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**SPRING 2000 MONITORING REPORT
BETTER BRITE PLATING, INC
DE PERE, WISCONSIN**

July 10, 2000

Prepared For:

Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
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Project No. F119

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CERTIFICATION

This report,
SPRING 2000 MONITORING REPORT
BETTER BRITE PLATING, INC.
DE PERE, WISCONSIN

dated July 10, 2000

was prepared by
certified hydrogeologists as
defined in s. NR712.03 (1)

I, Judy L. Fassbender, hereby certify that I am a hydrogeologist as defined in s. NR712.03(1), and that to the best of my knowledge, all information contained in this document is correct.

Judy L. Fassbender, P.G.
Hydrogeologist

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1.0 INTRODUCTION

The Better Brite Chrome Shop and Zinc Shops are located at 519 Lande Street and 315 South Sixth Street, respectively, in the City of De Pere, Brown County, Wisconsin (Figure 1-1). The former Better Brite Plating Chrome Shop property comprises 3.7 acres and the Zinc Shop property comprises 0.61 acres. The sites are located about 2,000 feet apart in Sections 21 and 28 in the De Pere Township (T23N, R20E). Both sites are situated approximately 1/4 mile west of the Fox River, and are primarily in residential areas. The Grant Street water supply well, De Pere municipal well #2, is located about 250 feet generally downgradient from the Zinc Shop. Groundwater impacted with Chromium and VOCs was detected at both of the sites. The Better Brite sites were nominated for inclusion on the National Priority List (NPL) in October, 1989, and added to the list on August 28, 1990. Both plating shops are currently decommissioned and all buildings and manufacturing equipment have been removed from the sites.

The geology at the Better Brite sites is comprised of approximately 30 feet of unconsolidated glacial deposits overlying bedrock. The unconsolidated deposits are primarily silty clay to lean clay with very low hydraulic conductivity. The bedrock consists of approximately 150 feet of dolomite of the Ordovician-age Sinnipee Group, underlain by sandstone of the Ordovician-age St. Peter Formation. These bedrock formations are underlain by Cambrian-age sandstones and Precambrian-age crystalline bedrock at a depth of approximately 600 to 2,000 feet. The water table is located 5 to 10 feet below ground surface.

In the fall of 1999, the area with ground water impacted by hexavalent chromium at the Chrome Shop was stabilized by mixing a chemical reductant, EnviroBlend™, into the soil to a depth of 20 feet below ground surface. The stabilization process resulted in the conversion of hexavalent chromium in soil and ground water to the trivalent state, thereby limiting the potential for contaminant migration. At the Zinc Shop, extraction of hexavalent chromium contaminated ground water and pretreatment of the ground water prior to discharge to the sanitary sewer is ongoing.

This document presents the results of groundwater monitoring at the Chrome and Zinc Shop sites. Data from continued monitoring is used to evaluate the effectiveness of the remedial actions conducted at the sites.

2.0 SAMPLE COLLECTION LOCATIONS

2.1 Chrome Shop

Spring 2000 post remedial action groundwater monitoring at the Chrome Shop included sample collection and analysis from 11 existing wells and three new monitor wells. The new wells include MW-115 and MW-115A, which were installed on the west side of the area to be stabilized, to replace MW-109 and MW-109A located within the stabilization area. The third new well, MW-116, was installed in the center of the stabilization area (Figure 2-1). The wells included in the spring 2000 post remedial action monitoring included:

MW-106	MW-106A	MW-107	MW-107A
MW-108	MW-108A	MW-110	MW-110A
MW-111	MW-112	MW-113	MW-115
MW-115A	MW-116		

Several wells were abandoned as a result of limited usefulness and/or stabilization and solidification processes. The abandoned wells included:

B-102	MW-106B	MW-107B	MW-108B
MW-109	MW-109A	MW-109B	MW-114
W-1	W-9	B-105B	

2.2 Zinc Shop

Spring 2000 post remedial action groundwater monitoring at the Zinc Shop included 15 existing wells, one well from the Progressive Farmer's Coop (PF-MW-2, the replacement for MW-13), and the extraction sump (Zinc Sump; Figure 2-2). The wells included in the monitoring plan include:

MW-3	MW-4	MW-4A	MW-5	MW-5A
MW-6	MW-6A	MW-7	MW-7A	MW-8
MW-8A	MW-9	MW-10R	MW-11	MW-12
PF-MW-2	Zinc Sump			

MW-4B, MW-5B, and MW-6B were abandoned at the Zinc Shop. The bedrock wells did not produce enough water for sample collection or water level measurement. However, without proper abandonment, they could have presented a conduit for contaminant migration over time.

3.0 SAMPLE ANALYSIS PARAMETERS

3.1 Groundwater

Five groups of parameters were included in the groundwater sampling. These are water level elevation, field measurements (annotated below), hexavalent chromium, total chromium, and VOCs. The groundwater samples were collected following the HSI GeoTrans' Standard Operating Procedures.

3.1.1 Groundwater Elevation

Groundwater elevation was measured at all monitoring points included in the monitoring plan. Elevation was measured to 0.01 ft. using an electronic water level probe.

3.1.2 Field Measurements

Groundwater samples were screened in the field to determine the temperature, pH, conductivity, color, odor, and turbidity. Temperature, pH, and conductivity were measured with field instruments and recorded as numerical values. Color, odor, and turbidity were determined by visual and olfactory examination.

3.1.3 Total and Hexavalent Chromium

Groundwater samples were collected for analysis of hexavalent chromium and total chromium. Unfiltered samples were submitted for analysis of both hexavalent and total chromium. Samples were analyzed by Test America, Inc. in Watertown, Wisconsin. Test America is an analytical laboratory certified to complete the required analyses by the State of Wisconsin.

3.1.4 Volatile Organic Compounds

Groundwater samples collected from the extraction sump at the Zinc Shop, PF-MW-2 and MW-10 at the Zinc Shop and MW-116 at the Chrome Shop were analyzed for VOCs by method SW846-8260. Historical groundwater sampling results indicate that VOCs are not a significant concern in monitor wells at the Chrome Shop or the Zinc Shop, however, the Zinc Shop extraction sump contains VOCs at levels exceeding the NR140 groundwater standards. Elevated VOCs concentrations have been noted at the Chrome Shop sump and the french drain at the Chrome Shop. However, both of these sampling locations were located within the area to be stabilized. Thus, they could not be included in the monitoring plan. One round of VOCs was collected from MW-116 at the Chrome Shop to verify the level of VOCs in the new well. Samples were analyzed by Test America in Watertown which is an analytical laboratory certified to complete the required analyses by the State of Wisconsin.

4.0 SAMPLING RESULTS

4.1 Presampling Activities

During the week of May 1, 2000, three monitor wells including two water table wells, MW-115 and MW-116, and one piezometer, MW-115A, were installed at the Chrome Shop (Figure 2-1). All soil cuttings generated during well installation activities were spread along the vegetated perimeter of the Chrome Shop adjacent to the railroad tracks and the purge water (approximately 200 gallons) was contained and transported to the treatment building at the Zinc Shop for treatment. MW-115 and MW-115A were developed during the week of May 1, 2000. MW-116 was developed in late May, as the water did not enter the well until several weeks following well installation. Soil boring logs, well construction forms, and well development forms are included as Appendix A.

Use of MW-2 was negotiated from the Progressive Farmer's Coop near the Zinc Shop. The well is referenced as PF-MW-2 to differentiate this well from the former MW-2 well installed to the east of the former Zinc Shop facility. Well construction information for this well is included as Appendix B.

Hydraulic conductivity was calculated for PF-MW-2 and MW-115A. MW-115 and MW-116 did not have adequate recharge to calculate hydraulic conductivity accurately. Hydraulic conductivity testing results are included as Appendix C.

Seven wells with above grade protective casings were converted to flush mounted wells. The stick up pro-tops at B-104A, MW-106A, MW-107 and MW-107A were completely removed from the ground with minimal PVC pipe movement. The pro-tops for B-101, MW-106 and MW-113 could not be removed without damaging the PVC pipe. The pro-tops for these wells were cut off about one foot below grade so as not to interfere with the flush mount placement. Approximately 3 feet

of pro-top pipe remains below ground at these three locations. A well conversion summary table is included as Appendix D.

Carow Land Surveying from Appleton, Wisconsin surveyed the three newly constructed wells (MW-115, MW-115A and MW-116), and resurveyed the seven wells that were converted to flush mounts at the Chrome Shop and the top of the extraction sump at the Zinc Shop. The elevation of the top of the PVC casing and ground surface were measured at each location. The survey data is included as Appendix E.

4.2 Chrome Shop Monitoring Results

Ground water elevation was measured at all existing wells at the Chrome Shop during the Spring 2000 sampling event. The water table and potentiometric surface configurations are presented on Figure 4-1 and 4-2, respectively. Ground water flow at the water table differs significantly from previous observations. The cone of depression centered on the former sump area is completely absent as a result of the discontinuation of ground water extraction in the stabilization area. Ground water flow at the water table is primarily to the west, following existing topography. The potentiometric surface is similar to previous measurements with flow predominantly to the south, coincident with bedrock topography. Water table measurements are included as Appendix F.

Field parameters, including temperature, pH, conductivity, color, odor and turbidity, were measured and the results are reported on the field water quality data sheets included as Appendix G. Nothing unusual was noted in the field parameter reporting.

Hexavalent and total chromium concentrations were measured at 14 wells. Hexavalent Chromium was detected only at MW-116 with 1600 ppb and 1500 ppb in the duplicate. Total chromium was detected above the 10 ppb preventive action limit (PAL) but below the enforcement standard (ES) at MW-107A, MW-108A, MW-110A, MW-111, MW-113, and MW-115A. Only MW-116

contained total chromium at concentrations above the ES with 470 ppb. The extent of highly mobile hexavalent chromium in ground water is limited to the stabilization area. Hexavalent chromium concentrations in the stabilization area are approximately two orders of magnitude lower than previously measured in this area and further significant reduction is anticipated because of the stabilization conducted in the fall of 1999 in this area. Analytical data is summarized on Table 4-1 and the analytical results and chain of custody forms are included as Appendix H.

At the Chrome Shop, only MW-116 was sampled for VOCs. Several VOCs were detected in the sample and the duplicate including dichlorodifluoromethane (5.8 and 4.9 ppb), 1,1-dichloroethane (1.6 and 1.3 ppb), 1,1,1-trichloroethane (3.2 and 2.4 ppb), trichlorofluoromethane (4.4 and 3.5 ppb), and tetrachloroethene (1.7 and 1.5 ppb). All detected compounds were present at concentrations below WDNR ES s and all VOCs except tetrachloroethene were present below PALs. VOC analytical results and chain of custody forms are included as Appendix H.

4.3 Zinc Shop Monitoring Results

Ground water elevation was measured at all existing site wells, PF-MW-2 and the extraction sump at the Zinc Shop during the Spring 2000 sampling event. The water table and potentiometric surface configurations are presented on Figure 4-3 and 4-4, respectively. Ground water flow at the water table shows draw down related to ground water extraction from the Zinc Shop sump as a result of continued ground water extraction. Ground water flow at the water table is primarily to the north and west. A ground water divide runs parallel to south 6th Street. The potentiometric surface is similar to previous measurements with flow predominantly to the north, coincident with bedrock topography. Water table measurements are included as Appendix F.

Field parameters, including temperature, pH, conductivity, color, odor and turbidity, were measured and the results are reported on the field water quality data sheets included as Appendix G. Nothing unusual was noted in the field parameter reporting.

Hexavalent and total chromium concentrations were measured at 17 wells. Hexavalent Chromium was detected at seven locations, including the zinc sump, MW-3, MW-5, MW-6, MW-6A, MW-9 and MW-10. Maximum concentrations were detected at MW-10 and MW-6 with concentrations of 30,000 ppb and 23,000 ppb, respectively. Total chromium was detected above PALs at nine locations including the seven locations with detectable hexavalent chromium, plus MW-8 and MW-8A. Concentrations of total chromium ranged from 1.6 ppb to 30,000 ppb. The extent of chromium impacts in ground water is presented on Figure 4-5. Chromium concentrations measured at the Zinc Shop sump are approximately two orders of magnitude lower than previously measured at this location. Analytical data is summarized on Table 4-1 and the analytical results and chain of custody forms are included as Appendix H.

Only the Zinc Shop Sump and PF-MW-2 were sampled for VOCs at the Zinc Shop. The Zinc Shop sump contained only 1,1,1-trichloroethane above detection limits with a concentration of 1.4 ppb. Seven petroleum hydrocarbon related VOCs were detected at PF-MW-2. All of the VOCs detected were present at concentrations below their respective ES and PAL with the exception of benzene at PF-MW-2. At PF-MW-2, benzene was detected at 1.3 ppb, which exceeds the PAL of 0.5 ppb but is less than the ES of 5.0 ppb. VOC analytical results and chain of custody forms are included as Appendix H.

5.0 DATA VALIDATION

Laboratory data from this sampling event was validated by comparing the contents of the data packages and QA/QC results to the requirements contained in the laboratory analytical methods. Data validation was completed by the M.A. Kuehl Company of Green Bay, Wisconsin, a third party validator which specializes in validation services.

CLP level data was collected so raw data such as GC/MS Total Ion Current Chromatograms, GC chromatograms, and mass spectra data reports and data station printouts could be examined to ensure that reported results comply with the established QC criteria based on spike, duplicate and blank results provided by the laboratory. The data review did not identify any out-of-control data points or data omissions. An evaluation of data accuracy, precision, sensitivity, and completeness was performed. Data validation results are included as Appendix I.

6.0 GROUNDS AND TREATMENT SYSTEM MAINTENANCE

6.1 Chrome Shop

The western edge of the stabilization area has settled over a foot in some areas. Placement of topsoil, regrading and reseeding are planned for mid July to bring the area back up to final grade.

The current vegetative cover installed over the stabilized and regraded soils as well as the remainder of the site requires periodic lawn mowing for optimum growth and development. The northern end of the site has been mowed by the city on at least one occasion in May 2000.

6.2 Zinc Shop

A row of landscape boulders have been placed to the north of the treatment building to prohibit motorized vehicle traffic across the site.

Areas of subsidence were noted above the extraction trenches and utility lines. The subsiding areas have been backfilled with top soil or gravel, depending on their location. Grass is well established in the areas that required seeding.

The groundwater treatment building is operational in its new location at the Zinc Shop. Some final reengineering of the discharge piping from the decant tank and filter press will be completed by the end of the July 2000. System operation and maintenance will continue to be conducted in accordance with the operation and maintenance plan.

7.0 CONCLUSIONS AND RECOMMENDATIONS

In conclusion, chromium concentrations in ground water continue to exceed NR140 standards at both the Chrome Shop and the Zinc Shop. Of primary concern are 1) the presence of hexavalent chromium in ground water within the stabilization area at concentrations above the 100 ppb ES for total chromium and 2) the wide spread chromium impacts in ground water at the Zinc Shop. Significant decreases in chromium concentrations are notable at both shops and further reduction is anticipated as a result of the reductant chemical introduced in fall 1999 at the Chrome Shop and continued ground water extraction at the Zinc Shop.

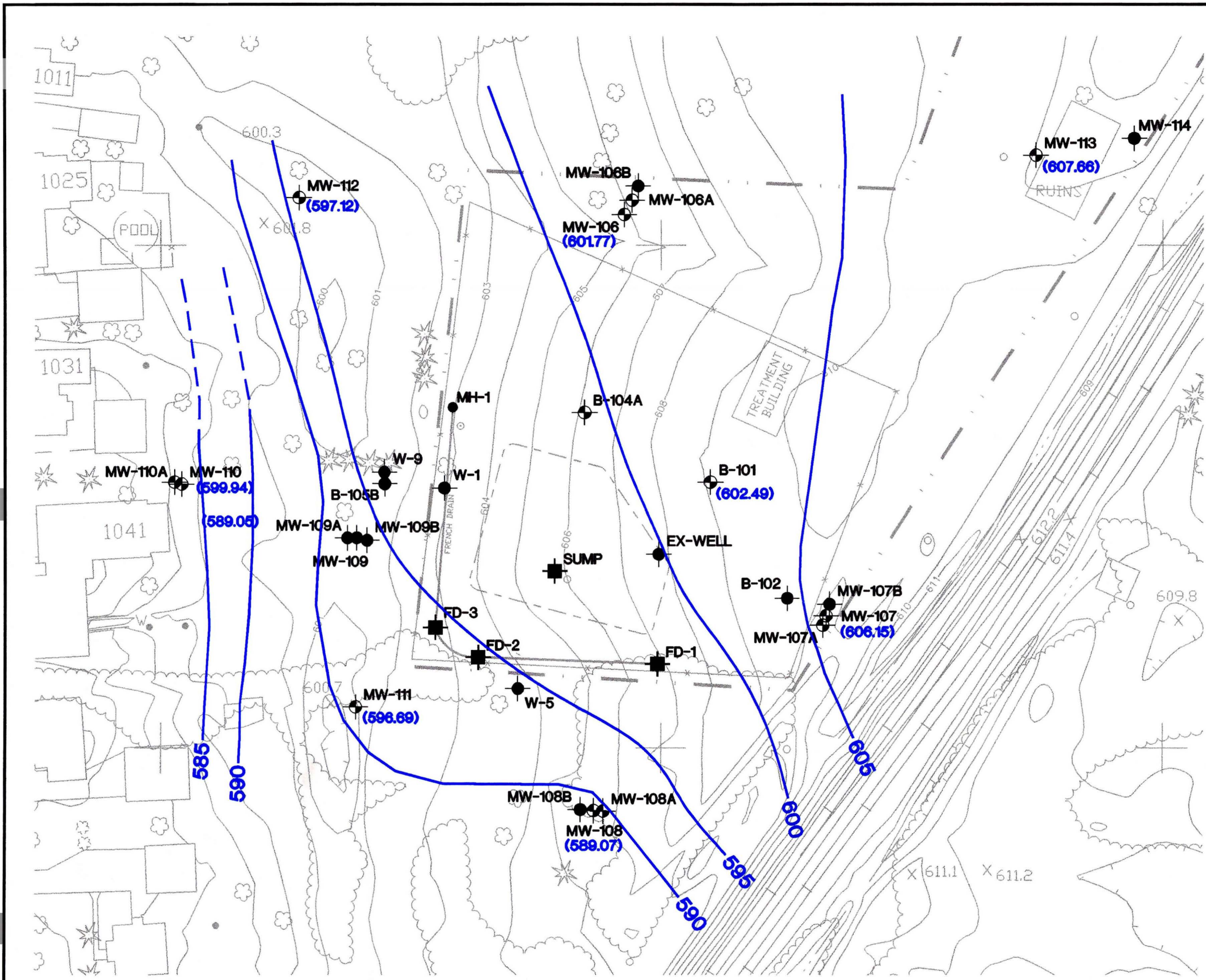
7.1 Chrome Shop Recommendations

Biannual sampling was originally proposed for the wells at the Chrome Shop. Following the original monitoring plan, the next sampling of the groundwater would be conducted in 2002. Hexavalent chromium in ground water as measured at MW-116 warrants more frequent ground water sampling. A resampling of MW-116 in July 2000 is recommended to confirm the initial sampling result, then the sampling schedule of MW-116 should be revised to semi annual sampling for the next two years or until hexavalent chromium concentrations drop to below 100 ppb, whichever occurs first. Biannual sampling through 2008 followed by sample collection once every four years for the next twelve years (2008, 2012, 2016, 2020) is still adequate for the remaining Chrome Shop wells. This sampling frequency will provide adequate information to document variation in the contaminant concentrations with time following stabilization of soils at the site.








7.2 Zinc Shop Recommendations

No modifications to the original monitoring plan are recommended for the Zinc Shop. Semi-annual Monitor well sampling of the groundwater for two years is proposed. After two years, monitor well sampling will be modified to collect samples annually. This sampling frequency will provide adequate

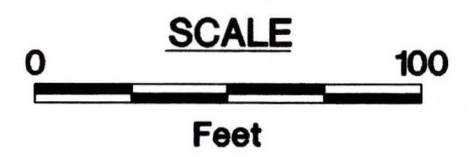
information to document the progress of remediation through variation in the contaminant concentrations with time following installation of the treatment system at the site.



EXPLANATION

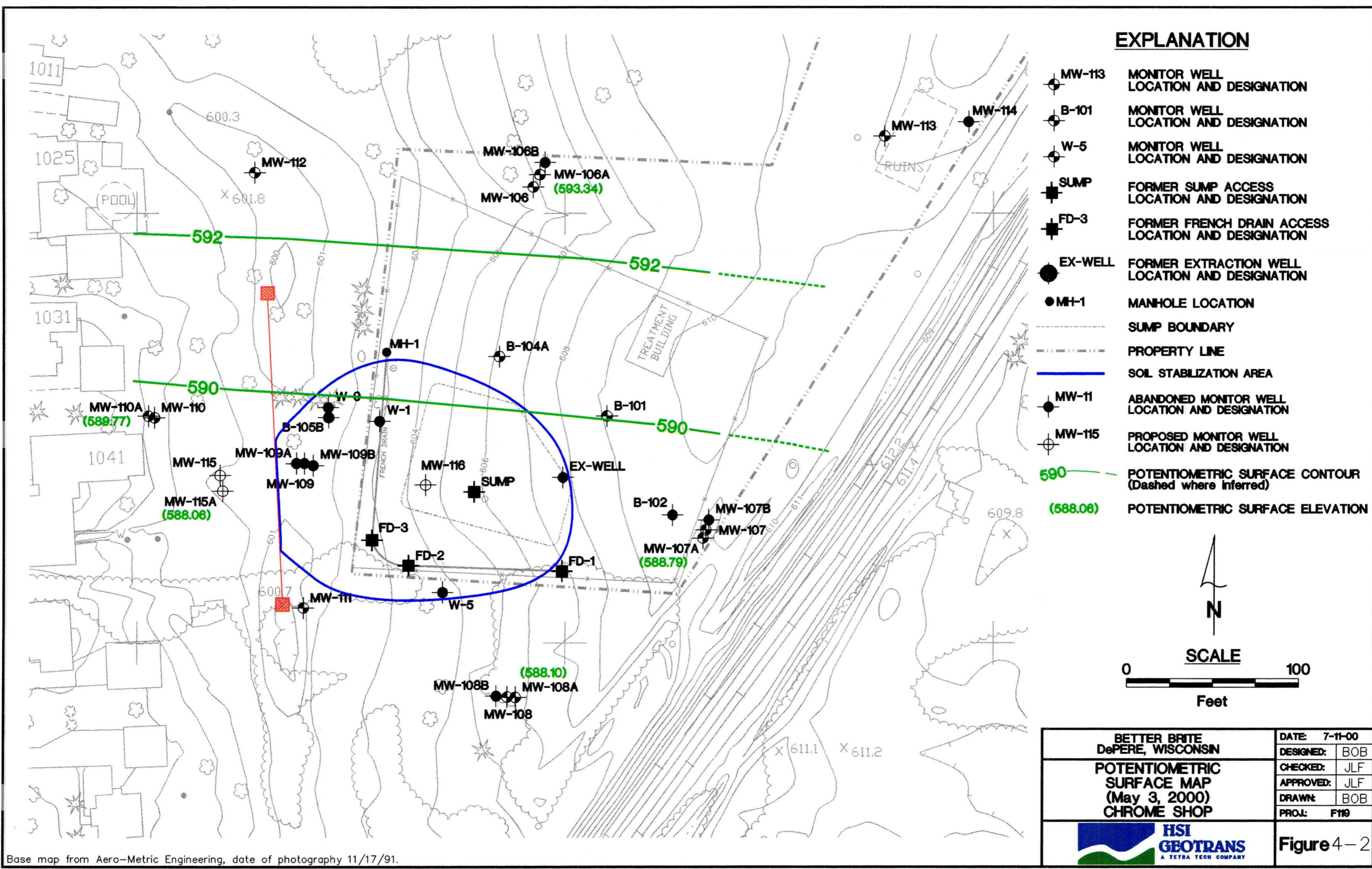
-  MW-113 MONITOR WELL LOCATION AND DESIGNATION
-  MW-11 ABANDONED WELL (any filled in well symbol)
-  MH-1 MANHOLE LOCATION
-  SUMP BOUNDARY
-  PROPERTY LINE
-  WATER TABLE CONTOURS (Dashed where inferred)
-  (596.69) WATER TABLE ELEVATION

Note : Elevation from MW-116 was not available



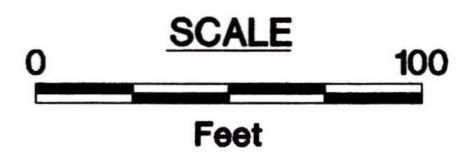
BETTER BRITE DePERE, WISCONSIN WATER TABLE MAP (May 3, 2000) CHROME SHOP	DATE: 7-11-00 DESIGNED: BOB CHECKED: JLF APPROVED: JLF DRAWN: BOB PROJ: F119
	

Base map from Aero-Metric Engineering, date of photography 11/17/91.



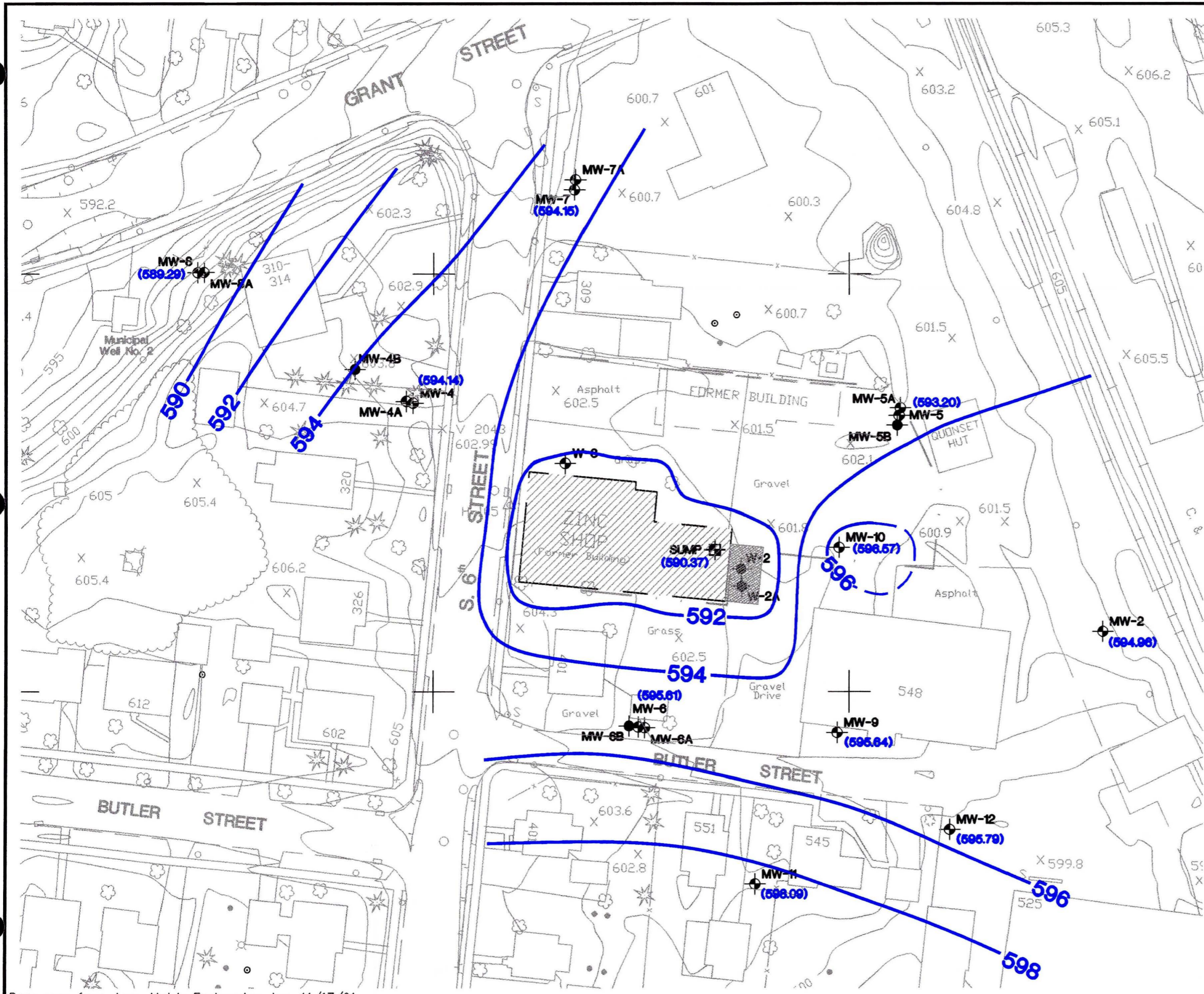
EXPLANATION

- MW-113 MONITOR WELL LOCATION AND DESIGNATION
- B-101 MONITOR WELL LOCATION AND DESIGNATION
- W-5 MONITOR WELL LOCATION AND DESIGNATION
- SUMP FORMER SUMP ACCESS LOCATION AND DESIGNATION
- FD-3 FORMER FRENCH DRAIN ACCESS LOCATION AND DESIGNATION
- EX-WELL FORMER EXTRACTION WELL LOCATION AND DESIGNATION
- MH-1 MANHOLE LOCATION
- SUMP BOUNDARY
- PROPERTY LINE
- SOIL STABILIZATION AREA
- MW-11 ABANDONED MONITOR WELL LOCATION AND DESIGNATION
- MW-115 PROPOSED MONITOR WELL LOCATION AND DESIGNATION
- 590 POTENTIOMETRIC SURFACE CONTOUR (Dashed where inferred)
- (588.06) POTENTIOMETRIC SURFACE ELEVATION



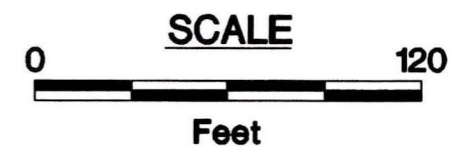
BETTER BRITE DePERE, WISCONSIN	DATE: 7-11-00
	DESIGNED: BOB
POTENTIOMETRIC SURFACE MAP (May 3, 2000) CHROME SHOP	CHECKED: JLF
	APPROVED: JLF
	DRAWN: BOB
	PROJ: F119
Figure 4-2	

Base map from Aero-Metric Engineering, date of photography 11/17/91.



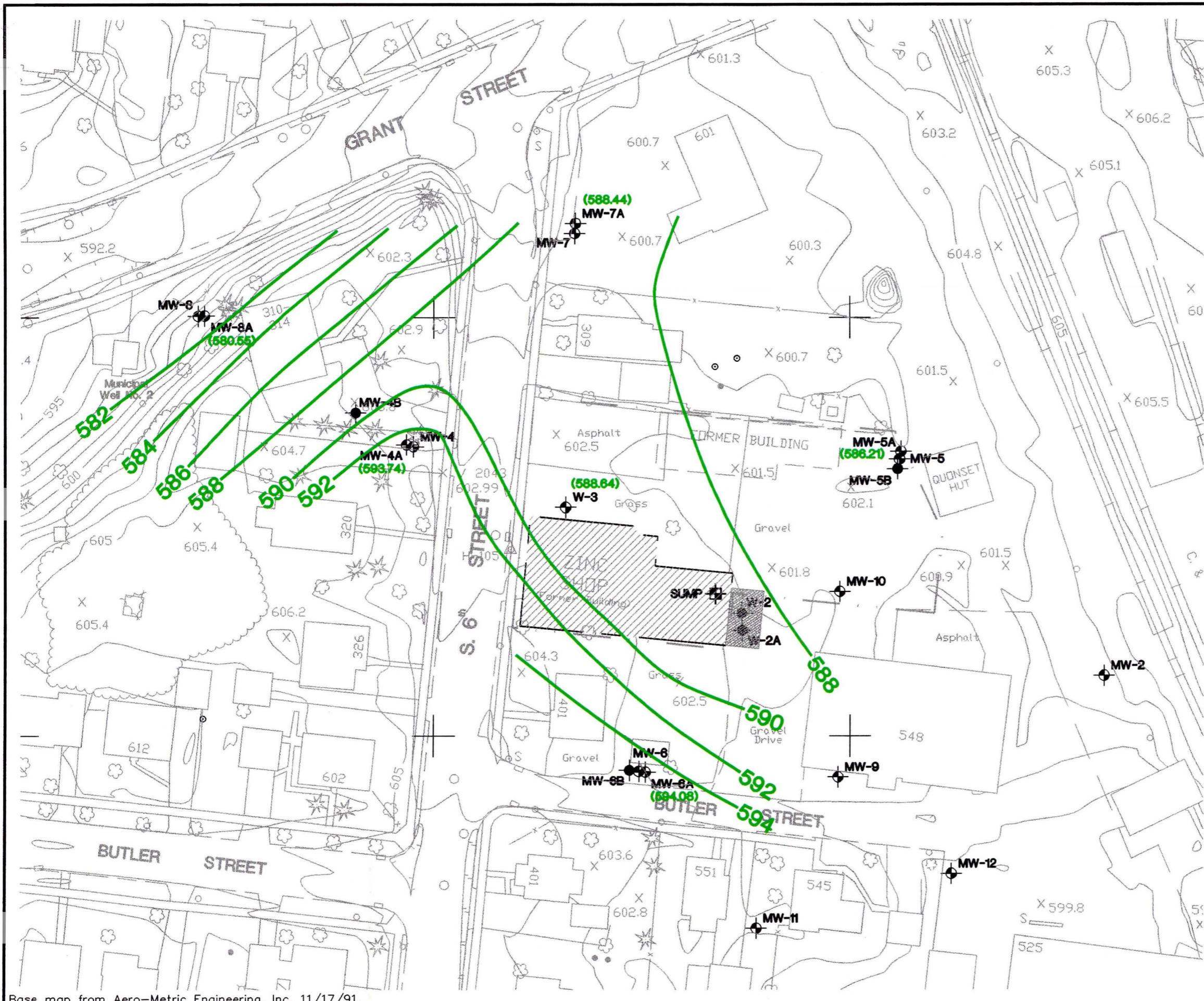
EXPLANATION

- MW-9 MONITOR WELL LOCATION AND DESIGNATION
- SUMP ACCESS LOCATION AND DESIGNATION
- W-3 ABANDONED MONITOR WELL LOCATION AND DESIGNATION
- MW-13 NON LOCATABLE LOCATION AND DESIGNATION
- GROUND WATER COLLECTION SYSTEM EXCAVATION COMPLETED IN 1993
- GROUND WATER COLLECTION SUMP EXCAVATION COMPLETED IN 1990
- PROPERTY LINE
- SUMP BOUNDARY
- WATER TABLE CONTOURS (Dashed where inferred)
- (594.96) WATER TABLE ELEVATION



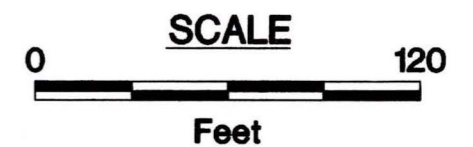
BETTER BRITE DePERE, WISCONSIN		DATE: 7-11-00
WATER TABLE MAP (May 2, 2000) ZINC SHOP		DESIGNED: BOB
		CHECKED: JLF
		APPROVED: JLF
		DRAWN: BOB
		PROJ: F119
HSI GEOTRANS A TETRA TECH COMPANY		Figure 4-3

Base map from Aero-Metric Engineering, Inc. 11/17/91.



EXPLANATION

- MW-9** MONITOR WELL LOCATION AND DESIGNATION
- SUMP** SUMP ACCESS LOCATION AND DESIGNATION
- W-3A** ABANDONED MONITOR WELL LOCATION AND DESIGNATION
- MW-13** PROPOSED MONITOR WELL LOCATION AND DESIGNATION
- GROUND WATER COLLECTION SYSTEM EXCAVATION COMPLETED IN 1993**
- GROUND WATER COLLECTION SUMP EXCAVATION COMPLETED IN 1990**
- PROPERTY LINE**
- SUMP BOUNDARY**
- 592** POTENTIOMETRIC SURFACE CONTOUR (Dashed where inferred)
- (594.08)** POTENTIOMETRIC SURFACE ELEVATION

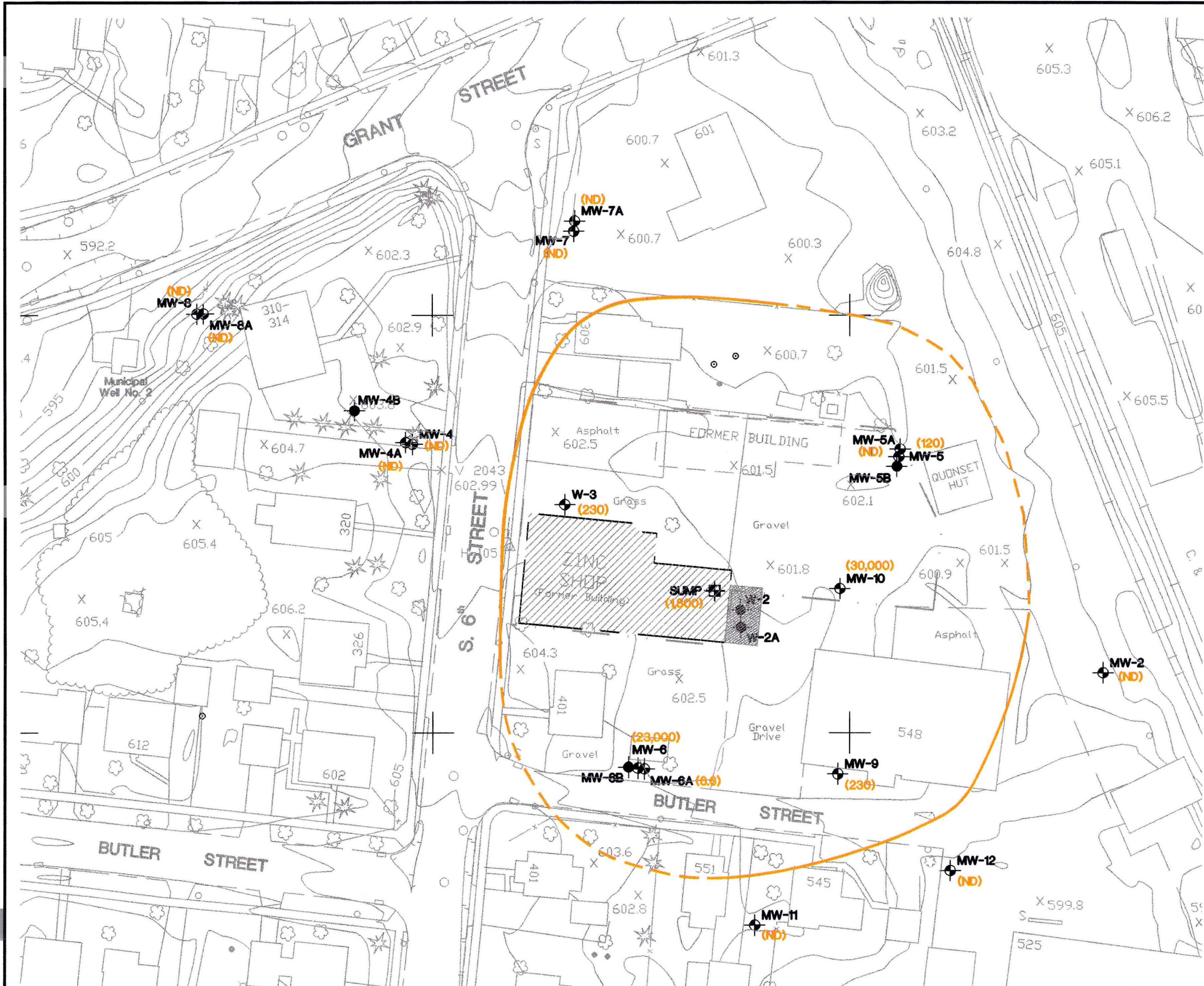


BETTER BRITE DePERE, WISCONSIN	DATE: 7-11-00
	DESIGNED: BOB
POTENTIOMETRIC SURFACE MAP (May 2, 2000) ZINC SHOP	CHECKED: JLF
	APPROVED: JLF
	DRAWN: BOB
	PROJ: F119



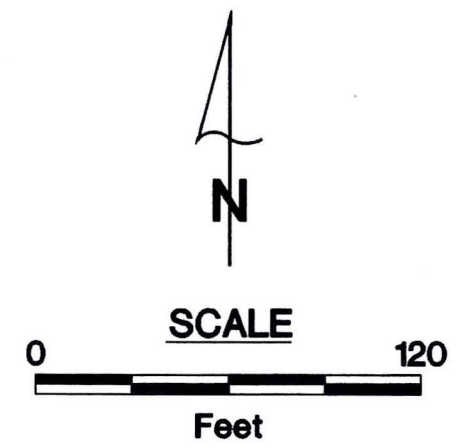
Figure 4-4

Base map from Aero-Metric Engineering, Inc. 11/17/91.



EXPLANATION

- MW-9 MONITOR WELL LOCATION AND DESIGNATION
- SUMP ACCESS LOCATION AND DESIGNATION
- W-3 ABANDONED MONITOR WELL LOCATION AND DESIGNATION
- MW-13 NON LOCATABLE LOCATION AND DESIGNATION
- GROUND WATER COLLECTION SYSTEM EXCAVATION COMPLETED IN 1993
- GROUND WATER COLLECTION SUMP EXCAVATION COMPLETED IN 1990
- PROPERTY LINE
- SUMP BOUNDARY
- EXTENT OF HEXAVALENT CHROMIUM (ppb) Dashed where inferred
- (23,000) HEXAVALENT CHROMIUM CONCENTRATION (ppb)
- (ND) NOT DETECTED



BETTER BRITE DePERE, WISCONSIN	DATE: 7-11-00
	DESIGNED: BOB
EXTENT OF HEXAVALENT CHROMIUM IMPACTS (May, 2000) ZINC SHOP	CHECKED: JLF
	APPROVED: JLF
	DRAWN: BOB
	PROJ: F119
Figure 4-5	

Base map from Aero-Metric Engineering, Inc. 11/17/91.

GROUNDWATER ANALYTICAL RESULTS - HEXAVALENT CHROMIUM AND CHROMIUM

Parameter	Date	Hexavalent Chromium	Chromium
ES			100
PAL			10
Chrome Sump	8/94	620000	694000
	10/94	300200	297000
	4/98	195000	192000
	7/98	132000	
French Drain	8/94	25800	22000
	10/94	32000	31700
	4/98	1060	1010
	7/98	336	312
B-101	8/94	<10	<3.4
	10/94	<10	
MW-106	8/94	7	<2.8
	DUP.	<10	<2.8
	10/94	<10 J	<3.4 J
	DUP.	<10 J	<3.4 J
	4/98	<10	<5
	DUP	<10	<5
	5/00	<4.2	4.0
MW-106A	8/94	<10	<2.8
	10/94	<10 J	<3.4 J
	4/98	<10	<5
	5/00	<4.2	9.4
MW-106B	8/94	<10	
MW-107	8/94	<10	4.1 BJ
	10/94	<10 J	<3.4
	4/98	<10	<5
	5/00	<4.2	4.2
MW-107A	8/94	<10	<2.8
	10/94	<10 J	<3.4 J
	4/98	<10	<5
	5/00	<4.2	16.0
MW-107B	8/94	<10	
MW-108	8/94	<10	<2.8
	10/94	<10	<3.4 J
	4/98	<10	
	DUP	<10	<5
MW-108A	8/94	<10	3.0 BJ
	10/94	<10	<3.4 J
	4/98	<10	<5
	5/00	<4.2	55.0
MW-108B	8/94	<10	
MW-109	8/94	6780	9570
	10/94	2400	1980
	DUP.	3100	1700
	4/98	16500	18600
	7/98	12200	11100

ES - NR140 Enforcement Standard
 PAL - NR140 Preventive Action Limit
 Blacked out - Compound not analyzed
 Underlined - Concentration exceeds PAL
 Shaded - Concentration exceeds ES

GROUNDWATER ANALYTICAL RESULTS - HEXAVALENT CHROMIUM AND CHROMIUM

Parameter	Date	Hexavalent Chromium	Chromium
ES			100
PAL			10
MW-109A	8/94	<10	<2.8
	10/94	<10	1.3 B
	4/98	<10	<5
	7/98	<10	7
MW-109B	8/94	<10	
	10/94	<10	
MW-110	8/94	<10	3.6 BJ
	10/94	<10	<3.4 J
	4/98	<10	<5
	5/00	<4.2	37.0
MW-110A	8/94	<10	<2.8
	10/94	<10	<3.4 J
	4/98	<10	<5
	5/00	<4.2	25.0
MW-111	8/94	<10	<3.4
	DUP.	<10	<3.4
	10/94	<10	<0.70
	4/98	226	<5
	7/98	22.0	27
	11/98	<0.5	<0.5
	5/00	<4.2	36.0
MW-112	10/94	<10	<0.70
	11/94	<10	<2.5
	4/98	<10	<5
	5/00	<4.2	4.1
MW-113	8/94	140	99.7
	10/94	<10 J	8.6 B
	5/95	43	20.3
	4/98	<10	<5
	7/98	<10	12
	5/00	<4.2	22.0
MW-114	3/95	<10 J	<2.9
	DUP.	<10 J	<2.9
	5/95	<10 J	<1.0
	DUP.	<10 J	<1.0
	4/98	<10	<5
MW-115	5/00	<4.2	6.0
MW-115A	5/00	<4.2	12.0
MW-116	5/00	1600	470
	DUP.	1500	460
PF-MW-2	5/00	<4.2	7.6
MW-3	5/00	230.0	330
MW-4	8/94	<10	<3.4
	DUP	<10	<3.4
	10/94	<10 J	<3.4 J
	DUP	<10 J	<3.4 J
	4/98	<10	<5
	5/00	<4.2	4.6

ES - NR140 Enforcement Standard
 PAL - NR140 Preventive Action Limit
 Blacked out - Compound not analyzed
 Underlined - Concentration exceeds PAL
 Shaded - Concentration exceeds ES

GROUNDWATER ANALYTICAL RESULTS - HEXAVALENT CHROMIUM AND CHROMIUM

Parameter	Date	Hexavalent Chromium	Chromium
ES			100
PAL			10
MW-4A	8/94	<10	<3.4
	10/94	<10 J	6.0 B
	4/98	<10	<5
	5/00	<4.2	8.7
MW-4B	10/94	<10	<0.70
	11/94	<10	<2.5
MW-5	8/94	1590	827
	10/94	460 J	299 J
	DUP	510 J	763 J
	4/98	212	631
	DUP	207	667
	7/98	1420	1230
	5/00	120	190
MW-5A	8/94	<10	<3.4
	10/94	<10	<3.4 J
	4/98	<10	<5
	5/00	<4.2	6.5
MW-5B	8/94		
	10/94	<10	<5
MW-6	8/94	15900	39200
	10/94	47000	41,900 J
	4/98	7650	4560
	5/00	23000	26000
MW-6A	8/94	<10	4.9 B
	10/94	<10	<3.4 J
	4/98	<10	<5
	5/00	6.6	22.0
MW-6B	8/94	<10	
MW-7	8/94	<10	6.6 BJ
	DUP.	<10	<2.8
	10/94	<10 J	36.4 J
	4/98	<10	<5
	DUP	<10	<5
	5/00	<4.2	3.9
MW-7A	8/94	<10	<2.8
	10/94	<10 J	<3.4 J
	4/98	<10	<5
	5/00	<4.2	4.7
MW-8	10/94	<10	<0.70
	11/94	<10	<2.5
	DUP.	<10	<2.5
	4/98	<10	<5
	5/00	<4.2	15.0
MW-8A	10/94	<10	<0.70
	11/94	<10	<2.5
	4/98	<10	<5
	5/00	<4.2	16.0

ES - NR140 Enforcement Standard
 PAL - NR140 Preventive Action Limit
 Blacked out - Compound not analyzed
 Underlined - Concentration exceeds PAL
 Shaded - Concentration exceeds ES

GROUNDWATER ANALYTICAL RESULTS - HEXAVALENT CHROMIUM AND CHROMIUM

Parameter	Date	Hexavalent Chromium	Chromium
ES			100
PAL			10
MW-9	8/94	400	697
	10/94	470 J	442 J
	4/98	209	<5
	7/98	60.0	75
MW-10	8/94	60300	53100
	10/94	60,800 J	43,500 J
MW-11	5/95	<10	<1.0
	4/98	<10	<5
	5/00	<4.2	7.0
MW-12	3/95	<10 J	<2.9
	5/95	<10	<1.0
	4/98	<10	<5
	5/00	<4.2	4.8
MW-13	3/95	<10 J	<2.9
	5/95	<10	<1.0
Zinc Sump	8/94	89000	209000
	10/94	144900	277000
	4/98	66000	38300
	7/98	131000	131000
	5/00	1800	1700
Private	8/94	<10	<10
Municipal	8/94	<10	<10
	DUP.	<10	<10
	10/94	<10	<10
	DUP.	<10	<10
USGS	10/94	<10	0.75 B
USGS-A	10/94	<10	11.9

ES - NR140 Enforcement Standard
 PAL - NR140 Preventive Action Limit
 Blacked out - Compound not analyzed
 Underlined - Concentration exceeds PAL
 Shaded - Concentration exceeds ES

w:\wpdata\projectnew\F119Chrom.TBL

APPENDIX A
WDNR SOIL BORING LOGS, WELL CONSTRUCTION FORMS, AND WELL
DEVELOPMENT FORMS

Route To: Watershed/Wastewater Waste Management
Remediation/Revelpment Other

Page 1 of 2

Facility/Project Name Better Brite			License/Permit/Monitoring Number -----		Boring Number MW-115
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Jim Last Name: Berthold Firm: Boart Longear			Date Drilling Started 05/01/2000 m m d d y y y y	Date Drilling Completed 05/01/2000 m m d d y y y y	Drilling Method MSA
WI Unique Well No.	DNR Well ID No.	Well Name MW-115	Final Static Water Level 587.65 Feet MSL	Surface Elevation 601.46 Feet MSL	Borehole Diameter 8 inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 226347.12 N, 2470800.86 E S/CN			Lat 0 ' " 0 ' "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of 1/4 of Section 28, T23 N, R20 EW		County Brown County Code 05 Civil Town/City or Village De Pere			

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	6 1/24	3 4 4 5	2	0-2.0' Topsoil, sandy silt, dark brown, med. moisture, 10YR 5/3	NA									
2	21 1/24	3 5 5 13	4	* sand seam 7" by 5.										
3	17 1/24	4 15 12 21	6	2-6.5' silty clay, 15 to 20% sand, low to med. plasticity, reddish brown 5YR 4/4 with gray (5YR 7/1) mottles	ML									
4	17 1/24	4 13 5 20	8	fractured, moist										
5	15 1/24	5 13 9 22	10	5-6.0' silty sand lense, olive gray.	CL									
RP	19 1/24	8 15 11 19	14											

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature **Keith Becker** Firm **HSI Geotrans, Inc**

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information.

Route To: Watershed/Wastewater Waste Management
Remediation/Revelopment Other

Page 1 of 2

Facility/Project Name <u>Better Brite</u>		License/Permit/Monitoring Number -----	Boring Number <u>MW-115A</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Jim</u> Last Name: <u>Berthold</u>		Date Drilling Started <u>05/01/2000</u>	Date Drilling Completed <u>05/01/2000</u>
Firm: <u>Boart Longear</u>		Drilling Method <u>HSA</u>	
WI Unique Well No.	DNR Well ID No.	Well Name <u>MW-115A</u>	Final Static Water Level <u>588.06 Feet MSL</u>
		Surface Elevation <u>601.52 Feet MSL</u>	Borehole Diameter <u>8 inches</u>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/>		Local Grid Location	
State Plane <u>226342.78 N, 2470802.06 E S/CN</u>		<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of <u>28</u> 1/4 of Section <u>28</u> , T <u>23</u> N, R <u>20</u> W		Lat <u>0</u> ' " Long <u>0</u> ' "	
Facility ID	County <u>BROWN</u>	County Code <u>05</u>	Civil Town/City or Village <u>De Pere</u>

Sample Number and Type	Length Alt. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	6/24	3 4 5	0-2'	topsoil, sandy silt, dark brown, med. moisture, 10%R 5/3,	NA									
2	21/24	3 5 5 13	2-4'	* sand seam 7" bgs.										
3	17/24	4 15 12 21	4-6'	2-6.5' silty clay, 15 to 20% sand, low to med. plasticity, reddish brown 5YR 4/4	ML									
4	17/24	4 13 5 20	6-8'	w/ gray mottles 5YR 7/1, fractured, moist, mottles at										
5	15/24	5 13 9 22	8-10'	* 5-6' silty sand lense, olive gray.										
6	19/24	8 15 11 19	10-12'	6.5-19' lean clay with sand, < 10% gravel, yellow staining in fractures reddish brown 5YR 5/4, low plasticity.	CL									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Keith Beckin Firm: H.S.I. GEOTRANS, INC.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route To: Watershed/Wastewater Waste Management
Remediation/Revelopment Other

Page 1 of 2

Facility/Project Name <u>Better Brite</u>		License/Permit/Monitoring Number -----		Boring Number <u>mw-110</u>	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>JIM</u> Last Name: <u>Berthold</u>		Date Drilling Started <u>05/01/2000</u> m m d d y y y y		Date Drilling Completed <u>05/01/2000</u> m m d d y y y y	
Firm: <u>Boart Longyear</u>		Drilling Method <u>HSA</u>			
WI Unique Well No.	DNR Well ID No.	Well Name <u>mw-110</u>	Final Static Water Level <u>dry</u> Feet MSL	Surface Elevation <u>604.88</u> Feet MSL	Borehole Diameter <u>8</u> inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane <u>2263.37.11</u> N, <u>247079.62</u> E S/C/N			Local Grid Location Lat <u>0</u> ' " <input type="checkbox"/> N <input type="checkbox"/> E Long <u>0</u> ' " <input type="checkbox"/> S <input type="checkbox"/> W		
1/4 of <u>28</u> 1/4 of Section <u>28</u> , T <u>23</u> N, R <u>20</u> E W					
Facility ID	County <u>Brown</u>	County Code <u>05</u>	Civil Town/City/Village <u>De Pere</u>		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	7.5/24	3 5 3	0-1.5'	Topsoil, sandy silt, dark brown, moist. 7.5 YR 3/1, 30% clay, 40% silt, 30% sand.	NA									
2	12/24	6 11 8 14	1.5-6'	silty clay, 60% clay, 30% silt, 10% fine grained sand. 7.5 YR 4/4, med. plastic.	CL									
3	6/24	3 6 5 8	* 5.5'-6'	mottling with few cobbles 5 YR 4/3	CL									
4	11.5/24	5 19 7 20	6-12'	silty clay, 65% clay, 25% silt, 10% fine sand, low plasticity, dry, 5 YR 4/3 reddish brown.	ML									
5	11.5/24	4 24 4 30	* 11.5-12'	90% gravel sand	ML									
6	15/24	5 18 12 15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Keith E. Becker Firm HSI Geotrans, Inc.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name <u>Better Brite</u>	County Name <u>Brown</u>	Well Name <u>mw-115</u>
Facility License, Permit or Monitoring Number	County Code <u>05</u>	Wis. Unique Well Number
		DNR Well ID Number

1. Can this well be purged dry? Yes No

2. Well development method
- surged with bailer and bailed 41
 - surged with bailer and pumped 61
 - surged with block and bailed 42
 - surged with block and pumped 62
 - surged with block, bailed and pumped 70
 - compressed air 20
 - bailed only 10
 - pumped only 51
 - pumped slowly 50
 - Other

3. Time spent developing well 180 min.

4. Depth of well (from top of well casing) 14.5 ft.

5. Inside diameter of well 2.05 in.

Volume of water in filter pack and well casing 0.5 gal.

7. Volume of water removed from well 2.3 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? Yes No
(If yes, attach results)

17. Additional comments on development: very slow to recharge. Not enough water to fully develop well.

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>14.48</u> ft.	<u>11.39</u> ft.
Date	b. <u>05/02/2000</u> m m d d y y y y	<u>05/05/2000</u> m m d d y y y y
Time	c. <u>10:00</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>10:50</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.5</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>brown color</u> <u>no odor</u> <u>turbid</u> <u>only 250ml</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>brown color</u> <u>no odor</u> <u>turbid</u> <u>2 gallons</u>

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids _____ mg/l _____ mg/l

15. COD _____ mg/l _____ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: KEITH Last Name: BECKER

Firm: HSI GeoTrans, INC.

Name and Address of Facility Contact/Owner/Responsible Party

First Name: _____ Last Name: _____

Facility/Firm: _____

Street: _____

City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: Keith E. Becker

Print Name: KEITH E. BECKER

Firm: HSI GeoTrans, INC.

Facility/Project Name Better Brite	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.		Well Name MW-115
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/>	Wis. Unique Well No.	DNR Well ID No.
Facility ID	Lat. _____ " Long. _____ " or _____	Date Well Installed 05/01/2000 m m d d y y v v y y	Well Installed By: Name (first, last) and Firm Jim Berthold
Type of Well Well Code 11, MW	St. Plane 226347.12 ft. N. 2470800.86 ft. E. S/C/N	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec 28 , T. 23 N., R. 20 <input checked="" type="checkbox"/> E. <input type="checkbox"/> W.	
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____

A. Protective pipe, top elevation 601.48 ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation 601.04 ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Morrison Flush Mount Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation 601.46 ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Red Flint sand/gravel #30 Other <input checked="" type="checkbox"/>
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 5 e. _____ Ft ³ volume added for any of the above
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. Wyoming Holeplug Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	7. Fine sand material: Manufacturer, product name & mesh size a. Budger Mining 33 #7 b. Volume added 1/2 bag ft ³
17. Source of water (attach analysis, if required): _____	8. Filter pack material: Manufacturer, product name & mesh size a. Red Flint sand/gravel #30 b. Volume added 6 bags ft ³
E. Bentonite seal, top _____ ft. MSL or 1.0 ft.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or 2.5 ft.	10. Screen material: PVC schedule 40 a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
G. Filter pack, top _____ ft. MSL or 3.5 ft.	b. Manufacturer Baart Langyear c. Slot size: 0.010 in. d. Slotted length: 10.0 ft.
H. Screen joint, top _____ ft. MSL or 4.5 ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
I. Well bottom _____ ft. MSL or 14.5 ft.	
J. Filter pack, bottom _____ ft. MSL or 15.0 ft.	
K. Borehole, bottom _____ ft. MSL or 15.0 ft.	
L. Borehole, diameter 8.0 in.	
M. O.D. well casing 2.38 in.	
N. I.D. well casing 2.05 in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature **Keith Becker** Firm **HSI GeoTrans, Inc.**

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

City/Project Name <u>Letter Br. 7e</u>		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.		Well Name <u>MW-115A</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/>		Wis. Unique Well No. <input type="checkbox"/> DNR Well ID No. <input type="checkbox"/>	
Facility ID		St. Plane <u>276.342.78</u> ft. N. <u>247.080.2.06</u> ft. E. S/C/N		Date Well Installed <u>2570112000</u> m m d d y v v y	
Type of Well Well Code <u>12, P2</u>		Section Location of Waste/Source 1/4 of _____ 1/4 of Sec <u>28</u> , T. <u>23</u> N., R. <u>20</u> <input checked="" type="checkbox"/> E. <input type="checkbox"/> W.		Well Installed By: Name (first, last) and Firm <u>Jim Berthold</u> <u>Boart Longyear</u>	
Distance from Waste/Source _____ ft.		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number _____	
Enf. Stds. Apply <input type="checkbox"/>					

A. Protective pipe, top elevation <u>601.53</u> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation <u>601.0</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> _____
C. Land surface elevation <u>601.52</u> ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> _____
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Other <input checked="" type="checkbox"/> <u>Red Flint sand/gravel #30</u>
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/> _____	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. <u>Wyoming Holeplug</u> Other <input type="checkbox"/> _____
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	7. Fine sand material: Manufacturer, product name & mesh size a. <u>Badger Mining BB #7</u> b. Volume added <u>1 Bag</u> ft ³
17. Source of water (attach analysis, if required): _____	8. Filter pack material: Manufacturer, product name & mesh size a. <u>Red Flint Sand/Gravel #30</u> b. Volume added <u>3.5 bags</u> ft ³
E. Bentonite seal, top _____ ft. MSL or <u>2.0</u> ft.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> _____
F. Fine sand, top _____ ft. MSL or <u>14.5</u> ft.	10. Screen material: <u>PVC schedule 40</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> _____
G. Filter pack, top _____ ft. MSL or <u>16.5</u> ft.	b. Manufacturer <u>Boart Longyear</u>
H. Screen joint, top _____ ft. MSL or <u>18.5</u> ft.	c. Slot size: <u>0.010</u> in.
I. Well bottom _____ ft. MSL or <u>23.5</u> ft.	d. Slotted length: <u>5.0</u> ft.
J. Filter pack, bottom _____ ft. MSL or <u>24.0</u> ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> _____
K. Borehole, bottom _____ ft. MSL or <u>24.0</u> ft.	
L. Borehole, diameter <u>8.0</u> in.	
M. O.D. well casing <u>2.38</u> in.	
N. I.D. well casing <u>2.05</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature Keith Becker Firm HSI Geotrans, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name <u>Better Brite</u>	County Name <u>Brown</u>	Well Name <u>MW-115A</u>
Facility License, Permit or Monitoring Number	County Code <u>05</u>	Wis. Unique Well Number _____
		DNR Well ID Number _____

1. Can this well be purged dry? Yes No

2. Well development method

surged with bailer and bailed	<input checked="" type="checkbox"/>	41
surged with bailer and pumped	<input type="checkbox"/>	61
surged with block and bailed	<input type="checkbox"/>	42
surged with block and pumped	<input type="checkbox"/>	62
surged with block, bailed and pumped	<input type="checkbox"/>	70
compressed air	<input type="checkbox"/>	20
bailed only	<input type="checkbox"/>	10
pumped only	<input type="checkbox"/>	51
pumped slowly	<input type="checkbox"/>	50
Other _____	<input type="checkbox"/>	

3. Time spent developing well 195 min.

4. Depth of well (from top of well casing) 23.5 ft.

5. Inside diameter of well 2.05 in.

6. Volume of water in filter pack and well casing 1.7 gal.

7. Volume of water removed from well 26 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? Yes No
(If yes, attach results)

17. Additional comments on development:

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>13.12</u> ft.	<u>12.95</u> ft.
Date	b. <u>05/02/2000</u> m m d d y y y y	<u>05/05/2000</u> m m d d y y y y
Time	c. <u>10:05</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>10:55</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>brown color</u> <u>no odor</u> <u>turbid</u> <u>7 gal. then</u> <u>dry</u>	Clear <input checked="" type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>clear color</u> <u>no odor</u> <u>clear clarity</u> <u>7 gal. then</u> <u>dry</u>
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l
16. Well developed by: Name (first, last) and Firm		
First Name:	<u>Keith</u>	Last Name: <u>Becker</u>
Firm:	<u>HSI GeoTrans, Inc.</u>	

Name and Address of Facility Contact/Owner/Responsible Party

First Name: _____ Last Name: _____
Name: _____

Facility/Firm: _____

Street: _____

City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: Keith Becker

Print Name: KEITH BECKER

Firm: HSI GeoTrans, Inc.

NOTE: See instructions for more information including a list of county codes and well type codes.

City/Project Name Water Brite		Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.		Well Name MW-116	
Facility License, Permit or Monitoring No.		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. _____ " Long. _____ " or _____ " or _____ "		Wis. Unique Well No. _____ DNR Well ID No. _____	
Facility ID		St. Plane 226337-11 ft. N, 2470919-62 ft. E. S/C/N		Date Well Installed 4 5 10 11 2000 m m d d y y v v v	
Type of Well Well Code 1 L1 MW		Section Location of Waste/Source 1/4 of _____ 1/4 of Sec 28 , T. 23 N., R. 20 <input type="checkbox"/> E. <input type="checkbox"/> W.		Well Installed By: Name (first, last) and Firm Jim Berthold Beart Longyear	
Distance from Waste/Source _____ ft.		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number _____	
Enf. Stds. Apply <input type="checkbox"/>					

- A. Protective pipe, top elevation 604.90 ft. MSL
- B. Well casing, top elevation 604.28 ft. MSL
- C. Land surface elevation 604.88 ft. MSL
- D. Surface seal, bottom _____ ft. MSL or _____ ft.

12. USCS classification of soil near screen:
 GP GM GC GW SW SP
 SM SC ML MH CL CH
 Bedrock

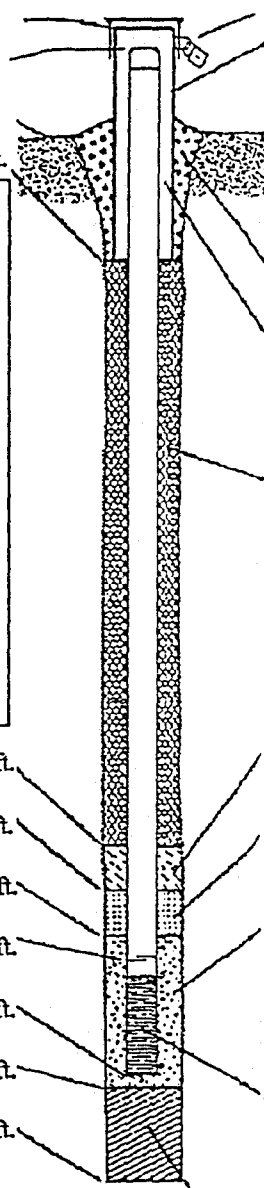
13. Sieve analysis performed? Yes No

14. Drilling method used: Rotary 50
 Hollow Stem Auger 41
 Other

15. Drilling fluid used: Water 02 Air 01
 Drilling Mud 03 None 99

16. Drilling additives used? Yes No
 Describe _____

17. Source of water (attach analysis, if required):



- 1. Cap and lock? Yes No
- 2. Protective cover pipe:
 - a. Inside diameter: _____ in.
 - b. Length: _____ ft.
 - c. Material: **Morrison Flush Mount** Steel 04
Other
 - d. Additional protection? Yes No
If yes, describe: _____
- 3. Surface seal: Bentonite 30
Concrete 01
Other
- 4. Material between well casing and protective pipe: Bentonite 30
Red Flint sand/gravel #30 Other
- 5. Annular space seal:
 - a. Granular/Chipped Bentonite 33
 - b. _____ Lbs/gal mud weight ... Bentonite-sand slurry 35
 - c. _____ Lbs/gal mud weight ... Bentonite slurry 31
 - d. _____ % Bentonite ... Bentonite-cement grout 50
 - e. _____ Ft³ volume added for any of the above
 - f. How installed: Tremie 01
Tremie pumped 02
Gravity 08
- 6. Bentonite seal:
 - a. Bentonite granules 33
 - b. 1/4 in. 3/8 in. 1/2 in. Bentonite chips 32
 - c. **Wyoming Holeplug** Other
- 7. Fine sand material: Manufacturer, product name & mesh size
 - a. **Badger Mining B13 #7**
 - b. Volume added **1 Bag** ft³
- 8. Filter pack material: Manufacturer, product name & mesh size
 - a. **Red Flint sand/gravel #30**
 - b. Volume added **6 Bags** ft³
- 9. Well casing: Flush threaded PVC schedule 40 23
 Flush threaded PVC schedule 80 24
 Other
- 10. Screen material: **PVC schedule 40**
 - a. Screen type: Factory cut 11
Continuous slot 01
Other
 - b. Manufacturer **Beart Longyear**
 - c. Slot size: **0.010** in.
 - d. Slotted length: **10.0** ft.
- 11. Backfill material (below filter pack): None 14
Other

- E. Bentonite seal, top _____ ft. MSL or 1.0 ft.
- F. Fine sand, top _____ ft. MSL or 5.6 ft.
- G. Filter pack, top _____ ft. MSL or 7.6 ft.
- H. Screen joint, top _____ ft. MSL or 9.6 ft.
- I. Well bottom _____ ft. MSL or 19.6 ft.
- J. Filter pack, bottom _____ ft. MSL or 20.0 ft.
- K. Borehole, bottom _____ ft. MSL or 20.0 ft.
- L. Borehole, diameter 8.0 in.
- M. O.D. well casing 2.38 in.
- N. I.D. well casing 2.05 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Keith Becker Firm HSI Geotrans, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name <u>Better Brite</u>	County Name <u>Brown</u>	Well Name <u>MW-116</u>
Facility License, Permit or Monitoring Number	County Code <u>05</u>	Wis. Unique Well Number _____
		DNR Well ID Number _____

1. Can this well be purged dry? Yes No
2. Well development method
- surged with bailer and bailed 41
 - surged with bailer and pumped 61
 - surged with block and bailed 42
 - surged with block and pumped 62
 - surged with block, bailed and pumped 70
 - compressed air 20
 - bailed only 10
 - pumped only 51
 - pumped slowly 50
 - Other No water in well
3. Time spent developing well 30 min.
4. Depth of well (from top of well casing) 19.6 ft.
5. Inside diameter of well 2.05 in.
6. Volume of water in filter pack and well casing 0.0 gal.
7. Volume of water removed from well 0.0 gal.
8. Volume of water added (if any) 0.0 gal.
9. Source of water added NA
10. Analysis performed on water added? Yes No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. _____ ft.	_____ ft.
Date	b. ____/____/____ m m d d y y y y	____/____/____ m m d d y y y y
Time	c. ____:____ <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	____:____ <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	_____ inches	_____ inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input type="checkbox"/> 15 (Describe) _____	Clear <input type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) _____

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids _____ mg/l

15. COD _____ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: _____ Last Name: _____

Firm: _____

17. Additional comments on development:
No water present to develop well 96 hours after construction.

Name and Address of Facility Contact/Owner/Responsible Party

First Name: _____ Last Name: _____

Facility/Firm: _____

Street: _____

City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: Keith E. Becker

Print Name: KEITH E BECKER

Firm: HSI Geotrans, Inc.

NOTE: See instructions for more information including a list of county codes and well type codes

APPENDIX B
PF-MW-2 WELL CONSTRUCTION DOCUMENTATION

Route To:
 Solid Waste Haz. Waste
 Emergency Response Underground Tanks
 Wastewater Water Resources
 Superfund Other

Facility/Project Name Progressive Farmers Co-operative (Butler Street)		License/Permit/Monitoring Number 05-2209		Boring Number MW-1	
Boring Drilled By (Firm name and name of crew chief) EDS, Inc. - STS 22102W		Date Drilling Started 04/30/96		Date Drilling Completed 04/30/96	
DNR Facility Well No.		WI Unique Well No.		Common Well Name	
Final Static Water Level Feet MSL		Surface Elevation 602.0 Feet MSL		Borehole Diameter 8.0 Inches	
Boring Location State Plane 1/4 of NE 1/4 of Section 28 T 23 N, R 20 E		Lat 01 N Long 01 W		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County Brown		DNR County Code 05		Civil Town/City/ or Village De Pere	

Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments		
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200			
			2	Blind drill to 15.5 feet										HSA		
			4													HSA
			6													
			8													
			10													HSA
			12													
			14													
					End of Boring Boring advanced from 0.0 feet to 15.5 feet with hollow-stem auger Installed 2-inch diameter Schedule 40 PVC monitoring well											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature <i>Robert J. Mottel</i>	Firm STS Consultants, Ltd. 1035 Kepler Drive Green Bay, Wisconsin Tel: 414-468-1978, Fax: 414-468-3312
--------------------------------------	--

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

City/Project Name
Progressive Farmers Co-operative (Butler Street)

City License, Permit or Monitoring Number
05-2209

Type of Well
Water Table Observation Well 11
Piezometer 12

Distance Well Is From Waste/Source Boundary
ft. _____

Well A Point of Enforcement Std. Application?
 Yes No

Local Grid Location of Well
_____ ft. N. _____ ft. E.
_____ ft. S. _____ ft. W.

Grid Origin Location
Lat. _____ Long. _____ or
St. Plane _____ ft. N. _____ ft. E.

Section Location of Waste/Source
_____ 1/4 of NE 1/4 of Sec. 28, T. 23 N, R. 20 E. W.

Location of Well Relative to Waste/Source
u Upgradient s Sidegradient
d Downgradient n Not Known

Well Name
MW-1

Wis. Unique Well Number: DNR Well Number

Date Well Installed
04/30/96

Well Installed By: (Person's Name and Firm)
B. Repinski
EDS, Inc.

Protective pipe, top elevation 602.05 ft. MSL

Well casing, top elevation 601.67 ft. MSL

Land surface elevation 602.0 ft. MSL

Surface seal, bottom 600.5 ft. MSL or 1.5 ft.

2. USCS classification of soil near screen:
GP GM GC GW SW SP
SM SC ML MH CL CH
Bedrock

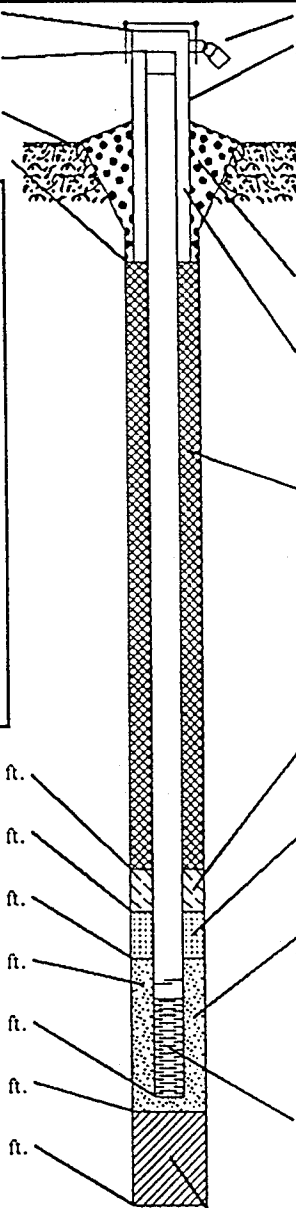
13. Sieve analysis attached? Yes No

14. Drilling method used: Rotary 50
Hollow Stem Auger 41
Other

15. Drilling fluid used: Water 02 Air 01
Drilling Mud 03 None 99

16. Drilling additives used? Yes No
Describe N/A

17. Source of water (attach analysis):



1. Cap and lock? Yes No

2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Aluminum Steel 04 Other
d. Additional protection? Yes No
If yes, describe: _____

3. Surface seal: Bentonite 30
Concrete 01
Other

4. Material between well casing and protective pipe:
Bentonite 30
Annular space seal
Other

5. Annular space seal:
a. Granular Bentonite 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry 35
c. _____ Lbs/gal mud weight . . . Bentonite slurry 31
d. _____ % Bentonite . . . Bentonite-cement grout 50
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie 01
Tremie pumped 02
Gravity 08

6. Bentonite seal:
a. Bentonite granules 33
b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32
c. _____ Other

7. Fine sand material: Manufacturer, product name and mesh size
a. N/A
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name and mesh size
a. Badger 40/60 Sand
b. Volume added _____ ft³

9. Well casing: Flush threaded PVC schedule 40 23
Flush threaded PVC schedule 80 24
Other

10. Screen material: Schedule 40 PVC
a. Screen Type: Factory cut 11
Continuous slot 01
Other
b. Manufacturer Northern Air
c. Slot size: 0.006 in.
d. Slotted length: _____ ft.

11. Backfill material (below filter pack): None 14
Other

E. Bentonite seal, top 600.5 ft. MSL or 1.5 ft.

F. Fine sand, top 598.0 ft. MSL or 4.0 ft.

G. Filter pack, top 598.0 ft. MSL or 4.0 ft.

H. Screen joint, top 597.0 ft. MSL or 5.0 ft.

I. Well bottom 587.0 ft. MSL or 15.0 ft.

J. Filter pack, bottom 586.5 ft. MSL or 15.5 ft.

K. Borehole, bottom 586.5 ft. MSL or 15.5 ft.

L. Borehole, diameter 2.0 in.

M. O.D. well casing 2.37 in.

N. I.D. well casing 2.04 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Robert M. [unclear] Firm **STS Consultants, Ltd.** Tel: (414) 468-1978
1035 Kepler Drive Green Bay, Wisconsin Fax: (414) 468-3312

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other

Facility/Project Name Progressive Farmers Co-operative (Butler Street)	County Name Brown	Well Name MW-1	
Facility License, Permit or Monitoring Number	County Code 05	Wis. Unique Well Number	DNR Well Number

1. Can this well be purged dry? Yes No
2. Well development method:
- surged with bailer and bailed 4 1
 - surged with bailer and pumped 6 1
 - surged with block and bailed 4 2
 - surged with block and pumped 6 2
 - surged with block, bailed, and pumped 7 0
 - compressed air 2 0
 - bailed only 1 0
 - pumped only 5 1
 - pumped slowly 5 0
 - other
3. Time spent developing well 20 min.
4. Depth of well (from top of well casing) 15.5 ft.
- Inside diameter of well 2.04 in.
6. Volume of water in filter pack and well casing _____ gal.
7. Volume of water removed from well 15.0 gal.
8. Volume of water added (if any) 0.0 gal.
9. Source of water added _____
10. Analysis performed on water added? Yes No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>9.50</u> ft.	<u>14.06</u> ft.
Date	b. <u>05/03/96</u>	<u>05/03/96</u>
Time	c. <u>10:30</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>10:50</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>1.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe)	Clear <input checked="" type="checkbox"/> 2 0 Turbid <input type="checkbox"/> 2 5 (Describe)
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

16. Additional comments on development:

Well developed by: Person's Name and Firm

Name: S. Lane

Firm: EDS, Inc.

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: Shawn G. Lane

Print Initials: S G L

Firm: EDS, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other

Facility/Project Name Progressive Farmers Co-operative (Butler Street)	County Name Brown	Well Name MW-2	
Facility License, Permit or Monitoring Number	County Code 05	Wis. DNR Well Number	DNR Well Number

1. Can this well be purged dry? Yes No
2. Well development method:
- surged with bailer and bailed 4 1
 - surged with bailer and pumped 6 1
 - surged with block and bailed 4 2
 - surged with block and pumped 6 2
 - surged with block, bailed, and pumped 7 0
 - compressed air 2 0
 - bailed only 1 0
 - pumped only 5 1
 - pumped slowly 5 0
 - other

3. Time spent developing well 30 min.

4. Depth of well (from top of well casing) 15.5 ft.

 inside diameter of well 2.04 in.

6. Volume of water in filter pack and well casing _____ gal.

7. Volume of water removed from well 45.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? Yes No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>6.00</u> ft.	<u>9.00</u> ft.
Date	b. <u>05/03/96</u>	<u>05/03/96</u>
Time	c. <u>11:00</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>11:50</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>1.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe)	Clear <input checked="" type="checkbox"/> 2 0 Turbid <input type="checkbox"/> 2 5 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids _____ mg/l _____ mg/l

15. COD _____ mg/l _____ mg/l

16. Additional comments on development:

Well developed by: Person's Name and Firm

S. Lane

Firm: **EDS, Inc.**

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: Shawn G. Lane

Print Initials: SLG

Firm: EDS, Inc.

Facility/Project Name Progressive Farmers Co-operative (Butler Street)	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. ft. <input type="checkbox"/> S. <input type="checkbox"/> W.	Well Name MW-2
Facility License, Permit or Monitoring Number 05-2209	Grid Origin Location Lat. _____ Long. _____ or _____	Wis. Unique Well Number: _____ DNR Well Number: _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	St. Plane _____ ft. N. _____ ft. E.	Date Well Installed 04/30/96
Distance Well Is From Waste/Source Boundary ft. _____	Section Location of Waste/Source 1/4 of NE 1/4 of Sec. 28 , T. 23 N, R. 20 <input checked="" type="checkbox"/> E. <input type="checkbox"/> W.	Well Installed By: (Person's Name and Firm) B. Repinski EDS, Inc.
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	

A. Protective pipe, top elevation <u>603.01</u> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation <u>602.45</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>8.0</u> in. b. Length: <u>1.0</u> ft. c. Material: <u>Aluminum</u> Steel <input type="checkbox"/> 04 Other <input checked="" type="checkbox"/>
C. Land surface elevation <u>603.0</u> ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom <u>601.5</u> ft. MSL or <u>1.5</u> ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite . . . Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name and mesh size a. <u>N/A</u> b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe <u>N/A</u>	8. Filter pack material: Manufacturer, product name and mesh size a. <u>Badger 40/60 Sand</u> b. Volume added _____ ft ³
17. Source of water (attach analysis): _____	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top <u>601.5</u> ft. MSL or <u>1.5</u> ft.	10. Screen material: <u>Schedule 40 PVC</u> a. Screen Type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top <u>599.0</u> ft. MSL or <u>4.0</u> ft.	b. Manufacturer <u>Northern Air</u> c. Slot size: <u>0.006</u> in. d. Slotted length: _____ ft.
G. Filter pack, top <u>599.0</u> ft. MSL or <u>4.0</u> ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top <u>598.0</u> ft. MSL or <u>5.0</u> ft.	
I. Well bottom <u>588.0</u> ft. MSL or <u>15.0</u> ft.	
J. Filter pack, bottom <u>587.5</u> ft. MSL or <u>15.5</u> ft.	
K. Borehole, bottom <u>587.5</u> ft. MSL or <u>15.5</u> ft.	
L. Borehole, diameter <u>2.0</u> in.	
M. O.D. well casing <u>2.37</u> in.	
N. I.D. well casing <u>2.04</u> in.	

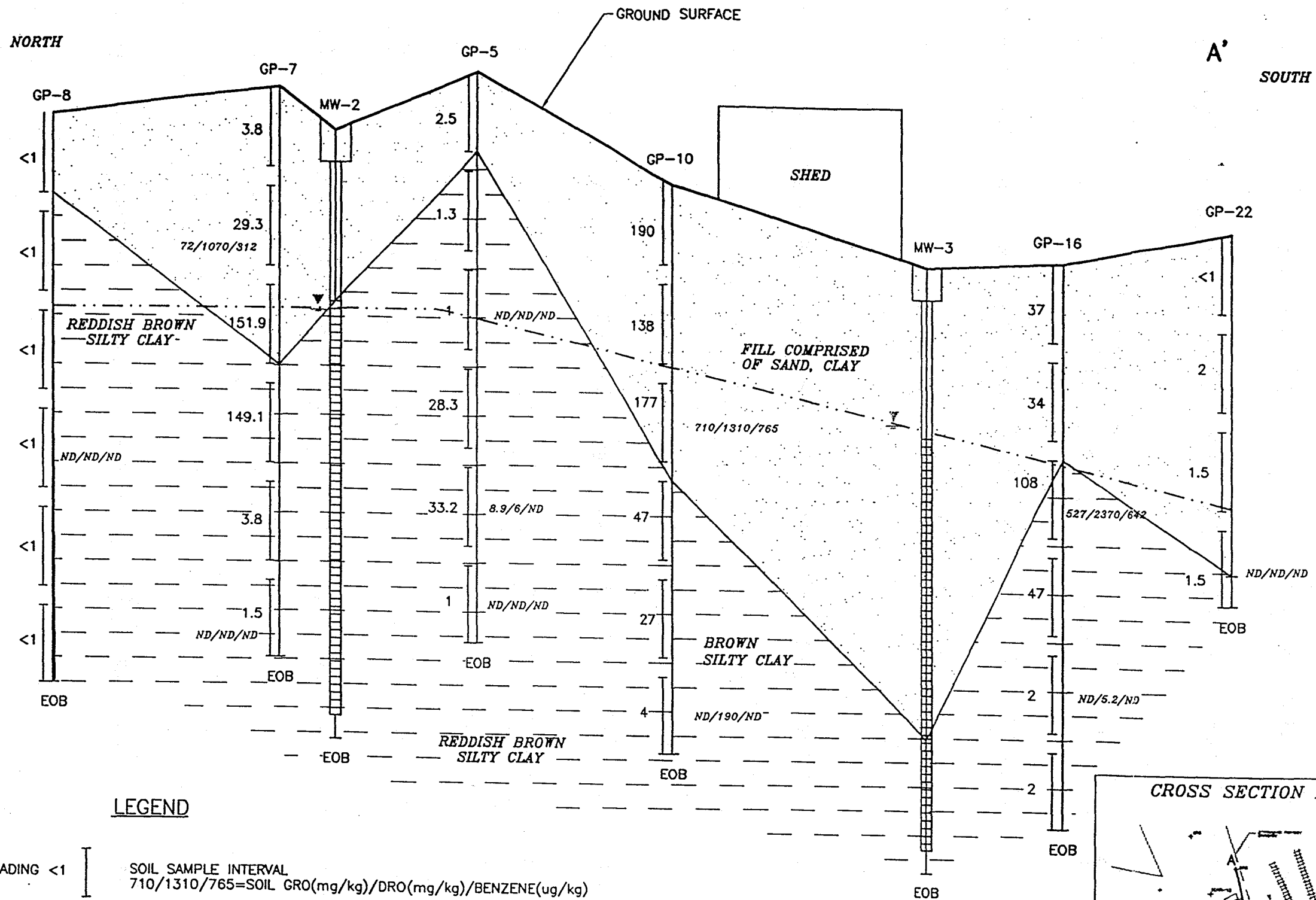
I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature Randy Mottel Firm STS Consultants, Ltd. Tel: (414) 468-1978
1mm22102 1035 Kepler Drive Green Bay, Wisconsin Fax: (414) 468-3312

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

ELEVATION MEAN SEA LEVEL

605
602
599
596
593
590
587
584
581

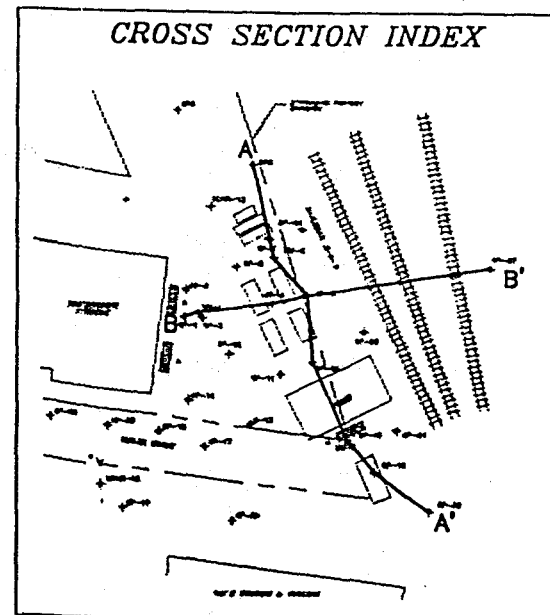
A




LEGEND

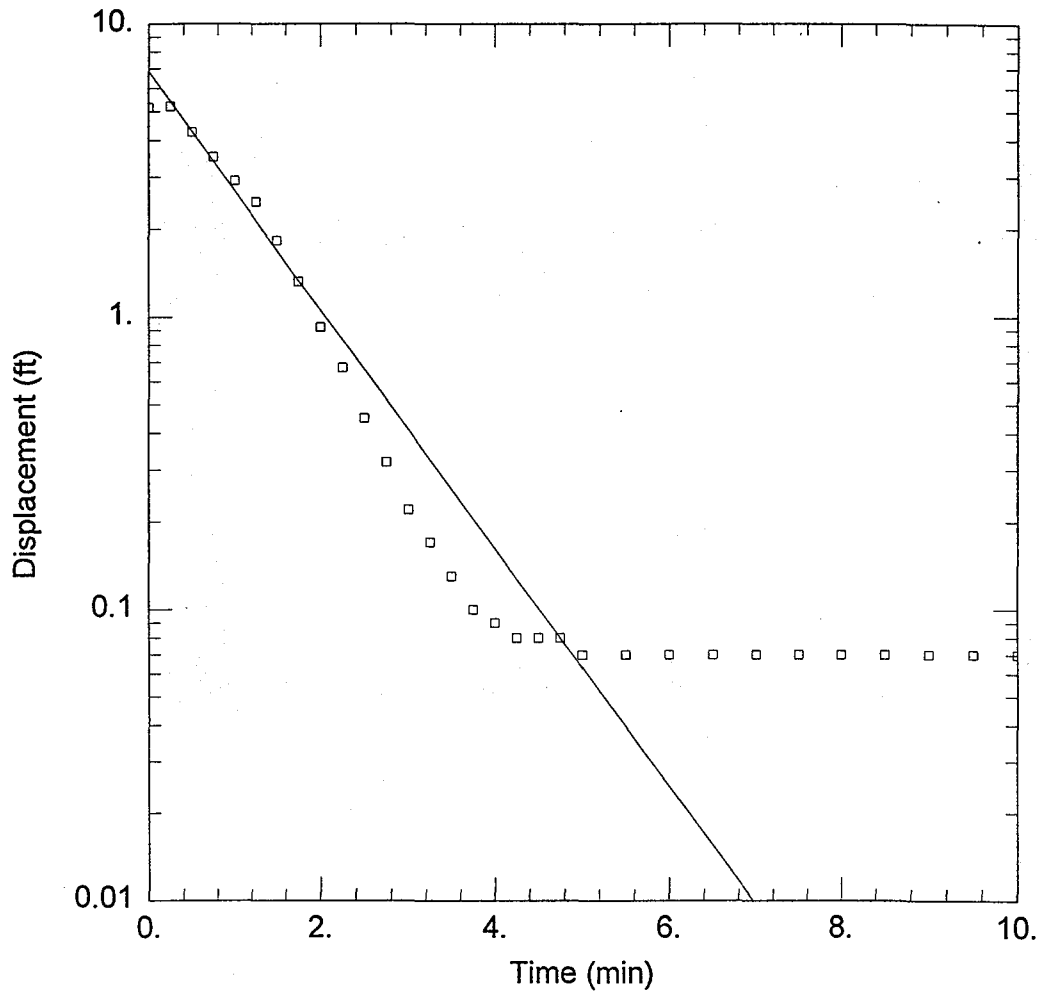
- PID READING <1
- SOIL SAMPLE INTERVAL
710/1310/765=SOIL GRO(mg/kg)/DRO(mg/kg)/BENZENE(ug/kg)
- PROTECTOR PIPE
- PVC MONITORING WELL
- SCREENED PORTION OF WELL
- EOB END OF BORING
- ND NOT DETECTED
- GROUNDWATER TABLE ELEVATION IN MONITORING WELL
- GROUNDWATER TABLE OBSERVED ON 5-14-96

SCALE: HORIZ. 1" = 20'
VERT. 1" = 3'



DRAWN BY	DJM	DATE	6-11-96
CHECKED BY	RJM	DATE	6-25-96
APPROVED BY		DATE	
CAD FILE	W:\DWG96\22102W\RED07.DWG		
CROSS SECTION A-A' PROGRESSIVE FARMERS CO-OPERATIVE 548 BUTLER STREET DEPERE, WISCONSIN			
 STS Consultants Ltd. Consulting Engineers			
STS PROJECT NO. 22102W			
STS PROJECT FILE			
SCALE AS NOTED			
SHEET NO. 3			

APPENDIX C
HYDRAULIC CONDUCTIVITY TESTING RESULTS



WELL TEST ANALYSIS

Data Set: P:\KEB\BETTERBRIK-TEST\MW-2.AQT

Date: 05/17/00

Time: 15:38:13

PROJECT INFORMATION

Company: HSI GeoTrans, Inc.

Client: Better Brite

Project: F119

Test Location: De Pere, WI

Test Well: MW-2

Test Date: 5/4/00

AQUIFER DATA

Saturated Thickness: 6.67 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 5.17 ft

Water Column Height: 6.67 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.25 ft

Screen Length: 10. ft

Gravel Pack Porosity: 0.3

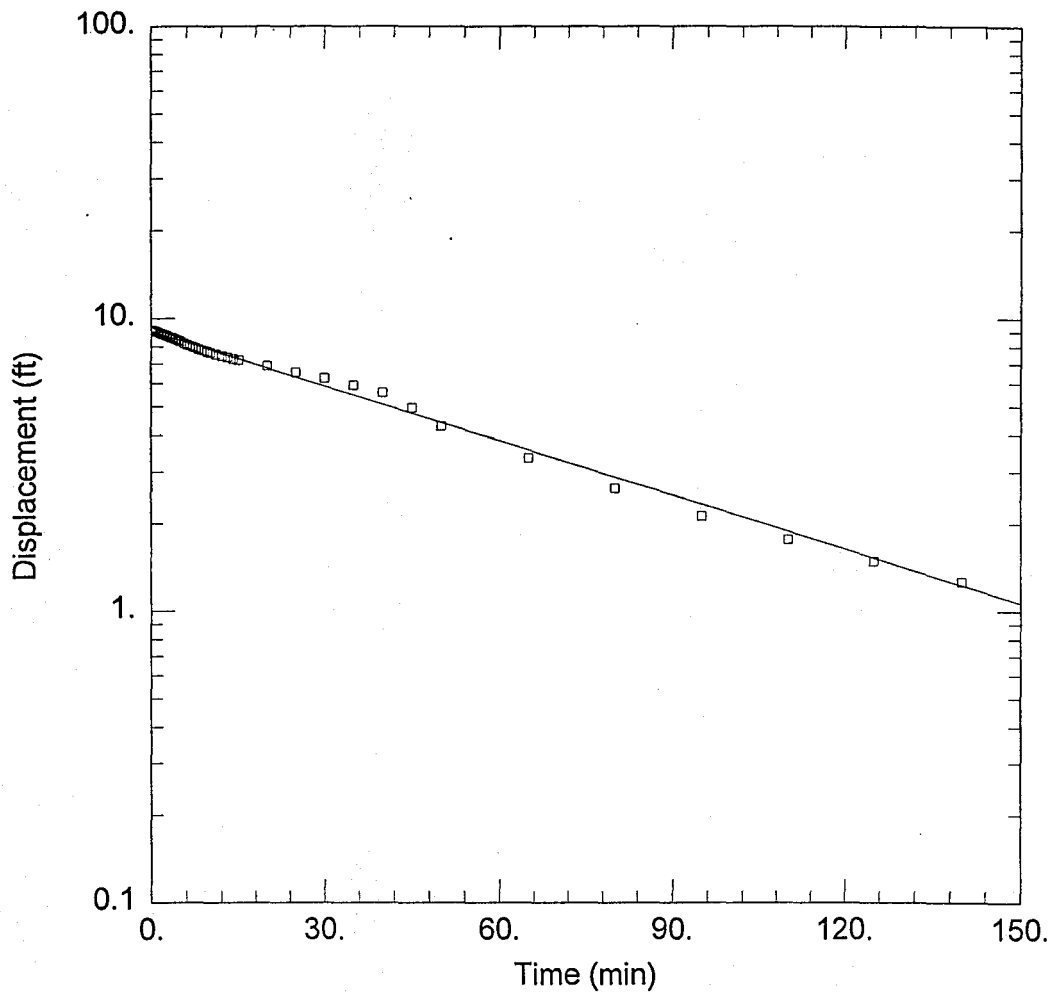
SOLUTION

Aquifer Model: Unconfined

K = 0.00143 cm/sec

Solution Method: Bouwer-Rice

y0 = 6.866 ft



WELL TEST ANALYSIS

Data Set: P:\KEB\BETTERBRK-TESTMW-115A.AQT

Date: 05/17/00

Time: 15:39:40

PROJECT INFORMATION

Company: HSI GeoTrans, Inc.

Client: Better Brite

Project: F119

Test Location: De Pere, WI

Test Well: MW-115A

Test Date: 5/4/00

AQUIFER DATA

Saturated Thickness: 9.34 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA

Initial Displacement: 9.13 ft

Water Column Height: 5. ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.25 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined

$K = 3.26E-05$ cm/sec

Solution Method: Bouwer-Rice

$y_0 = 8.999$ ft

APPENDIX D
PRO-TOP WELL CONVERSION SUMMARY TABLE

SUMMARY OF STICK UP PRO-TOP TO FLUSH MOUNT CONVERSION
MAY, 2000

Well ID	Result
B-101	Could not remove 100%. Left 3' of pipe cut below grade.
B-104A	Removed complete pro-top from ground.
MW-106	Could not remove 100%. Left 3' of pipe cut below grade.
MW-106A	Removed complete pro-top from ground.
MW-107	Removed complete pro-top from ground.
MW-107A	Removed complete pro-top from ground.
MW-113	Could not remove 100%. Left 3' of pipe cut below grade.

APPENDIX E
SURVEY DATA

May 17, 2000

Keith Becker
HSI Geotrans Inc.
175 N. Corporate Drive, Suite 100
Brookfield, Wisconsin 53045



1837 West Wisconsin Ave.
P.O. Box 1297
Appleton, Wisconsin 54912-1297
Phone (920) 731-4168
Fax (920) 731-5673

RE: Better Brite Chrome & Zinc Plating Site
DePere, Wisconsin
A949.13-00

Listed below are the locations and elevations for the additional wells and probes.

Chrome Plating Site

Well	Northing	Easting	Ground	Top of Casing	Top of PVC
B-101					608.85
B-104A					606.08
MW-106					606.21
MW-106A					606.36
MW-107					608.41
MW-107A					608.33
MW-113					611.08
MW-115	226,347.12	2,470,800.86	601.46	601.48	601.04
MW-115A	226,342.78	2,470,802.06	601.52	601.53	601.01
MW-116	226,337.11	2,470,919.62	604.88	604.90	604.28

Zinc Plating Site

SUMP 604.09

APPENDIX F
WATER ELEVATION MEASUREMENTS

GROUNDWATER LEVELS

May, 2000

CHROME SHOP			
Well Number	Top of Casing	Water Level in feet	Water Elevation
B-101	608.85	6.36	602.49
B-104A	606.08	6.85	599.23
MW-106	606.21	4.44	601.77
MW-106A	606.36	13.02	593.34
MW-107	608.41	2.26	606.15
MW-107A	608.33	19.54	588.79
MW-108	604.22	15.15	589.07
MW-108A	604.44	16.34	588.10
MW-110	603.05	3.11	599.94
MW-110A	603.31	13.54	589.77
MW-111	600.76	4.07	596.69
MW-112	600.61	3.49	597.12
MW-113	611.08	3.42	607.66
MW-115	601.04	13.99	587.05
MW-115A	601.01	12.95	588.06
MW-116	604.28	dry	NA

ZINC SHOP			
Well Number	Top of Casing	Water Level in feet	Water Elevation
MW-12	599.87	4.08	595.79
MW-9	601.66	6.02	595.64
MW-5	600.81	7.61	593.20
MW-5A	600.81	14.60	586.21
MW-6	602.33	6.72	595.61
MW-6A	605.19	11.11	594.08
MW-4	602.99	8.85	594.14
MW-4A	603.29	9.55	593.74
MW-8	598.18	8.89	589.29
MW-8A	598.59	18.04	580.55
MW-7	600.60	6.45	594.15
MW-7A	600.51	12.07	588.44
MW-11	602.40	4.31	598.09
MW-3	602.52	13.88	588.64
MW-10	601.53	4.96	596.57
MW-2	602.45	7.47	594.98
Sump	604.09	13.72	590.37

DATE: 5-7-00

WATER LEVEL DATA

PROJECT: Better Brake
 PROJECT #: F119
 LOCATION: G. De Pere

Zinc Shop

WELL:	TIME (MILITARY)	MEASURING INSTRUMENT	FIELD MEASUREMENT & SURVEY DATA			MEASURED BY	COMMENTS
			TOP OF PVC CASING ELEV. (ft. msl)	MEASURED DEPTH BELOW TOP PVC CASING (ft.)	WATER ELEVATION (ft. msl)		
MW-7	1040	Solinst	600.60	6.45	594.15		
MW-7A	1042		600.51	12.07	588.44		
MW-8	1049		598.18	8.89	589.29		
MW-8A	1051		598.59	18.04	580.55		
MW-4	1055		602.99	8.85	594.14		
MW-4A	1057		603.29	9.55	593.74		
MW-3A	11:10		602.52	13.88	588.64		Burred Cap off / lock unlocked
MW-11	11:10		602.4	4.31	598.09		cover cap wait seal.
MW-6	11:30		602.33	6.72	595.61		
MW-6A	11:35		605.19	11.11	594.08		
MW-9	11:45		601.66	6.02	595.64		lock unlocked
MW-10	12:15		601.53	4.96	596.57		new lock
MW-5	12:20		600.81	7.61	593.2		
MW-5A	12:22		600.81	14.60	586.21		
sump	12:30		604.09	13.72	590.37		N. side of green top tank
MW-12	12:35		599.87	4.08	595.79		reading from new lock
MW-12	12:45			8.22			sump sump 2
MW-12	13:20		602.45	7.47	594.98		
					594.98		
letter A core piezometers							

APPENDIX G
FIELD WATER QUALITY DATA SHEETS

FIELD WATER QUALITY SAMPLING AND ANALYSIS

119684404

PROJECT: tot Chrome/Butter Brik
 PROJECT #: E119
 LOCATION: Kaukauna, WI
 PERSONNEL: KS, KB

INSTRUMENTS
 TEMPERATURE: YSI 68
 CONDUCTIVITY: ↓
 PH: ↓
 OTHER: Solinst

GENERAL:		wt Chrome	Butter Brik			
SAMPLE POINT		F-12	MW-110	MW-110A	MW-111	MW-108
WATER TYPE		GW	GW	GW	GW	GW
DATE		5-1-00	5-1-00	5-1-00	5-1-00	5-1-00
CLOCK TIME		09:05	1435	1400	13:51	
DEPTH TO WATER*		25.60	3.86 ^{3.11}	13.54	4.07	12.5 15.15
MEASURED WELL DEPTH		30.19	14.50	23.59	14.35	15.45
PURGE VOL/CASING VOL(g)			7g	6.5g	6.7g	.19
DEPTH SAMPLE TAKEN		30.00	14.00	23.00	14.00	15.00
SAMPLING DEVICE		ded. catd. bailer	hang bailer	hang bailer	hang bailer	hang bailer
FIELD TEMPERATURE (°C)			14.1	17.0	10.8	
ELEC. COND. (umhos/cm)	MEASURED AT 25°C		1429	948	637	
PH			7.30	7.91	7.22	
ALKALINITY						
COLOR		brown (choc. milk)	lt. brown	lt. brown	lt.	
ODOR		none	none	none	none	
CLARITY		turbid	cloudy	cloudy	cloudy	
SAMPLING PARAMETERS	# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)					
		purged on mah.	-waited for water to reach static DTW: 3.11	-purged dry after 5g		-purged dry - parameters and sample tomorrow.
		-bailed 4 gallons out before well went dry.				
		well sample thurs. or Fri.				
Total Cr						
Hex Cr						
LABORATORY: SENT TO:		Test America				
DATE SENT:			5-1-00	5-1-00	5-1-00	
SAMPLED BY:		KB/KS				

*Measured from top of well riser.

Apr. 22 Check
 Call bank & verify routing + account
 Call Corporate in a.m.
 703-444-7000 about direct deposit

FIELD WATER QUALITY SAMPLING AND ANALYSIS

PROJECT: Better Brute
 PROJECT #: PH
 LOCATION: DE PERE, WI
 PERSONNEL: KS, KB

INSTRUMENTS
 TEMPERATURE: YSI 63
 CONDUCTIVITY: _____
 pH: _____
 OTHER: Selinst

GENERAL:		ZINC			
SAMPLE POINT		MW-5A	Zinc Sump	MW-10	MW-9
WATER TYPE		GW	GW	GW	GW
DATE		5/4/00	5/4/00	5-5-00	5-5-00
CLOCK TIME		16:55	16:30	10:05	16:20
DEPTH TO WATER*		14.46	13.62	6.68	6.15
MEASURED WELL DEPTH		24.48	20.46	14.69	16.36
PURGE VOL/CASING VOL (g)		9.8 gal	5 gal	5.5 g	6.5 g
DEPTH SAMPLE TAKEN		29.00	20.00	14.00	14.00
SAMPLING DEVICE		hang bailer	dedicated bailer	hang bailer	hang bailer
FIELD TEMPERATURE (°C)		16.8	18.0	14.2	45.1
ELEC. COND. (µmhos/cm)	MEASURED	259	242	1193	735
	AT 25°C	301	240.7	1506	902
pH		7.40	7.08	7.09	7.17
ALKALINITY		—	—	—	—
COLOR		lt. brown	clear	yellow	lt. brown
ODOR		none	none	none	none
CLARITY		cloudy	clear	clear	cloudy
SAMPLING PARAMETERS		# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)			
		purged dry after 7g	did not purge	bailed dry @ 5.5 gal	well on verge of going dry after 6.5 g.
LABORATORY: SENT TO:					
DATE SENT:					
SAMPLED BY:					

*Measured from top of well riser.

FIELD WATER QUALITY SAMPLING AND ANALYSIS

PROJECT: Better Brak
 PROJECT #: 119
 LOCATION: 112 rd. 1 mi
 PERSONNEL: KS, KB

INSTRUMENTS: YSI 63
 TEMPERATURE: _____
 CONDUCTIVITY: _____
 PH: _____
 OTHER: 201.201

GENERAL:	SAMPLE POINT	MW-12	MW-2	MW-115A	MW-15	MW-5
WATER TYPE		GW	GW	GW	GW	GW
DATE		5/4/00	5/4/00 5/4/00	5/4/00	5-4-00	5-4-00
CLOCK TIME		14:50	1510	1555	1535	16:50
DEPTH TO WATER*		3.95	7.54	13.19	13.99	7.68
MEASURED WELL DEPTH		14.55	14.13	22.53	14.48	15.35
PURGE VOL/CASING VOL (g)		1 gal	4.5 g	4.5	0.32	5 gal
DEPTH SAMPLE TAKEN		14.00	14.00	22.00	14.00	15.30
SAMPLING DEVICE		hang bailer	dedicated bailer	dedicated bailer	dedicated bailer	hang bailer
FIELD TEMPERATURE (°C)		17.6	19.02	15.2	18.6	15.3
ELEC. COND. (µmhos/cm)	MEASURED	1612	1671	565	627	238
	AT 25°C	1841	1826	203	715	1035
PH		6.91	6.79	7.19	7.02	7.21
ALKALINITY						
COLOR		brown	lt. yellow	clear	clear	lt. brown
ODOR		none	slight fuel smell	none	none	none
CLARITY		turbid	cloudy	clear	clear	clear
SAMPLING PARAMETERS	# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)					
		purged dry after 6.5g.			not developed	
LABORATORY: SENT TO:		Test America				
DATE SENT:						
SAMPLED BY:		KS, KB				

*Measured from top of well riser.

FIELD WATER QUALITY SAMPLING AND ANALYSIS

PROJECT: Better Boat
 PROJECT #: 1-117
 LOCATION: Pepperoni
 PERSONNEL: KS, KB

INSTRUMENTS
 TEMPERATURE: YSI 43
 CONDUCTIVITY: ↓
 PH: ↓
 OTHER: Solinst

GENERAL:	SAMPLE POINT	<u>Zinc</u>	<u>Zinc</u>	<u>Zinc</u>		
	MW-7	MW-6.9	MW-6	MW-7-D	MW-7MS	MSD
WATER TYPE	GW	GW	GW	GW	GW	
DATE	5-4-80	5-4-80	5-4-80	5/4/86	5/4/80	
CLOCK TIME	13:10	1440	14:25	13:20	13:10	
DEPTH TO WATER*	6.51	11.10	6.85	6.51	6.51	
MEASURED WELL DEPTH	15.00	28.40	15.50	15.60	15.60	
PURGE VOL/CASING VOL(g)	0	11	5.5	6	6	
DEPTH SAMPLE TAKEN	15.02	28.00	15.00	15	15	
SAMPLING DEVICE	^{hand} bailer	^{hand} bailer	^{hand} bailer	^{hand} bailer	^{hand} bailer	
FIELD TEMPERATURE (°C)	18.00	18.3	20.1			
ELEC. COND. (µmhos/cm)	MEASURED	956	1110	365	1116	
	AT 25°C	1106	1205	414	1205	
PH	6.95	7.22	7.07			
ALKALINITY						
COLOR	lt. brown	Brown	yellow			
ODOR	none	none	none			
CLARITY	clear	turbid	clear			
SAMPLING PARAMETERS	# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)					
		-pumped 7.5g then went dry				
LABORATORY: SENT TO:	Test America					
DATE SENT:						
LED BY:	KS KB					

*d from top of well riser.

FIELD WATER QUALITY SAMPLING AND ANALYSIS

PROJECT: W1 Refr. Brite
 PROJECT #: E-119
 LOCATION: Green Bay well
 PERSONNEL: KS, KB

INSTRUMENTS
 TEMPERATURE: YSI-63
 CONDUCTIVITY: _____
 PH: _____
 OTHER: Seinst

GENERAL:		SAMPLE POINT	MW-108A	mw-107	MW-107A	MW-107D	MW-106A
WATER TYPE			GW	GW	GW	GW	GW
DATE			5-1-00	5-2-00	5-2-00	5/2/00	5/2/00
CLOCK TIME			1645	1600	1550	1605	1705
DEPTH TO WATER*			16.34	22.82	19.54	2.20	13.02
MEASURED WELL DEPTH			32.95	15.41	39.04	15.41	31.82
PURGE VOL/CASING VOL(g)			11g	8.6g	12.7g	8.6g	12g
DEPTH SAMPLE TAKEN			32.00	15.00	39.00	15	31.00
SAMPLING DEVICE			hang bailer	hang bailer	hang bailer	hang bailer	hang bailer
FIELD TEMPERATURE (°C)			12.1	16.5	15.9		16.0
ELEC. COND. (µmhos/cm)	MEASURED		309	892	306.5		346
	AT 25°C		407	1008	319.5		408
PH			8.19	7.39	7.65		7.42
ALKALINITY			—	—	—	—	—
COLOR			lt. brown	lt. brown	lt. brown		lt. orange
ODOR			none	none	none		none
CLARITY			cloudy	cloudy	turbid		cloudy
SAMPLING PARAMETERS			# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)				
			- purged dry after 7g.		temp = 15.9		- purged dry after 7g.
Total Cr							
Hex Cr							
LABORATORY: SENT TO:			Test Ann				
DATE SENT:			5-1-00				
SAMPLED BY:			KS/KB				

*Measured from top of well riser.

FIELD WATER QUALITY SAMPLING AND ANALYSIS

PROJECT: Better Brook
 PROJECT #: 2119
 LOCATION: 24 West, WI
 PERSONNEL: KS, K

INSTRUMENTS
 TEMPERATURE: YSI Model 63
 CONDUCTIVITY: _____
 PH: _____
 OTHER: Selinst # 7

		ZINC	ZINC	ZINC	ZINC	ZINC
GENERAL:	SAMPLE POINT	MW-3A	MW-4	MW-4A	MW-3	MW-7A
	WATER TYPE	GW	GW	GW	GW	GW
	DATE	5-3-00	5-3-00	5-3-00	5-3-00	5-4-00
	CLOCK TIME	1425	1540	1608	0945	1300
	DEPTH TO WATER*	18.17	8.82	9.53	14.07	12.21
	MEASURED WELL DEPTH	27.23	14.92	28.64	28.56	26.50
	PURGE VOL/CASING VOL(g)	6.5	110	52	10	9.5
	DEPTH SAMPLE TAKEN	27.00	14.00	28.00	28.00	26.00
	SAMPLING DEVICE	hang bailer	dedicated bailer	dedicated bailer	peristaltic pump	hang bailer
	FIELD TEMPERATURE (°C)	17.2	16.9	14.2	17.0	20.2
ELEC. COND. (µmhos/cm)	MEASURED	298	1171	963	1057	344
	AT 25°C	343	1370	1214	1251	380
	PH	7.33	7.01	7.11	7.10	7.24
	ALKALINITY	—	—	—	—	—
	COLOR	lt. brown	lt. brown	lt. brown	clear	lt. brown
	ODOR	none	none	none	none	none
	CLARITY	cloudy	clear	clear	clear	cloudy
SAMPLING PARAMETERS		# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC) PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)				
		- baled dry after 4/29	4" well - purged dry	4" well - purged dry	- 11 inches down pipe separator	- purged 8 g. then went dry
			- purged 9 g with water	- purged 16 gallons	need to use peristaltic pump.	
					- 2" Sched 40 80 pipe	
					- cap won't go tight	
					- purged 3.5 g. then went dry	
LABORATORY:	SENT TO:	Test America				
	DATE SENT:					
LEAD BY:		KS, K				

red from top of well riser.

FIELD WATER QUALITY SAMPLING AND ANALYSIS

PROJECT: Better Brk
 PROJECT #: 2119
 LOCATION: W. of Fire
 PERSONNEL: KB, KS

INSTRUMENTS: SI 63
 TEMPERATURE: _____
 CONDUCTIVITY: _____
 pH: _____
 OTHER: Solinst

GENERAL:		SAMPLE POINT	MW-106	MW-112	MW-113	ZINC mw-11	ZINC MW-8
WATER TYPE			GW	GW	GW	GW	GW
DATE			5/2/00	5/3/00	5-3-00	5-3-00	5-3-00
CLOCK TIME			1710	1255	12:45	13:36	1410
DEPTH TO WATER*			4.44	3.49	3.42	4.31	8.89
MEASURED WELL DEPTH			14.30	15.00	14.83	15.30	16.38
PURGE VOL/CASING VOL(g)			6.5	8	7	7	5
DEPTH SAMPLE TAKEN			14.00	15.00	14.00	15.00	16.00
SAMPLING DEVICE			hang bailer	hang bailer	hang bailer	hang bailer	hang bailer
FIELD TEMPERATURE (°C)			15.1	15.9	15.7	18.3	15.8
ELEC. COND. (µmhos/cm)	MEASURED		720	659	811	1336	846
	AT 25°C		886	799	2046	1501	1627
pH			7.38	7.31	7.18	7.11	7.20
ALKALINITY							
COLOR			Tan	clear	lt. Brown	lt. Brown	lt. Brown
ODOR			none	none	none	none	none
CLARITY			cloudy	clear	cloudy	cloudy	cloudy
SAMPLING PARAMETERS			# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)				
			- purge dry after 7g	- new 100K			
Total Cr							→
Hex Cr							→
LABORATORY: SENT TO:			Test America				
DATE SENT:							→
SAMPLED BY:			KS, KB				

*Measured from top of well riser.

APPENDIX H
ANALYTICAL LABORATORY DATA AND CHAIN OF CUSTODY FORMS

ANALYTICAL AND QUALITY CONTROL REPORT

RECEIVED

MAY 12 2000

MASTER FILE COPY
PROJECT # _____
CC: _____

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

HDI Geotrans
Milwaukee

05/10/2000

Job No: 00.03531

Page 1 of 10

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
393390	MW-108A F116 Better Brite	05/01/2000	05/02/2000
393391	MW-110A F116 Better Brite	05/01/2000	05/02/2000
393392	MW-110 F116 Better Brite	05/01/2000	05/02/2000
393393	MW-111 F116 Better Brite	05/01/2000	05/02/2000

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

- | | |
|--|--|
| A = Analyzed/extracted past hold time | B = Blank is contaminated |
| C = Standard outside of control limits | D = Diluted for analysis |
| F = Sample filtered in lab | G = Received past hold time |
| H = Late eluting hydrocarbons present | I = Improperly handled sample |
| J = Estimated concentration | L = Common lab solvent and contaminant |
| M = Matrix interference | P = Improperly preserved sample |
| Q = Result confirmed via re-analysis | S = Sediment present |
| T = Does not match typical pattern | W = BOD re-set due to missed dilution |
| X = Unidentified compound(s) present | Z = Internal standard outside limits |

Karen R. Wenta
Karen R. Wenta
Inorganic Operations Manager

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03531
Sample No: 393390
Account No: 39150
Page 2 of 9

JOB DESCRIPTION: F116 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-108A F116 Better Brite
Rec'd on ice

Date/Time Taken: 05/01/2000 16:45

Date Received: 05/02/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/02/2000	596
Chromium, GFAA	0.055	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03531
Sample No: 393391
Account No: 39150
Page 3 of 9

JOB DESCRIPTION: F116 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-110A F116 Better Brite
Rec'd on ice

Date/Time Taken: 05/01/2000 14:00

Date Received: 05/02/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/02/2000	596
Chromium, GFAA	0.025	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03531
Sample No: 393392
Account No: 39150
Page 4 of 9

JOB DESCRIPTION: F116 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-110 F116 Better Brite
Rec'd on ice

Date/Time Taken: 05/01/2000 14:35

Date Received: 05/02/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/02/2000	596
Chromium, GFAA	0.037	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03531
Sample No: 393393
Account No: 39150
Page 5 of 9

JOB DESCRIPTION: F116 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-111 F116 Better Brite
Rec'd on ice

Date/Time Taken: 05/01/2000 15:51

Date Received: 05/02/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/02/2000	596
Chromium, GFAA	0.036	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

QUALITY CONTROL REPORT CONTINUING CALIBRATION VERIFICATION

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03531
Account No: 39150

Page 6 of 9

Job Description: F116 Better Brite

Parameter	Run Batch	True Value	Observed Value	Percent Recovery	Control Limits	Analyst
Chromium, hexavalent	596	0.500	0.50	100.0	90 - 110	jts
Chromium, hexavalent	596	0.500	0.48	96.0	90 - 110	jts
Chromium, GFAA	574	0.0100	0.0105	105.0	90 - 110	mmm
Chromium, GFAA	574	0.0100	0.0106	106.0	90 - 110	mmm

QUALITY CONTROL REPORT BLANKS

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03531
Account No: 39150

Page 7 of 9

Job Description: F116 Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Chromium, hexavalent		596	<0.0042	0.0042	0.015	mg/L
Chromium, hexavalent		596	<0.0042	0.0042	0.015	mg/L
Chromium, GFAA	988	574	0.00089	0.00052	0.0018	mg/L
Chromium, GFAA		574	<0.00052	0.00052	0.0018	mg/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03531
Account No: 39150

Page 8 of 9

Job Description: F116 Better Brite

Analyte	Prep	Run	LCS	Units	LCS	LCSD	LCS	LCSD	Control	Relative
	Batch	Batch					Percent	Percent		Limits
	Number	Number	Amount		Result	Result	Recovery	Recovery		Difference
Chromium, GFAA	988	574	0.0100	mg/L	0.0111		111.0		87 - 116	

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/10/2000

Job No: 00.03531
 Account No: 39150

Page 9 of 9

Job Description: F116 Better Brite

Analyte	Prep	Run	Sample	Spike	Matrix	MS	MSD	Relative			
	Batch	Batch							Spike	Spike	MSD
	Number	Number	Result	Amount	Units	Result	Result	Recovery	Recovery	Limits	Difference
Chromium, hexavalent		596	<0.0042	0.500	mg/L	0.48	0.48	96.0	96.0	70 - 116	0.0
Chromium, GFAA	988	574	0.016	0.0100	mg/L	0.0258	0.0227	98.0	67.0	80 - 131	12.8

TestAmerica

INCORPORATED

ANALYTICAL AND QUALITY CONTROL REPORT

RECEIVED

MAY 12 2000

FILE COPY
PROJECT # _____
CO: _____

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS *GeoTrans*
175 N. Corporate Drive *Milwaukee*
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03562

Page 1 of 11

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
393540	MW-106 F119 Better Brite	05/02/2000	05/03/2000
393541	MW-106A F119 Better Brite	05/02/2000	05/03/2000
393542	MW-107A F119 Better Brite	05/02/2000	05/03/2000
393543	MW-107D F119 Better Brite	05/02/2000	05/03/2000
393544	MW-107 F119 Better Brite	05/02/2000	05/03/2000

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time	B = Blank is contaminated
C = Standard outside of control limits	D = Diluted for analysis
F = Sample filtered in lab	G = Received past hold time
H = Late eluting hydrocarbons present	I = Improperly handled sample
J = Estimated concentration	L = Common lab solvent and contaminant
M = Matrix interference	P = Improperly preserved sample
Q = Result confirmed via re-analysis	S = Sediment present
T = Does not match typical pattern	W = BOD re-set due to missed dilution
X = Unidentified compound(s) present	Z = Internal standard outside limits

Karen R. Wenta
Karen R. Wenta *mmmm*
Inorganic Operations Manager

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03562
Sample No: 393540
Account No: 39150
Page 2 of 11

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-106 F119 Better Brite
Rec'd on ice

Date/Time Taken: 05/02/2000 17:10

Date Received: 05/03/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/03/2000	597
Chromium, GFAA	0.0040	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03562
Sample No: 393541
Account No: 39150
Page 3 of 11

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-106A F119 Better Brite
Rec'd on ice

Date/Time Taken: 05/02/2000 17:05

Date Received: 05/03/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/03/2000	597
Chromium, GFAA	0.0094	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ug/L

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03562
Sample No: 393542
Account No: 39150
Page 4 of 11

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-107A F119 Better Brite
Rec'd on ice

Date/Time Taken: 05/02/2000 15:50

Date Received: 05/03/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/03/2000	597
Chromium, GFAA	M 0.016	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03562
Sample No: 393543
Account No: 39150
Page 5 of 11

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-107D F119 Better Brite
Rec'd on ice

Date/Time Taken: 05/02/2000 16:05

Date Received: 05/03/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/03/2000	597
Chromium, GFAA	0.0045	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000
Job No: 00.03562
Sample No: 393544
Account No: 39150
Page 6 of 11

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-107 F119 Better Brite
Rec'd on ice

Date/Time Taken: 05/02/2000 16:00

Date Received: 05/03/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/03/2000	597
Chromium, GFAA	0.0042	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

QUALITY CONTROL REPORT CONTINUING CALIBRATION VERIFICATION

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03562
Account No: 39150

Page 7 of 11

Job Description: F119 Better Brite

Parameter	Run Batch	True Value	Observed Value	Percent Recovery	Control Limits	Analyst
Chromium, hexavalent	597	0.500	0.51	102.0	90 - 110	jts
Chromium, hexavalent	597	0.500	0.49	98.0	90 - 110	jts
Chromium, GFAA	574	0.0100	0.0105	105.0	90 - 110	mmm
Chromium, GFAA	574	0.0100	0.0106	106.0	90 - 110	mmm

QUALITY CONTROL REPORT BLANKS

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03562
Account No: 39150

Page 8 of 11

Job Description: F119 Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Chromium, hexavalent		597	<0.0042	0.0042	0.015	mg/L
Chromium, hexavalent		597	<0.0042	0.0042	0.015	mg/L
Chromium, GFAA	988	574	0.00089	0.00052	0.0018	mg/L
Chromium, GFAA		574	<0.00052	0.00052	0.0018	mg/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT DUPLICATES

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03562
Account No: 39150

Page 9 of 11

Job Description: F119 Better Brite

Parameter	Prep	Run	Sample Value	Duplicate Value	Units	RPD	Control Limit
	Batch Number	Batch Number					
Chromium, hexavalent		597	<0.0042	<0.0042	mg/L		23
Chromium, GFAA	988	574	0.0042	0.0038	mg/L	10.0	20

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/10/2000

Job No: 00.03562
 Account No: 39150

Page 10 of 11

Job Description: F119 Better Brite

Analyte	Prep	Run	Sample	Spike	Units	Matrix	MS	MSD	MS	MSD	Relative
	Batch	Batch				Spike					
	Number	Number	Result	Amount		Result	Result	Recovery	Recovery	Limits	Difference
Chromium, hexavalent		597	<0.0042	0.500	mg/L	0.50	0.49	100.0	98.0	70 - 116	2.0
Chromium, GFAA	988	574	0.016	0.0100	mg/L	0.0258	0.0227	98.0	67.0	80 - 131	12.8

QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/10/2000

Job No: 00.03562
Account No: 39150

Page 11 of 11

Job Description: F119 Better Brite

Analyte	Prep	Run	LCS		LCS	LCS	LCS	LCS	Relative
	Batch	Batch	Amount	Units	Result	Result	Percent	Percent	Control
	Number	Number					Recovery	Recovery	Limits
Chromium, GFAA	988	574	0.0100	mg/L	0.0111		111.0		87 - 116

CHAIN OF CUSTODY RECORD

00.03562

602 Commerce Drive / Watertown, WI 53094
Phone: (920) 261-1660 / Fax: (920) 261-8120

COMPANY: HSI GeoTrans
ADDRESS: 175 N. Corporate Dr. 100
PHONE: 262-792-1282 FAX:
PROJECT DESCRIPTION/NO.: Fl19 Better Brite
PROJECT MANAGER: Dan Morgan

REPORT TO: Dan Morgan
INVOICE TO:

P.O. NO.:
QUOTE NO.:

SAMPLED BY:
Kathryn Schoephoester
NAME
Keith Becker
NAME

Fax Results? QC w/Results?
Which regulations apply?
NPDES/Wastewater RCRA UST
Drinking Water Other None

DATE	TIME	SAMPLE ID/DESCRIPTION	FILTERED	MATRIX	GRAB	COMP	# and Type of Containers							OTHER	ANALYSES	COMMENTS	
							HCl	NaOH	HNO ₃	H ₂ SO ₄	NONE	METHANOL	OTHER				
5/26	1710	MW-106	NO	SW	X				X						X	Total Cr	
	1705	MW-106 A			X				X						X	Hex Cr	
	1550	MW-107 A			X				X						X		MS/MSD
	1605	MW-107 D			X				X						X		
	1600	MW-107			X				X						X		
		MW-10															

LAB USE ONLY
CONDITION OF SAMPLE: BOTTLES INTACT? YES NO
VOLATILES FREE OF HEADSPACE? YES NO
BOTTLES SUPPLIED BY LAB? YES NO
TEMPERATURE UPON RECEIPT: 10.0 °C

RELINQUISHED BY: Kathryn Schoephoester DATE: 5/26 TIME: 5:35 pm
RECEIVED BY: _____ DATE: 5/3/03 TIME: 11:00
RECEIVED FOR LAB BY: Carla Beaman

METHOD OF SHIPMENT: TestAmerica Courier _____
Client: E Fedex
Common Carrier: _____
REMARKS: m 5/3/03

ANALYTICAL AND QUALITY CONTROL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/16/2000

Job No: 00.03645

Page 1 of 17

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
393885	MW-4 Better Brite	05/03/2000	05/04/2000
393886	EQ-1 Better Brite	05/03/2000	05/04/2000
393887	MW-4A Better Brite	05/03/2000	05/04/2000
393888	MW-11 Better Brite	05/03/2000	05/04/2000
393889	MW-113 Better Brite	05/03/2000	05/04/2000
393890	MW-112 Better Brite	05/03/2000	05/04/2000
393891	MW-8 Better Brite	05/03/2000	05/04/2000
393892	MW-8A Better Brite	05/03/2000	05/04/2000
393893	Trip Blank Better Brite	05/03/2000	05/04/2000

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time	B = Blank is contaminated
C = Standard outside of control limits	D = Diluted for analysis
F = Sample filtered in lab	G = Received past hold time
H = Late eluting hydrocarbons present	I = Improperly handled sample
J = Estimated concentration	L = Common lab solvent and contaminant
M = Matrix interference	P = Improperly preserved sample
Q = Result confirmed via re-analysis	S = Sediment present
T = Does not match typical pattern	W = BOD re-set due to missed dilution
X = Unidentified compound(s) present	Z = Internal standard outside limits



Brian D. DeJong
Organic Operations Manager

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/16/2000
Job No: 00.03645
Sample No: 393885
Account No: 39150
Page 2 of 17

JOB DESCRIPTION: Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-4 Better Brite
Rec'd on ice

Date/Time Taken: 05/03/2000 15:40

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.0046	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/16/2000
 Job No: 00.03645
 Sample No: 393886
 Account No: 39150
 Page 3 of 17

JOB DESCRIPTION: Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: EQ-1 Better Brite
 Rec'd on ice

Date/Time Taken: 05/03/2000 15:25

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.0038	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/16/2000
 Job No: 00.03645
 Sample No: 393886
 Account No: 39150
 Page 4 of 17

JOB DESCRIPTION: Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: EQ-1 Better Brite
 Rec'd on ice

Date/Time Taken: 05/03/2000 15:25

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Toluene	0.14	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Surr: Dibromofluoromethane	97.0	%		88-116	SW 8260B	05/08/2000	1905
Surr: Toluene-d8	99.6	%		88-113	SW 8260B	05/08/2000	1905
Surr: Bromofluorobenzene	94.4	%		91-111	SW 8260B	05/08/2000	1905

ANALYTICAL REPORT

Mr. Dan Morgan
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Suite 100
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05/16/2000
Job No: 00.03645
Sample No: 393887
Account No: 39150
Page 5 of 17

JOB DESCRIPTION: Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-4A Better Brite
Rec'd on ice

Date/Time Taken: 05/03/2000 16:08

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.0087	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
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05/16/2000
Job No: 00.03645
Sample No: 393888
Account No: 39150
Page 6 of 17

JOB DESCRIPTION: Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-11 Better Brite
Rec'd on ice

Date/Time Taken: 05/03/2000 13:36

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.0070	mg/L	0.00052	0.0018	EPA 218.2	05/09/2000	988 574

ANALYTICAL REPORT

Mr. Dan Morgan
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05/16/2000
Job No: 00.03645
Sample No: 393889
Account No: 39150
Page 7 of 17

JOB DESCRIPTION: Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-113 Better Brite
Rec'd on ice

Date/Time Taken: 05/03/2000 12:45

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.022	mg/L	0.00052	0.0018	EPA 218.2	05/15/2000	989 575

ANALYTICAL REPORT

Mr. Dan Morgan
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05/16/2000
Job No: 00.03645
Sample No: 393890
Account No: 39150
Page 8 of 17

JOB DESCRIPTION: Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-112 Better Brite
Rec'd on ice

Date/Time Taken: 05/03/2000 12:55

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.0041	mg/L	0.00052	0.0018	EPA 218.2	05/15/2000	989 575

ANALYTICAL REPORT

Mr. Dan Morgan
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175 N. Corporate Drive
Suite 100
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05/16/2000
Job No: 00.03645
Sample No: 393891
Account No: 39150
Page 9 of 17

JOB DESCRIPTION: Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-8 Better Brite
Rec'd on ice

Date/Time Taken: 05/03/2000 14:10

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.015	mg/L	0.00052	0.0018	EPA 218.2	05/15/2000	989 575

ANALYTICAL REPORT

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/16/2000
Job No: 00.03645
Sample No: 393892
Account No: 39150
Page 10 of 17

JOB DESCRIPTION: Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-8A Better Brite
Rec'd on ice

Date/Time Taken: 05/03/2000 14:25

Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/04/2000	598
Chromium, GFAA	0.016	mg/L	0.00052	0.0018	EPA 218.2	05/15/2000	989 575

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/16/2000
 Job No: 00.03645
 Sample No: 393893
 Account No: 39150
 Page 11 of 17

JOB DESCRIPTION: Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: Trip Blank Better Brite
 Rec'd on ice

Date/Time Taken: 05/03/2000 UNKNOWN Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/16/2000
 Job No: 00.03645
 Sample No: 393893
 Account No: 39150
 Page 12 of 17

JOB DESCRIPTION: Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: Trip Blank Better Brite
 Rec'd on ice

Date/Time Taken: 05/03/2000 UNKNOWN Date Received: 05/04/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Methylene Chloride	L 0.58	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/08/2000	1905
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	05/08/2000	1905
Surr: Dibromofluoromethane	97.4	%		88-116	SW 8260B	05/08/2000	1905
Surr: Toluene-d8	97.6	%		88-113	SW 8260B	05/08/2000	1905
Surr: Bromofluorobenzene	93.2	%		91-111	SW 8260B	05/08/2000	1905

QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

05/16/2000

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

Job No: 00.03645
 Account No: 39150

Page 13 of 17

Job Description: Better Brite

Parameter	Run Batch	True Value	Observed Value	Percent Recovery	Control Limits	Analyst
Chromium, hexavalent	598	0.500	0.50	100.0	90 - 110	jts
Chromium, hexavalent	598	0.500	0.49	98.0	90 - 110	jts
Chromium, GFAA	574	0.0100	0.0105	105.0	90 - 110	mmm
Chromium, GFAA	574	0.0100	0.0106	106.0	90 - 110	mmm
Chromium, GFAA	575	0.0100	0.0102	102.0	90 - 110	mmm
Chromium, GFAA	575	0.0100	0.0104	104.0	90 - 110	mmm
VOC - AQUEOUS - EPA 8260B						
Benzene	1905	50.0	45.5	91.0		mae
Bromoform	1905	50.0	50.2	100.4		mae
Chlorobenzene	1905	50.0	48.8	97.6		mae
Chloroform	1905	50.0	44.4	88.8	80 - 120	mae
Chloromethane	1905	50.0	42.2	84.4		mae
1,1-Dichloroethane	1905	50.0	44.9	89.8		mae
1,1-Dichloroethene	1905	50.0	44.4	88.8	80 - 120	mae
1,2-Dichloropropane	1905	50.0	45.2	90.4	80 - 120	mae
Ethylbenzene	1905	50.0	47.5	95.0	80 - 120	mae
Methyl-t-butyl ether	1905	50.0	44.7	89.4	80 - 120	mae
1,1,2,2-Tetrachloroethane	1905	50.0	47.4	94.8		mae
Toluene	1905	50.0	48.1	96.2	80 - 120	mae
Trichloroethene	1905	50.0	49.0	98.0		mae
1,2,4-Trimethylbenzene	1905	50.0	47.7	95.4		mae
1,3,5-Trimethylbenzene	1905	50.0	47.1	94.2		mae
Vinyl Chloride	1905	50.0	42.0	84.0	80 - 120	mae
Xylenes, Total	1905	150	145.0	96.7		mae
Surr: Dibromofluoromethane	1905	50.0	47.8	95.6	87 - 116	mae
Surr: Toluene-d8	1905	50.0	50.7	101.4	89 - 109	mae
Surr: Bromofluorobenzene	1905	50.0	47.0	94.0	87 - 112	mae

QUALITY CONTROL REPORT

BLANKS

05/16/2000

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

Job No: 00.03645
 Account No: 39150

Page 14 of 17

Job Description: Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Chromium, hexavalent		598	<0.0042	0.0042	0.015	mg/L
Chromium, hexavalent		598	<0.0042	0.0042	0.015	mg/L
Chromium, GFAA	988	574	0.00089	0.00052	0.0018	mg/L
Chromium, GFAA		574	<0.00052	0.00052	0.0018	mg/L
Chromium, GFAA	989	575	<0.00052	0.00022	0.00078	mg/L
Chromium, GFAA		575	<0.00052	0.00022	0.00078	mg/L
VOC - AQUEOUS - EPA 8260B						
Benzene		1905	<0.10	0.10	0.33	ug/L
Bromobenzene		1905	<0.25	0.25	0.83	ug/L
Bromochloromethane		1905	<0.25	0.25	0.83	ug/L
Bromodichloromethane		1905	<0.25	0.25	0.83	ug/L
Bromoform		1905	<0.25	0.25	0.83	ug/L
Bromomethane		1905	<0.25	0.25	0.83	ug/L
n-Butylbenzene		1905	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		1905	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		1905	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		1905	<0.25	0.25	0.83	ug/L
Chlorobenzene		1905	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		1905	<0.25	0.25	0.83	ug/L
Chloroethane		1905	<0.25	0.25	0.83	ug/L
Chloroform		1905	<0.25	0.25	0.83	ug/L
Chloromethane		1905	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		1905	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		1905	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		1905	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		1905	<0.25	0.25	0.83	ug/L
Dibromomethane		1905	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		1905	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		1905	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		1905	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		1905	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		1905	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		1905	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		1905	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		1905	<0.25	0.25	0.83	ug/L
trans-1,2-Dichloroethene		1905	<0.25	0.25	0.83	ug/L
1,2-Dichloropropane		1905	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

05/16/2000

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

Job No: 00.03645
 Account No: 39150

Page 15 of 17

Job Description: Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
1,3-Dichloropropane		1905	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		1905	<0.25	0.25	0.83	ug/L
1,1-Dichloropropene		1905	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		1905	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		1905	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		1905	<0.25	0.25	0.83	ug/L
Ethylbenzene		1905	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		1905	<0.25	0.25	0.83	ug/L
Isopropylbenzene		1905	<0.25	0.25	0.83	ug/L
p -Isopropyltoluene		1905	<0.25	0.25	0.83	ug/L
M ethylene Chloride		1905	<0.25	0.25	0.83	ug/L
Methyl-t-butyl ether		1905	<0.25	0.25	0.83	ug/L
Naphthalene		1905	<0.25	0.25	0.83	ug/L
n-Propylbenzene		1905	<0.25	0.25	0.83	ug/L
Styrene		1905	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		1905	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		1905	<0.25	0.25	0.83	ug/L
Tetrachloroethene		1905	<0.25	0.25	0.83	ug/L
Toluene		1905	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		1905	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		1905	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		1905	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		1905	<0.25	0.25	0.83	ug/L
Trichloroethene		1905	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		1905	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		1905	<0.25	0.25	0.83	ug/L
1,2,4-Trimethylbenzene		1905	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		1905	<0.10	0.10	0.33	ug/L
Vinyl Chloride		1905	<0.25	0.25	0.83	ug/L
Xylenes, Total		1905	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		1905	95.4		88-116	%
Surr: Toluene-d8		1905	100.2		88-113	%
Surr: Bromofluorobenzene		1905	91.0		91-111	%

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/16/2000

Job No: 00.03645
Account No: 39150

Page 16 of 17

Job Description: Better Brite

Analyte	Prep	Run			LCS	LCS	LCS	LCS	Relative
	Batch	Batch	LCS	Units	LCS	LCS	Percent	Percent	Control
	Number	Number	Amount		Result	Result	Recovery	Recovery	Limits
									Percent
Chromium, GFAA	988	574	0.0100	mg/L	0.0111		111.0		87 - 116
Chromium, GFAA	989	575	0.0100	mg/L	0.0108		108.0		87 - 116

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/16/2000

Job No: 00.03645
 Account No: 39150

Page 17 of 17

Job Description: Better Brite

Analyte	Prep	Run	Sample	Spike	Matrix	MS	MSD	Relative			
	Batch	Batch							Control	Percent	Percent
	Number	Number	Result	Amount	Units	Result	Result	Recovery	Recovery	Limits	Difference
Chromium, hexavalent		598	<0.0042	0.500	mg/L	0.48	0.48	96.0	96.0	70 - 116	0.0
Chromium, GFAA	988	574	0.016	0.0100	mg/L	0.0258	0.0227	98.0	67.0	80 - 131	12.8
Chromium, GFAA	989	575	0.0039	0.0100	mg/L	0.0159	0.0151	120.0	112.0	80 - 131	5.2
VOC - AQUEOUS - EPA 8260B											
Benzene		1905	<0.10	50.0	ug/L	45.2	45.1	90.4	90.2	80 - 121	0.2
Chlorobenzene		1905	<0.25	50.0	ug/L	48.7	49.9	97.4	99.8	85 - 116	2.4
1,1-Dichloroethene		1905	<0.25	50.0	ug/L	43.9	44.2	87.8	88.4	72 - 131	0.7
Ethylbenzene		1905	<0.25	50.0	ug/L	49.1	49.9	98.2	99.8	83 - 118	1.6
Methyl-t-butyl ether		1905	<0.25	50.0	ug/L	42.3	43.1	84.6	86.2	71 - 127	1.9
Toluene		1905	0.14	50.0	ug/L	47.1	50.0	93.9	99.7	82 - 116	6.0
Trichloroethene		1905	<0.25	50.0	ug/L	46.1	47.0	92.2	94.0	80 - 117	1.9
1,2,4-Trimethylbenzene		1905	<0.10	50.0	ug/L	47.3	49.8	94.6	99.6	80 - 122	5.1
1,3,5-Trimethylbenzene		1905	<0.10	50.0	ug/L	47.3	49.3	94.6	98.6	83 - 122	4.1
Xylenes, Total		1905	<0.25	150	ug/L	144.4	150.3	96.3	100.2	84 - 119	4.0
Surr: Dibromofluoromethane		1905	48.5	50.0	%	49.0	49.3	98.0	98.6	88 - 116	0.6
Surr: Toluene-d8		1905	49.8	50.0	%	50.0	51.2	100.0	102.4	88 - 113	2.4
Surr: Bromofluorobenzene		1905	47.2	50.0	%	47.5	48.0	95.0	96.0	91 - 111	1.0

CHAIN OF CUSTODY RECORD

00.03645

602 Commerce Drive / Watertown, WI 53094
 Phone: (920) 261-1660 / Fax: (920) 261-8120

COMPANY HSI GeoTrans
 ADDRESS 175 N. Corporate Dr. #100
 PHONE 262-792-1282 FAX _____
 PROJECT DESCRIPTION/NO. Better Brite
 PROJECT MANAGER Dan Morgan

REPORT TO: Dan Morgan
 INVOICE TO: _____
 P.O. NO.: _____
 QUOTE NO.: _____

SAMPLED BY:
Kathryn Schoephoester
 NAME
Keith Becker
 NAME

DATE	TIME	SAMPLE ID/DESCRIPTION	FILTERED	MATRIX	GRAB	COMP	# and Type of Containers ¹						OTHER	ANALYSES			COMMENTS	
							HCl	NaOH	HNO ₃	H ₂ SO ₄	NONE	METHANOL		Hex Cr	Total Cr	VOC		
5/3/00	1540	MW-4	No	6W	X								X	X				
	1525	EQ-1					3						X	X	X			
	1608	MW-4A											X	X	X			
	1336	MW-11											X	X	X			
	1245	MW-11B											X	X				
	1255	MW-#3 112											X	X				
	1410	MW-8											X	X				
✓	1425	MW-8A	↓	↓	↓								X	X				
		Trip Blank					1								X			Ⓜ

Fax Results? _____ QC w/Results? _____
 Which regulations apply?
 NPDES/Wastewater _____ RCRA _____ UST _____
 Drinking Water _____ Other _____ None _____

LAB USE ONLY
 CONDITION OF SAMPLE: BOTTLES INTACT? YES/NO 0 VOLATILES FREE OF HEADSPACE? YES/NO 0 BOTTLES SUPPLIED BY LAB? YES/NO 0 TEMPERATURE UPON RECEIPT: keel °C

RELINQUISHED BY: Kathryn Schoephoester DATE: 5/3/00 TIME: 5:00 RECEIVED BY: _____ DATE: 7/4/00 TIME: 10:50 RECEIVED FOR LAB BY: Carla B...

METHOD OF SHIPMENT: _____ REMARKS: _____
 TestAmerica Courier _____
 Client: _____
 Common Carrier: keel ck
a 5/5/00

TestAmerica

INCORPORATED

RECEIVED
RECEIVED

ANALYTICAL AND QUALITY CONTROL REPORT

MAY 22 2000
HSI GEOTRANS
MILWAUKEE
HSI Geotrans
Milwaukee

BETTER FILE COPY

PROJECT # _____
601 _____

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000

Job No: 00.03691

Page 1 of 23

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
394254	MW-5A F119 Better Brite	05/04/2000	05/05/2000
394255	MW-115 F119 Better Brite	05/04/2000	05/05/2000
394256	Zinc Sump F119 Better Brite	05/04/2000	05/05/2000
394257	MW-5 F119 Better Brite	05/04/2000	05/05/2000
394258	MW-12 F119 Better Brite	05/04/2000	05/05/2000
394259	MW-115A F119 Better Brite	05/04/2000	05/05/2000
394260	MW-6 F119 Better Brite	05/04/2000	05/05/2000
394261	MW-6D F119 Better Brite	05/04/2000	05/05/2000
394262	MW-2 F119 Better Brite	05/04/2000	05/05/2000
394263	EQ-2 F119 Better Brite	05/04/2000	05/05/2000
394264	MW-7D F119 Better Brite	05/04/2000	05/05/2000
394265	MW-6A F119 Better Brite	05/04/2000	05/05/2000
394266	MW-7 F119 Better Brite	05/04/2000	05/05/2000
394267	MW-7A F119 Better Brite	05/04/2000	05/05/2000

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time	B = Blank is contaminated
C = Standard outside of control limits	D = Diluted for analysis
F = Sample filtered in lab	G = Received past hold time
H = Late eluting hydrocarbons present	I = Improperly handled sample
J = Estimated concentration	L = Common lab solvent and contaminant
M = Matrix interference	P = Improperly preserved sample
Q = Result confirmed via re-analysis	S = Sediment present
T = Does not match typical pattern	W = BOD re-set due to missed dilution
X = Unidentified compound(s) present	Z = Internal standard outside limits



Brian D. DeJong
Organic Operations Manager

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03691
Sample No: 394254
Account No: 39150
Page 2 of 23

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-5A F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 16:55

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.0065	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03691
Sample No: 394255
Account No: 39150
Page 3 of 23

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-115 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 15:35 Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.0060	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000
 Job No: 00.03691
 Sample No: 394256
 Account No: 39150
 Page 4 of 23

JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: Zinc Sump F119 Better Brite
 Rec'd on Ice

Date/Time Taken: 05/04/2000 16:30

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	1.8	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	1.7	mg/L	0.00052	0.0018	EPA 218.2	05/18/2000	989 577
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908

ANALYTICAL REPORT

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000
 Job No: 00.03691
 Sample No: 394256
 Account No: 39150
 Page 5 of 23

JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: Zinc Sump F119 Better Brite
 Rec'd on Ice

Date/Time Taken: 05/04/2000 16:30

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,1-Trichloroethane	1.4	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Surr: Dibromofluoromethane	97.8	%		88-116	SW 8260B	05/10/2000	1908
Surr: Toluene-d8	104.0	%		88-113	SW 8260B	05/10/2000	1908
Surr: Bromofluorobenzene	100.8	%		91-111	SW 8260B	05/10/2000	1908

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
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05/18/2000
Job No: 00.03691
Sample No: 394257
Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-5 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 16:50

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	0.12	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.19	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

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05/18/2000
Job No: 00.03691
Sample No: 394258
Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-12 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 14:50

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.0048	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

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05/18/2000
Job No: 00.03691
Sample No: 394259
Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-115A F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 15:55

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.012	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

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05/18/2000
Job No: 00.03691
Sample No: 394260
Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-6 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 14:25

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	23	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, AA	26	mg/L	0.026	0.091	EPA 218.1	05/17/2000	1597 832

ANALYTICAL REPORT

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05/18/2000
Job No: 00.03691
Sample No: 394261
Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-6D F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 14:30

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	22	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, AA	26	mg/L	0.026	0.091	EPA 218.1	05/17/2000	1597 832

ANALYTICAL REPORT

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05/18/2000
 Job No: 00.03691
 Sample No: 394262
 Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: MW-2 F119 Better Brite
 Rec'd on Ice

Date/Time Taken: 05/04/2000 15:10

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.0076	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577
VOC - AQUEOUS - EPA 8260B							
Benzene	1.3	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
sec-Butylbenzene	0.71	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908

ANALYTICAL REPORT

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05/18/2000
 Job No: 00.03691
 Sample No: 394262
 Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: MW-2 F119 Better Brite
 Rec'd on Ice

Date/Time Taken: 05/04/2000 15:10

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	0.37	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Isopropylbenzene	2.6	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Methyl-t-butyl ether	34	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
n-Propylbenzene	0.53	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Toluene	0.12	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Surr: Dibromofluoromethane	99.8	%		88-116	SW 8260B	05/10/2000	1908
Surr: Toluene-d8	104.4	%		88-113	SW 8260B	05/10/2000	1908
Surr: Bromofluorobenzene	100.8	%		91-111	SW 8260B	05/10/2000	1908

ANALYTICAL REPORT

Mr. Dan Morgan
 HSI GEOTRANS
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 Brookfield, WI 53045

05/18/2000
 Job No: 00.03691
 Sample No: 394263
 Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: EQ-2 F119 Better Brite
 Rec'd on Ice

Date/Time Taken: 05/04/2000 13:20

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.00082	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908

ANALYTICAL REPORT

Mr. Dan Morgan
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 Suite 100
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05/18/2000
 Job No: 00.03691
 Sample No: 394263
 Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: EQ-2 F119 Better Brite
 Rec'd on Ice

Date/Time Taken: 05/04/2000 13:20

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	05/10/2000	1908
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	05/10/2000	1908
Surr: Dibromofluoromethane	98.6	%		88-116	SW 8260B	05/10/2000	1908
Surr: Toluene-d8	105.8	%		88-113	SW 8260B	05/10/2000	1908
Surr: Bromofluorobenzene	99.4	%		91-111	SW 8260B	05/10/2000	1908

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03691
Sample No: 394264
Account No: 39150
Page 15 of 23

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-7D F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 13:20

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.0016	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03691
Sample No: 394265
Account No: 39150
Page 16 of 23

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-6A F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 14:40

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	0.0066	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.022	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03691
Sample No: 394266
Account No: 39150
Page 17 of 23

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-7 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 13:10

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.0039	mg/L	0.00052	0.0018	EPA 218.2	05/15/2000	989 575

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03691
Sample No: 394267
Account No: 39150
Page 18 of 23

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-7A F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/04/2000 13:00

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	<0.0042	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.0047	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000

Job No: 00.03691
 Account No: 39150

Page 19 of 23

Job Description: F119 Better Brite

Parameter	Run Batch	True Value	Observed Value	Percent Recovery	Control Limits	Analyst
Chromium, hexavalent	599	0.500	0.48	96.0	90 - 110	jts
Chromium, hexavalent	599	0.500	0.51	102.0	90 - 110	jts
Chromium, AA	832	0.500	0.506	101.2	90 - 110	gaf
Chromium, AA	832	0.500	0.511	102.2	90 - 110	gaf
Chromium, GFAA	575	0.0100	0.0102	102.0	90 - 110	mmm
Chromium, GFAA	575	0.0100	0.0104	104.0	90 - 110	mmm
Chromium, GFAA	577	0.0100	0.0105	105.0	90 - 110	mmm
Chromium, GFAA	577	0.0100	0.0103	103.0	90 - 110	mmm
Chromium, GFAA	577	0.0100	0.0102	102.0	90 - 110	mmm
VOC - AQUEOUS - EPA 8260B						
Benzene	1908	50.0	48.2	96.4		mae
Bromoform	1908	50.0	50.3	100.6		mae
Chlorobenzene	1908	50.0	49.4	98.8		mae
Chloroform	1908	50.0	47.9	95.8	80 - 120	mae
Chloromethane	1908	50.0	44.4	88.8		mae
1,1-Dichloroethane	1908	50.0	49.6	99.2		mae
1,1-Dichloroethene	1908	50.0	50.4	100.8	80 - 120	mae
1,2-Dichloropropane	1908	50.0	48.9	97.8	80 - 120	mae
Ethylbenzene	1908	50.0	49.6	99.2	80 - 120	mae
Methyl-t-butyl ether	1908	50.0	48.6	97.2	80 - 120	mae
1,1,2,2-Tetrachloroethane	1908	50.0	45.8	91.6		mae
Toluene	1908	50.0	50.5	101.0	80 - 120	mae
Trichloroethene	1908	50.0	50.2	100.4		mae
1,2,4-Trimethylbenzene	1908	50.0	47.4	94.8		mae
1,3,5-Trimethylbenzene	1908	50.0	48.3	96.6		mae
Vinyl Chloride	1908	50.0	42.2	84.4	80 - 120	mae
Xylenes, Total	1908	150	146.9	97.9		mae
Surr: Dibromofluoromethane	1908	50.0	49.5	99.0	87 - 116	mae
Surr: Toluene-d8	1908	50.0	52.8	105.6	89 - 109	mae
Surr: Bromofluorobenzene	1908	50.0	49.9	99.8	87 - 112	mae

QUALITY CONTROL REPORT

BLANKS

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000

Job No: 00.03691
 Account No: 39150

Page 20 of 23

Job Description: F119 Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Chromium, hexavalent		599	<0.0042	0.0042	0.015	mg/L
Chromium, hexavalent		599	<0.0042	0.0042	0.015	mg/L
Chromium, AA	1597	832	<0.026	0.026	0.091	mg/L
Chromium, AA		832	<0.026	0.026	0.091	mg/L
Chromium, GFAA	989	575	<0.00052	0.00022	0.00078	mg/L
Chromium, GFAA		575	<0.00052	0.00022	0.00078	mg/L
Chromium, GFAA		577	<0.00052	0.00052	0.0018	mg/L
Chromium, GFAA		577	<0.00052	0.00052	0.0018	mg/L
VOC - AQUEOUS - EPA 8260B						
Benzene		1908	<0.10	0.10	0.33	ug/L
Bromobenzene		1908	<0.25	0.25	0.83	ug/L
Bromochloromethane		1908	<0.25	0.25	0.83	ug/L
Bromodichloromethane		1908	<0.25	0.25	0.83	ug/L
Bromoform		1908	<0.25	0.25	0.83	ug/L
Bromomethane		1908	<0.25	0.25	0.83	ug/L
n-Butylbenzene		1908	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		1908	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		1908	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		1908	<0.25	0.25	0.83	ug/L
Chlorobenzene		1908	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		1908	<0.25	0.25	0.83	ug/L
Chloroethane		1908	<0.25	0.25	0.83	ug/L
Chloroform		1908	<0.25	0.25	0.83	ug/L
Chloromethane		1908	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		1908	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		1908	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		1908	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		1908	<0.25	0.25	0.83	ug/L
Dibromomethane		1908	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		1908	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		1908	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		1908	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		1908	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		1908	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		1908	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		1908	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		1908	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

05/18/2000

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

Job No: 00.03691
 Account No: 39150

Page 21 of 23

Job Description: F119 Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
trans-1,2-Dichloroethene		1908	<0.25	0.25	0.83	ug/L
1,2-Dichloropropane		1908	<0.25	0.25	0.83	ug/L
1,3-Dichloropropane		1908	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		1908	<0.25	0.25	0.83	ug/L
1,1-Dichloropropene		1908	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		1908	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		1908	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		1908	<0.25	0.25	0.83	ug/L
Ethylbenzene		1908	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		1908	<0.25	0.25	0.83	ug/L
Isopropylbenzene		1908	<0.25	0.25	0.83	ug/L
p-Isopropyltoluene		1908	<0.25	0.25	0.83	ug/L
Methylene Chloride		1908	<0.25	0.25	0.83	ug/L
Methyl-t-butyl ether		1908	<0.25	0.25	0.83	ug/L
Naphthalene		1908	<0.25	0.25	0.83	ug/L
n-Propylbenzene		1908	<0.25	0.25	0.83	ug/L
Styrene		1908	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		1908	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		1908	<0.25	0.25	0.83	ug/L
Tetrachloroethene		1908	<0.25	0.25	0.83	ug/L
Toluene		1908	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		1908	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		1908	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		1908	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		1908	<0.25	0.25	0.83	ug/L
Trichloroethene		1908	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		1908	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		1908	<0.25	0.25	0.83	ug/L
1,2,4-Trimethylbenzene		1908	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		1908	<0.10	0.10	0.33	ug/L
Vinyl Chloride		1908	<0.25	0.25	0.83	ug/L
Xylenes, Total		1908	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		1908	98.4		88-116	%
Surr: Toluene-d8		1908	102.0		88-113	%
Surr: Bromofluorobenzene		1908	96.6		91-111	%

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000

Job No: 00.03691
 Account No: 39150

Page 22 of 23

Job Description: F119 Better Brite

Analyte	Prep	Run			LCS	LCSD			Relative	
	Batch	Batch	LCS	LCS	LCSD	Percent	Percent	Control	Percent	
	Number	Number	Amount	Units	Result	Result	Recovery	Recovery	Limits	Difference
Chromium, AA	1597	832	0.500	mg/L	0.454		90.8		76 - 106	
Chromium, GFAA	989	575	0.0100	mg/L	0.0108		108.0		87 - 116	

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000

Job No: 00.03691
 Account No: 39150

Page 23 of 23

Job Description: F119 Better Brite

Analyte	Prep	Run	Sample Result	Spike		Matrix		MS	MSD	Control Limits	Relative Percent Difference
	Batch Number	Batch Number		Amount	Units	Spike Result	MSD Result	Percent Recovery	Percent Recovery		
Chromium, hexavalent		599	<0.0042	0.500	mg/L	0.49	0.49	98.0	98.0	70 - 116	0.0
Chromium, AA	1597	833	<0.026	0.500	mg/L	0.390	0.391	78.0	78.2	62 - 122	0.3
Chromium, GFAA	989	575	0.0039	0.0100	mg/L	0.0159	0.0151	120.0	112.0	80 - 131	5.2
VOC - AQUEOUS - EPA 8260B											
Benzene		1908	3.0	50.0	ug/L	48.2	48.7	90.4	91.4	80 - 121	1.0
Chlorobenzene		1908	5.7	50.0	ug/L	53.0	52.1	94.6	92.8	85 - 116	1.7
1,1-Dichloroethene		1908	<0.25	50.0	ug/L	50.3	50.2	100.6	100.4	72 - 131	0.2
Ethylbenzene		1908	<0.25	50.0	ug/L	47.9	47.2	95.8	94.4	83 - 118	1.5
Methyl-t-butyl ether		1908	<0.25	50.0	ug/L	48.6	49.0	97.2	98.0	71 - 127	0.8
Toluene		1908	0.13	50.0	ug/L	48.2	48.2	96.1	96.1	82 - 116	0.0
Trichloroethene		1908	<0.25	50.0	ug/L	46.2	46.9	92.4	93.8	80 - 117	1.5
1,2,4-Trimethylbenzene		1908	<0.10	50.0	ug/L	44.4	45.8	88.8	91.6	80 - 122	3.1
1,3,5-Trimethylbenzene		1908	<0.10	50.0	ug/L	45.3	46.4	90.6	92.8	83 - 122	2.4
Xylenes, Total		1908	<0.25	150	ug/L	139.9	141.0	93.3	94.0	84 - 119	0.8
Surr: Dibromofluoromethane		1908	50.7	50.0	%	50.5	50.0	101.0	100.0	88 - 116	1.0
Surr: Toluene-d8		1908	52.5	50.0	%	52.3	52.3	104.6	104.6	88 - 113	0.0
Surr: Bromofluorobenzene		1908	49.4	50.0	%	49.5	48.6	99.0	97.2	91 - 111	1.8

CHAIN OF CUSTODY RECORD

00.03691
 REPORT TO: Dan Morgan
 INVOICE TO: _____

602 Commerce Drive / Watertown, WI 53094
 Phone: (920) 261-1660 / Fax: (920) 261-8120

COMPANY HSI Geotrans
 ADDRESS 175 N. Corporate Dr. # 100
 PHONE 262-792-1282 FAX _____
 PROJECT DESCRIPTION/NO. Better Brite F119
 PROJECT MANAGER Dan Morgan

P.O. NO.: _____
 QUOTE NO.: _____

SAMPLED BY: Kathryn Schoephoester
 NAME: Keith Becker

ANALYSES

Fax Results? _____ QC w/Results? _____

Which regulations apply?
 NPDES/Wastewater _____ RCRA _____ UST _____
 Drinking Water _____ Other _____ None _____

DATE	TIME	SAMPLE ID/DESCRIPTION	FILTERED	MATRIX	GRAB	COMP	# and Type of Containers							Hex Cr	Total Cr	VOC	COMMENTS
							HCl	NaOH	HNO ₃	H ₂ SO ₄	NONE	METHANOL	OTHER				
5/4/00	1655	MW-5A	NO	GW	X									X	X		
	1535	MW-115	NO	GW	X									X	X		(2) voc's
	1630	Zinc Sump	NO	GW	X		1							X	X	X	
	1650	MW-5	NO	GW	X									X	X		
	1545	MW-12	NO	GW	X									X	X		time = 1450
	1555	MW115A	NO	GW	X									X	X		
	1425	MW-6	NO	GW	X									X	X		
	1430	MW-6-D	NO	GW	X									X	X		
	1510	MW-2	NO	GW	X		1							X	X	X	3 voc's
	1320	EQ-2					1			*	*					X	JUS
	1320	EQ-2	NO	GW	X		1							X	X	X	3 voc's
	1320	MW-7D	NO	GW	X									X	X		
	1440	MW-6A	NO	GW	X									X	X		
	1310	MW-7	NO	GW	X					2	2			X	X		MS/MSD
	1300	MW-7A	NO	GW	X					1	1			X	X		

LAB USE ONLY

CONDITION OF SAMPLE: BOTTLES INTACT? YES/NO NO VOLATILES FREE OF HEADSPACE? YES/NO NO BOTTLES SUPPLIED BY LAB? YES/NO NO TEMPERATURE UPON RECEIPT: 16.0°C

RELINQUISHED BY: Kathryn Schoephoester DATE: 5/4/00 TIME: 5:15 RECEIVED BY: _____ DATE: 5/5/00 TIME: 12:40 RECEIVED FOR LAB BY: Carla B

METHOD OF SHIPMENT: TestAmerica Courier _____ Client: X FedEx REMARKS: Sneaky worms SUD

RECEIVED

TestAmerica

INCORPORATED

TEST AMERICA
FAX: 920-261-8120
CO:

2000
ANALYTICAL AND QUALITY CONTROL
LABORATORY

ANALYTICAL AND QUALITY CONTROL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000

Job No: 00.03709

Page 1 of 9

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
394437	MW-3 F119 Better Brite	05/05/2000	05/05/2000
394438	MW-10 F119 Better Brite	05/05/2000	05/05/2000
394439	MW-9 F119 Better Brite	05/05/2000	05/05/2000

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

- | | |
|--|--|
| A = Analyzed/extracted past hold time | B = Blank is contaminated |
| C = Standard outside of control limits | D = Diluted for analysis |
| F = Sample filtered in lab | G = Received past hold time |
| H = Late eluting hydrocarbons present | I = Improperly handled sample |
| J = Estimated concentration | L = Common lab solvent and contaminant |
| M = Matrix interference | P = Improperly preserved sample |
| Q = Result confirmed via re-analysis | S = Sediment present |
| T = Does not match typical pattern | W = BOD re-set due to missed dilution |
| X = Unidentified compound(s) present | Z = Internal standard outside limits |

Karen R. Wenta
Inorganic Operations Manager

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03709
Sample No: 394437
Account No: 39150
Page 2 of 9

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-3 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/05/2000 09:45

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	0.23	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.33	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03709
Sample No: 394438
Account No: 39150
Page 3 of 9

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-10 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/05/2000 10:05

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	30	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, AA	30	mg/L	0.026	0.091	EPA 218.1	05/17/2000	1597 832

ANALYTICAL REPORT

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000
Job No: 00.03709
Sample No: 394439
Account No: 39150
Page 4 of 9

JOB DESCRIPTION: F119 Better Brite
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-9 F119 Better Brite
Rec'd on Ice

Date/Time Taken: 05/05/2000 10:20

Date Received: 05/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Chromium, hexavalent	0.013	mg/L	0.0042	0.015	SM 3500CrD	05/05/2000	599
Chromium, GFAA	0.039	mg/L	0.00052	0.0018	EPA 218.2	05/17/2000	989 577

QUALITY CONTROL REPORT CONTINUING CALIBRATION VERIFICATION

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000

Job No: 00.03709
Account No: 39150

Page 5 of 9

Job Description: F119 Better Brite

Parameter	Run Batch	True Value	Observed Value	Percent Recovery	Control Limits	Analyst
Chromium, hexavalent	599	0.500	0.48	96.0	90 - 110	jts
Chromium, hexavalent	599	0.500	0.51	102.0	90 - 110	jts
Chromium, AA	832	0.500	0.506	101.2	90 - 110	gaf
Chromium, AA	832	0.500	0.511	102.2	90 - 110	gaf
Chromium, GFAA	577	0.0100	0.0105	105.0	90 - 110	mmm
Chromium, GFAA	577	0.0100	0.0103	103.0	90 - 110	mmm
Chromium, GFAA	577	0.0100	0.0102	102.0	90 - 110	mmm

QUALITY CONTROL REPORT

BLANKS

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000

Job No: 00.03709
 Account No: 39150

Page 6 of 9

Job Description: F119 Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Chromium, hexavalent		599	<0.0042	0.0042	0.015	mg/L
Chromium, hexavalent		599	<0.0042	0.0042	0.015	mg/L
Chromium, AA	1597	832	<0.026	0.026	0.091	mg/L
Chromium, AA		832	<0.026	0.026	0.091	mg/L
Chromium, GFAA	989	575	<0.00052	0.00022	0.00078	mg/L
Chromium, GFAA		577	<0.00052	0.00052	0.0018	mg/L
Chromium, GFAA		577	<0.00052	0.00052	0.0018	mg/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT DUPLICATES

Mr. Dan Morgan
HSI GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

05/18/2000

Job No: 00.03709
Account No: 39150

Page 7 of 9

Job Description: F119 Better Brite

Parameter	Prep Batch Number	Run Batch Number	Sample Value	Duplicate Value	Units	RPD	Control Limit
Chromium, hexavalent		599	<0.0042	<0.0042	mg/L		23
Chromium, AA	1597	833	<0.026	<0.026	mg/L		12
Chromium, GFAA	989	575	0.016	0.018	mg/L	11.8	20

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000

Job No: 00.03709
 Account No: 39150

Page 8 of 9

Job Description: F119 Better Brite

Analyte	Prep	Run	Sample Result	Spike Amount	Units	Matrix	MSD Result	MS	MSD	Control Limits	Relative Percent Difference
	Batch Number	Batch Number				Spike Result		Percent Recovery	Percent Recovery		
Chromium, hexavalent		599	<0.0042	0.500	mg/L	0.49	0.49	98.0	98.0	70 - 116	0.0
Chromium, AA	1597	833	<0.026	0.500	mg/L	0.390	0.391	78.0	78.2	62 - 122	0.3
Chromium, GFAA	989	575	0.0039	0.0100	mg/L	0.0159	0.0151	120.0	112.0	80 - 131	5.2

QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

Mr. Dan Morgan
 HSI GEOTRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

05/18/2000

Job No: 00.03709
 Account No: 39150

Page 9 of 9

Job Description: F119 Better Brite

Analyte	Prep	Run			LCS	LCS	LCS	LCS	Relative
	Batch	Batch	LCS	Units	LCS	LCS	Percent	Percent	Control
	Number	Number	Amount		Result	Result	Recovery	Recovery	Limits
									Percent
									Difference
Chromium, AA	1597	832	0.500	mg/L	0.454		90.8		76 - 106
Chromium, GFAA	989	575	0.0100	mg/L	0.0108		108.0		87 - 116

CHAIN OF CUSTODY RECORD

00.03709

602 Commerce Drive / Watertown, WI 53094
 Phone: (920) 261-1660 / Fax: (920) 261-8120

COMPANY HSI GeoTrans
 ADDRESS 175 N. Corporate Dr. #100
 PHONE 262-792-1282 FAX _____
 PROJECT DESCRIPTION/NO. Better Brite F119
 PROJECT MANAGER Dan Morgan

REPORT TO: Dan Morgan
 INVOICE TO: _____
 P.O. NO.: _____
 QUOTE NO.: _____

SAMPLED BY: Kathryn Schoephaester
 NAME
Keith Becker
 NAME

ANALYSES

Fax Results? _____ QC w/Results? _____

Which regulations apply?
 NPDES/Wastewater _____ RCRA _____ UST _____
 Drinking Water _____ Other _____ None _____

DATE	TIME	SAMPLE ID/DESCRIPTION	FILTERED	MATRIX	GRAB	COMP	# and Type of Containers										Hex Cr	Total Cr	COMMENTS
							HCl	NaOH	HNO ₃	H ₂ SO ₄	NONE	METHANOL	OTHER						
5/5/00	9:45	MW-3	NO	GLW	X												X	X	
5/5/00	10:05	MW-10	NO	GLW	X												X	X	
5/5/00	10:20	MW-9	NO	GLW	X												X	X	

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
 LAB USE ONLY VOLATILES FREE OF HEADSPACE? YES / NO BOTTLES SUPPLIED BY LAB? YES / NO
 TEMPERATURE UPON RECEIPT above °C

RELINQUISHED BY: Kathryn Schoephaester DATE: 5/5/00 TIME: 2:30 PM RECEIVED BY: Shelby Loomis
 RELINQUISHED BY: _____ DATE: 5/5/00 TIME: 15:05 RECEIVED FOR LAB BY: CaCa B.

METHOD OF SHIPMENT: TestAmerica Courier Client Common Carrier _____
 REMARKS: Shelby Loomis
SI

ANALYTICAL AND QUALITY CONTROL REPORT

RECEIVED

JUN 20 2000

ANALYTICAL

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/19/2000
Job No: 00.04709
Page 1 of 12

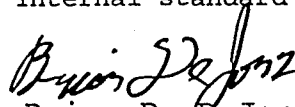
FILE COPY
PROJECT: F119
CC: DLM, KEITH,
JLF

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
398279	F119-MW-116 Better Brite	06/05/2000	06/05/2000
398280	F119-MW-116D Better Brite	06/05/2000	06/05/2000
398281	Trip Blank Better Brite	06/05/2000	06/05/2000

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

- | | |
|--|--|
| A = Analyzed/extracted past hold time | B = Blank is contaminated |
| C = Standard outside of control limits | D = Diluted for analysis |
| F = Sample filtered in lab | G = Received past hold time |
| H = Late eluting hydrocarbons present | I = Improperly handled sample |
| J = Estimated concentration | L = Common lab solvent and contaminant |
| M = Matrix interference | P = Improperly preserved sample |
| Q = Result confirmed via re-analysis | S = Sediment present |
| T = Does not match typical pattern | W = BOD re-set due to missed dilution |
| X = Unidentified compound(s) present | Z = Internal standard outside limits |


Brian D. DeJong
Organic Operations Manager
KHJ

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

06/19/2000
 Job No: 00.04709
 Sample No: 398279
 Account No: 39150
 Page 2 of 12

JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: F119-MW-116 Better Brite
 Rec'd on ice

Date/Time Taken: 06/05/2000 08:00

Date Received: 06/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	1.6	mg/L	0.0042	0.015	SM 3500CrD	06/05/2000	608
Chromium, AA	0.47	mg/L	0.026	0.091	EPA 218.1	06/19/2000	1643 842
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Dichlorodifluoromethane	5.8	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloroethane	1.6	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

06/19/2000
 Job No: 00.04709
 Sample No: 398279
 Account No: 39150
 Page 3 of 12

JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: F119-MW-116 Better Brite
 Rec'd on ice

Date/Time Taken: 06/05/2000 08:00

Date Received: 06/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Tetrachloroethene	1.7	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,1-Trichloroethane	3.2	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Trichlorofluoromethane	4.4	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Surr: Dibromofluoromethane	97.2	%		89-119	SW 8260B	06/08/2000	1952
Surr: Toluene-d8	97.4	%		86-105	SW 8260B	06/08/2000	1952
Surr: Bromofluorobenzene	99.8	%		89-107	SW 8260B	06/08/2000	1952

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

06/19/2000
 Job No: 00.04709
 Sample No: 398280
 Account No: 39150
 Page 4 of 12

JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: F119-MW-116D Better Brite
 Rec'd on ice

Date/Time Taken: 06/05/2000 08:00

Date Received: 06/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Chromium, hexavalent	1.5	mg/L	0.0042	0.015	SM 3500CrD	06/05/2000	608
Chromium, AA	0.46	mg/L	0.026	0.091	EPA 218.1	06/19/2000	1643 842
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Dichlorodifluoromethane	4.9	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloroethane	1.3	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

06/19/2000
 Job No: 00.04709
 Sample No: 398280
 Account No: 39150
 Page 5 of 12

JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: F119-MW-116D Better Brite
 Rec'd on ice

Date/Time Taken: 06/05/2000 08:00

Date Received: 06/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date	Prep/Run
						Analyzed	Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Tetrachloroethene	1.5	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,1-Trichloroethane	2.4	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Trichlorofluoromethane	3.5	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Surr: Dibromofluoromethane	87.6	%		89-119	SW 8260B	06/08/2000	1952
Surr: Toluene-d8	93.8	%		86-105	SW 8260B	06/08/2000	1952
Surr: Bromofluorobenzene	103.8	%		89-107	SW 8260B	06/08/2000	1952

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

06/19/2000
 Job No: 00.04709
 Sample No: 398281
 Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: Trip Blank Better Brite
 Rec'd on ice

Date/Time Taken: 06/05/2000 UNKNOWN Date Received: 06/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952

ANALYTICAL REPORT

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
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 Brookfield, WI 53045

06/19/2000
 Job No: 00.04709
 Sample No: 398281
 Account No: 39150
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JOB DESCRIPTION: F119 Better Brite
 PROJECT DESCRIPTION: Groundwater Analysis
 SAMPLE DESCRIPTION: Trip Blank Better Brite
 Rec'd on ice

Date/Time Taken: 06/05/2000 UNKNOWN Date Received: 06/05/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Methylene Chloride	L 0.69	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	06/08/2000	1952
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	06/08/2000	1952
Surr: Dibromofluoromethane	93.6	%		89-119	SW 8260B	06/08/2000	1952
Surr: Toluene-d8	95.6	%		86-105	SW 8260B	06/08/2000	1952
Surr: Bromofluorobenzene	100.8	%		89-107	SW 8260B	06/08/2000	1952

QUALITY CONTROL REPORT CONTINUING CALIBRATION VERIFICATION

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/19/2000

Job No: 00.04709
Account No: 39150

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Job Description: F119 Better Brite

Parameter	Run Batch	True Value	Observed Value	Percent Recovery	Control Limits	Analyst
Chromium, hexavalent	608	0.500	0.51	102.0	90 - 110	jts
Chromium, hexavalent	608	0.500	0.47	94.0	90 - 110	jts
Chromium, AA	842	0.500	0.521	104.2	90 - 110	gaf
Chromium, AA	842	0.500	0.500	100.0	90 - 110	gaf
VOC - AQUEOUS - EPA 8260B						
Benzene	1952	50.0	51.1	102.2		mae
Bromoform	1952	50.0	48.6	97.2		mae
Chlorobenzene	1952	50.0	48.8	97.6		mae
Chloroform	1952	50.0	51.3	102.6	80 - 120	mae
Chloromethane	1952	50.0	42.4	84.8		mae
1,1-Dichloroethane	1952	50.0	50.6	101.2		mae
1,1-Dichloroethene	1952	50.0	52.5	105.0	80 - 120	mae
1,2-Dichloropropane	1952	50.0	52.7	105.4	80 - 120	mae
Ethylbenzene	1952	50.0	49.0	98.0	80 - 120	mae
Methyl-t-butyl ether	1952	50.0	56.1	112.2	80 - 120	mae
1,1,2,2-Tetrachloroethane	1952	50.0	46.9	93.8		mae
Toluene	1952	50.0	50.2	100.4	80 - 120	mae
Trichloroethene	1952	50.0	54.1	108.2		mae
1,2,4-Trimethylbenzene	1952	50.0	47.0	94.0		mae
1,3,5-Trimethylbenzene	1952	50.0	47.7	95.4		mae
Vinyl Chloride	1952	50.0	49.8	99.6	80 - 120	mae
Xylenes, Total	1952	150	144.1	96.1		mae
Surr: Dibromofluoromethane	1952	50.0	51.3	102.6	87 - 116	mae
Surr: Toluene-d8	1952	50.0	50.2	100.4	89 - 109	mae
Surr: Bromofluorobenzene	1952	50.0	48.4	96.8	87 - 112	mae

QUALITY CONTROL REPORT

BLANKS

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

06/19/2000

Job No: 00.04709
 Account No: 39150

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Job Description: F119 Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Chromium, hexavalent		608	<0.0042	0.0042	0.015	mg/L
Chromium, hexavalent		608	<0.0042	0.0042	0.015	mg/L
Chromium, AA	1643	842	<0.026	0.026	0.091	mg/L
Chromium, AA		842	<0.026	0.026	0.091	mg/L
VOC - AQUEOUS - EPA 8260B						
Benzene		1952	<0.10	0.10	0.33	ug/L
Bromobenzene		1952	<0.25	0.25	0.83	ug/L
Bromochloromethane		1952	<0.25	0.25	0.83	ug/L
Bromodichloromethane		1952	<0.25	0.25	0.83	ug/L
Bromoform		1952	<0.25	0.25	0.83	ug/L
Bromomethane		1952	<0.25	0.25	0.83	ug/L
n-Butylbenzene		1952	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		1952	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		1952	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		1952	<0.25	0.25	0.83	ug/L
Chlorobenzene		1952	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		1952	<0.25	0.25	0.83	ug/L
Chloroethane		1952	<0.25	0.25	0.83	ug/L
Chloroform		1952	<0.25	0.25	0.83	ug/L
Chloromethane		1952	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		1952	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		1952	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		1952	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		1952	<0.25	0.25	0.83	ug/L
Dibromomethane		1952	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		1952	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		1952	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		1952	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		1952	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		1952	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		1952	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		1952	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		1952	<0.25	0.25	0.83	ug/L
trans-1,2-Dichloroethene		1952	<0.25	0.25	0.83	ug/L
1,2-Dichloropropane		1952	<0.25	0.25	0.83	ug/L
1,3-Dichloropropane		1952	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		1952	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

06/19/2000

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

Job No: 00.04709
 Account No: 39150

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Job Description: F119 Better Brite

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
1,1-Dichloropropene		1952	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		1952	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		1952	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		1952	<0.25	0.25	0.83	ug/L
Ethylbenzene		1952	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		1952	<0.25	0.25	0.83	ug/L
Isopropylbenzene		1952	<0.25	0.25	0.83	ug/L
p-Isopropyltoluene		1952	<0.25	0.25	0.83	ug/L
Methylene Chloride		1952	2.0	0.25	0.83	ug/L
Methyl-t-butyl ether		1952	<0.25	0.25	0.83	ug/L
Naphthalene		1952	<0.25	0.25	0.83	ug/L
n-Propylbenzene		1952	<0.25	0.25	0.83	ug/L
Styrene		1952	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		1952	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		1952	<0.25	0.25	0.83	ug/L
Tetrachloroethene		1952	<0.25	0.25	0.83	ug/L
Toluene		1952	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		1952	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		1952	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		1952	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		1952	<0.25	0.25	0.83	ug/L
Trichloroethene		1952	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		1952	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		1952	<0.25	0.25	0.83	ug/L
1,2,4-Trimethylbenzene		1952	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		1952	<0.10	0.10	0.33	ug/L
Vinyl Chloride		1952	<0.25	0.25	0.83	ug/L
Xylenes, Total		1952	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		1952	103.4		89-119	%
Surr: Toluene-d8		1952	102.6		86-105	%
Surr: Bromofluorobenzene		1952	98.4		89-107	%

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

Mr. Dan Morgan
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/19/2000

Job No: 00.04709
Account No: 39150

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Job Description: F119 Better Brite

Analyte	Prep Batch Number	Run Batch Number	LCS Amount	Units	LCS Result	LCSD Result	LCS Percent Recovery	LCSD Percent Recovery	Control Limits	Relative Percent Difference
Chromium, AA	1643	842	0.500	mg/L	0.441		88.2		76 - 106	

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Mr. Dan Morgan
 HYDRO-SEARCH/GEO TRANS
 175 N. Corporate Drive
 Suite 100
 Brookfield, WI 53045

06/19/2000

Job No: 00.04709

Account No: 39150

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Job Description: F119 Better Brite

Analyte	Prep	Run	Sample Result	Spike Amount	Units	Matrix	MSD	MS	MSD	Relative Control Limits	Percent Difference
	Batch Number	Batch Number				Spike Result		Percent Recovery	Percent Recovery		
Chromium, AA	1643	842	<0.026	0.500	mg/L	0.415	0.418	83.0	83.6	62 - 122	0.7
VOC - AQUEOUS - EPA 8260B											
Benzene		1952	<0.10	50.0	ug/L	47.6	42.2	95.2	84.4	80 - 121	12.0
Chlorobenzene		1952	<0.25	50.0	ug/L	46.6	48.4	93.2	96.8	85 - 116	3.8
1,1-Dichloroethene		1952	<0.25	50.0	ug/L	48.2	48.2	96.4	96.4	72 - 131	0.0
Ethylbenzene		1952	<0.25	50.0	ug/L	47.5	48.5	95.0	97.0	83 - 118	2.1
Methyl-t-butyl ether		1952	<0.25	50.0	ug/L	47.3	38.3	94.6	76.6	71 - 127	21.0
Toluene		1952	<0.10	50.0	ug/L	46.4	46.7	92.8	93.4	82 - 116	0.6
Trichloroethene		1952	<0.25	50.0	ug/L	48.1	41.5	96.2	83.0	80 - 117	14.7
1,2,4-Trimethylbenzene		1952	<0.10	50.0	ug/L	45.6	49.6	91.2	99.2	80 - 122	8.4
1,3,5-Trimethylbenzene		1952	<0.10	50.0	ug/L	46.0	49.4	92.0	98.8	83 - 122	7.1
Xylenes, Total		1952	<0.25	150	ug/L	138.6	147.9	92.4	98.6	84 - 119	6.5
Surr: Dibromofluoromethane		1952	48.6	50.0	%	50.4	47.6	100.8	95.2	89 - 119	5.7
Surr: Toluene-d8		1952	48.7	50.0	%	49.8	47.8	99.6	95.6	86 - 105	4.1
Surr: Bromofluorobenzene		1952	49.9	50.0	%	49.3	51.9	98.6	103.8	89 - 107	5.1

APPENDIX I
DATA VALIDATION RESULTS