13	0.63	0.95	<1
	11-11.9	9/13/95	--	--	--	--	--	--	ND	<1
TB-11	10-11.3	9/13/95	--	--	--	--	--	--	ND	NS
TB-12	8.5-10.0	9/13/95	--	--	--	--	--	--	ND	NS
	10-11.3	9/13/95	--	--	--	--	--	--	ND	NS
TB-13	8.5-9	9/14/95	--	--	0.80	--	0.97	4.20	5.97	200
TB-14	8.5-9.5	9/14/95	--	--	--	--	--	--	ND	NS
TB-15	9.5-10.5	9/14/95	--	--	--	--	--	0.01	0.01	NS
	10.5-11	9/14/95	--	--	--	--	--	0.01	0.01	NS
TB-16	9-10	9/14/95	--	--	--	--	--	0.01	0.01	NS
TB-17	8.5-10.5	9/14/95	--	--	--	--	--	--	ND	NS
	11.5-12	9/14/95	--	--	0.83	--	1.00	3.90	5.73	NS
TB-18	8-9	9/14/95	--	--	--	--	0.02	0.11	0.13	NS
	9.5-10	9/14/95	--	--	--	--	--	0.05	0.05	NS
	10-10.8	9/14/95	--	--	--	--	--	--	ND	NS
TB-19	10-11	9/14/95	--	--	--	--	--	0.03	0.03	NS
	11-11.5	9/14/95	--	--	0.51	--	1.20	5.20	6.91	NS

NOTES:

1. ALL COMPOUNDS REPORTED IN mg/L OR PARTS-PER-MILLION (PPM).
2. ABBREVIATIONS:  
G.C. - GAS CHROMATOGRAPH  
NS - NOT SCREENED.
4. NOT DETECTED IS REPRESENTED BOTH AS "ND" AND "--".
5. \* UNKNOWN\* REFER TO UNIDENTIFIED NON-TARGET PETROLEUM COMPOUNDS.

GK\WKS247833-001\TABL1.WGI



6601 Kirkville Road East  
E. Syracuse, New York 13057  
315-432-0506 or 800-950-0506

Company Name  
*GREEN WATERS*

Project Name / Number  
*TINOS 112*  
*95L3074 / TSK2 / PROJ*

- Standard Service  
 - \* Rush Service

Date requested by: \_\_\_\_\_

Ph # ( ) - - - \_\_\_\_\_

Fax # ( ) - - - \_\_\_\_\_

PARAMETERS FOR ANALYSIS									
<i>80:21 STARS w/ MEK</i>									
<i>Semi-VoAs STARS</i>									
<i>TCLP Extract Followed</i>									
<i>BY STARS VoA (with</i>									
<i>MEK) Semi-VoA</i>									

Send Report to: Tom W. Moran Send Invoice to: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

P.O. # \_\_\_\_\_

SAMPLE ID	Date	Time	TYPE		Chain of Custody Record				
			Comp.	Grab	Aqueous	Soil	Other	ID	Number
TB16 (9-10)	9/14			X		Y		L25705-1	
TB10 (11-11.9)	9/13			X		X		L25705-2	
TB17 (11.5-12)	9/14			X		Y		L25705-3	
TB18 (10-10.8)	9/14			X		X		L25705-4	
TB12 (10-11.3)	9/13			X		X		L25705-5	
TB4 (10.5-11)	9/13			X		X		L25705-6	
TB19 (11-11.5)	9/14			X		Y		L25705-7	

*to be analyzed* ~~XXXX~~ *per Scott Schulman*  
*per Tom Moran*

*9/14/95*  
*4:35*

REMARKS: PLEASE RUN: STARS VOAs (w/MEK) AND Semi-VOAs PLUS STARS  
VOAs (w/MEK) + Semi-VOAs OF A TCLP EXTRACT FOR SAMPLE TB4. IF SAMPLE MATERIAL  
VOLUME IS TOO SMALL; PLEASE RUN STANDARD STARS VOAs (w/MEK) + Semi-VOAs on TB4 then  
STARS VOAs (w/MEK) + Semi-VOAs OF A TCLP EXTRACT ON TB19. *TAN IN 9/13/95*

SAMPLER'S NAME: *Scott Schulman* SIGNATURE: *Scott Schulman*

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:		Custody Seal Intact? Sample Shipment Complete? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N.A.
NAME: <i>Scott Schulman</i>	DATE: <i>9/15/95</i>	NAME:	DATE:	
SIGNATURE: <i>Scott Schulman</i>	TIME: <i>11:30</i>	SIGNATURE:	TIME:	
NAME:	DATE:	NAME:	DATE:	Airbill # <i>well in</i>
SIGNATURE:	TIME:	SIGNATURE:	TIME:	
NAME:	DATE:	Received For Laboratory By:	DATE:	
SIGNATURE:	TIME:	(Signature) <i>[Signature]</i>	TIME: <i>11:30</i>	



# Galson Laboratories

## GC VOLATILE ANALYTICAL REPORT

Client : Gleason Works  
 Account # : 12032  
 Site : Tanks 1/2

Date Received : 15-SEP-95 Matrix : Soil  
 Date Sampled : 13-SEP-95 - 14-SEP-95 Method : SW846 8021  
 Units : UG/KG

Galson ID:	L25705-1	L25705-2	L25705-3
Client ID:	TB 16(9-10)	TB 10(11-11.9)	TB 17(11.5-12)
Benzene	<0.6	<0.6	<2.8
2-Butanone	<6	<5.8	<28
n-Butylbenzene	<0.6	<0.6	<2.8
sec-Butylbenzene	<0.6	<0.6	<2.8
tert-Butylbenzene	<0.6	<0.6	<2.8
Ethylbenzene	<0.6	<0.6	58
Isopropylbenzene	<0.6	<0.6	<2.8
p-Isopropyltoluene	<0.6	<0.6	<2.8
Naphthalene	<0.6	<0.6	<2.8
n-Propylbenzene	<0.6	<0.6	<2.8
Toluene	1.7	0.9	<2.8
1,2,4-Trimethylbenzene	<0.6	<0.6	<2.8
1,3,5-Trimethylbenzene	<0.6	<0.6	<2.8
m,p-Xylene	1.2	<0.6	15
o-Xylene	<0.6	<0.6	<2.8
Percent Moisture (%)	16	14	12
Dilution Factor	1	1	5
Analysis Date	09/23/95	09/23/95	09/26/95
Method Blank	QC80922A95-1	QC80922A95-1	QC8092595-1

ug - microgram  
 mg - milligram  
 kg - kilogram  
 > - Greater than

NR - Not Requested  
 NS - Not Specified  
 L - Liter  
 < - Less than

Approved by : JT  
 Date : 04-OCT-95  
 QC by : *Jane*  
 Date : 10/5/95

Footnotes:





# Galson Laboratories

## GC VOLATILE ANALYTICAL REPORT

Client : Gleason Works  
 Account # : 12032  
 Site : Tanks 1/2

Date Received : 15-SEP-95 Matrix : Soil  
 Date Sampled : 13-SEP-95 - 14-SEP-95 Method : SW846 8021  
 Units : UG/KG

Galson ID:	L25705-4	L25705-5	L25705-6
Client ID:	TB 18(10-10.8)	TB 12(10-11.3)	TB 4(10.5-11)
Benzene	<0.6	1.2	<5.1
2-Butanone	<5.6	<5.6	<51
n-Butylbenzene	<0.6	<0.6	<5.1
sec-Butylbenzene	<0.6	<0.6	<5.1
tert-Butylbenzene	<0.6	<0.6	<5.1
Ethylbenzene	<0.6	<0.6	64
Isopropylbenzene	<0.6	<0.6	<5.1
p-Isopropyltoluene	<0.6	<0.6	<5.1
Naphthalene	<0.6	<0.6	<5.1
n-Propylbenzene	<0.6	<0.6	11
Toluene	1.6	1.9	7.1
1,2,4-Trimethylbenzene	<0.6	<0.6	12
1,3,5-Trimethylbenzene	<0.6	<0.6	6.8
m,p-Xylene	1.1	0.8	48
o-Xylene	<0.6	<0.6	7.5
Percent Moisture (%)	10	11	51
Dilution Factor	1	1	5
Analysis Date	09/23/95	09/23/95	09/26/95
Method Blank	QC80922A95-1	QC80922A95-1	QC8092595-1

ug - microgram  
 mg - milligram  
 kg - kilogram  
 > - Greater than

NR - Not Requested  
 NS - Not Specified  
 L - Liter  
 < - Less than

Approved by : JT  
 Date : 04-OCT-95  
 QC by : *[Signature]*  
 Date : 10/5/95

Footnotes:





# Galson Laboratories

## GC VOLATILE ANALYTICAL REPORT

Client : Gleason Works  
 Account # : 12032  
 Site : Tanks 1/2

Date Received : 15-SEP-95  
 Date Sampled : 13-SEP-95 - 14-SEP-95  
 Matrix : Soil  
 Method : SW846 8021  
 Units : UG/KG

Galson ID: QC8092595-1      QC80922A95-1  
 Client ID: METHOD BLANK      METHOD BLANK

Benzene	<0.5	<0.5
2-Butanone	<5	<5
n-Butylbenzene	<0.5	<0.5
sec-Butylbenzene	<0.5	<0.5
tert-Butylbenzene	<0.5	<0.5
Ethylbenzene	<0.5	<0.5
Isopropylbenzene	<0.5	<0.5
p-Isopropyltoluene	<0.5	<0.5
Naphthalene	<0.5	<0.5
n-Propylbenzene	<0.5	<0.5
Toluene	<0.5	<0.5
1,2,4-Trimethylbenzene	<0.5	<0.5
1,3,5-Trimethylbenzene	<0.5	<0.5
m,p-Xylene	<0.5	<0.5
o-Xylene	<0.5	<0.5

Percent Moisture (%)	NA	NA
Dilution Factor	1	1
Analysis Date	09/25/95	09/22/95
Method Blank	QC8092595-1	QC80922A95-1

ug - microgram  
 mg - milligram  
 kg - kilogram  
 > - Greater than

NR - Not Requested  
 NS - Not Specified  
 L - Liter  
 < - Less than

Approved by : JT  
 Date : 04-OCT-95  
 QC by : *JM*  
 Date : 10/15/95

Footnotes:





SOIL MOISTURE ANALYSIS

LOGIN: L25705 QC BATCH: LAB GROUP: INORGANIC REF. #: 989

Wet Weight by: PL  
 Date : 21-SEP-95  
 Time : 14:40

Dry Weight by: PH  
 Date : 22-SEP-95  
 Time : 9:40

GALSON ID	SAMPLE DESC	D C T	PAN WT (gm)	NET WET WT (gm)	GROSS DRY WT (gm)	NET DRY WT (gm)	% MOIST	% SOLID
25705-1		N	1.00	5.14	5.34	4.34	15.6	84.4
25705-2	TB 10 (11-11.	N	0.99	5.80	5.96	4.97	14.3	85.7
L25705-3		N	0.99	5.35	5.71	4.72	11.8	88.2
25705-4		N	0.98	6.43	6.77	5.79	10.0	90.0
25705-5		N	1.00	5.72	6.08	5.08	11.2	88.8
L25705-6	TB 4 (10.5-11	N	0.98	5.01	3.46	2.48	50.5	49.5

$$\text{Percent Moisture} = \frac{(\text{net wet weight}) - (\text{net dry weight})}{\text{net wet weight}} \times 100$$



# Galson Laboratories

## SEMIVOLATILE ANALYTICAL REPORT

Client : Gleason Works  
 Account # : 12032  
 Site : Tanks 1/2

Date Received : 15-SEP-95  
 Date Sampled : 13-SEP-95  
 Date Extracted: 20-SEP-95

Matrix : Soil  
 Method : SW846/3550/8270  
 Units : UG/KG

Galson ID:	L25705-2	L25705-6	Q-2918
Client ID:	TB 10(11-11.9)	TB 4(10.5-11)	METHOD BLANK

Naphthalene	<390	<680	<330
Acenaphthene	<390	<680	<330
Fluorene	<390	<680	<330
Phenanthrene	<390	<680	<330
Anthracene	<390	<680	<330
Fluoranthene	<390	<680	<330
Pyrene	<390	<680	<330
Benzo(a)anthracene	<390	<680	<330
Chrysene	<390	<680	<330
Benzo(b)fluoranthene	<390	<680	<330
Benzo(k)fluoranthene	<390	<680	<330
Benzo(a)pyrene	<390	<680	<330
Indeno(1,2,3-cd)pyrene	<390	<680	<330
Dibenzo(a,h)anthracene	<390	<680	<330
Benzo(g,h,i)perylene	<390	<680	<330

Percent Moisture (%)	14	51	NA
Dilution Factor	1	1	1
Analysis Date	09/26/95	09/26/95	09/26/95

ug - microgram  
 mg - milligram  
 kg - kilogram  
 > - Greater than

NR - Not Requested  
 NS - Not Specified  
 L - Liter  
 < - Less than

Approved by : PK  
 Date : 29-SEP-95  
 QC by : *fr*  
 Date : 10/5/95

Footnotes:





# Galson Laboratories

## SEMIVOLATILE ANALYTICAL REPORT

Client : Gleason Works  
 Account # : 12032  
 Site : Tanks 1/2

Date Received : 15-SEP-95  
 Date Sampled : 13-SEP-95  
 Date Extracted: 20-SEP-95

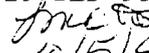
Matrix : Soil  
 Method : SW846/3550/8270  
 Units : UG/KG

Galson ID: Q-2918GPC  
 Client ID: GPC BLANK

Naphthalene	<330
Acenaphthene	<330
Fluorene	<330
Phenanthrene	<330
Anthracene	<330
Fluoranthene	<330
Pyrene	<330
Benzo(a)anthracene	<330
Chrysene	<330
Benzo(b)fluoranthene	<330
Benzo(k)fluoranthene	<330
Benzo(a)pyrene	<330
Indeno(1,2,3-cd)pyrene	<330
Dibenzo(a,h)anthracene	<330
Benzo(g,h,i)perylene	<330

Percent Moisture (%)	NA
Dilution Factor	1
Analysis Date	09/26/95

ug - microgram	NR - Not Requested
mg - milligram	NS - Not Specified
kg - kilogram	L - Liter
> - Greater than	< - Less than

Approved by : PK   
 Date : 29-SEP-95  
 QC by :   
 Date : 10/5/95

Footnotes:







SEMIVOLATILE ANALYTICAL REPORT

Client : Gleason Works
Account # : 12032
Site : Tanks 1/2

Date Received : 15-SEP-95
Date Sampled : 13-SEP-95
Date Extracted: 20-SEP-95

Matrix : Leachate
Method : SW846/1311/8270-TCLP
Units : UG/L

Galson ID: L25705-6 Q-2933 Q-2933TP
Client ID: TB 4(10.5-11) Method Blank TCLP Blank

Table with 4 columns: Compound Name, L25705-6, Q-2933, Q-2933TP. Rows include Naphthalene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene.

Dilution Factor 1 1 1
Analysis Date 09/26/95 09/26/95 09/26/95

ug - microgram
mg - milligram
kg - kilogram
> - Greater than

NR - Not Requested
NS - Not Specified
L - Liter
< - Less than

Approved by : PK
Date : 29-SEP-95
QC by : Joneck
Date : 10/5/95

Footnotes:







# Galson Laboratories

## GC VOLATILE ANALYTICAL REPORT

Client : Gleason Works  
 Account # : 12032  
 Site : Tanks 1/2

Date Received : 15-SEP-95  
 Date Sampled : 13-SEP-95

Matrix : Leachate  
 Method : SW846 8021  
 Units : UG/L

Galson ID:	L25705-6	QC8092795-1	QC8092795-1TP
Client ID:	TB 4(10.5-11)	Method Blank	TCLP Blank
Benzene	<0.5	<0.5	<0.5
2-Butanone	<5	<5	<5
n-Butylbenzene	<0.5	<0.5	<0.5
sec-Butylbenzene	<0.5	<0.5	<0.5
tert-Butylbenzene	<0.5	<0.5	<0.5
Ethylbenzene	4.2	<0.5	<0.5
Isopropylbenzene	<0.5	<0.5	<0.5
p-Isopropyltoluene	<0.5	<0.5	<0.5
Naphthalene	0.7 T	<0.5	0.8
n-Propylbenzene	0.6	<0.5	<0.5
Toluene	0.9 T	<0.5	0.9
1,2,4-Trimethylbenzene	0.8	<0.5	<0.5
1,3,5-Trimethylbenzene	<0.5	<0.5	<0.5
m,p-Xylene	3.8 T	<0.5	0.6
o-Xylene	<0.5	<0.5	<0.5
Dilution Factor	1	1	1
Analysis Date	09/27/95	09/27/95	09/27/95
Method Blank	QC8092795-1	QC8092795-1	QC8092795-1

ug - microgram  
 mg - milligram  
 kg - kilogram  
 > - Greater than

NR - Not Requested  
 NS - Not Specified  
 L - Liter  
 < - Less than

Approved by : JT  
 Date : 04-OCT-95  
 QC by : *[Signature]*  
 Date : 10/15/95

### Footnotes:

T : Compound was also detected in TCLP blank.





**Attachment E**