668SERBSF10,638

668SERBSF10,638

Site Name (Subject):	SPARTA INDUSTRIES - NEW PLANT
Site ID (Document ID):	NCD003466505
Document Name (DocType):	Preliminary Assessment/Site Inspection (PA/SI)
Report Segment:	
Description:	Abbreviated Preliminary Assessment
Date of Document:	2/12/2002
Date Received:	
Box: *Enter SF and # with no spaces*	SF10,638
Access Level:	PUBLIC
Division:	WASTE MANAGEMENT
Section:	SUPERFUND
Program (Document Group):	SERB (SERB)
Document Category:	FACILITY

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North Carolina
Department of Environment and Natural Resources
Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Director

NCDENR

February 12, 2002

Ms. Jennifer Wendel
NC Site Management Section
US EPA Region IV Waste Division
61 Forsyth Street, 11th Floor
Atlanta, GA 30303

Subject: Abbreviated Preliminary Assessment
Sparta Industries - New Plant Site
Sparta, Alleghany County, NC
US EPA ID: NCN 003 466 505

Dear Ms. Wendel:

Enclosed is the Abbreviated Preliminary Assessment (APA), completed by the North Carolina Department of Environment and Natural Resources (NCDENR) Superfund Section for the Sparta Industries - New Plant ("the Site") located in Sparta, Alleghany County, NC.

Under authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the North Carolina Superfund Section conducted an APA at the Site. The purpose of the APA was to evaluate environmental conditions present at the Site in order to determine the need for additional investigative and remedial activities under the CERCLA program. Information about the site was obtained through the review of available file documents.

The Site is located on 1731 US Highway 21 South in an industrial/commercial area of Sparta, Alleghany County, NC. Corresponding geographic coordinates for the facility are 36° 29' 19.36" latitude and 81° 05' 59.47" longitude (Reference 1). Since 1978 the facility has been used to manufacture tobacco-smoking pipes. Previous investigations have identified three areas of concern: a deactivated wastewater retention tank, a former chemical pump house, and a dry well where dumping of an unspecified amount of residual dye/coatings took place for approximately 8 years. Stains used in the pipe manufacturing process appear to be the primary source of contamination.

On November 7, 2000, the NC Superfund Section recommended that the Site be added to the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) for further investigation (Reference 2). This decision was based on groundwater analytical data obtained from previous investigations performed by the property owners and/or their consultants. The EPA added the Site to CERCLIS on December 12, 2000, and tasked the site for further assessment by the NC Superfund Section.

On November 14, 2000, the NC Inactive Hazardous Sites Branch (IHSB) received a Phase II Environmental Assessment Report from Law Engineering and Environmental Services, Inc. (LAW), which addressed the previously mentioned areas of concern at the Site (Reference 3). After thorough review of the report, the NC IHSB recommended that the Site be given a "no further action" status in the NC IHSB inventory (Reference 4).

Based on the November 14, 2000 analytical data obtained from LAW combined with the lack of human and environmental targets in the groundwater, surface water, and soil exposure pathways, the NC Superfund Section recommends that the Sparta Industries - New Plant site be assigned a "No Further Remedial Action Planned" status under CERCLA. If you have any questions regarding this APA, please feel free to contact me at (919) 733-2801 EXT. 298 or e-mail at mike.deaton@ncmail.net.

Sincerely,

Michael S. Deaton
Environmental Engineer
NC Superfund Section

Jim Bateson, Head
Site Evaluation and Removal Branch
NC Superfund Section

Attachments: APA Checklist
Latitude/Longitude Calculation Sheet (Reference 1)
Pre-CERCLIS Site Screening (Reference 2)
LAW's November 14, 2000 Phase II Environmental Assessment (Reference 3)
NC IHSB Memorandum to File (Reference 4)

cc: Scott Ross, File Room
Charlotte Jesneck, NC IHSB

Approved by: _____ Date: _____
Jennifer Wendel, NC Site Management Section

ABBREVIATED PRELIMINARY ASSESSMENT CHECKLIST

This checklist can be used to help the site investigator determine if an Abbreviated Preliminary Assessment (APA) is warranted. This checklist should document the rationale for the decision on whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer:	**Michael S. Deaton**	**February 11, 2002**
	Name/Title	Date
	NCDENR-Superfund Section	**919-733-2801, ext. 298**
	Address	Phone
	mike.deaton@ncmail.net	
	E-mail Address	

Site Name:	**Sparta Industries - New Plant Site**		
Previous Names (if any):			
EPA ID #	**NCD 003 466 505**		
Site Location:	**1731 US Highway 21 South, Sparta, Alleghany County, NC**		
Latitude:	**36° 29' 19.36"**	**Longitude:**	**81° 05' 59.47"**

Describe the release (or potential release) and its probable nature:

Beginning in 1978, the Sparta facility used a dry well to dispose of waste generated from the manufacturing and staining of tobacco smoking pipes. The wastes were generally a mixture of dry powder, methanol, and small amounts of ethylene glycol. Five-gallon containers were used for mixing the wastes and approximately one to two containers would be washed out daily. The discarded wastes were drained via pipe to the dry well. This operation was discontinued between 1984 and 1986.

Part 1 - Superfund Eligibility Evaluation

If all answers are "no" go on to Part 2, otherwise proceed to Part 3.	YES	NO
1. Is the site currently in CERCLIS or an "alias" of another site?	X	
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?	X	
3. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?		X
4. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?		X
5. Is there sufficient documentation to demonstrate that no potential for a release that could cause adverse environmental or human health impacts exists (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, previous HRS score determined, or an EPA approved risk assessment completed)?	X	

Please explain all "yes" answers.

1. **In November 2000, the NC Superfund Section recommended that the site be added to CERCLIS during a Pre-CERCLIS site screening.**
2. **The NC Inactive Hazardous Sites Branch is investigating the site and has assigned the site a "no further action" status.**
5. **The potential for a release to occur is minimal due to the recent analytical data and the fact that Sparta Industries ceased operation of the dry well, moved the stain mixing area to a new location in the plant, and began disposing the generated waste at a permitted hazardous waste facility.**

Part 2 - Initial Site Evaluation

Use Exhibit 1 of the APA fact sheet to make site assessment decisions based on the answers below:	YES	NO
Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?		X
Is there an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site?		X
Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but there are nearby targets (e.g., targets within 1 mile)?	X	
Is there no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site?		X
Does the site lack documented on-site, adjacent, or nearby targets?		X
Does the site lack releases or potential to release?		X
Does the site lack uncontained sources containing CERCLA eligible substances are present on site?		X

Please explain all "yes" answer(s).

It has been documented that releases of waste generated from the manufacturing and staining of tobacco smoking pipes occurred from 1978 to between 1984 and 1986. Most of the residents in the vicinity, including the workers at the Sparta plant, are supplied drinking water from the Town of Sparta. The nearest groundwater user is located upgradient of the site approximately 0.45 miles. Only 7 residences are located within ¼-mile of the site. No residences, schools, or daycare centers are located within 200 feet of on-site contamination. No documentation exists that a release to surface water pathway has occurred. The lack of targets in the surface water, groundwater, and soil exposure pathways give the site a Hazard Ranking System (HRS) score well below 28.5.

Part 3 - State Site Assessment Recommendation

Check the box that applies based on the conclusions of the APA:

- [X] NFRAP
- [ ] Higher Priority SI
- [ ] Lower Priority SI
- [ ] Defer to RCRA Subtitle C
- [ ] Defer to NRC
- [ ] Refer to Removal Program - further site assessment needed
- [ ] Refer to Removal Program - NFRAP
- [ ] Site is being addressed as part of another CERCLIS site
- [ ] Other:

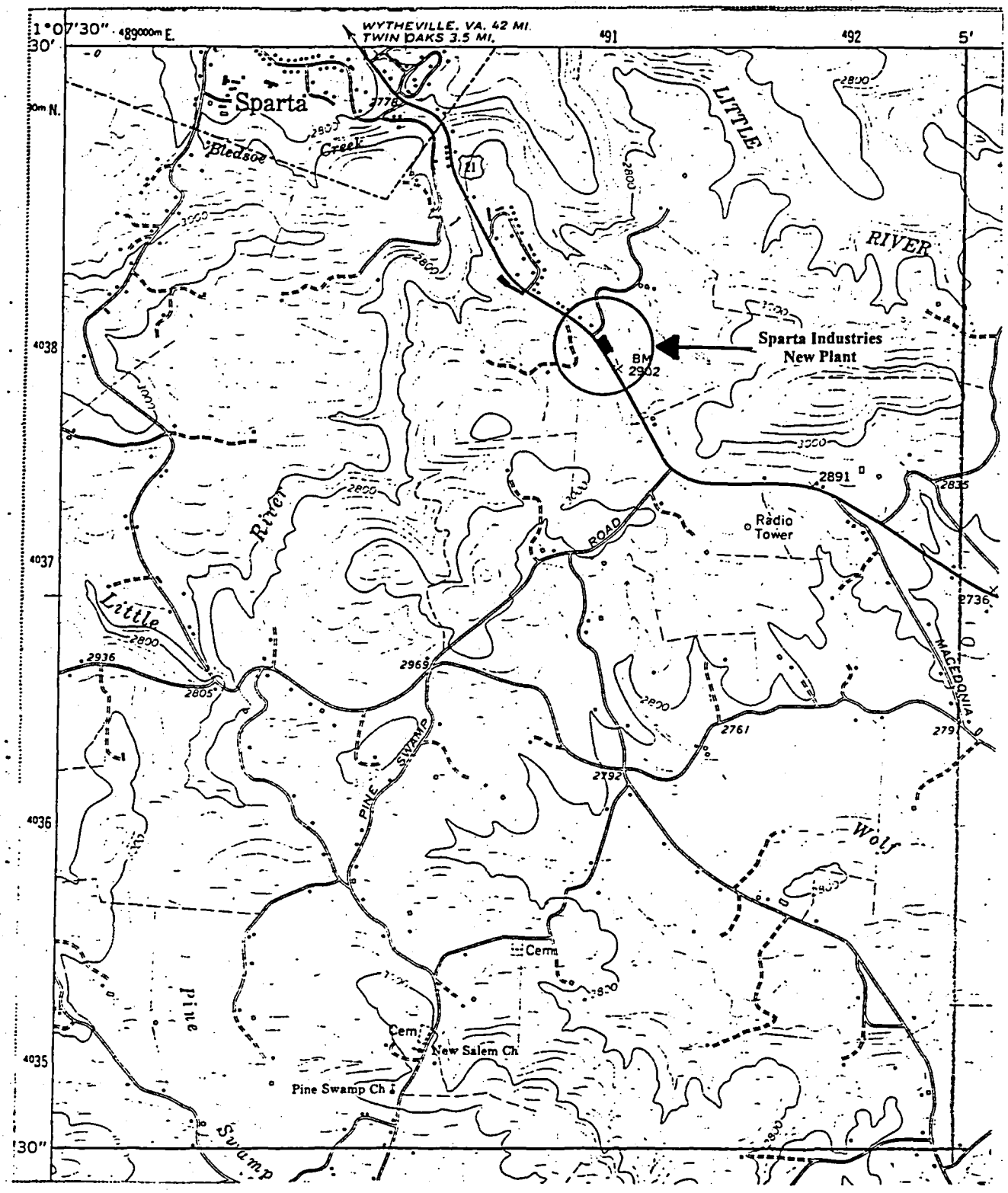
State Reviewer: Michael S. Deaton / Michael S. Deaton / 02/11/2002

Print Name/Signature — Date

REFERENCES

REFERENCE 1

SITE NAME: SPARTA INDUSTRIES-NEW PLANT NUMBER: NCD 003 466 505



TOPOGRAPHIC MAP QUADRANGLE NAME: GLADE VALLEY SCALE: 1:24,000

COORDINATES OF LOWER RIGHT-HAND CORNER OF 2.5-MINUTE GRID:

LATITUDE: 36 ° 27 · 30 · LONGITUDE: 81 ° 05 · 00 ·

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2

LI USING ENGINEER'S SCALE (1/60)

SITE NAME: Sparta Industries - New Plant CERCLIS #: NCD 003 466 505

AKA: n.a. SSID: n.a.

ADDRESS: Sparta Industries - New Plant

CITY: Sparta STATE: NC ZIP CODE: 28039

SITE REFERENCE POINT: Center of the Site

USGS QUAD MAP NAME: Glade Valley TOWNSHIP: - N/S RANGE: - E/W

SCALE: 1 : 24,000 MAP DATE: 1968 SECTION: - 1/4 - 1/4 - 1/4

MAP DATUM [1927] 1983 (CIRCLE ONE) MERIDIAN: -

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy)

LONGITUDE: 81 ° 0 ' 0.00 " LATITUDE: 36 ° 22 ' 30.00 "

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:

LONGITUDE: 81 ° 5 ' 0.00 " LATITUDE: 36 ° 27 ' 30.00 "

CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM LATITUDE GRID LINE TO SITE REF POINT: 331

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

A X 0.3304 = 109.36 "

C) EXPRESS IN MINUTES AND SECONDS (1' = 60") : 1 ' 49.36 "

D) ADD TO STARTING LATITUDE: 36 ° 27 ' 30.00 " + 1 ' 49.36 "

SITE LATITUDE: 36 ° 29 ' 19.36 "

CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM RIGHT LONGITUDE LINE TO SITE REF POINT: 180

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

A X 0.3304 = 59.47 "

C) EXPRESS IN MINUTES AND SECONDS (1' = 60") : 0 ' 59.47 "

D) ADD TO STARTING LATITUDE: 81 ° 5 ' 0.00 " + 0 ' 59.47 "

SITE LONGITUDE: 81 ° 5 ' 59.47 "

INVESTIGATOR: Michael S. Deaton DATE: 2/11/02

REFERENCE 2

NCDENR

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF WASTE MANAGEMENT

JAMES B. HUNT JR.
GOVERNOR

BILL HOLMAN
SECRETARY

WILLIAM L. MEYER
DIRECTOR

November 7, 2000

Ms. Jennifer Wendel
NC Site Management Section
US EPA Region IV Waste Division
61 Forsyth Street, 11th Floor
Atlanta, GA 30303

Subject: Pre-CERCLIS Site Screening
Sparta Industries: New Plant
1731 US Highway 21 South
Sparta, Alleghany County, NC

Dear Ms. Wendel,

Please add Sparta Industries: New Plant ("the Site") to the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). Situated along US Hwy 21 South and within the town limits of Sparta, it's corresponding geographic coordinates are latitude 36°29'19" and longitude 81°06'24" (Reference 1).

Site Description.

The Site, which serves as a manufacturing facility for laminated wood products, resides in an industrial-commercial section of the town. Of specific concern to NCDENR is an isolated dry well on the northwest corner of the property. It is here, according to file documents (Reference 2), dumping of an unspecified amount of residual dye/coatings took place unchecked for almost eight years.

While the town manager (Reference 3) confirmed all businesses in the region as being connected to municipal water, he did mention the presence of multiple residential dwellings within ½ mile radius of the Site. As these homes are outside the incorporated area, they rely on individual water-supply wells for potable water.

Preliminary Findings.

In November, 1994, the consultant hired by Sparta Industries undertook a limited subsurface assessment in the area around the dry well.

1646 MAIL SERVICE CENTER, RALEIGH, NORTH CAROLINA 27699-1646
401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605

Corresponding analytical results (Reference 4) confirmed the presence of multiple metals (Cr; 540µg/L, Cu; 480µg/L, Ni; 380µg/L, Pb; 430µg/L, and Zn 1400µg/L) and volatile organics (acetone; 870µg/L, 2-butanone; 30µg/L, 4-methyl-2-pentanone; 20µg/L, and toluene; 1µg/L) in the groundwater.

Conclusion.

Based on analytical data establishing the presence of multiple contaminants in the surrounding groundwater combined with the proximity of residential wells, the NCDENR Superfund Section recommends that the Site be added to CERCLIS as Sparta Industries: New Plant to initiate a Combined Preliminary Assessment/Site Inspection (PA/SI).

Should you have any questions or comments regarding the enclosed, please feel free to contact me at (919) 733-2801, EXT. 297 or by e-mail at joe.g.grant@ncmail.net.

Sincerely,

Joe Grant, Environmental Engineer
Site Evaluation and Removal Branch
Superfund Section

Dan LaMontagne, Head
Site Evaluation and Removal Branch
Superfund Section

Attachments: Lat/Long Calculation Sheet (Reference 1)
Preliminary Site Description (Reference 2)
Memo to File (Reference 3)
Analytical Results (Reference 4)

cc: Scott Ross
File

cc: (letter only)
Charlotte Jesneck

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2

LI USING ENGINEER'S SCALE (1/60)

SITE NAME: Sparta New Plant CERCLIS #: [redacted]

AKA: n/a SSID: n/a

ADDRESS: US Highway 21 South

CITY: Sparta STATE: NC ZIP CODE: [redacted]

SITE REFERENCE POINT: End of Pier

USGS QUAD MAP NAME: Glade Valley TOWNSHIP: [redacted] N/S RANGE: [redacted] E/W

SCALE: 1 : 24,000 MAP DATE: 1983 SECTION: [redacted] 1/4 [redacted] 1/4 [redacted] 1/4

MAP DATUM [ ] 1927 [X] 1983 (CHECK ONE BOX WITH AN "X") MERIDIAN: [redacted]

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy)

LONGITUDE: 81 ° 0 ' 0.00 " LATITUDE: 36 ° 22 ' 30.00 "

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:

LONGITUDE: 81 ° 5 ' 0.00 " LATITUDE: 36 ° 27 ' 30.00 "

CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM LATITUDE GRID LINE TO SITE REF POINT: 330.57

SITE LATITUDE: 36 ° 29 ' 19.03 "

CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)

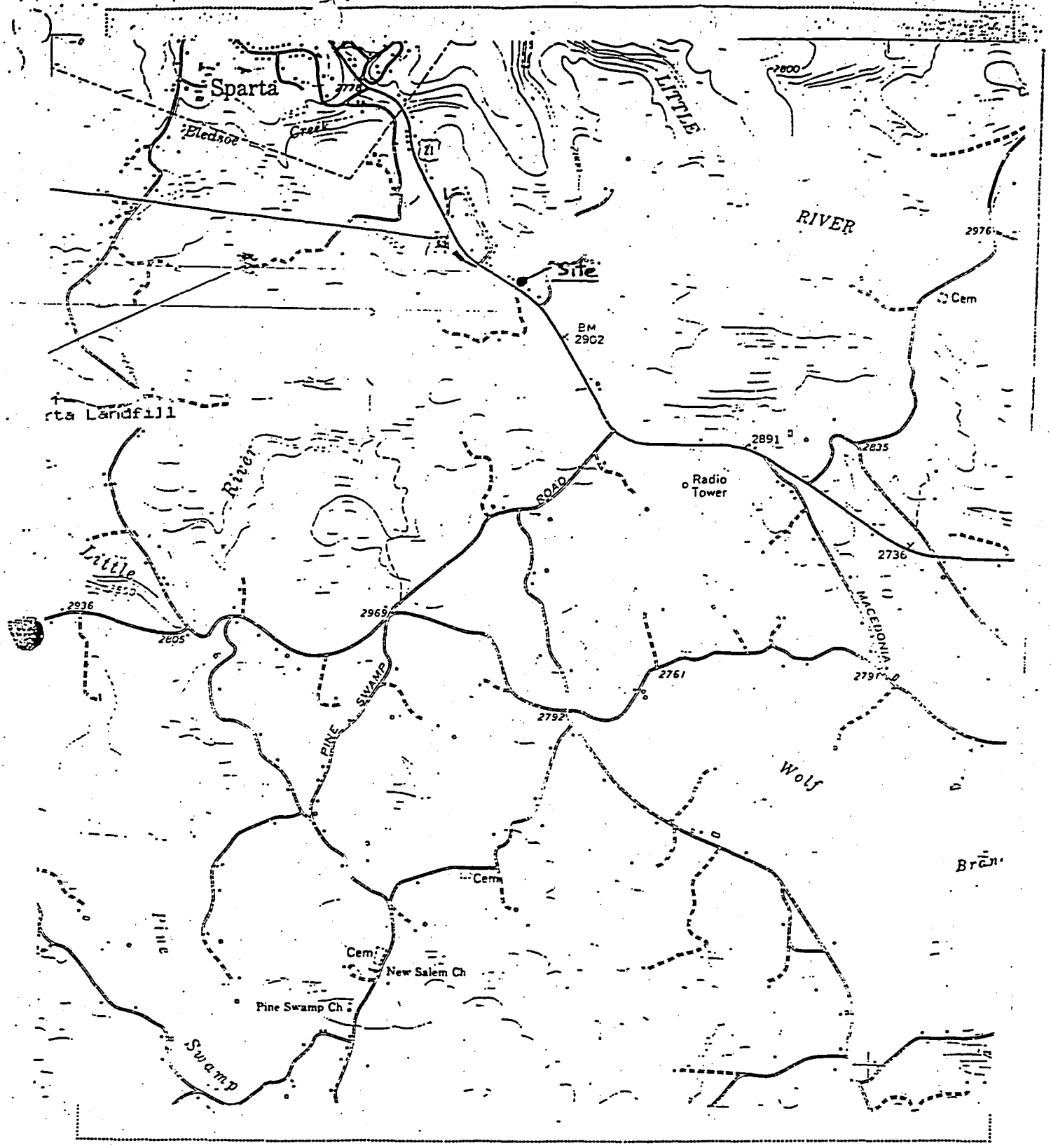
A) NUMBER OF RULER GRADUATIONS FROM RIGHT LONGITUDE LINE TO SITE REF POINT: 255

SITE LONGITUDE: 81 ° 6 ' 24.25 "

INVESTIGATOR: Joe Grant DATE: 11/21/00

Reference: 1

SITE NAME: Sparta New Plant NUMBER:



TOPOGRAPHIC MAP QUADRANGLE NAME: Glade Valley SCALE: 1:24,000

COORDINATES OF LOWER RIGHT-HAND CORNER OF 2.5-MINUTE GRID:

LATITUDE: 36 ° 29 ' 19 " LONGITUDE: 81 ° 06 ' 24 "

SPARTA INDUSTRIES, INC. (NEW PLANT)

ATTACHMENT G - KNOWN OR SUSPECTED RELEASES

1. Sparta Industries ("Sparta") commenced operation at its new facility in approximately July 1978. In connection with the construction of the facility, Sparta installed a dry well in the back of the facility. The specific dimensions of the dry well are not known. The top of the dry well was about two to three feet below ground surface. The dry well contained a perforated 55 gallon drum that was surrounded by gravel. A pipe leading from a small area of the plant where pipe stains were mixed was connected to this drum.

Small five gallon containers used for the mixing of stains were washed in a sink in the stain mixing area. The sink was connected to the dry well via the pipe noted above. The containers contained residual amounts of stain, which generally is and was a mixture of dry powder, methanol, and small amounts of ethylene glycol. Small quantities of methanol (approximately a quart) were used to wash the containers. Sparta would wash out, at most, one or two containers a day.

The use of the dry well as described above occurred from commencement of operations, in 1978, until some time between 1984 and 1986. At some point between 1984 and 1986, Sparta ceased operation of the dry well, moved the stain mixing area to a new location in the plant, and began disposing of this wash down at a facility permitted to accept hazardous waste. The barrel and certain gravels from the dry well were disposed of offsite, and the dry well was filled with clean gravel.

According to the results of sampling conducted by McLaren/Hart Environmental Engineers (report attached), no volatile organic compunds ("VOC"), with the exception of acetone, were detected in soil samples collected from two borings drilled through the former dry well (the samples were collected from two feet below the bottom of the dry well and approximately two feet above the soil/groundwater interface). The acetone detected in the laboratory samples is believed to be from laboratory procedures and not from the soils at the site. In addition, although low levels of certain VOCs were detected

in the groundwater samples taken from the site, the only VOC that was detected in a concentration above a state or federal standard was acetone, at 870 ppb (the Department of Environment, Health, and Natural Resources ("DEHNR") has established a groundwater standard of 700 ppb for acetone). McLaren/Hart believes the acetone detected in the groundwater sample is a result of laboratory procedures and is not representative of the groundwater at the site.

2. It is possible that Sparta may have also disposed of solid lacquer residue on the ground in the area of the dry well. The residue is comprised of the solids skimmed from the overspraying of lacquer on pipes and certain miscellaneous wood products. It is also possible that Sparta burned these wastes in a drum on an occasional basis. The information as to whether such activities took place is contradictory, however, and Sparta has not been able to verify whether either of these activities took place. If Sparta was engaged in either of these activities, such activities would have ceased at some point in the early to mid-1980's. Sparta has no information as to the quantity of wastes that would have been disposed of in this manner, if such disposal took place.

MEMORANDUM

Date: October 31, 2000

From: Joe Grant, SERB

To: FILE

Subject: Phone Conversation

Phone conversation today with Tom Douglas, Sparta Town Manager. He confirmed the area surrounding Sparta Industries to be primarily industrial-commercial with outlying residential dwellings (< ½ mile) on well water.

Reference: 3

PRIORITY POLLUTANT METALS

Preparation Method: EPA 3010 {a}

Project Name: *UST-Sparta*

Project Number: *130803091001*

Sample Description:

Lab Project-ID Number: *10721-12*

Sample Number: *MW-1*

Date Sampled: *11/29/94*

Date Received: *11/30/94*

Date Digested: *12/06/94*

Batch Number: *941206-4302*

Analyte (Symbol)/EPA Method	Date Analyzed	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)
Antimony (Sb)/6010	12/06/94	BRL	50
Arsenic (As)/7060	12/08/94	BRL	10
Beryllium (Be)/6010	12/06/94	60	5
Cadmium (Cd)/6010	12/06/94	BRL	10
Chromium (Cr)/6010	12/06/94	540	10
Copper (Cu)/6010	12/06/94	480	20
Lead (Pb)/7421	12/06/94	{b} 430	30
Mercury (Hg)/7470	12/03/94	BRL	0.2
Nickel (Ni)/6010	12/06/94	370	20
Selenium (Se)/7740	12/09/94	BRL	5
Silver (Ag)/6010	12/06/94	BRL	10
Thallium (Tl)/7841	12/09/94	BRL	10
Zinc (Zn)/6010	12/06/94	1400	20

Comments

The cover letter and enclosures are integral parts of this report.

{a} Applies to all metals except Arsenic, Lead, Selenium, Thallium, and Mercury. EPA Method 3010 is used for Arsenic, Selenium, Lead, and Thallium digestion. EPA Method 7470 is used for Mercury digestion.

{b} The sample was diluted 10 fold to bring target analyte within linear working range.
Date Digested and Batch # apply to all metals except Arsenic, Selenium, and Thallium, which were digested on 12/06/94, Batch # 941206-4303; and Mercury, which was digested on 12/03/94, Batch # 941203-1104.

Approved by: _____ Date: 12/20/94

VOLATILE ORGANICS

Analytical Method: EPA 8240 - Modified {a}

Project Name: UST-Sparta

Sample Description:

Sample Number: MW-1

Received: 11/30/94

Project Number: 130803091001

Lab Project-ID Number: 10721-12

Date Sampled: 11/29/94

Date Analyzed: 12/05/94

Analyte	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)
Bromomethane	BRL	10
Vinyl Chloride	BRL	10
Chloromethane	BRL	10
Chloroethane	BRL	10
Trichlorofluoromethane	BRL	10
Acetone	{d} 870	250
1,1-Dichloroethene	BRL	5
Methylene Chloride	~~{e} 2~~ BLL	5
Carbon Disulfide	BRL	5
trans-1,2-Dichloroethene	BRL	5
1,1-Dichloroethane	BRL	5
cis-1,2-Dichloroethene {b}	BRL	5
Chloroform	BRL	5
1,2-Dichloroethane	BRL	5
2-Butanone	30	25
1,1,1-Trichloroethane	BRL	5
Carbon Tetrachloride	BRL	5
Benzene	BRL	5
Trichloroethene	BRL	5
1,2-Dichloropropane	BRL	5
Bromodichloromethane	BRL	5
2-Chloroethylvinylether	BRL	10
cis-1,3-Dichloropropene	BRL	5
trans-1,3-Dichloropropene	BRL	5
1,1,2-Trichloroethane	BRL	5
Dibromochloromethane	BRL	5
Bromoform	BRL	5
4-Methyl-2-Pentanone	{c} 20	25
Toluene	{c} 1	5
2-Hexanone	BRL	25
Tetrachloroethene	BRL	5

Analytical Method: EPA 8240 - Modified {a}

Lab Project-
ID Number: *10721-12*

Analyte	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)
Chlorobenzene	BRL	5
Ethylbenzene	BRL	5
m & p Xylene	BRL	5
o-Xylene	BRL	5
Styrene	BRL	5
1,1,2,2-Tetrachloroethane	BRL	5
1,3-Dichlorobenzene {b}	BRL	5
1,4-Dichlorobenzene {b}	BRL	5
1,2-Dichlorobenzene {b}	BRL	5

Surrogates	Percent Recovery	Acceptance Limits
1,2-Dichloroethane-d4	91	76 - 114
Toluene-d8	102	88 - 110
Bromofluorobenzene	98	86 - 115

Comments

The cover letter and enclosures are integral parts of this report.

{a} Includes all analytes as listed in Table 2 of Method 8240, SW-846, 3rd edition.

{b} Additional analytes not listed in Table 2 of Method 8240, SW-846, 3rd edition.

{c} The data is reported as an estimated concentration below the established reporting limit.

{d} The data is reported from a different analytical run on 12/08/94 at a 10 fold dilution to obtain a result within linear range.

Methylene Chloride, a common laboratory contaminant, was detected in the sample. The associated method blank indicated no such contamination.

Approved by: _____ Date: 12/20/94

REFERENCE 3

LAW
LAWGIBB Group Member

REPORT OF PHASE II INVESTIGATION

SPARTA INDUSTRIES, INC. FACILITY — New Plant
1731 U.S. HIGHWAY 21 SOUTH
SPARTA NORTH CAROLINA
NONCD0000045

Prepared for:

United States Tobacco Company
100 West Putnam Avenue
Greenwich, Connecticut 06830

Prepared by:

Law Engineering and Environmental Services, Inc.
3301 Atlantic Avenue
Raleigh, North Carolina 27604

October 18, 2000

Law Project 12000-0-2105

1.0 Background Information

The subject site is the Sparta Industries facility located at 1731 Highway 21 in Sparta, North Carolina (Figure 1). Dr. Grabow brand tobacco smoking pipes are manufactured at the facility and have been since approximately 1978. The southern section of the facility was constructed in 1975 for Sparta Craft, Inc. for the manufacture of decorative wood products. The remainder of the facility was constructed in 1978 when Sparta Industries began manufacturing tobacco pipes. In May/June 1999, LAW performed a Phase I Environmental Site Assessment (Phase I ESA) to identify areas where actual or potential subsurface contamination from present and/or historical site and surrounding property uses may be present. The following three areas of concerns were identified in the Phase I ESA:

- Soil exhibiting a detectable concentration of acetone was identified in 1996 at the location of a deactivated underground wastewater retention tank (the retention tank) near the southwest corner of the building (Environmental Sampling and Analysis Report, Sparta Industries, Inc. Facility, December 1996, Radian International, LLC). No additional sampling was conducted in this area, and Radian concluded that the acetone was a lab contaminant. Based on the 1996 sampling results, LAW recommended that further assessment be performed to confirm the presence or absence of acetone in soils, and to determine potential impact to ground water.

- Staining was observed on the walls and floor inside a reported former chemical pump house located adjacent to the southeast corner of the building. This small building housed pressurized containers of furniture coatings that fed spray guns inside the finishing area of the plant. Based on the potential for subsurface contamination, LAW recommended that sampling and analytical testing of underlying soil and ground water be performed.

- In 1994, soil and ground water containing volatile organic compounds (VOCs) and metals were identified at the location of a deactivated wastewater receiving dry well in the eastern portion of the site (Final Report: Results of Subsurface Evaluation Program, Sparta Industries, Inc. Facility McLaren/Hart Environmental Engineering Corporation, April 1995). Other than acetone at 0.06 mg/Kg and 0.14 mg/Kg, no volatile organic compounds were detected in soils above method detection limits. Although low levels of several volatile organic compounds were detected in the groundwater samples collected in this area, only acetone was detected at a concentration slightly above the State groundwater standard. McLaren/Hart concluded that the likely source of the acetone in the samples was an artifact due to laboratory contamination. Low levels of metals were detected in the soils

and groundwater, but McLaren/Hart concluded that; (i) given the operations on the site, the metals in the soils appeared to be from background site conditions, and (ii) the groundwater samples were turbid and therefore, the presence of metals in the groundwater was reflective of the soil chemistry and not dissolved contaminants in groundwater. The turbidity may have been due to the fact that the McLaren/Hart groundwater samples were collected on the same day as the well installation. Nonetheless, the detection of certain metals in groundwater (chromium, lead and nickel) as well as the acetone detections noted above resulted in the site's inclusion in the North Carolina Inactive Hazardous Sites Inventory, Sites Priority List. Based on information contained in the McLaren/Hart report and the subsequent Radian report, LAW recommended that further assessment be performed to confirm the presence or absence of soil and ground-water contamination downgradient of the dry well.

The approximate locations of the three areas of concern are shown on Figure 2. Because of the potential concerns described above, LAW developed a program of further environmental assessment, the purpose of which was to determine the presence or absence and approximate magnitude of subsurface contamination. The scope of services that was conducted to address the identified items of concern is described in the following section.

2.0 Scope of Services

Evaluation of subsurface conditions and collection of soil and ground-water samples was accomplished by drilling soil borings and installing monitoring wells in the immediate vicinity of each of the three areas of concern. Descriptions of soil sampling, monitoring well installation, and groundwater sampling procedures are provided in Section 3.0.

The chart on the following page provides a summary of the number and types of samples collected from each of the three areas, and the laboratory analyses performed on those samples:

Area of Concern	No. Borings	No. Soil Samples	No. Ground-Water Samples	Soil Analyses	Ground-Water Analyses
Retention Tank	3	6	1	VOCs	VOCs
Former Chemical Pump House	2	3	1	VOCs Semi-VOCs Metals	VOCs Semi-VOCs Total Metals Dissolved Metals
Dry Well	6	12	1	VOCs Metals	VOCs Total Metals Dissolved Metals

Notes: VOCs = volatile organic compounds according to EPA Method 8260
Metals = beryllium, chromium, copper, lead, nickel, and zinc by EPA Method 6010
Semi-VOCs = semi-volatile organic compounds according to EPA Method 8270

A sample of soil from a background location (BG-1) was also collected and analyzed for the six metals cited above. The samples were submitted to Severn Trent Laboratories (STL), a North Carolina Certified analytical laboratory for analysis. LAW's proposed scope of work called for the advancement of a fourth boring in the vicinity of the retention tank. However, the presence of shallow bedrock on the southwestern side of the tank prevented the advancement of the fourth boring. Additionally, collection of a second sample from the boring advanced inside the former chemical pump house was prevented by the presence of either shallow rock, or the footing of the adjacent building. Therefore, only a shallow soil sample from this location was submitted for analysis.

LAW installed two additional monitoring wells in the northern and northwestern portions of the site to obtain ground-water elevation data to assist in evaluating the ground-water flow direction. A Registered Land Surveyor determined the locations and elevations of the monitoring wells. Preparation of this report was the final aspect of our scope of work.

3.0 Field Activities

Field activities were conducted by LAW professional and drilling personnel between November 8 and November 12, 1999. The locations of underground utilities at the drilling locations were identified by North Carolina One Call (a public utility locating service), and Sparta Industries personnel. The soil borings and monitoring well borings were drilled using hollow-stem auger drilling techniques, and all down-hole drilling and sampling equipment was decontaminated prior to each use to minimize the potential for cross contamination. Decontamination rinsate was containerized and stored on site.

Soil samples were obtained at approximately three-foot intervals in each mechanically drilled boring by driving a decontaminated steel split-tube sampler into relatively undisturbed subgrade materials below the base of the hollow-stem augers. A representative portion of each soil sample obtained from the split-tube sampler was screened in the field for presence of organic vapors using a portable toxic vapor analyzer (TVA). The remainder of each soil sample was placed in an ice-packed cooler for preservation as a potential candidate for laboratory testing.

Soil samples obtained from the borings were selected for laboratory analysis based on TVA screening results, or based on the depth of the item of concern being investigated and the apparent depth to the water table. Selected soil samples were placed in laboratory-supplied containers and preserved in an ice-packed cooler. The soil samples were shipped by overnight courier to STL's laboratory in Mobile, Alabama where they were analyzed for the parameters shown in the chart on page 2. Chain-of-custody procedures were maintained during handling and shipping of samples.

Ground-water samples were collected from wells MW-1, MW-2, and MW-3 using a Teflon bailer on November 11, 1999, after the wells were purged of at least three well-volumes of ground water. The samples were placed into laboratory supplied containers that were packed in an ice-chilled cooler and shipped by overnight courier to STL where they were tested for the parameters shown in the chart on page 2. Chain-of-custody procedures were maintained during handling and shipping of samples.

The approximate locations of the soil borings and monitoring wells installed near the retention tank, former chemical pump house, and dry well areas are shown on Figures 3, 4, and 5, respectively. Descriptions of the soil samples obtained from each boring and corresponding TVA readings are provided in Appendix A. The specific samples selected for laboratory analysis are also identified in Appendix A. A summary of monitoring well construction information is

provided in Table 1 and the required North Carolina Well Construction Records are included in Appendix B.

4.0 Hydrogeologic Conditions

Highly metamorphosed rocks of the Blue Ridge Geologic Belt underlie the subject site. According to the Geologic Map of North Carolina, these rocks consist of muscovite-biotite gneiss and amphibolite of the Ashe Metamorphic Suite. Overlying residual soils that were created through the in-place weathering of the parent rock are generally described as micaceous fine to medium sandy silt (see Appendix A).

The subject site is bordered to the east and west by two unnamed tributaries that flow to the northwest towards Little River. The USGS topographic map (Figure 1) shows that the site is located on the southwestern side of a northwest-southeast trending ridge. Observations made during the field activities, and conversations with individuals who were familiar with the property prior to construction of the Sparta Industries facility indicate that the ground surface at the site was leveled prior to construction by using soil and rock from the higher southeastern portion as fill in the lower northwestern portion of the site. The previous topography shown in Figure 1 suggests that ground water beneath the site would flow generally to the northwest and towards the unnamed tributaries that border the site.

On November 12, 1999, LAW field personnel measured the depth to the water table in the newly installed monitoring wells. Ground water was not encountered in well MW-4, which implies that the water table surface occurs below the top of bedrock in this general area. Mr. W. Kevin Dowell, a local Registered Land Surveyor, subsequently determined the locations and relative elevations of the monitoring wells with respect to a temporary benchmark established near well MW-1. The depth to ground water measurements were subtracted from the top of well casing elevations to derive the water-table elevations shown on Table 1. These data were plotted on the site map and contours of equal water-table elevation were drawn (Figure 6). The contours in Figure 6 infer a generally northwesterly flow of ground water beneath the site, and components of flow to the west and east-northeast in the vicinity of the tributaries that border the site. The water-table elevations and contours suggest that wells MW-1, MW-2, and MW-3 are situated at locations that are hydraulically downgradient of the areas of concern for which they were installed.

5.0 Results of Laboratory Analysis

Laboratory analysis results for the selected soil samples are summarized in Table 2, and the analytical results for the ground-water samples are summarized in Table 3. The laboratory analytical reports and Chain of Custody records are included in Appendix C. The analytical results are discussed by area of concern in the sections that follow.

5.1 Retention Tank

In 1996, Radian International, LLC (Radian) collected a soil sample from a location adjacent to the retention tank. Laboratory analysis of the soil sample did not indicate the presence of gasoline-range total petroleum hydrocarbons (TPH) according to EPA Methods 5030/8015, diesel-range TPH according to EPA Method 3550/8015, or semi-volatile organic compounds (semi-VOCs) according to EPA Method 8270. A low concentration of acetone (343 ug/kg) was detected in the sample through analysis by EPA Method 8260. Radian attributed the reported presence of acetone to possible sample contamination within the laboratory, since acetone is a common solvent used in laboratory settings.

As part of the scope of work for this project, LAW collected six soil samples from three soil borings drilled in the immediate vicinity of the retention tank, and one ground-water sample from well MW-1 installed adjacent to the west side of the tank (Figure 3). The samples were tested for volatile organic compounds (VOCs) according to EPA Method 8260.. Laboratory analysis results for these samples did not indicate the presence of VOCs within the soil samples (see Table 2 and Appendix C). Similarly, VOCs were not detected in the ground-water sample collected from well MW-1 (see Table 3 and Appendix C). These results imply that the subsurface environment has not been adversely affected by the presence of the retention tank.

5.2 Former Chemical Pump House

In our 1999 Phase I ESA, LAW identified the former chemical pump house as a potential environmental concern because of staining observed on the walls and floor of the building. Sampling and analysis of underlying soils or ground water had not previously been conducted at the pump house. During this Phase II investigation, LAW collected three soil samples and one ground-water sample in the immediate vicinity of the former chemical pump house (see Figure 4) and tested the samples for VOCs by EPA Method 8260, semi-VOCs by EPA Method 8270, and the metals, beryllium, chromium, copper, lead, nickel and zinc, by EPA Method 6010.

VOCs and semi-VOCs were not detected in the two soil samples collected from boring CPH-1/MW-2 (see Figure 4). The concentrations of metals detected in the samples from CPH-1/MW-

2 were comparable to those detected in the background soil sample BG-1 (see Table 2) and were below the Remediation Goals established by the Inactive Hazardous Sites Branch (IHSB).

Soil sample CPH-2 was obtained immediately beneath the concrete floor of the former chemical pump house in an area where substantial staining was present. VOCs were not detected in soil sample CPH-2, and the concentrations of metals detected were comparable to those detected in the background soil sample BG-1 (see Table 2). A low concentration of the semi-VOC bis (2-ethylhexl) phthalate (also known as DEHP) was detected in sample CPH-2. The DEHP concentration of 500 ug/Kg detected is well below the IHSB Remediation Goal of 46,000 ug/Kg for DEHP. Additionally, our experience with this particular compound indicates that DEHP is a common laboratory contaminant.

Analytical results for the ground-water sample obtained from CPH-1/MW-2 did not indicate the presence of VOCs or semi-VOCs. The ground-water sample exhibited a total zinc concentration of 0.25 mg/L, and a dissolved zinc concentration of 0.09 mg/L, both of which are well below the North Carolina ground-water standard of 2.1 mg/L for zinc. The presence of zinc in overlying soil samples and in the background sample (see Table 2) suggests that the concentration of zinc detected in the ground-water sample is reflective of natural soil chemistry conditions. These results imply that the subsurface environment has not been affected by the presence of the former chemical pump house.

5.3 Former Dry Well

A previous assessment of subsurface conditions in the vicinity of the former dry well by McLaren/Hart Environmental Engineering Corporation (McLaren/Hart) in 1994 identified the presence of the metals, beryllium, chromium, copper, lead, nickel and zinc, and the VOC acetone, within a soil sample obtained from the dry well. The same metals were detected in a ground-water sample obtained from a monitoring well installed vertically through the dry well. The concentrations of three of these metals, (chromium, lead and nickel) exceeded their respective North Carolina ground-water standards. Additionally, five VOCs were detected in the ground-water sample, however, only the concentration of acetone exceeded its North Carolina ground-water standard. McLaren/Hart concluded that the operation of the dry well had not impacted the environment because (i) the acetone detected was most likely a laboratory contaminant, and (ii) the metals detected at low concentrations were representative of background soil conditions.

In 1996 Radian collected a ground-water sample from the monitoring well that was installed by McLaren Hart within the dry well. Analytical results for this sample revealed much lower concentrations of metals than those detected previously. Additionally, Radian tested the sample

for semi-VOCs, and did not detect the presence of these compounds. Low concentrations of four petroleum-related VOCs were detected in the sample at concentrations below their respective North Carolina ground-water standards. Only one of the five VOCs (toluene) detected previously by McLaren/Hart was detected in the sample collected by Radian, but at a concentration below its North Carolina ground-water standard. Acetone was not detected in the sample collected by Radian.

In November 1999, LAW collected 12 soil samples from six borings located within and proximal to the former dry well (see Figure 5). We installed monitoring well MW-3 within boring DW-1 which is located approximately 25 feet downslope (northeast) of the dry well and near the property line. Topography to the northeast of well MW-3 and beyond the property line slopes significantly downward towards a perennial stream located approximately 100 feet northeast of the property line. The soil and ground-water samples collected were analyzed for VOCs and the previously identified metals.

Analytical results for the soil and ground-water samples are summarized in Tables 2 and 3, respectively. VOCs were not detected in either the soil or ground-water samples. Concentrations of the metals, beryllium, chromium, copper, nickel and zinc in soil samples from locations within or below the dry well appear to be generally higher than those detected in the background soil sample BG-1. However, with the exception of the soil sample from 8 to 10 feet in boring DW-6, concentrations of metals detected were all below the respective IHSB Remediation Goals.

Nickel was detected at a concentration of 1,200 mg/Kg within the 8 to 10 foot sample from boring DW-6. Chromium was also detected at an anomalous 300 mg/Kg concentration in this sample. It is noted however, that the laboratory analysis method used was not designed to distinguish between trivalent chromium (Cr 3+), and hexavalent chromium (Cr 6+) (see Table 2). The IHSB Remediation Goal for Cr 3+ is 26,000 mg/Kg while the Remediation Goal for Cr 6+ is 46 mg/Kg. Because other soil samples from locations within the dry well did not exhibit elevated concentrations of chromium and nickel, we are not certain as to whether the chromium and nickel concentrations in the 8 to 10 foot sample from DW-6 represent existing subsurface conditions. It is possible that inadvertent sample contamination could have been caused by the stainless steel sampling tools used to collect the sample.

Analytical results for the ground-water sample obtained from well MW-3 did not indicate the presence of VOCs (see Table 3). Two of the six target metals were identified at concentrations above laboratory detection limits within the sample. The metal zinc was identified at a total concentration of 0.15 mg/L and a dissolved concentration of 0.099 mg/L, both of which are well

below the North Carolina ground-water standard of 2.1 mg/L for zinc. Additionally, the metal copper was identified at a total concentration of 0.024 mg/L, which is well below the North Carolina ground-water standard of 1.0 mg/L for copper. Dissolved copper was not detected in the ground-water sample from MW-3. The analytical results for the ground-water sample obtained from well MW-3 do not suggest that the deactivated dry well is acting as a source of ground-water contamination.

6.0 Conclusions and Recommendations

Water-table elevation data indicate a generally northwesterly flow of ground water beneath the site, and components of flow to the west and east-northeast in the vicinity of the tributaries that border the site. The water-table elevations and contours suggest that wells MW-1, MW-2, and MW-3 are situated at locations that are hydraulically downgradient of the areas of concern for which they were installed.

LAW did not identify the presence of subsurface contamination at the location of the retention tank. We therefore do not foresee the need for further environmental assessment in this area.

LAW did not identify the presence of subsurface contamination at the location of the former chemical pump house, with the exception of a low concentration of DEHP detected in a soil sample collected directly beneath the building's floor slab. We note however, that the concentration of DEHP detected was well below the IHSB Remediation Goal for DEHP, and that this compound was not detected in underlying ground water. Additionally, DEHP is a common lab contaminant. We therefore do not foresee the need for further environmental assessment in this area.

LAW did not identify the presence of VOCs in soil or ground-water samples obtained in the vicinity of the dry well. In addition, the only metals in the ground-water sample that LAW collected (zinc and copper), were detected at concentrations well below their respective North Carolina Groundwater standards. In the soil samples that LAW collected, concentrations of metals were well below the IHSB remediation goals with the exception of the nickel and chromium detected in one soil sample from boring DW-6. Based on our experience, LAW believes that this isolated result may be due to inadvertent sample contamination from the use of stainless steel sampling tools, rather than being indicative of site conditions.

Based on the results of our sampling activities, LAW did not identify evidence that the dry well is acting as a source of ground-water contamination.

TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION INFORMATION
SPARTA INDUSTRIES SITE, SPARTA, NC
LAW PROJECT NO. 12000-0-2105

Well Identity	General Location	Installation Date	Total Depth (ft bg)	Screened Interval (ft bg)	Depth to Ground Water (ft btoc)	TOC Elevation (relative to TBM)	Ground Water Elevation (relative to TBM)
MW-1	West of retention tank	11/9/99	29.0	19.0-29.0	17.24	99.63	82.39
MW-2	South of chemical pump house	11/9/99	28.5	18.5-28.5	13.00	99.66	86.66
MW-3	Northeast of dry well	11/8/99	30.0	20.0-30.0	21.53	99.21	77.68
MW-4	Northwest of main building	11/10/99	25.0	15.0-25.0	DRY	98.30	< 73.30
MW-5	Southwest of main building	11/11/99	25.0	15.0-25.0	22.92	87.40	64.48

Water levels obtained on 11/12/99
ft bg = feet below ground
ft btoc = feet below top of well casing
TBM = Temporary bench mark, assumed 100.0 feet at ground surface adjacent to well MW-1
Well locations and elevations determined by W. Kevin Dowell, R.L.S.

Prepared by: ES Date: 9/00
Checked by: BJB Date: 9/00

TABLE 2
SUMMARY OF LABORATORY RESULTS FOR SOIL SAMPLES
SPARTA INDUSTRIES SITE, SPARTA, NC
LAW PROJECT NO. 12000-0-2105

Sample Identity	Depth (feet)	VOCs (ug/kg)	SVOCs (ug/kg)	Metals (mg/kg)					
				Beryllium	Chromium	Copper	Lead	Nickel	Zinc
BG-1	1-3	NA	NA	1.9	24	6.7	16	12	95
RT-2	8-10	ND	NT	NT	NT	NT	NT	NT	NT
RT-2	13-15	ND	NT	NT	NT	NT	NT	NT	NT
RT-3	8-10	ND	NT	NT	NT	NT	NT	NT	NT
RT-3	13-15	ND	NT	NT	NT	NT	NT	NT	NT
RT-4	8-10	ND	NT	NT	NT	NT	NT	NT	NT
RT-4	18-20	ND	NT	NT	NT	NT	NT	NT	NT
CPH-1	13-15	ND	ND	0.7	11	4.8	9.1	4.5	33
CPH-1	18-20	ND	ND	ND	6.2	3.2	6.8	3.2	14
CPH-2	1-1.5	ND	DEHP: 500ug/kg	0.76	15	6	13	10	41
DW-2	13-15	ND	NT	2.7	45	12	19	38	140
DW-2	18-20	ND	NT	3.4	34	47	15	33	150
DW-3	13-15	ND	NT	1.7	34	11	13	24	77
DW-3	18-20	ND	NT	3	55	26	15	23	160
DW-4	13-15	ND	NT	2.5	48	24	16	30	120
DW-4	18-20	ND	NT	3.7	54	22	20	34	150
DW-5	13-15	ND	NT	3.7	85	20	14	110	160
DW-5	18-20	ND	NT	3.7	58	21	24	29	130
DW-6	8-10	ND	NT	ND	300	19	0.64	1200	36
DW-6	18-20	ND	NT	3.1	53	10	20	27	120
MW-3	8-10	ND	NT	1.9	28	17	10	36	85
MW-3	18-20	ND	NT	1.3	22	11	11	13	74
IHSB RG		NA	DEHP: 46,000	NA	24,000*	620	400	320	4600

VOCs = Volatile Organic Compounds according to EPA Method 8260
SVOCs = Semi-Volatile Organic Compounds according to EPA Method 8270
Metals analysed by EPA Method 6010
ND = Not Detected
NT = Not Tested for this parameter
NA = Not Applicable
IHSB RG = Inactive Hazardous Sites Branch Remediation Goal for soil
* Value shown is the RG for Chromium 3+, RG for Chromium 6+ is 46 mg/kg
Concentration shown in bold exceeds the IHSB Remediation Goal for soil

Prepared by: [illegible] Date: 9/00
Checked by: [illegible] Date: 9/00

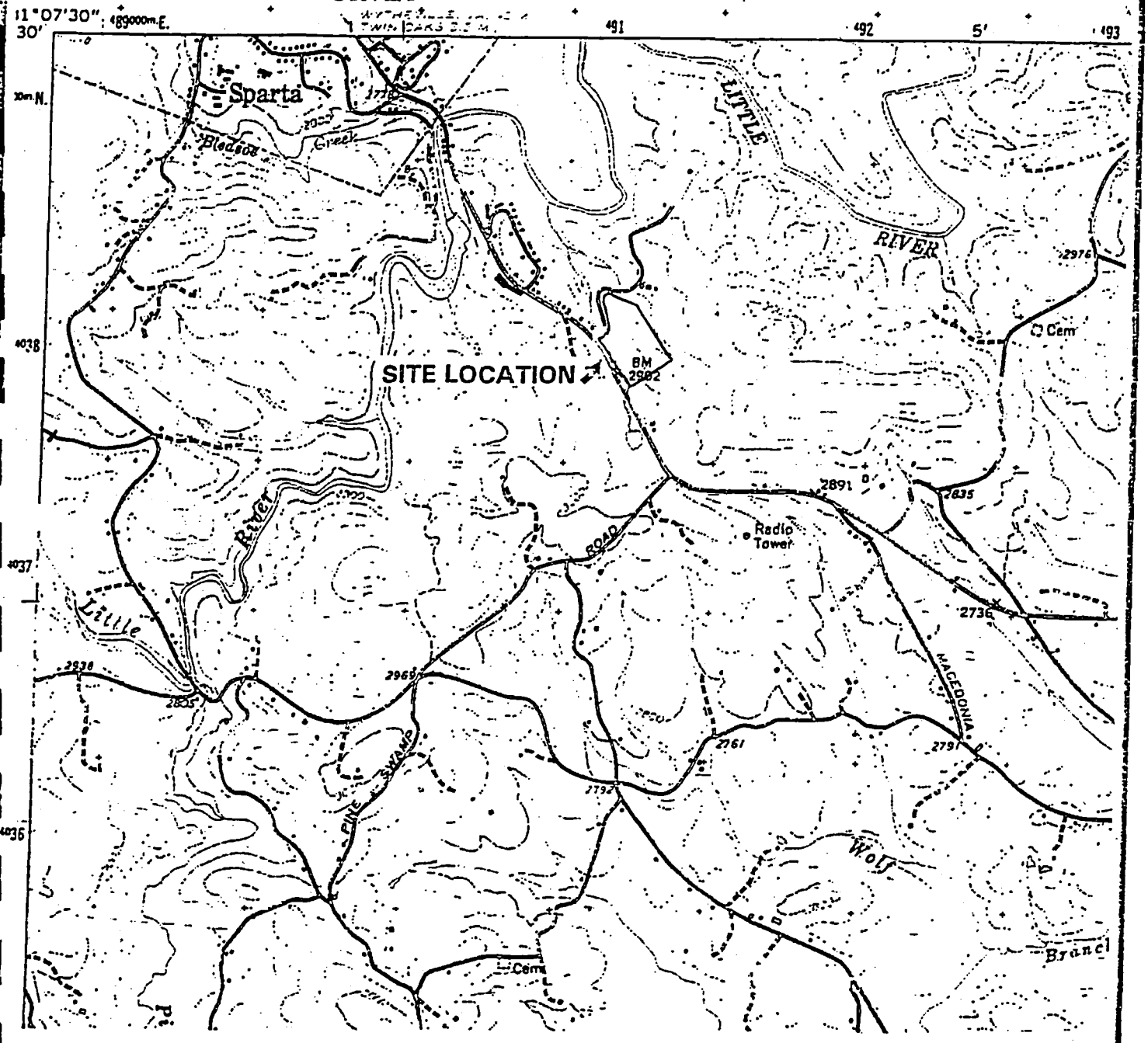
TABLE 3
SUMMARY OF LABORATORY RESULTS FOR GROUND-WATER SAMPLES
SPARTA INDUSTRIES SITE, SPARTA, NC
LAW PROJECT NO. 12000-0-2105

Sample Identity	VOCs (ug/L)	SVOCs (ug/L)	Metals (mg/L)					
			Beryllium	Chromium	Copper	Lead	Nickel	Zinc
MW-1	ND	NT	NT	NT	NT	NT	NT	NT
MW-2	ND	ND	ND	ND	ND	ND	ND	0.25
MW-3	ND	NT	ND	ND	0.024	ND	ND	0.15
NC STD	NA	NA	D.L.	0.5	1	0.15	0.1	2.1

VOCs = Volatile Organic Compounds according to EPA Method 8260
SVOCs = Semi-Volatile Organic Compounds according to EPA Method 8270
Metals analysed by EPA Method 6010
ND = Not Detected
NT = Not Tested for this parameter
NA = Not Applicable
NC STD = North Carolina Ground-Water Standard codified at 15A NCAC 2L .0202
D.L. = The laboratory Detection Limit is the North Carolina Ground-Water Standard for this constituent

Prepared by: ES Date: 9/00
Checked by: JWB Date: 9/00

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



Scale: 1:24,000
Source: USGS Glade Valley 7.5' Topo. Quad, 1968

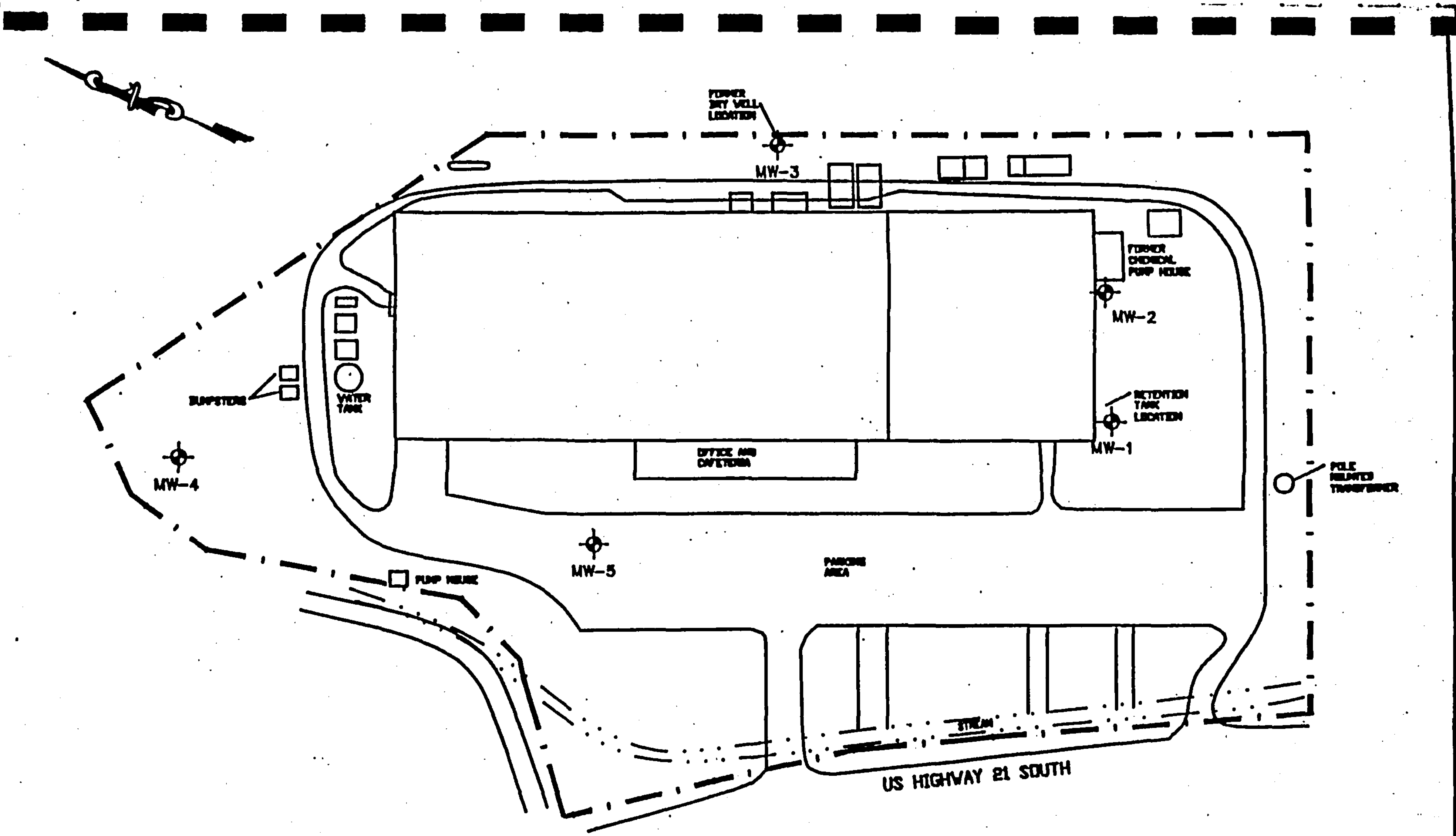
Prepared by / Date: DJK 11/30/99
Checked by / Date: [illegible] 11/30/99

Sparta Industries
Sparta, North Carolina

LAWGIBB GROUP

Topographic Site Map

Project 12000-0-2105 Figure 1



EXPLANATION

⊕ APPROXIMATE LOCATION OF MONITORING WELL

140 70 0 140

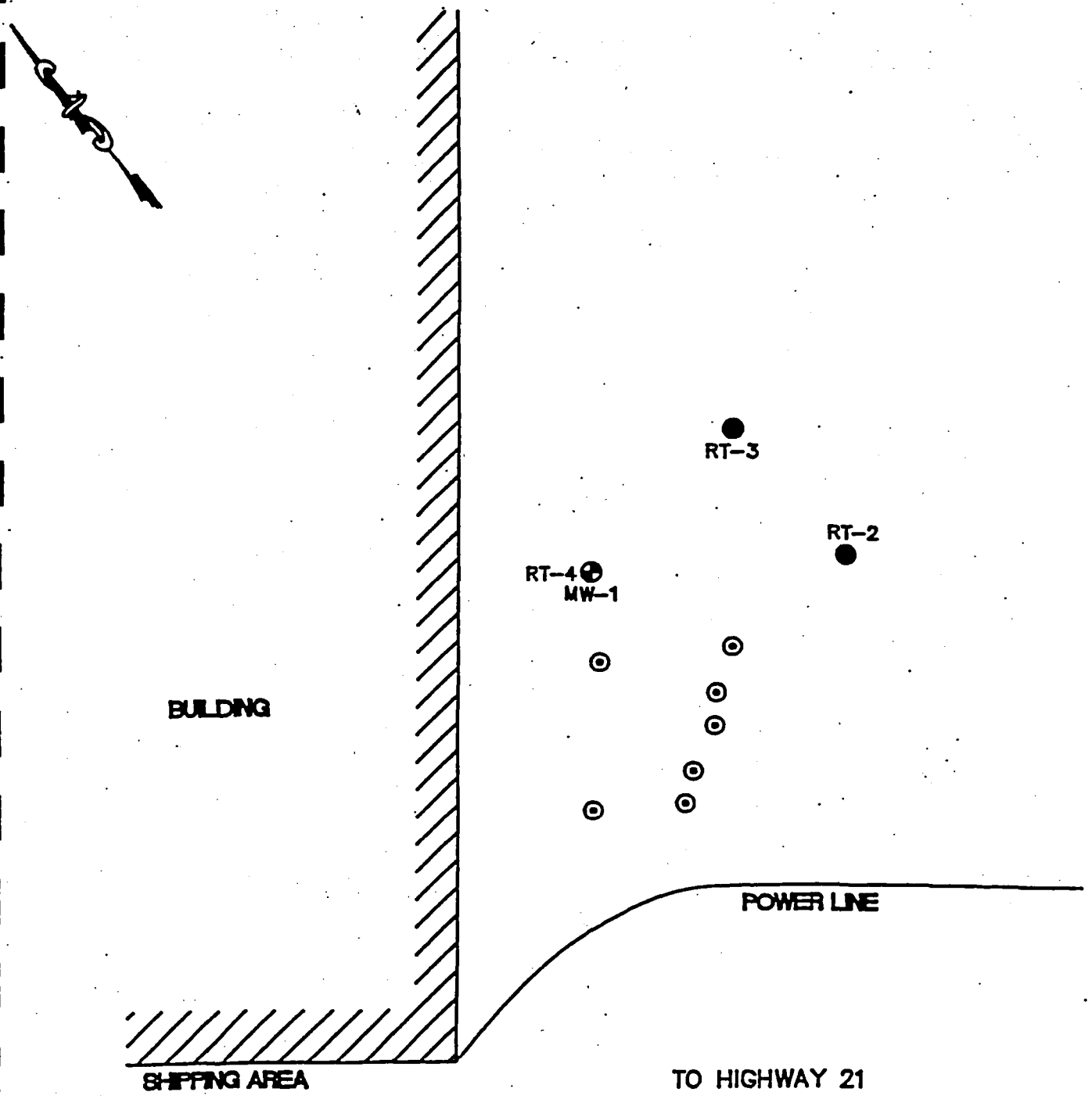
APPROXIMATE SCALE IN FEET

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
CHARLOTTE, NORTH CAROLINA

SITE PLAN
SPARTA INDUSTRIES
SPARTA, NORTH CAROLINA

REF: REDUCED PHOTOCOPIED SITE PLAN PREPARED BY RADIAN INTERNATIONAL, NOT DATED.

PREPARED BY	DATE	CHECKED	DATE	JOB NO.	FIGURE
J.T	12/99	BJB	12/99	12000-0-2105	2

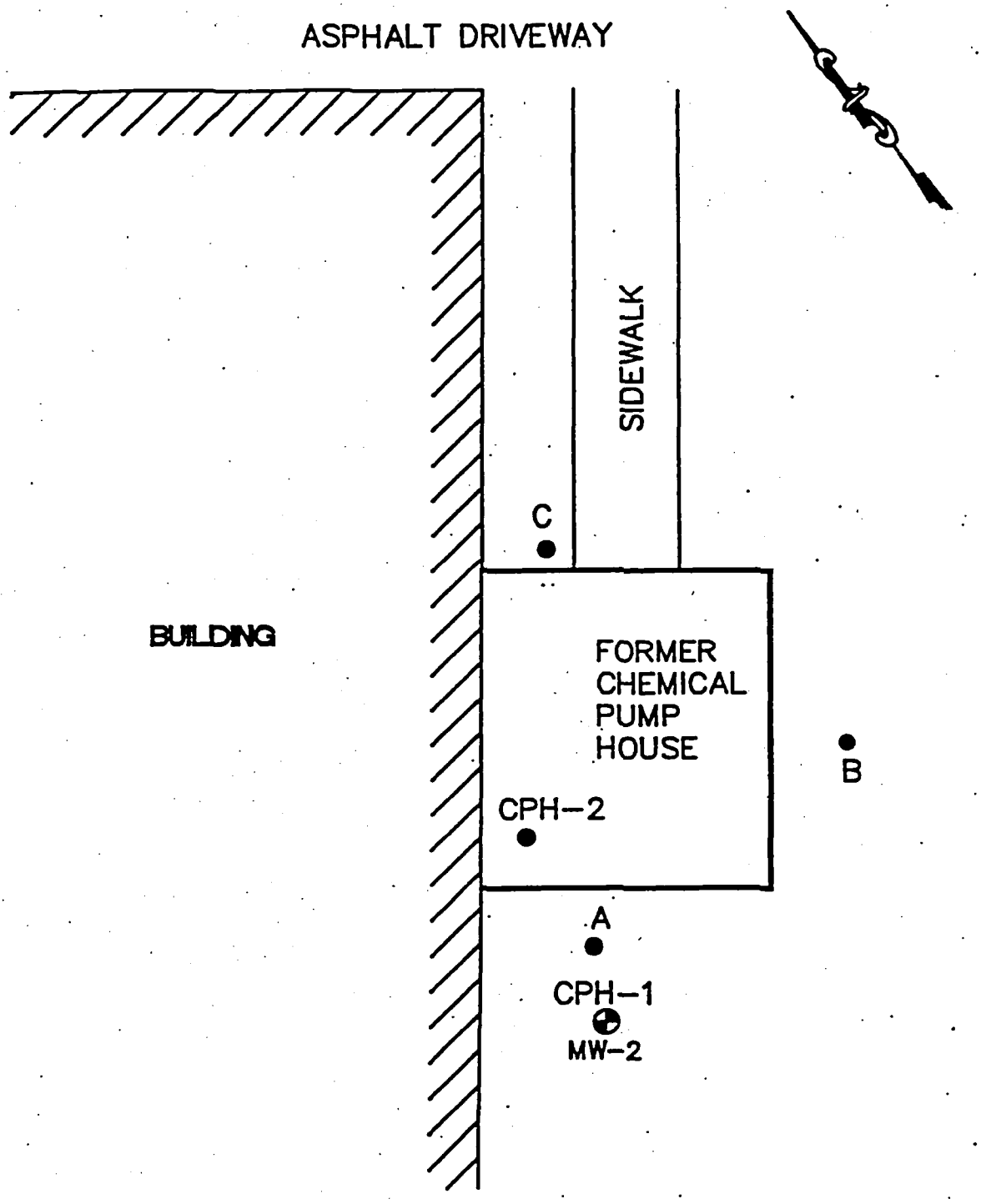


SITE SKETCH PREPARED FROM FIELD NOTS BY LAW ENGINEERING PERSONNEL

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
CHARLOTTE, NORTH CAROLINA

RETENTION TANK AREA
SPARTA INDUSTRIES
SPARTA, NORTH CAROLINA

DRAWN BY	DATE	CHECKED	DATE	JOB NO.	FIGURE
J.T	12/99	B/B.	12/99	12000-0-2105	3



EXPLANATION

- ● HAND AUGER BORINGS
- ◕ TYPE II MONITORING WELL INSTALLED IN BORING

8 4 0 8

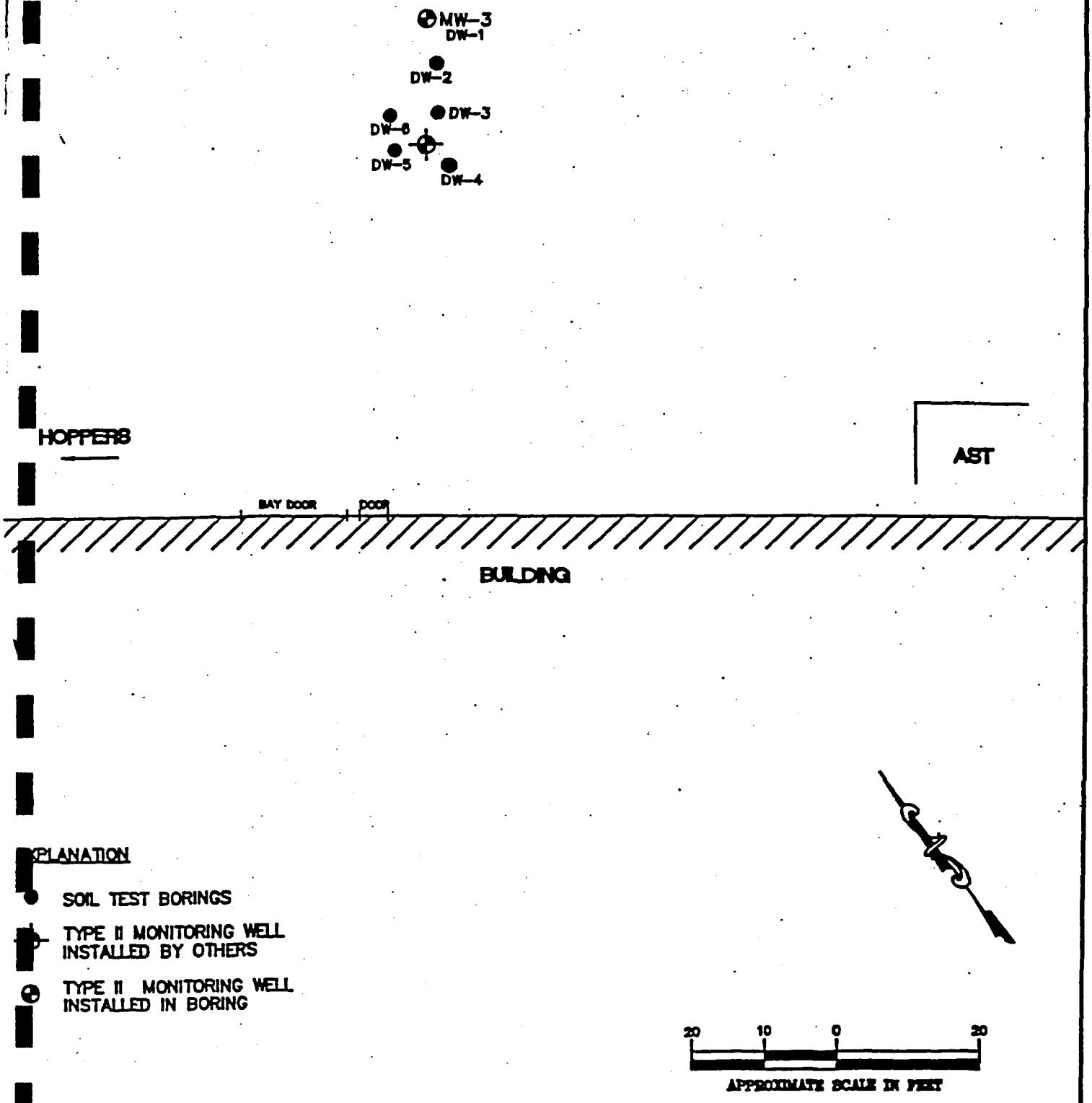
APPROXIMATE SCALE IN FEET

REF: SITE SKETCH PREPARED FROM FIELD NOTS BY LAW ENGINEERING PERSONNEL

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
CHARLOTTE, NORTH CAROLINA

FORMER CHEMICAL PUMP HOUSE
SPARTA INDUSTRIES
SPARTA, NORTH CAROLINA

PREPARED	DATE	CHECKED	DATE	JOB NO.	FIGURE
JT	12/99	BJB	12/99	12000-0-2105	4

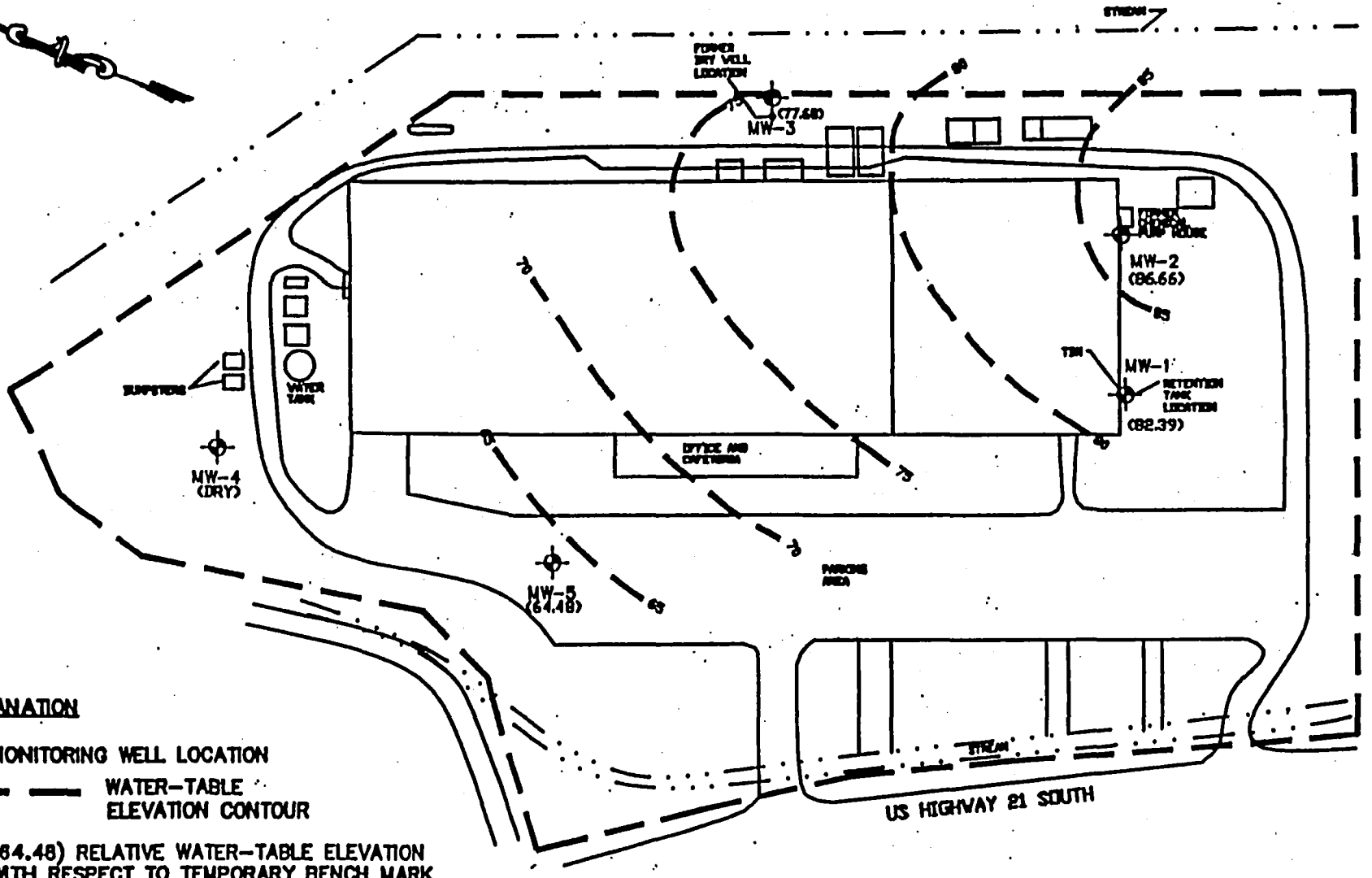


REF: SITE SKETCH PREPARED FROM FIELD NOTES BY LAW ENGINEERING PERSONNEL

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
CHARLOTTE, NORTH CAROLINA

FORMER DRY WELL LOCATION
SPARTA INDUSTRIES
SPARTA, NORTH CAROLINA

PREPARED BY	DATE	CHECKED	DATE	JOB NO.	FIGURE
SJT	12/99	DJB	12/99	12000-0-2105	5



EXPLANATION

MONITORING WELL LOCATION

WATER-TABLE ELEVATION CONTOUR

(64.48) RELATIVE WATER-TABLE ELEVATION WITH RESPECT TO TEMPORARY BENCH MARK (TBM) GROUND ELEVATION AT WELL MW-1

NOTE: WELL LOCATIONS AND ELEVATIONS DETERMINED BY W. KEVIN DOWELL, RLS.

140 70 0 140

APPROXIMATE SCALE IN FEET

REF: REDUCED PHOTOCOPIED SITE PLAN PREPARED BY RADIAN INTERNATIONAL, NOT DATED.

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
CHARLOTTE, NORTH CAROLINA

WATER-TABLE ELEVATION CONTOUR MAP

SPARTA INDUSTRIES
SPARTA, NORTH CAROLINA

PREPARED BY	DATE	CHECKED	DATE	JOB NO.	FIGURE
J.T	12/99	[illegible]	12/99	12000-0-2105	6

REFERENCE 4

December 28, 2000

To: Charlotte Jesneck, Head
Inactive Hazardous Sites Branch
Superfund Section

STATE FILE

From: Hanna Assefa
Environmental Toxicologist
Inactive Hazardous Sites Branch
Superfund Section

Re: Sparta Industries, Inc. Facility- New Plant
Sparta, Alleghany County

The subject site has been used for the manufacture of decorative wood products between 1975 and 1978. Since 1978 the facility has been used to manufacture smoking pipes. There were three areas of concern. These areas are around the deactivated wastewater retention tank and a dry well where previous sampling had indicated contamination, and a former chemical pump house where stains were visible. A possible source of contamination appeared to be stains used on the smoking pipes.

Previous sampling had shown the presence of acetone in soils near the deactivated underground wastewater retention tank. Volatile analysis for the November 1999 Phase II Environmental assessment in soil and groundwater did not detect the presence of acetone or any other volatile contaminants in soil or groundwater.

Soil and groundwater near the former chemical pump house where stains was observed. was analyzed for metals, VOC's and SVOC's. No VOC's were detected in soil or groundwaterin the November 1999 Phase II Environmental Assessment. Bis(2-ethylhexyl)phthalate was detected in soil at concentration below the Inactive Hazardous Sites Branch (IHSB) soil remediation goals. Zinc was detected in groundwater at concentrations below the 15NCAC 2L (2L) standards.

No VOC's were identified in soil or groundwater in the vicinity of the dry well during the Novermber 1999 Phase II Environmental Assessment. Zinc and copper were detected below their respective 2L standards in groundwater. All metals detected in soil were below the IHSB Soil Remediation Goals.

Based on my review of the November 1999 Phase II Environmental Assessment Report containing the above facts I recommend the site be given a no further action status on the IHSB inventory.