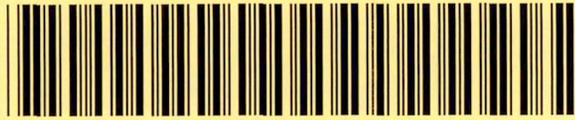


592IHSSF1225



DocumentID NONCD0002863

Site Name BABY DIAPER SERVICE

DocumentType Site Assessment Rpt (SAR)

RptSegment 1

DocDate 11/1/2007

DocRcvd 11/2/2007

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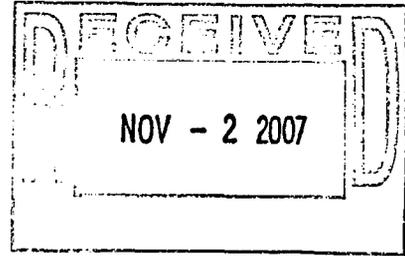
AccessLevel PUBLIC

Division WASTE MANAGEMENT

Section SUPERFUND

Program IHS (IHS)

DocCat FACILITY



INITIAL ASSESSMENT REPORT
Baby Diaper Service
1819 Spring Garden Street
Greensboro, Guilford County, North Carolina
S&ME Project No. 1584-07-045

Prepared For
Baby Diaper Service
810 McNair Court
High Point, North Carolina 27265

Prepared By
S&ME, Inc.
3718 Old Battleground Road
Greensboro, North Carolina, 27401

November 2007



November 2, 2007

Baby Diaper Service, Inc.
810 McNair Court
High Point, North Carolina 27265

Attention: Mr. Marshall Morgan

Reference: **INITIAL ASSESSMENT REPORT**

Baby Diaper Service
1819 Spring Garden Street
Greensboro, North Carolina
Incident #: Pending
S&ME Project No. 1584-07-045

Dear Mr. Morgan:

S&ME, Inc. prepared this correspondence to provide information related to the release incident at the above referenced site, in accordance to S&ME Proposal No. 1584-07-P121, dated September 20, 2007. This document is intended to fulfill the request for information from the North Carolina Department of Environment and Natural Resources included in their Acknowledgement of Report Receipt correspondence dated September 18, 2007. Per your request, a copy of this report was submitted to:

Guilford County Department of Public Health
Environmental Health Division
Attn: Mindy Lepard
1203 Maple Street
Greensboro, North Carolina, 27405

Please contact the undersigned should you have any questions concerning this report.

Sincerely,
S&ME, Inc.

Lyndal Butler
Environmental Scientist

Wayne H. Watterson, P.E.
Senior Engineer

1.0 SITE INFORMATION

1.1 Site Identification

Date of report: 11/02/2007
Facility I.D.: N/A
UST Incident Number: Pending
Site Name: Baby Diaper Service
Site Street Address: 1819 Spring Garden Street
City/Town: Greensboro County: Guilford

Description of Geographical Data Point:

Location Method: topographic map
Latitude: 36.06331 Longitude: 79.82295

1.2 Contact Information

Property Owner:

Address: Baby Diaper Service
810 McNair Court
High Point, NC 27265
Attn: Mr. Marshall Morgan

Tel: (336) 906-1314

Consultant/Contractor:

Address: S&ME, Inc.
3718 Old Battleground Road
Greensboro, NC 27410
Attn: Wayne H. Watterson, P.E.

Tel: (336) 288-7180

Analytical Laboratory:

Research & Analytical Laboratories, Inc.
P.O. Box 473
Kernersville, NC, 27285

State Certification Number: NC #34

Tel: (336) 996-2841

1.3 Information about Release

Date Discovered: July 10, 2007
Confirmed by laboratory results July 17, 2007

Estimated Quantity of Release: Unknown

Cause of Release: Unknown

Source of Release: Unknown

Size and Contents of AST Not Applicable

1.4 Certification

Wayne H. Watterson, P.E.



2.0 SITE HISTORY AND CHARACTERIZATION

2.1 Provide UST owner and operator information.

Date: November 1, 2007 Incident Number: Pending Baby Diaper Service

UST ID Number	Owner/Operator Name	Dates of Ownership	Facility ID No.
NA	Owner	1963 until closure	Unknown
Baby Diaper Service, 1819 Spring Garden Street, Greensboro, N.C.			

The release incident related to a former UST located west of the building near the monitor well MW-1 was closed with a Notice of No Further Action following completion of a Notice of Residual Petroleum for the property.

2.2 Provide AST information.

Above ground storage tanks located in the southeast corner of the building were used previously to store alkali material. No non-UST petroleum releases are currently known.

2.3 UST Information

UST ID No.	Last Contents	Previous Contents	Capacity	Construction Details
N/A	Gasoline	Gasoline	Unknown	Unknown

Tank Dimensions	Piping/Pumps	Date Tank Installed	Status of UST	Release
Unknown	Unknown	unknown	Permanently Closed	Yes

2.4 Description of Non-UST Non-Petroleum Release

A suspected release of an alkali material occurred in the southeast corner of the building, based on elevated pH levels in groundwater samples obtained from this portion of the site.

Groundwater beneath the subject property has been impacted by a release of trichloroethene.

2.5 Release Descriptions

The pH and trichloroethene impacts were confirmed by the receipt of analytical data on July 27, 2007, for groundwater samples obtained on July 10-11, 2007. The source of the elevated pH impacts are likely related to the former bulk storage of alkali material at this location. The cause of the release is not known.

The cause and source of the trichloroethene release is not known.

Each of these releases has no apparent relationship to the closed UST petroleum release.

Insufficient data has been collected to evaluate the potential for an off-site source of the trichloroethene release.

2.6 Description of Site Characteristics

The site location is shown on **Figure 1**, USGS Topographic Map. The site was previously occupied by Sedgefield Mills (1947), Amalgamated Chemical Company (1955 to 1957) and Baby Diaper Service (1963 to 2001). The facility is currently unoccupied. Land use surrounding the facility is primarily commercial, in addition to residential and institutional use in the vicinity. The ground surface topography on the site slopes down generally to the north northeast from an approximate elevation of 862 feet above mean sea level (msl) near the southwest corner of the property to an approximate elevation of 835 feet msl at the northwest corner of the property. The developed portion of the site has been graded relatively level, with a steeply rising slope in the southern portion of the property. The surrounding topography generally slopes to the north northeast. Vegetation on the property includes a landscaped area on the northernmost portion of the property and fallow growth in the southeastern portion of the property. The nearest drainage feature is located north of the site. No surface water or known water wells are located on the property. One steel-framed or masonry structure with a slab on grade is located on the property. The remaining ground surface is covered by concrete or asphalt pavement. Soil observed during geotechnical activities consisted of sandy silt and silty sand. The depth to groundwater is approximately 10 feet below the ground surface, and the depth to bedrock ranges from 10 feet to 30 feet below the ground surface (determined during geotechnical activities). The direction of groundwater flow is to the northwest in the area represented by monitoring wells installed in the northern half of the property (**Figure 2**).

3.0 Free Product Investigation and Recovery

Not applicable.

4.0 Groundwater and Surface Water Investigation

Six soil probes (G-1 – G-6) were performed on July 10, 2007, with a Geoprobe® at the locations shown on **Figure 3**. Groundwater was measured at depths ranging from approximately 7 to 9 feet below the ground surface at probe locations G-2, G-3, G-4 and G-6. Groundwater samples were collected from temporary standpipes on July 10 or July 11, 2007. Five groundwater samples were analyzed in the laboratory for volatile and semivolatile organic compounds EPA methods 6210D and 625, for chlorides and for pH. The results of the laboratory analyses are summarized in **Table 1**.

S&ME mobilized to the site on August 14, 2007, to collect groundwater samples at selected locations related to previous sample locations G-4 and G-6. Three groundwater sample locations (P-1, P-2 and P-3) were selected at locations north, west and south of previous sample location G-6. Groundwater samples obtained from the sampling device at locations P-1, P-2, P-3 were analyzed in the laboratory for volatile and semivolatile organic compounds EPA methods 6210D and 625. The results of the laboratory analyses are summarized in **Table 4**.

On October 8, 2007, S&ME installed three shallow groundwater monitor wells (MW-2, MW-3, MW-4) at the referenced site. Monitor well MW-3 was installed proximal to previous groundwater sample location G-6. Monitor wells MW-2 and MW-4 were installed in apparent downgradient and upgradient directions relative to MW-3, respectively. **Figure 3** illustrates the location of each monitor well.

The monitoring wells were installed with a track-mounted drill rig equipped with 4-1/4 inch internal diameter hollow-stem augers. A steam cleaner was used to clean drilling equipment between monitor well locations.

Each monitoring well was drilled and installed to approximate depths ranging from 15.5 to 16.4 feet below ground surface. Each of the monitoring wells contains an approximate 10 foot screened interval, which spans from the total depth of the boring through and above the top of the groundwater table. Filter pack sand was then added to the annular space between the boring wall and the PVC screen from the base of the screened interval to approximately 2.5 feet to 3 feet above the top of each screen. The annular space above the screened interval was sealed with hydrated pelletized bentonite from the top of the filter pack to a thickness ranging from approximately 2 feet to 2.5 feet. The remaining annular space between the hydrated bentonite and ground level was filled with a non-aggregate, cement grout slurry. The top of the PVC riser pipe of each monitoring well was trimmed off below ground level and capped with a lockable compression cap. A flush-mount casing with a bole-down lid was then added and grouted into place. Well construction information is included in **Table 2**. Copies of the Well Completion Reports for each monitor well are included in **Appendix I**.

On October 18, 2007, S&ME mobilized to the site to collect groundwater samples from each monitoring well installed by S&ME and from previously installed monitor well MW-1. The depth to groundwater was measured at each monitoring well location prior to sample collection (see Table 2). Free product was not encountered at any measured location. Each well was developed and purged following EPA's SW-846 protocols. During the development and purging activities, the groundwater monitoring wells were purged of approximately three (3) well volumes prior to sampling. After development and purging activities were completed, a groundwater sample was obtained from each well with a disposable PVC bailer. The samples were placed into new, sterile, laboratory supplied containers. The containers were placed into a cooler with ice. The groundwater samples were delivered under chain-of-custody procedures to Research & Analytical Laboratories located in Kernersville, North Carolina.

The groundwater samples collected from monitor wells MW-1, MW-2, MW-3 and MW-4 on October 18, 2007, were analyzed in the laboratory for volatile organic compounds by EPA method 6210D and for semivolatile organic compounds by EPA method 625 BNA. A copy of the laboratory report is included in **Appendix II**. The results of the laboratory analyses representing the October 2007 groundwater samples are summarized on **Table 3**.

The assessment activities did not include surface water sampling.

5.0 Initial Response and Abatement Action

No initial response or abatement actions have been taken during the time period that assessment actions have been performed. The UST system formerly located on the subject property was permanently closed by removal. No hazards due to pollutants were identified. No hazards due to fire, explosion or vapor hazards were identified.

6.0 EXCAVATION OF CONTAMINATED SOIL

6.1 Source and Extent of Soil Contamination Determined in Initial Investigations

Not applicable.

6.2 Excavation Process

Not applicable.

6.3 Post-Excavation Confirmation Soil Sampling

Not applicable.

6.4 Document Soil Investigation

S&ME mobilized to the site on July 10, 2007, to collect soil samples at selected locations on the property. Six macrocore soil probes (G-1 – G-6) were performed with a Geoprobe® at the locations shown on Figure 2. Continuous soil samples were collected from each probe and observed in the field. Based on field observations, one soil sample from each soil probe location was selected for laboratory analysis. The selected soil samples were transferred into laboratory-prepared containers using disposable latex gloves. The sample containers were placed into a cooler with ice for shipment to the analytical laboratory.

Three hand auger borings were performed at the site on July 11, 2007, at the locations shown on Figure 3. A sample of the near surface soil was collected after coring through the concrete floor. Hand auger borings HA-2 and HA-3 were performed on the east exterior of the building.

Based on field observations, one soil sample was selected from each hand auger boring for laboratory analysis. The selected soil samples were handled with a new, disposable pair of latex gloves, and transferred into laboratory-prepared containers. The containers were placed into a cooler with ice for shipment to the analytical laboratory.

Each selected soil sample was analyzed in the laboratory for volatile and semivolatile organic compounds by SW-846 methods 8260 and 8270. The results of the laboratory analyses are summarized in Table 5.

6.5 Disposal of Contaminated Soil

Not applicable.

6.6 Discussion

Soil containing benzo(a)anthrazene, benzo(b)fluoranthene and benzo(a)pyrene at concentrations exceeding the corresponding Maximum Soil Contaminant Concentrations (MSCC) remain in the subsurface at the location represented by hand auger boring HA-3 performed for others.

7.0 CONCLUSIONS

A groundwater flow direction to the northeast is indicated by groundwater occurrence measurements performed for the shallow monitoring wells installed on the site (Figure 2).

The detection of higher concentrations of dissolved petroleum-constituents in monitor wells MW-1 and MW-2 relative to the other sample locations are consistent with a known source area located near well MW-1 and the location of well MW-2 in a hydrologic downgradient position relative to the source area and well MW-1. The horizontal and vertical extent of the dissolved plume has not been defined; however, the associated release has been closed. The concentrations of detected petroleum-related compounds are below the corresponding Gross Contaminant Levels.

The detection of elevated concentrations of trichloroethene in shallow monitor well MW-3 is not consistent with the analytical results for groundwater samples obtained from temporary devices at other locations on the site. The source and cause of the trichloroethene impacts are not known. The horizontal and vertical extent of the trichloroethene plume has not been defined.

The adjoining property to the east is owned by Time Warner Cable. Historical city directories suggest an automobile repair business was formerly located on the Time Warner Cable property. S&ME requested permission from Time Warner Cable to install a groundwater monitor well on the adjoining property to the east to assess groundwater quality east of monitor well MW-3. Time Warner Cable did not provide S&ME with permission to install a monitor well on its property.

The apparent source of alkali material that impacted shallow groundwater was located in the southeast corner of the building. Elevated pH measurements were confirmed in groundwater obtained from a location near the building corner and immediately downgradient of the corner. The presence of groundwater with pH levels within the groundwater quality standard range was confirmed west and north of the apparent source locations, indicating a limited horizontal extent of alkaline impacts.

Due to the presence of soil containing compound concentrations exceeding the corresponding MSCC and groundwater containing dissolved compound concentrations exceeding the groundwater quality standards, additional assessment will be required to define the source and extent of the detected contaminants.

8.0 SOLE USE STATEMENT

All materials and information used for this project were obtained by S&ME. This report is provided for the sole use of Baby Diaper Service for this project. Use of this report by any parties other than Baby Diaper Service will be at such party's sole risk. S&ME disclaims liability for any use of or reliance on this report by third parties.

TABLES

Table 1
Summary of Groundwater Data
1819 Spring Garden Street
Greensboro, North Carolina
S&ME Project No. 1584-07-040/045

Sample Location	G1	G2	G3	G4	G6	2L Standard
Analyte	[Concentration (ug/l)]					
Benzene	16.4	<0.5	<0.5	<0.5	<250	1
Trichloroethene	<0.5	11.2	<0.5	<0.5	<250	2.8
Toluene	<0.5	<0.5	<0.5	<0.5	7100	1000
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	5060	550
N-Butylbenzene	<0.5	<0.5	<0.5	<0.5	6840	70
Naphthalene	<0.5	<0.5	<0.5	<0.5	24000	21
1,3,5-Trimethylbenzene	<0.5	<0.5	<0.5	<0.5	19000	350
1,2,4-Trimethylbenzene	<0.5	<0.5	<0.5	<0.5	74000	350
Xylenes(total)	<0.5	<0.5	<0.5	<0.5	32600	530
I-propylbenzene	<0.5	<0.5	<0.5	<0.5	1000	NS
N-Propylbenzene	<0.5	<0.5	<0.5	<0.5	4560	70
cis-1,2-Dichloroethene	<0.5	0.6	<0.5	<0.5	<250	70
2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.01	196	14
Chloride	30	34	8.5	13.5	20	250
pH	6.85	7.35	6.82	10.1	7.24	6.5 - 8.5

2L Standard - North Carolina Groundwater Quality Standard, NCAC 2L .0202

ug/l - micrograms per liter

NS - no 2L Standard

Notes: **Yellow-highlighted cells represent NCAC 2L exceedances**

Blue-highlighted cells represent detected concentrations below NCAC 2L standard

Samples collected on July 10 and 11, 2007

TABLE 2
MONITOR WELL / GROUNDWATER ELEVATION DATA
BABY DIAPER SERVICE
GREENSBORO, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-045

Well I.D.	MW-1		MW-2		MW-3		MW-4	
Installation Date	Unknown		10/8/2007		10/8/2007		10/8/2007	
Total Depth ¹	-		16.4		15.5		15.4	
Top of Casing Elevation	838.26		835.27		837.05		837.24	
Casing Diameter	2-inch		2-inch		2-inch		2-inch	
Consultant	Griffith Enterprises		S&ME		S&ME		S&ME	
Screen Interval Depth ¹	-		6.3-15.8		5.4-14.9		5.9-15.4	
Date	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
10/18/07	9.37	828.89	8.27	827.00	9.08	827.97	8.70	828.54

Notes: All measurements are in feet

DTW = Depth to groundwater measured from the top of casing

GWE = Groundwater elevation

NI = Monitor well had not been installed at the time of data collection

- = No data

¹ Depth below ground surface in feet

Table 3
 Summary of Groundwater Data
 1819 Spring Garden Street
 Greensboro, North Carolina
 S&ME Project No. 1584-07-045

Sample Location		MW-1	MW-2	MW-3	MW-4	2L Standard
Method	Analyte	[Concentration (ug/l)]				
6210D						
	chloroform	<12.5	<12.5	<12.5	1	70
	Benzene	1110	2820	39.8	<0.5	1
	Trichloroethene	<12.5	<12.5	1140	<0.5	2.8
	Toluene	5830	392	13.2	<0.5	1000
	Ethylbenzene	1950	479	157	<0.5	550
	p-isopropyltoluene	22.5	<12.5	<12.5	<0.5	NS
	Naphthalene	581	132	94.5	<0.5	21
	1,3,5-Trimethylbenzene	540	168	58.6	<0.5	350
	1,2,4-Trimethylbenzene	1920	316	386	<0.5	350
	Xylenes(total)	7180	528	54.2	<0.5	530
	I-propylbenzene	104	44.5	48	<0.5	NS
	N-Propylbenzene	318	116	100	<0.5	70
	cis-1,2-Dichloroethene	<12.5	31.5	18.2	<0.5	70
	Isopropyl ether	102	2260	24.2	<0.5	70
625 BN						
	2-methylnaphthalene	127	54.2	28.8	<10	14

2L Standard - North Carolina Groundwater Quality Standard, NCAC 2L .0202

ug/l - micrograms per liter

NS - no 2L Standard

Notes: **Yellow-highlighted cells represent NCAC 2L exceedances**

Blue-highlighted cells represent detected concentrations below NCAC 2L standard

Samples collected on October 18, 2007

Table 4
 Summary of Groundwater Data
 1819 Spring Garden Street
 Greensboro, North Carolina
 S&ME Project No. 1584-07-045

Sample Location		P-1	P-2	P-3	2L Standard
Method	Analyte	[Concentration (ug/l)]			
6210D					
	Benzene	<25	226	924	1
	Trichloroethene	872	707	840	2.8
	Toluene	<25	1960	688	1000
	Ethylbenzene	470	1920	1150	550
	Naphthalene	258	569	268	21
	1,3,5-Trimethylbenzene	<25	514	284	350
	1,2,4-Trimethylbenzene	<25	2350	973	350
	Xylenes(total)	27	6740	1710	530
	I-propylbenzene	92.5	136	84	NS
	N-Propylbenzene	102	346	194	70
	cis-1,2-Dichloroethene	<25	276	45.5	70
625 BN					
	Naphthalene	153	349	336	21
	2-methylnaphthalene	43	127	152	14

2L Standard - North Carolina Groundwater Quality Standard, NCAC 2L .0202

ug/l - micrograms per liter

NS - no 2L Standard

Notes: **Yellow-highlighted cells represent NCAC 2L exceedances**

Blue-highlighted cells represent detected concentrations below NCAC 2L standard

Samples collected on August 14, 2007

Table 5
Summary of Soil Analytical Data
1819 Spring Garden Street
Greensboro, North Carolina
S&ME Project No. 1584-07-040

Sample Location	G1	G2	G3	G4	G5	G6	HA1	HA2	HA3	S-to-W
Sample Depth (ft)	3	4	4	5	4	3	3	2	3	
Analyte	[Concentration (mg/kg)]									
Anthracene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.492	1000
Benzo(a)anthracene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.78	0.34
Benzo(b)fluoranthene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.84	1.2
Benzo(k)fluoranthene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.745	12
Benzo(ghi)perylene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.777	6700
Benzo(a)pyrene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.33	0.091
Chrysene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.56	38
Fluoranthene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	2.44	280
Indeno(1,2,3-cd)pyrene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.794	3.3
Phenanthrene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	1.93	60
Pyrene	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	2.65	290

mg/kg - milligram per kilogram

ft - Feet

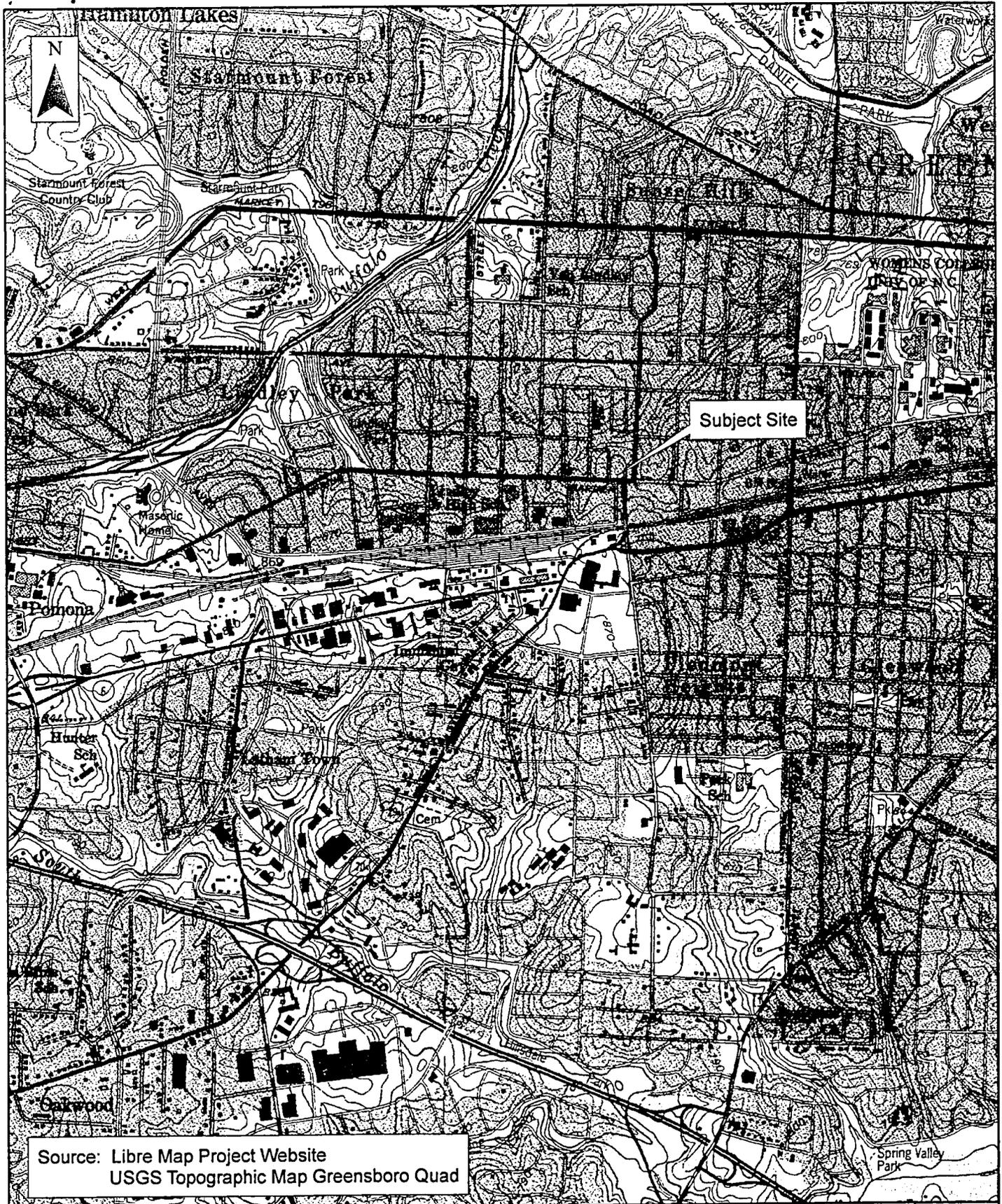
S-to-W - Soil-to-Water Maximum Contaminant Concentration

UST Section Guidelines for the Investigation and Remediation of Contamination from

Non-UST Petroleum Releases, NCDENR Division of Waste Management, UST Section, July 1, 2007

Notes: **Yellow-highlighted cells represent concentrations above S-to-W**
Samples collected on July 10 and 11, 2007

FIGURES



Scale: 1 inch equals 2,000 feet
Drawn by: SDM
Reviewed by: LB
Date: October 2007

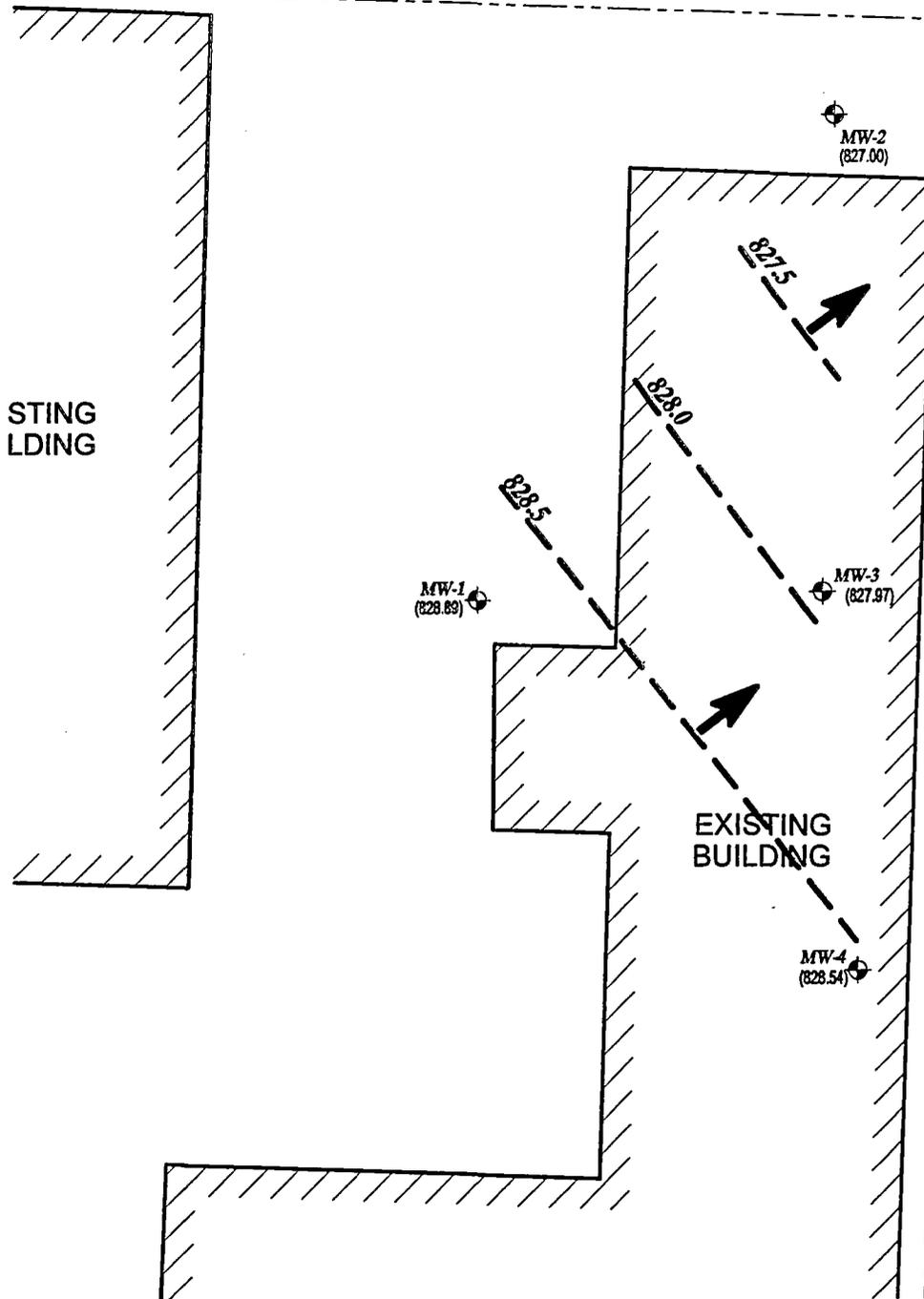


S&ME
ENVIRONMENTAL SERVICES • ENGINEERING • TESTING

Baby Diaper Service
Greensboro, North Carolina
USGS Topographic Map
Job No. 1584-07-045

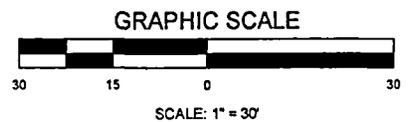
FIGURE
1

SPRING GARDEN STREET



CONTOUR INTERVAL = 0.5 FEET

- KEY**
- MONITORING WELL LOCATION
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER CONTOUR
 - GROUNDWATER ELEVATION OBSERVED IN MONITORING WELL



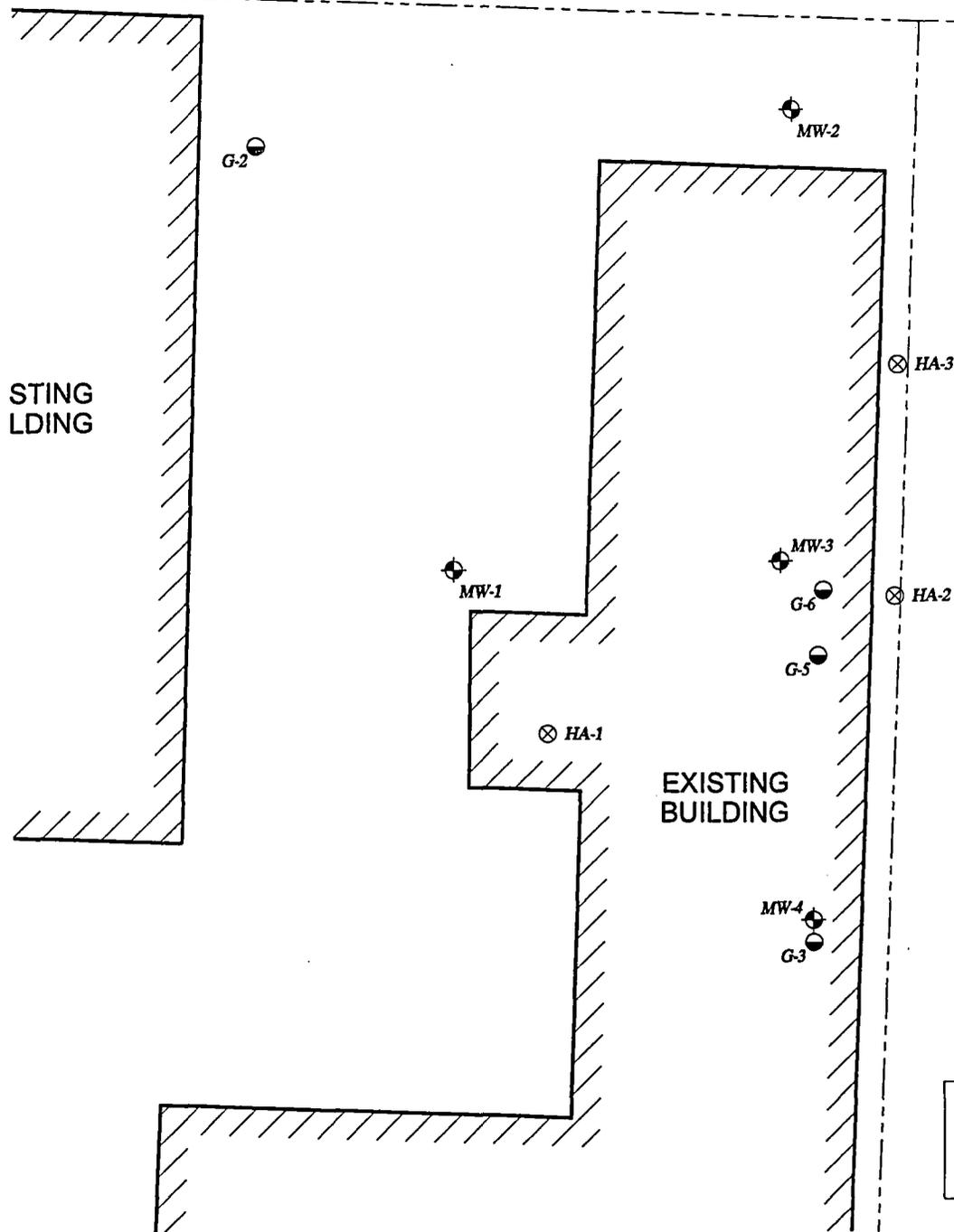
SCALE: AS SHOWN
 DATE: OCTOBER 2007
 DRAWN BY: RDM
 PROJECT NO: 1584-07-045



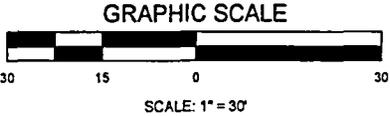
**GROUNDWATER
 FLOW MAP**
 1819 SPRING GARDEN STREET
 GREENSBORO, NORTH CAROLINA

FIGURE NO.
2

SPRING GARDEN STREET



- KEY**
- ⊕ - MONITORING WELL LOCATION
 - ⊗ - HAND AUGER LOCATION
 - - GEOPROBE LOCATION



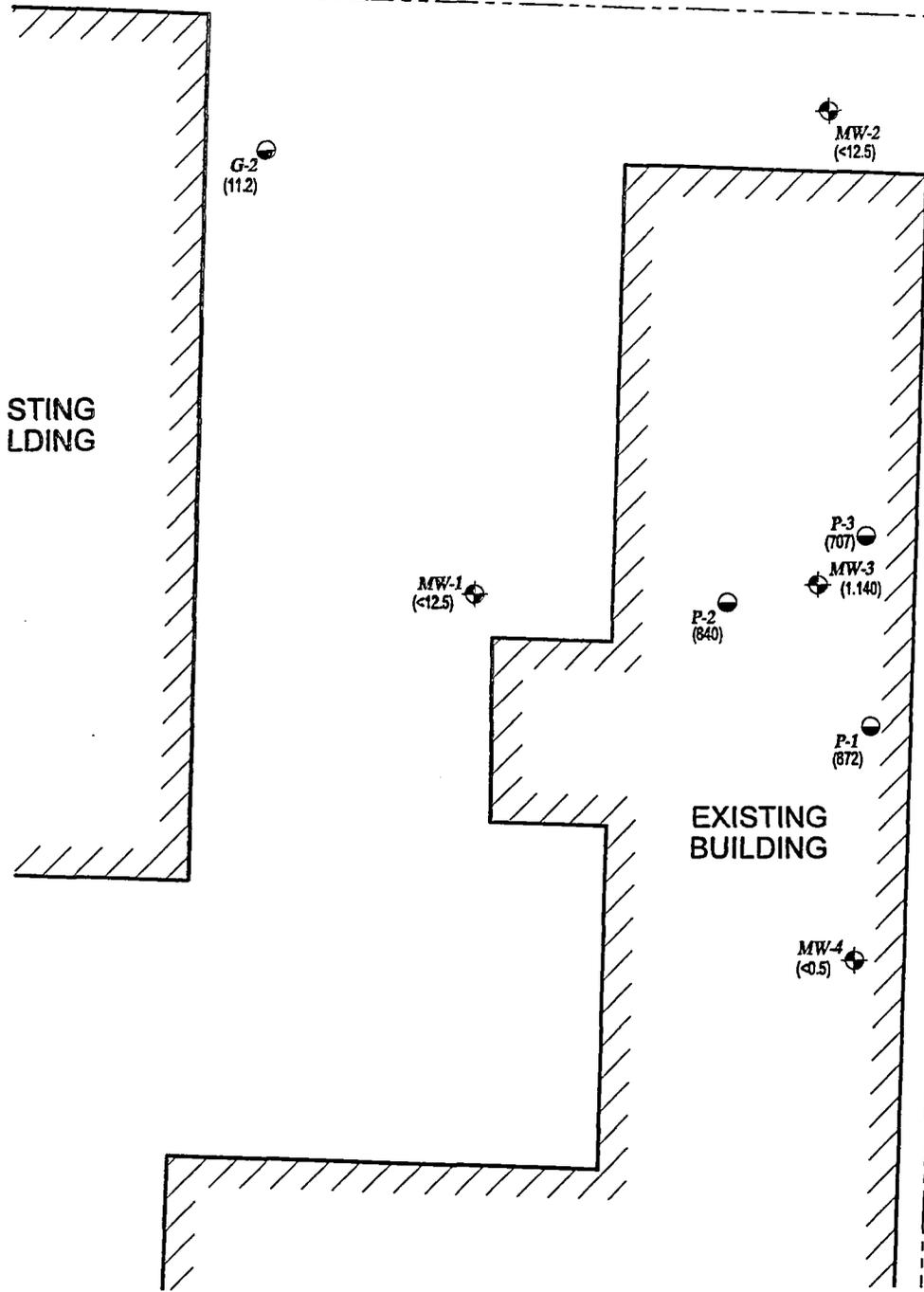
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DATE:	OCTOBER 2007
DRAWN BY:	RDM
PROJECT NO:	1584-07-045



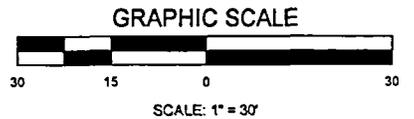
SAMPLE LOCATION PLAN
 1819 SPRING GARDEN STREET
 GREENSBORO, NORTH CAROLINA

FIGURE NO.
3

SPRING GARDEN STREET



- KEY**
- ⊕ - MONITORING WELL LOCATION
 - - HAND AUGER LOCATION
 - (xxx) - TRICHLOROETHENE CONCENTRATION (MICROGRAMS PER LITER)



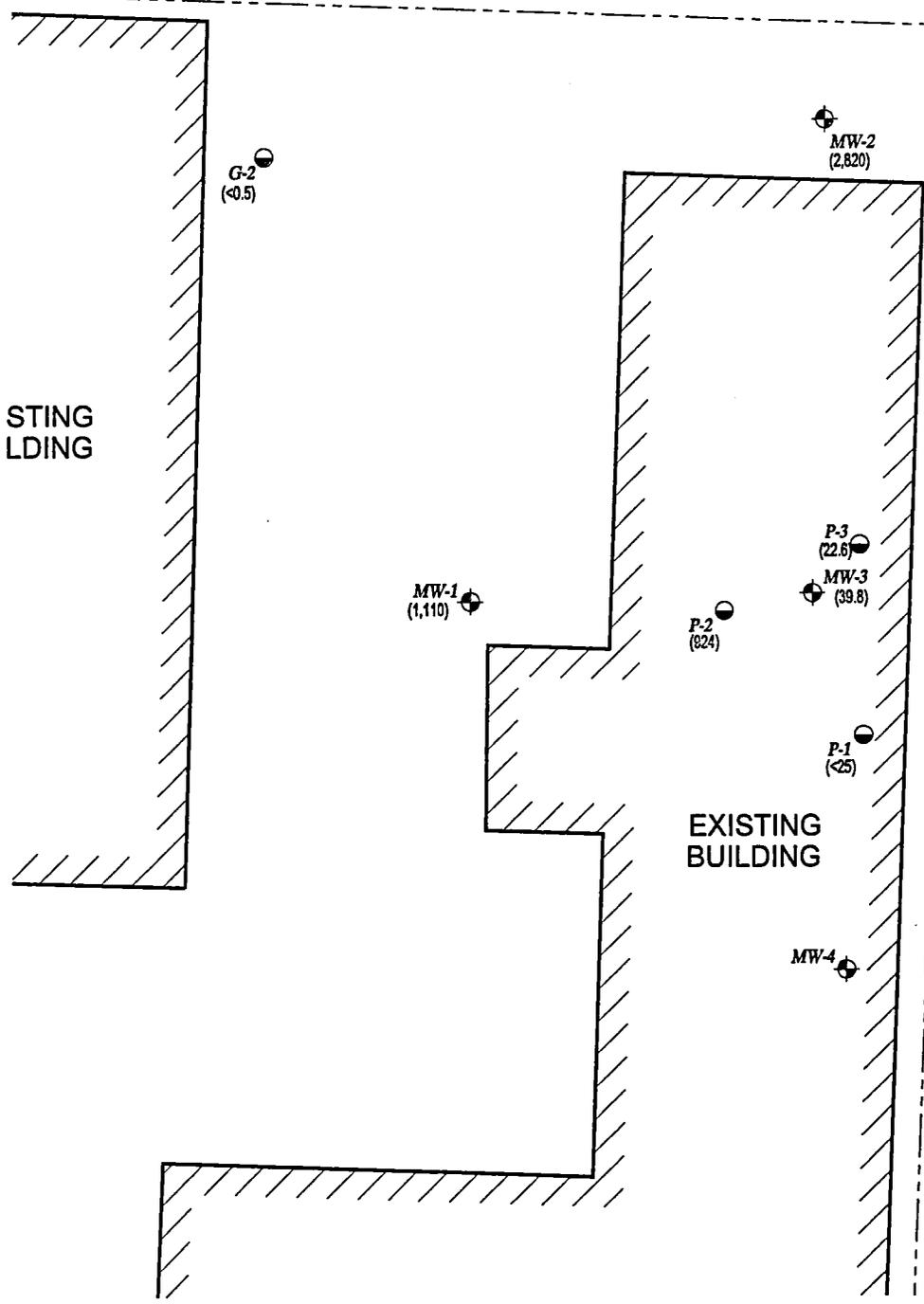
SCALE: AS SHOWN
 DATE: OCTOBER 2007
 DRAWN BY: RDM
 PROJECT NO: 1584-07-045



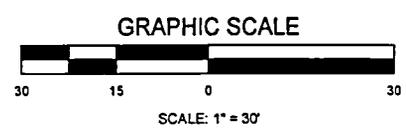
**TRICHLOROETHENE CONCENTRATIONS
 IN GROUNDWATER**
 1819 SPRING GARDEN STREET
 GREENSBORO, NORTH CAROLINA

FIGURE NO.
4

SPRING GARDEN STREET



- KEY**
-  - MONITORING WELL LOCATION
 -  - HAND AUGER LOCATION
 -  - BENZENE CONCENTRATION (MICROGRAMS PER LITER)



SCALE:	AS SHOWN
DATE:	OCTOBER 2007
DRAWN BY:	RDM
PROJECT NO:	1584-07-045



**BENZENE CONCENTRATIONS
IN GROUNDWATER**
1819 SPRING GARDEN STREET
GREENSBORO, NORTH CAROLINA

FIGURE NO.
5

APPENDIX I
Well Completion Reports and Well Construction Records

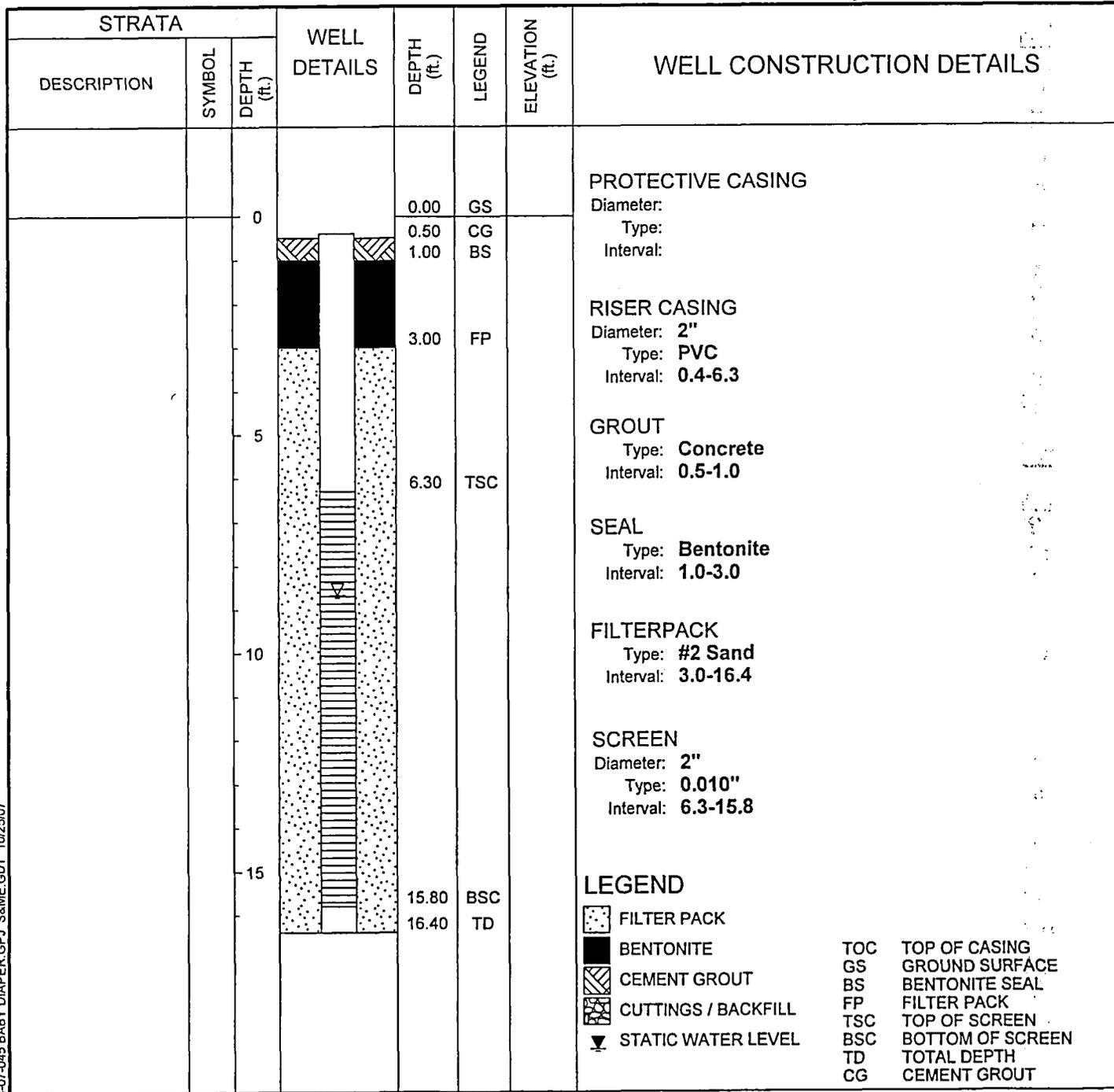
COMPLETION REPORT OF WELL No. MW-2

PROJECT: **Baby Diaper Service**
 PROJECT NO: **1584-07-045**
 PROJECT LOCATION: **1819 Spring Garden Street, Greensboro, NC**

WATER LEVEL: **Depth to water = 8.27 feet below top of casing (10/18/07)**

DRILLING CONTRACTOR: **Chris Bost**
 DRILLING METHOD: **4 1/4" H.S.A.**
 DATE DRILLED: **10/8/07**

LATITUDE:
 LONGITUDE:
 TOP OF CASING ELEVATION:
 DATUM: **MSL**
 LOGGED BY: **Lyndal Butler**



MONITORING WELL 1584-07-045 BABY DIAPER.CPJ S&ME.GDT 10/25/07



**COMPLETION REPORT OF
WELL No. MW-2**

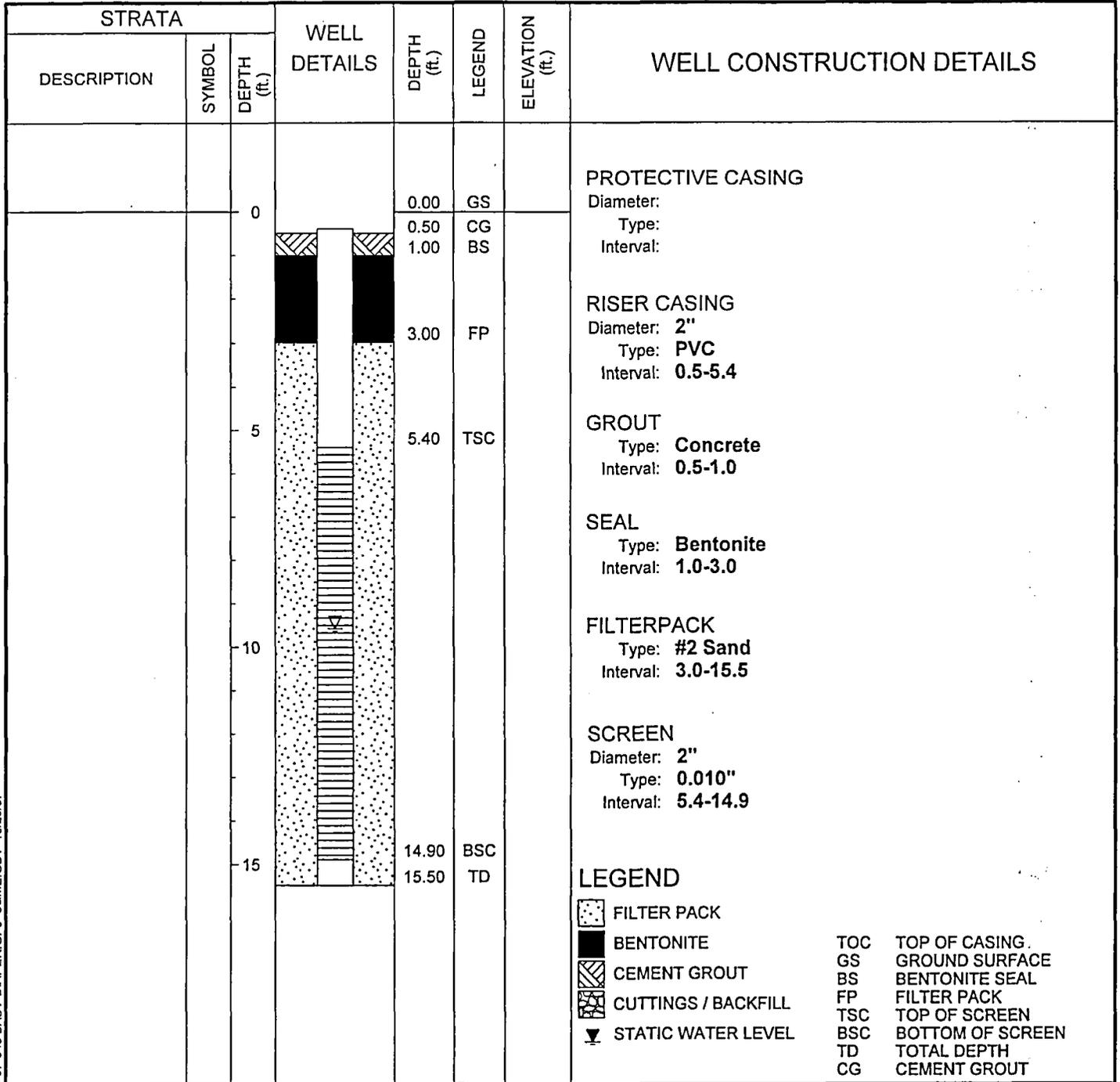
COMPLETION REPORT OF WELL No. MW-3

PROJECT: **Baby Diaper Service**
 PROJECT NO: **1584-07-045**
 PROJECT LOCATION: **1819 Spring Garden Street, Greensboro, NC**

WATER LEVEL: **Depth to water = 9.08 feet below top of casing (10/18/07)**

DRILLING CONTRACTOR: **Chris Bost**
 DRILLING METHOD: **4 1/4" H.S.A.**
 DATE DRILLED: **10/8/07**

LATITUDE:
 LONGITUDE:
 TOP OF CASING ELEVATION:
 DATUM: **MSL**
 LOGGED BY: **Lyndal Butler**



MONITORING WELL 1584-07-045 BABY DIAPER.GPJ S&ME.GDT 10/25/07



**COMPLETION REPORT OF
WELL No. MW-3**

COMPLETION REPORT OF WELL No. MW-4

PROJECT: **Baby Diaper Service**
 PROJECT NO: **1584-07-045**
 PROJECT LOCATION: **1819 Spring Garden Street, Greensboro, NC**

WATER LEVEL: **Depth to water = 8.70 feet below top of casing (10/18/07)**

DRILLING CONTRACTOR: **Chris Bost**
 DRILLING METHOD: **4 1/4" H.S.A.**
 DATE DRILLED: **10/8/07**

LATITUDE:
 LONGITUDE:
 TOP OF CASING ELEVATION:
 DATUM: **MSL**
 LOGGED BY: **Lyndal Butler**

STRATA			WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS																
DESCRIPTION	SYMBOL	DEPTH (ft.)																					
		0		0.00	GS		<p>PROTECTIVE CASING Diameter: Type: Interval:</p> <p>RISER CASING Diameter: 2" Type: PVC Interval: 0.5-5.9</p> <p>GROUT Type: Concrete Interval: 0.1-1.0</p> <p>SEAL Type: Bentonite Interval: 1.0-3.5</p> <p>FILTERPACK Type: #2 Sand Interval: 3.5-16.5</p> <p>SCREEN Diameter: 2" Type: 0.010" Interval: 5.9-15.4</p> <p>LEGEND</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"> FILTER PACK</td> <td style="width: 50%;">TOC TOP OF CASING</td> </tr> <tr> <td> BENTONITE</td> <td>GS GROUND SURFACE</td> </tr> <tr> <td> CEMENT GROUT</td> <td>BS BENTONITE SEAL</td> </tr> <tr> <td> CUTTINGS / BACKFILL</td> <td>FP FILTER PACK</td> </tr> <tr> <td> STATIC WATER LEVEL</td> <td>TSC TOP OF SCREEN</td> </tr> <tr> <td></td> <td>BSC BOTTOM OF SCREEN</td> </tr> <tr> <td></td> <td>TD TOTAL DEPTH</td> </tr> <tr> <td></td> <td>CG CEMENT GROUT</td> </tr> </table>	 FILTER PACK	TOC TOP OF CASING	 BENTONITE	GS GROUND SURFACE	 CEMENT GROUT	BS BENTONITE SEAL	 CUTTINGS / BACKFILL	FP FILTER PACK	 STATIC WATER LEVEL	TSC TOP OF SCREEN		BSC BOTTOM OF SCREEN		TD TOTAL DEPTH		CG CEMENT GROUT
 FILTER PACK	TOC TOP OF CASING																						
 BENTONITE	GS GROUND SURFACE																						
 CEMENT GROUT	BS BENTONITE SEAL																						
 CUTTINGS / BACKFILL	FP FILTER PACK																						
 STATIC WATER LEVEL	TSC TOP OF SCREEN																						
	BSC BOTTOM OF SCREEN																						
	TD TOTAL DEPTH																						
	CG CEMENT GROUT																						
				0.50	CG																		
				1.00	BS																		
				3.50	FP																		
		5		5.90	TSC																		
		10																					
		15		15.40	BSC																		
				16.50	TD																		

MONITORING WELL 1584-07-045 BABY DIAPER.GPJ S&ME.GDT 10/25/07



COMPLETION REPORT OF WELL No. MW-4



NON RESIDENTIAL WELL CONSTRUCTION RECORD
 North Carolina Department of Environment and Natural Resources- Division of Water Quality
 WELL CONTRACTOR CERTIFICATION # 2736

1. WELL CONTRACTOR:
Chris Bost
 Well Contractor (Individual) Name
Probe Technology, Inc.
 Well Contractor Company Name
 STREET ADDRESS **P O Box 1369**
Concord, NC 28026
 City or Town State Zip Code
(704) 933-5538
 Area code- Phone number

2. WELL INFORMATION:
 SITE WELL ID #(if applicable) _____
 STATE WELL PERMIT #(if applicable) _____
 DWQ or OTHER PERMIT #(if applicable) _____
 WELL USE (Check Applicable Box) Monitoring Municipal/Public
 Industrial/Commercial Agricultural Recovery Injection
 Irrigation Other (list use) _____
 DATE DRILLED **110/08/07**
 TIME COMPLETED **12:00** AM PM

3. WELL LOCATION:
 CITY: **Greensboro** COUNTY: **Guilford**
 (Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)
 TOPOGRAPHIC / LAND SETTING:
 Slope Valley Flat Ridge Other _____
 (check appropriate box)
 LATITUDE **3 N 36 03.56** May be in degrees, minutes, seconds or in a decimal format
 LONGITUDE _____ **W 79 49.19**
 Latitude/longitude source: GPS Topographic map
 (location of well must be shown on a USGS topo map and attached to this form if not using GPS)

4. FACILITY - is the name of the business where the well is located.
 FACILITY ID #(if applicable) _____
 NAME OF FACILITY _____
 STREET ADDRESS **1819 Spring Garden St.**
Greensboro, NC
 City or Town State Zip Code
 CONTACT PERSON **Baby Diaper Service**
 MAILING ADDRESS **810 McNair Court**
High Point, NC 27265
 City or Town State Zip Code

 Area code - Phone number

5. WELL DETAILS:
 a. TOTAL DEPTH: _____
 b. DOES WELL REPLACE EXISTING WELL? YES NO
 c. WATER LEVEL Below Top of Casing: _____ FT.
 (Use "*" if Above Top of Casing)

d. TOP OF CASING IS 0 FT. Above Land Surface*
 *Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. YIELD (gpm): _____ METHOD OF TEST _____

f. DISINFECTION: Type _____ Amount _____

g. WATER ZONES (depth):
 From _____ To _____ From _____ To _____
 From _____ To _____ From _____ To _____
 From _____ To _____ From _____ To _____

6. CASING: Thickness/Weight Material
 Depth Diameter Weight Material
 From 0 To 5 Ft. 2 inch Schd 40 PVC
 From _____ To _____ Ft. _____ _____
 From _____ To _____ Ft. _____ _____

7. GROUT: Depth Material Method
 From 0 To 1 Ft. portland pour
 From 1 To 3 Ft. benonite pour
 From _____ To _____ Ft. _____ _____

8. SCREEN: Depth Diameter Slot Size Material
 From 5 To 15 Ft. 2 in. 0.010 in. PVC
 From _____ To _____ Ft. _____ in. _____ in. _____
 From _____ To _____ Ft. _____ in. _____ in. _____

9. SAND/GRAVEL PACK: Depth Size Material
 From 3 To 15 Ft. #2 silica
 From _____ To _____ Ft. _____ _____
 From _____ To _____ Ft. _____ _____

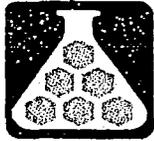
10. DRILLING LOG
 From To Formation Description

11. REMARKS:
MW-2

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Chris Bost **10/24/07**
 SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE
Chris Bost
 PRINTED NAME OF PERSON CONSTRUCTING THE WELL

APPENDIX II
Copies of Laboratory Analytical Report
And Chain-Of-Custody Record



RESEARCH & Analytical LABORATORIES, INC.

Analytical/Process Consultations

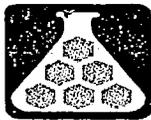


*Chemical Analysis for Selected Parameters and Water Samples Identified as Baby Diaper II
(A S & ME Project #1584-07-045, collected 18 October 2007)*

I. Volatile Organics	Quantitation	MW1	MW2	MW3	MW4
EPA Method 6210 D	Limit				
<u>Parameter</u>	<u>(ppb)</u>	<u>(ppb)</u>	<u>(ppb)</u>	<u>(ppb)</u>	<u>(ppb)</u>
1,1-Dichloroethane	0.5	BQL	BQL	BQL	BQL
2,2-Dichloropropane	0.5	BQL	BQL	BQL	BQL
Chloroform	0.5	BQL	BQL	BQL	1.0
1,1,1-Trichloroethane	0.5	BQL	BQL	BQL	BQL
1,1-Dichloropropene	0.5	BQL	BQL	BQL	BQL
Carbon Tetrachloride	0.5	BQL	BQL	BQL	BQL
Benzene	0.5	1,110	2,820	39.8	BQL
1,2-Dichloroethane	0.5	BQL	BQL	BQL	BQL
Trichloroethene	0.5	BQL	BQL	1,140	BQL
1,2-Dichloropropane	0.5	BQL	BQL	BQL	BQL
Dibromomethane	0.5	BQL	BQL	BQL	BQL
Toluene	0.5	5,830	392	13.2	BQL
1,1,2-Trichloroethane	0.5	BQL	BQL	BQL	BQL
1,3-Dichloropropane	0.5	BQL	BQL	BQL	BQL
Tetrachloroethene	0.5	BQL	BQL	BQL	BQL
1,1,1,2-Tetrachloroethane	0.5	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	0.5	BQL	BQL	BQL	BQL
1,2,3-Trichloropropane	0.5	BQL	BQL	BQL	BQL
Hexachlorobutadiene	0.5	BQL	BQL	BQL	BQL
Bromobenzene	0.5	BQL	BQL	BQL	BQL
Ethylbenzene	0.5	1,950	479	157	BQL
Styrene	0.5	BQL	BQL	BQL	BQL
Bromoform	0.5	BQL	BQL	BQL	BQL
p-Isopropyltoluene	0.5	22.5	BQL	BQL	BQL
N-Butylbenzene	0.5	BQL	BQL	BQL	BQL
Naphthalene	0.5	581	132	94.5	BQL
1,3,5-Trimethylbenzene	0.5	540	168	58.5	BQL
1,2,4-Trimethylbenzene	0.5	1,920	316	386	BQL
1,2,4-Trichlorobenzene	0.5	BQL	BQL	BQL	BQL
1,2,3-Trichlorobenzene	0.5	BQL	BQL	BQL	BQL
Chlorobenzene	0.5	BQL	BQL	BQL	BQL
2-Chlorotoluene	0.5	BQL	BQL	BQL	BQL
4-Chlorotoluene	0.5	BQL	BQL	BQL	BQL
Tert-Butylbenzene	0.5	BQL	BQL	BQL	BQL
Sec-Butylbenzene	0.5	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL
Total Xylenes	0.5	7,180	528	54.2	BQL
i-Propylbenzene	0.5	104	44.5	48.0	BQL
n-Propylbenzene	0.5	318	116	100	BQL
1,3-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL
Dibromochloromethane	0.5	BQL	BQL	BQL	BQL
Dichlorodifluoromethane	0.5	BQL	BQL	BQL	BQL
Chloromethane	0.5	BQL	BQL	BQL	BQL
Vinyl Chloride	0.5	BQL	BQL	BQL	BQL
Bromomethane	0.5	BQL	BQL	BQL	BQL
Chloroethane	0.5	BQL	BQL	BQL	BQL
Trichlorofluoromethane	0.5	BQL	BQL	BQL	BQL
1,1-Dichloroethene	0.5	BQL	BQL	BQL	BQL
Methylene Chloride	0.5	BQL	BQL	BQL	BQL
Trans-1,2-Dichloroethene	0.5	BQL	BQL	BQL	BQL
Cis-1,2-Dichloroethene	0.5	BQL	31.5	18.2	BQL
Bromodichloromethane	0.5	BQL	BQL	BQL	BQL
Bromochloromethane	0.5	BQL	BQL	BQL	BQL
Cis-1,3-Dichloropropene	0.5	BQL	BQL	BQL	BQL
Trans-1,3-Dichloropropene	0.5	BQL	BQL	BQL	BQL
Methyl-Tert-Butyl ether (MTBE)	5.0	BQL	BQL	BQL	BQL
Isopropyl ether (IPE)	5.0	102	2,260	24.2	BQL
Dilution Factor		25	25	25	1
Sample Number		601893	601894	601895	601896
Sample Date		10/18/07	10/18/07	10/18/07	10/18/07
Sample Time (hrs)		1825	1805	1330	1230

BQL = Below Quantitation Limits

ppb = parts per billion (ppb)



RESEARCH & Analytical LABORATORIES, INC.

Analytical/Process Consultations



Chemical Analysis for Selected Parameters and Water Samples Identified as Baby Diaper II (A S & ME Project #1584-07-045, collected 18 October 2007)

II. Semi-Volatile Organics	Quantitation	MW1	MW2	MW3	MW4
EPA Method 625 BNA	Limit				
Parameter	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
4-Chloro-3-methylphenol	10.0	BQL	BQL	BQL	BQL
2-Chlorophenol	10.0	BQL	BQL	BQL	BQL
2,4-Dichlorophenol	10.0	BQL	BQL	BQL	BQL
2,4-Dimethylphenol	10.0	BQL	BQL	BQL	BQL
2,4-Dinitrophenol	50.0	BQL	BQL	BQL	BQL
2-Methyl-4,6-dinitrophenol	50.0	BQL	BQL	BQL	BQL
2-Nitrophenol	10.0	BQL	BQL	BQL	BQL
4-Nitrophenol	50.0	BQL	BQL	BQL	BQL
Pentachlorophenol	50.0	BQL	BQL	BQL	BQL
Phenol	10.0	BQL	BQL	BQL	BQL
2,4,6-Trichlorophenol	10.0	BQL	BQL	BQL	BQL
Acenaphthene	10.0	BQL	BQL	BQL	BQL
Acenaphthylene	10.0	BQL	BQL	BQL	BQL
Anthracene	10.0	BQL	BQL	BQL	BQL
Benzdine	50.0	BQL	BQL	BQL	BQL
Benzo(a)anthracene	10.0	BQL	BQL	BQL	BQL
Benzo(a)pyrene	10.0	BQL	BQL	BQL	BQL
Benzo(b)fluoranthene	10.0	BQL	BQL	BQL	BQL
Benzo(ghi)perylene	10.0	BQL	BQL	BQL	BQL
Benzo(k)fluoranthene	10.0	BQL	BQL	BQL	BQL
Benzyl butyl phthalate	10.0	BQL	BQL	BQL	BQL
Bis(2-chloroethoxy)methane	10.0	BQL	BQL	BQL	BQL
Bis(2-chloroethyl)ether	10.0	BQL	BQL	BQL	BQL
Bis(2-chloroisopropyl)ether	10.0	BQL	BQL	BQL	BQL
Bis(2-ethyl-hexyl)phthalate	10.0	BQL	BQL	BQL	BQL
4-Bromophenyl phenyl ether	10.0	BQL	BQL	BQL	BQL
2-Chloronaphthalene	10.0	BQL	BQL	BQL	BQL
4-Chlorophenyl phenyl ether	10.0	BQL	BQL	BQL	BQL
Chrysene	10.0	BQL	BQL	BQL	BQL
Dibenzo(a,h)anthracene	10.0	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	10.0	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	10.0	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	10.0	BQL	BQL	BQL	BQL
3,3-Dichlorobenzidine	20.0	BQL	BQL	BQL	BQL
Diethyl phthalate	10.0	BQL	BQL	BQL	BQL
Dimethyl phthalate	10.0	BQL	BQL	BQL	BQL
Di-N-Butyl phthalate	10.0	BQL	BQL	BQL	BQL
2,4-Dinitrotoluene	10.0	BQL	BQL	BQL	BQL
2,6-Dinitrotoluene	10.0	BQL	BQL	BQL	BQL
Di-N-Octyl phthalate	10.0	BQL	BQL	BQL	BQL
1,2-Diphenylhydrazine	50.0	BQL	BQL	BQL	BQL
Fluoranthene	10.0	BQL	BQL	BQL	BQL
Fluorene	10.0	BQL	BQL	BQL	BQL
Hexachlorobenzene	10.0	BQL	BQL	BQL	BQL
Hexachlorobutadiene	10.0	BQL	BQL	BQL	BQL
Hexachlorocyclopentadiene	10.0	BQL	BQL	BQL	BQL
Hexachloroethane	10.0	BQL	BQL	BQL	BQL
Indeno(1,2,3-cd) pyrene	10.0	BQL	BQL	BQL	BQL
Isophorone	10.0	BQL	BQL	BQL	BQL
Nitrobenzene	10.0	BQL	BQL	BQL	BQL
N-Nitrosodimethylamine	10.0	BQL	BQL	BQL	BQL
N-nitrosodi-n-propylamine	10.0	BQL	BQL	BQL	BQL
N-Nitrosodiphenylamine	10.0	BQL	BQL	BQL	BQL
Phenanthrene	10.0	BQL	BQL	BQL	BQL
Pyrene	10.0	BQL	BQL	BQL	BQL
1,2,4-Trichlorobenzene	10.0	BQL	BQL	BQL	BQL
2-Methylnaphthalene	10.0	127	54.2	28.8	BQL
Dilution Factor		2	2	2	1

Sample Number	601893	601894	601895	601896
Sample Date	10/18/07	10/18/07	10/18/07	10/18/07
Sample Time (hrs)	1825	1805	1330	1230

ppb = parts per billion

BQL = Below Quantitation Limits

BNA = Base-Neutral Acid Extractables

